An empirical study of normative dissociation in musical and non-musical everyday life experiences

https://doi.org/10.1177/0305735611430080 (first published Dec 20, 2011). Available in Vol 41/3, 2013

Abstract

Dissociative experiences involving music have received little research attention outside the field of ethnomusicology. This paper examines the psychological characteristics of normative dissociation (detachment) across musical and non-musical experiences in 'real world', everyday settings. It draws upon a subset of data arising from an empirical project designed to compare transformative shifts of consciousness, with and without music in daily life, and the ways in which use of music may facilitate the processes of dissociation and absorption. Twenty participants kept unstructured diaries for two weeks, recording free descriptions of involving experiences of any kind as soon as possible after their occurrence. All descriptions were subsequently subjected to Interpretative Phenomenological Analysis (IPA).

Results suggest that dissociative experiences are a familiar occurrence in everyday life. Diary entries highlight an established practice of actively sought detachment from self, surroundings or activity, suggesting that, together with absorption, the processes of derealisation (altered perception of surroundings) and depersonalization (detachment from self) constitute common means of self-regulation in daily life. Music emerges as a particularly versatile facilitator of dissociative experience because of its semantic ambiguity, portability, and the variety of ways in which it may mediate perception, so facilitating an altered relationship to self and environment.

Key words: normative dissociation, absorption, depersonalization, derealization, music, everyday life.

Introduction

Instances of normative or nonpathological dissociation (detachment from self, surroundings or activity), are acknowledged to be more common than pathological dissociative experiences (Butler, 2004, 2006; De Ruiter, Elzinga & Phaf, 2006; Kihlstrom, Glisky, Angiulo, 1994), constituting integral parts of everyday psychological functioning. However, the detailed phenomenology of such experiences, in conjunction with and without music in everyday life, remains an almost uncharted area. This paper offers a preliminary account of musical and non-musical real world reported instances of normative dissociation, discussing psychological processes involved, with an assessment of music's efficacy in affording dissociative experience.

Nonpathological dissociation has been defined as 'an altered state of consciousness that is not organically induced, that does not occur as part of a dissociative disorder, and that involves the temporary alteration or separation of normally integrated mental processes in conscious awareness' (Butler & Palesh, 2004: 66). The term 'normative' is intended to indicate an understanding of dissociation as an intrinsically normal process which may be 'distorted or hijacked in pathological dissociative states', often through the effects of trauma (Butler, 2006: 46). In literature according with this viewpoint, dissociation is frequently described as a natural defence mechanism against anxiety and pain (Cardeña, 1994: 24) and

possibly an innate psychobiological adaptative response (De Ruiter et al., 2006; Ludwig, 1983) that may become maladaptive over time (Putnam, 1997: 74) i.e. severely dissociative symptoms may continue to occur in the absence of trauma (Butler, 2006: 54). Indeed, De Ruiter et al. have asserted that normative dissociation may be profitably viewed as a cognitive capacity or resource i.e. a 'general information processing style, associated with enhanced attention and working memory capacities' (2006: 117), rather than 'pathological coping mechanism' or dysfunction (2006: 116).

Discussions concerning functions of normative dissociation have been largely informal, anecdotal or speculative. Nevertheless, they provide a useful series of hypotheses that can inform empirical study. Ludwig (1983) proposed seven potential functions of dissociation, several of which are relevant to normative dissociation in everyday life, including automatization of behaviour, cathartic discharge, and escape from the constraints of reality. Butler (2004, 2006) confirmed Ludwig's notion of dissociation as affording escape, defining the nature of such experiences as constituting a 'form of cognitive involvement in absorbing activities (or elaborate fantasies)...' (2006: 55), adding two further functions: (1) dissociation via daydreaming as a forum for passive, seemingly spontaneous mental processing (2004: 5, 2006: 54); (2) positive dissociative states marked by a benign depersonalization i.e. sense of detachment from self, including 'ongoing perceptions, actions, emotions, or thoughts' (Cardeña, 1994: 24) and derealization i.e. sense of surroundings as unreal or preternatural (Cardeña, 1994: 24) that accompany skilled 'worthy activities' such as musical performance or sport, thus serving to reinforce the desire to pursue them (Butler, 2006: 56). In general terms, the processes of daydreaming, fantasy and

absorption are often considered to be common markers of everyday dissociative experiences, as evidenced by inclusion of items relating to these phenomena within the Dissociative Experiences Scale (henceforth DES), a widely used measuring instrument of Dissociation (Carlson and Putnam, 1993; Kihlstrom, 1994; Waller, Putnam & Carlson, 1996).

EVERYDAY DISSOCIATIVE ACTIVITIES AND THE CASE OF MUSIC

Dissociation literature relating to daily life has referenced a diverse range of activities including reading (Nell, 1988), pet attachment (Brown & Katcher, 1997), film (Butler & Palesh, 2004), positive experiences concerning sport, sex, prayer, anticipating or receiving good news (Pica & Beere, 1995), and music (Becker-Blease, 2004; Butler, 2004). Excepting the work of Pica & Beere, studies either consider activities theoretically, or tap dissociation via questionnaires.

Dissociation literature appears to be largely unknown to music psychologists. Aside from the empirical project outlined in this paper, a recent study of enjoyment of negative emotions in music by Garrido and Schubert (2011, discussed below) is - to the author's knowledge - the only study to employ the term dissociation. However, during the last decade an important body of work concerning music and consciousness change - particularly aspects of subjective experience that 'do not clearly fall within the category of emotional responses' (Juslin & Sloboda, 2010: 940) - and musical engagement has accumulated, much of it relevant to the topic of dissociation, albeit not explicitly concerned

with dissociative shifts of consciousness in conjunction with music. Consciousness transformation in conjunction with music has been examined with relation to the psychological characteristics of peak experiences involving music (Gabrielsson & Lindstrom Wik, 2003; Gabrielsson, 2011; Lamont, 2011), and the notion of different kinds of musical consciousness (Clarke & Clarke, 2011). A diverse range of research has focused on the subjective experience of music in daily life (DeNora, 2000, Bull, 2007; Lamont & Webb, 2010; Greasley & Lamont, 2006, 2011; Heye & Lamont, 2010; Juslin et al., 2008; Saarikallio and Erkkilä' (2007)) underlining a range of ways individuals may use music. Enjoyment has emerged as a key reason for listening to music (Lamont & Webb, 2009; Greasley & Lamont, 2011; Heye & Lamont, 2010), others being to pass time, to modulate mood, to relax, to create the right atmosphere (Juslin et al., 2008; Greasley & Lamont, 2011; Lamont & Webb, 2009; Heye & Lamont, 2010).

A significant amount of this work has touched on dissociative aspects of experience. For example, studies of the function of music in daily life have referenced dissociative uses of music e.g. as a diversion from negative rumination or stressful situations (Saarikalio & Erkkilä, 2007: 98), or as a general form of escape (Greasley & Lamont, 2006: 965). Bull's study of mobile musicking, (2003, 2007) (using interviews and an online questionnaire targeted at iPod users) has clearly identified the dissociative potential that portable sound technologies afford. iPods are described as one of a number of 'technologies of separation' (2007: 23) (others being mobile phones, cars, TV) that facilitate 'a significant mode of "being-in-the-world"'(2007: 12) where music acts as a sensory and physical 'gating' device tenabling users to inhabit an insulatory 'auditory bubble' which mediates experience by

filtering it (2007: 22). Heye & Lamont's (2010) study of the use of MP3 players while travelling has provided further confirmation that mobile listeners frequently use music to demarcate an "inside" and "outside" world' (2010: 106). The authors also observe that individuals may feel less self-conscious or anxious when listening to music on the move, and sometimes experience a changed awareness of surroundings (2010: 106)

DeNora has highlighted music's role as a resource for self-regulation, the construction of self-identity, 'emotional work' and as a 'technology' of health (2000, 2003, 2005, 2010). References to dissociative characteristics of experience are implicit within interview accounts of music listening episodes and practices supplied by the British and American women who took part in her interview study concerning the role of music in everyday life (DeNora, 2000) e.g. disconnection from external concerns, reconfiguration of clock time, reconfiguration of environment, use of music to provide virtual realities. DeNora has also explicitly noted the use of music to afford dissociation from exercise in an ethnography of music's role in an aerobics class (2000: 98).

Dissociation constituted a primary target of research in a study by Garrido and Schubert (2011) focussing on impact of individual differences on experience of music. The authors constructed a survey incorporating existing subscales for dissociation, absorption, fantasy proneness, empathy and rumination to assess the extent to which each of these psychological processes might be correlated with enjoyment of negative emotion in music. They hypothesized that 'individuals who score highly on dissociation or its normative manifestation absorption will show a high capacity 'to enjoy negative emotion in music' (2011: 283). Results confirmed the hypothesis regarding absorption, but no statistically

significant correlation between dissociation and enjoyment of negative emotion emerged, although, as the authors note, this may have been because the dissociation subscale used (Questionnaire of Experiences of Dissociation (QED, Riley, 1988)) was ineffective in measuring non-clinical dissociation (2011: 289).

Taken together, references concerning the use of music to cut off, block out, escape from or facilitate distantiation from aspects of self or environment in extant literature from the fields of music psychology, sociology and cultural studies suggest that dissociation is a pervasive phenomenon in everyday life interactions with music. Despite this, with the exception of Garrido & Schubert's study, dissociation, unlike absorption, has not been a *principle* focus of musical research. Detailed data concerning the phenomenology of dissociative experiences involving music is scarce.

Outside the field of music psychology, dissociation has long been recognized by ethnomusicologists, as evidenced in ethnographic accounts of possession and shamanistic trance in ritual contexts (Becker, 2004; Jankowsky, 2007; Rouget, 1985) and is commonly conceptualized as a form of altered consciousness or trance. The *Diagnostic and Statistical Manual of Mental Disorders* (DSM – IV-TR,) states that 'such voluntary and nonpathological [dissociative] states are common and consitute the overwhelming majority of trance and possession states encountered cross culturally' (2000: 783).

PROBLEMS IN LABELLING EXPERIENCE

Musical engagement has more commonly been conceptualized in terms of absorption (effortless involvement) than dissociation, e.g as in studies of strong experiences of music

(Lamont, 2011; Gabrielsson, 2010, 2011). Levels of absorption in conjunction with listening to music have frequently been measured in laboratory conditions (Kreutz, Ott, Teichmann, Osawa, & Vaitl, 2008; Rhodes, David, & Combs, 1987) using the Tellegen Absorption Scale (henceforth TAS, Tellegen & Atkinson, 1974).

Confusingly, the terms absorption and dissociation are used both as distinct, over-arching concepts in their respective literatures, but also on occasions within the same literatures, as interchangeable terms. For example, the construct of dissociation may be conceptualized as subsuming absorption (as in the DES which presents a three-factor structure (absorption, depersonalization, derealization) for dissociation), or the construct of absorption may be understood as including dissociative elements (as in the TAS), and be related to the broader personality trait of openness to experience (McCrae and Costa, 1985). Normative dissociation has sometimes been equated with absorption (Butler, 2006), and at other times absorbing experiences have been conceptualized as being *either* integrative or dissociative (Kihlstrom et. al., 1994: 121-2; Tellegen, 1992: 1). In a similar vein, Carlson and Putnam have postulated that highly hypnotizable individuals may display capacities for spontaneously dissociative *or* intentional absorbed styles of experience in everyday life (1989: 36). However, the authors' hypothetical divide between dissociation and absorption relies on contrasting the experiences of individuals deemed to demonstrate a pathological model of dissociative functioning, (i.e. current response automatically conditioned by previous trauma) with experiences of individuals demonstrating high levels of trait absorption. It is thus not clear whether nonpathological and pathological dissociation are distinct types (Waller et al., 1996) or instead related along a continuum (Bernstein &

Putnam, 1986; James, 1890; Ludwig, 1983). The notion of absorption as comprising a component (e.g. one of three-factors) of dissociation (Waller, Putnam & Carlson, 1996: 301), is rarely pursued, even though several items on the TAS reference depersonalization and derealization - both markers of dissociative experience.

Additionally, the use of conceptual labels particular to specific disciplines to describe aspects of experience may mask similarities regarding mental processes involved, so impeding informed cross-disciplinary understanding (Bohm, 1957). For example, the literature on flow and peak experiences does not mention dissociation (Butler, 2006: 49), even though such experiences seem implicitly to possess characteristics of normative dissociation

SUMMARY

At present the role of music in everyday dissociative experience has not yet constituted a prime focus of any empirical study of experiences of music in daily life. Real world and laboratory studies of musical experience have privileged phenomenological characteristics associated with absorption, as opposed to interactions involving the dissociative processes of depersonalization and derealization. Research indicates the need for qualitative, empirical study of normative dissociation in naturalistic settings, in order to complement findings relating to the subjective experience of absorption, and to yield understanding of the relative weighting of characteristics such as absorption, imaginative involvement, depersonalization and derealisation within everyday dissociative episodes. Crucially, comparison of impacts of different stimuli and activities on subjective experience is required to establish whether music is a particularly effective facilitator of dissociation.

Method

This study explored the phenomenology of everyday dissociative musical and non-musical experiences using an unstructured diary method, carried out over two weeks. This method was selected for three reasons: 1. it was unobtrusive (i.e. did not interrupt unfolding experience as might have been the case with ESM); 2. it facilitated the generation of rich data; 3. it enabled experiences to be recorded soon after they occurred, minimizing vagaries of retrospective recall. Self-reflection and self-report yield a close focus, detailed exploration of subjective experience beyond the scope of survey studies, but inevitably possess limitations. Most obviously, verbal descriptions are bound by language limitations, articulating only aspects of experience of which individuals are consciously aware. Nevertheless, if reports are 'necessarily partial', this does not invalidate them as sources of evidence if it is recognized that they cannot report the totality of experience. Another potentially problematic factor is that the act of diary making has the capacity to alter or mediate the nature of subjective experience. However, although participants in previous diary studies of everyday musical experience (e.g. studies employing experience sampling methodology (ESM), involving completion of structured response sheets) have reported increased conscious awareness of interactions with music, they have stated that such patterns of reactivity have not substantially altered their pattern of musical use or response to music (Sloboda et al., 2001; Greasley & Lamont, 2011).

Unstructured diaries undoubtedly 'place a great deal of responsibility on the respondent' (Robson, 2003: 258), demanding high levels of commitment, but their successful use in the earlier stages of the current project demonstrated that they were a feasible and valid means of enquiry, particularly if preceded by purposeful sampling of participants. A clear precedent for using diaries has been set by previous research regarding musical experiences/use of music in daily life, which frequently employs diary methods (often in conjunction with semi-structured interviews). Diaries may take the form of structured questionnaires (as in North et al., 2004), but are more commonly semi-structured i.e. containing a mixture of rating scale, forced-choice and open-ended questions, so enabling individual variations in musical engagement to be captured to a far greater extent (Sloboda et al., 2001; Greasley & Lamont, 2006; Saarikallio & Erkkilä, 2007; Griffin, 2009; Lamont & Webb, 2009; Heye & Lamont, 2010; Greasley & Lamont, 2011; Zijl & Sloboda, 2011). Diary methods have been used to tap a wide variety of everyday musical phenomena; evidence thus indicates that the method retains ecological validity.

AIMS AND APPROACH

The present study of dissociation formed part of the third and final stage of an empirical investigation of the range of consciousness within everyday music listening experiences. The first two stages formed an exploratory examination of the psychological processes present in everyday experiences of music, via semi-structured interviews and free descriptions completed by participants over a two week period (Herbert, 2009). Findings indicated the frequent occurrence of subtle alterations of consciousness in conjunction with

hearing music in daily life, marked by changes in sensory awareness, thought processes, attentional focus, arousal levels, sense of self and experience of time. Altered experiences fell into two broad phenomenological types: (1) episodes which appeared predominantly integrative (absorbed); (2) episodes where elements of experience appeared separated (dissociated). It is important to emphasize that some reports described experiences that contained a fluctuation between elements of both dissociation and absorption. It was however possible to group experiences by the relative weighting of these concepts in individual descriptions.

The final inquiry had three aims: first to compare qualities of absorbed and dissociative shifts of consciousness with and without music; second to clarify whether some activities are more likely to afford absorption or dissociation than others; third to examine the ways music facilitates such transformations of consciousness. I have discussed experiences marked by a primarily absorbed emphasis (category 1) elsewhere (Herbert, 2009, Herbert, 2011a,b). In this paper I focus on a dissociative subset of experiences characterised by depersonalization and derealisation (category 2).

PARTICIPANTS

Purposive sampling, involving an initial informal interview, was used to identify articulate individuals able to give qualitative insight regarding subjective 'feel' of experience, and to assess level of involvement in music, as listeners and /or players. Level of musical involvement was ascertained by interview questions drawing on Greasley and Lamont's (2006) previous research regarding characteristics of high and low levels of engagement in

music (Greasley & Lamont, 2006). Individuals were asked to describe how important music was to them, how regularly they listened, whether music was self-chosen, how much they knew about self-chosen musics, how much music they owned, and whether they were involved in music-related activities. Other questions indirectly explored the extent to which individuals were consciously aware of ways they engaged with music. In accordance with the aim of accessing as many involving activities as possible, there was no requirement that all participants had to possess a high involvement in music, although seven did.

Due to the exploratory nature and idiographic emphasis of the study, it was considered desirable to access a heterogeneous sample in terms of age, gender, occupation. 20 unpaid volunteers (eight males, twelve females) from London and two towns in Southern Britain were recruited. Participants ranged in age from 18 to 71 years (average age 46); declared occupations (see Appendix A) were diverse. Only one was a full time student. In this paper all participants are referred to using pseudonyms in order to preserve anonymity

PROCEDURE AND MATERIALS

A verbal description of the project and an information and instructions sheet (Appendix B) was presented to each participant, prior to completion of informed written consent. Each individual negotiated a convenient date on which to begin the unstructured diary. Participants were asked to record involving experiences with and without music for approximately fourteen days in a reflective journal. The general phrase 'involving experiences' rather than 'absorbing and dissociative experiences' was used to avoid prescribing written responses. Free descriptions from the previous (music-specific) stage of the study had indicated that participants experience both dissociation and absorption as

forms of involvement. In the case of dissociation, individuals were taken out of a familiar association with aspects of self and surroundings, experiencing a sense of involvement characterized by derealization and depersonalization as opposed to immersion in particular stimuli. The term 'involving', derived from previous participant descriptions, accommodated experiences containing fluctuation between elements of both dissociation and absorption. The instruction sheet advised logging of experiences as soon as possible after their occurrence, providing as much written detail as possible. To this end, following context reinstatement techniques used in witness testimony (Brace & Roth, 2002: 125), participants were given the option of using present tense to enhance memory retrieval and multi-sensory recall. The instructions stated that participants should include: '1. Experiences involving music. 2. Experiences involving music and another activity (e.g. travel, hobbies, work). 3. Experiences involving a non-musical activity'. Individuals were free to log as many or as few experiences as they wished. Selection criteria for involving episodes were not provided, as these might have prescribed elements of experiences. Participants also completed formal experience response sheets (Appendix C), modelled on those used by Sloboda, O'Neill and Ivaldi (2001) in their study of music in everyday life. These requested detail concerning duration of the episode, time lapse between occurrence and documentation, perceived mood and level of alertness before and after the experience. All individuals were encouraged (but not required) to submit their diary entries and response forms as they completed them, to facilitate clarification of any unclear details whilst the experience was still relatively recent. Before the study commenced, it was approved by the university's research ethics committee, all participant names were changed

and non-crucial detail was altered or removed to ensure confidentiality. Participants supplied electronic written consent for future publication.

DATA ANALYSIS

Documented experiential episodes were analysed using Interpretative Phenomenological Analysis (IPA – see Appendix D), a qualitative, idiographic, methodological approach involving detailed analysis of a small number of case studies, commonly used by researchers in the fields of health and social sciences in the UK (Smith, Flowers & Larkin, 2009; Smith, 2004)

All participants read an initial draft of the completed research, before completing five item open-response feedback questionnaires, assessing whether their experiences had been accurately and fairly represented (Appendix D). Participant comments controlled for interpretative discrepancies and were integrated into the final draft manuscript.

Results

A total of 151 experiences were recorded, the number of episodes logged by individuals varying from three to twenty-eight. Word count of journals ranged from c 1000 to 6,400 words, all participants opting to record their experiences in written, rather than oral form. Experience response sheets indicated that the majority of experiences were documented the same day, varying from immediately to several hours afterwards. 83 experiences (55%) featured music or sound. Analysis of the data supported the division of

experiences into two categories: (1) those in which subjective experience appeared primarily integrative (predominantly characterized by absorption); (2) those in which experience appeared primarily dissociative (predominantly characterized by depersonalization and derealization). Forty experiences (26.5%) exhibited markedly dissociative qualities, and music was volitionally heard in 25 (62.5%) of these. 13 participants (65%) reported experiences in which dissociative characteristics were present (all twenty reported instances of absorption), but because individuals were free to document as many or as few experiences as they wished, it was not possible to assess variety within the participant group with regard to frequency or nature of dissociative experiences with and without music. Participants completed the Modified Tellegen Absorption Scale (Jameson, 2005) eight weeks after the conclusion of the diary study, but the relationship between trait absorption scores and instances of state absorption (as recorded in the diaries) was inconsistent (reported in Herbert, forthcoming, 2012). Because existing dissociation scales are designed to assess pathological dissociation, they are problematic in measuring normative trait dissociation (Butler, 2006; Garrido & Schubert, 2011); the current study did not attempt to compare levels of trait dissociation across the sample.

While certain activities featured in participant descriptions of both dissociative and absorbing episodes (work, travel, exercise, playing an instrument, looking at surroundings, watching TV, drinking alcohol, washing up, taking a bath, daydreaming), experience response sheets indicated that mood and alertness levels prior to and during absorbing and dissociative experiences differed. Absorbed experiences (examined in Herbert, 2009; 2011a,b), occurred when individuals felt focused, balanced or pleasantly dreamy;

individuals were preoccupied with and appreciative of the activity itself and experiences themselves tended to possess a positive valence. Dissociative episodes occurred when individuals felt tired, emotionally overloaded, subject to external discomfort or internal rumination; experiences could possess a positive or negative valence, though some episodes did not appear to display levels of either. Primary function of dissociative episodes was to cut off from aspects of experience, i.e. engagement in an activity was a means to an end rather than an end in itself. A sense of disconnection was frequently an integral part of experience as it unfolded. Unconsciously or consciously, in episodes of this nature the intention seemed to be to 'dull' or escape consciousness by the use of an activity to numb or flood it - to 'hold consciousness at bay' (Nell, 1988: 64).

An exception to episodes prompted by the desire to 'escape', were occasions where a perceived 'everyday' self appeared to be spontaneously replaced by an alternative, 'observing self' (Deikman, 1982). Such episodes featured a crystal clear sharpening of consciousness and an inclusive sense of experiencing 'things as they are', reminiscent of the Buddhist practice of insight meditation i.e. 'attention to, yet detachment from, the object of meditation, which may be the meditator's own stream of consciousness' (Pekala, 1991: 40).

As was the case with absorbing experiences (Herbert, 2011a,b), travel was the most common context for everyday dissociative experiences. Portable leisure pursuits, such as listening to music or spoken word, or reading were popular, due to their capacity to be easily integrated into working days. Dissociation, like absorption could occur spontaneously or volitionally; compared to absorption a greater number of instances appeared to be spontaneous (i.e. not consciously pre-planned). Dissociative episodes were

more likely than absorbing ones to centre around impromptu, repetitive activities such as counting bricks, 'air-writing' etc.

Analysis of participant reports of dissociative experiences yielded 5 superordinate thematic categories each of which reflect processes of depersonalization and/or derealization. Since consciousness is fundamentally processual, one or more of the superordinate themes may be present at different times or occur simultaneously within a single episode, though experiences generally featured a primary emphasis on one of them.

1. ESCAPING SELF (DEPERSONALIZATION)

Normative dissociation was often described in terms of a defensive tactic - sometimes spontaneous, more often intentional - to escape current anxieties and concerns. Activities included active occupations, such as playing the piano, running, and passive pursuits e.g. reading, daydreaming, staring, listening to music. One individual stated, '...I use music to block out all thought...loud music like the band Norma Jean, is good for not wanting to think anything'. Younger members of the sample (18 - 30) were particularly familiar with using music in this way, to detach from preoccupations of self or situation. Some most frequently articulated the need to 'disappear' or 'tune out'; processes of 'escape' were intentional and well rehearsed. One described his regular access of a 'non-state':

> I really just lock into it whether I am listening to music or not. The function of the music is to provide a further mask… to enable a deeper descent. [Gary]

Detachment from internal dialogue or unwanted thoughts was often aided by engagement in activities involving restricted stimuli, repetition and movement e.g. exercise,

manual tasks, life-drawing, night-time motorway driving. Such experiences did not necessarily exhibit qualities of positive involvement:

> Waiting for appointment at hospital… could feel my heart beating and it gradually increased in pace as my mind whizzed through all the things I generally like to keep in a box at the back of my mind. In order to try and block out these thoughts I begin to realize I am spelling the words 'Stedland Reception' over and over and 'writing' the words in the air with my finger very minimally…happened before I consciously realized it, but I have used this tactic before. Time seems almost to have paused and yet life is flitting by. I feel very detached. [Louise]

Primary concern is not with an absorbed immersion in sensation, but with using activity to occupy consciousness, cutting off from or controlling unwanted thoughts. The activity also serves to suspend the sense of time passing (an instance of benign derealization), and facilitates a disconnection from surroundings. A narrowed attentional focus involves making minimal, patterned movement; repetitively traced words lose meaning, functioning instead as a visual (and perhaps internally audiated) mantra.

Repetition, pattern and movement constitute fundamental stimulus properties of music. Although academic consensus is that the contribution of music to consciousness transformation is not causal (Becker, 2004; Rouget, 1985), several writers maintain that certain musical features may support or afford trance induction (Aldridge & Fachner,

2006). In the current study, belief in the 'effect' of music was central to participants' regulation of subjective experience. Music possessing a slow rate of change was often used to bypass negative emotions, e.g. following an argument:

> The walk into the town centre is only a short one, but I aim to plug in and tune out anyway...The sounds consist of very little more than looped string sections, which are layered to allow for slow and quite subtle thematic shifts… this allows me to drift into the comfortable non-state… the whole point is to be as unaware of my physical self as is realistically possible – the music allows for gradual and deeper dislocation. [Gary]

Walking appears to entrain with repetitive elements within the music, which in turn impacts on thought processes and lowers emotional arousal. The musical features listed (repetition, layered, slow rate of change) seem to function here almost as an aural mandala (i.e. the equivalent of a repeating visual pattern, used in some meditation practices). The participant describes apparently familiar methods of using music to yield the experience of standing outside physical consciousness and to access an onlooker mentality where reality is experienced as dream-like.

2. ENABLING TECHNOLOGY OR ACTIVITY (DEPERSONALIZATION AND DEREALIZATION

Instances of normative dissociation in this category were commonly intentional. Activities included listening to music or spoken word on the move, watching TV, reading and tasks featuring repeated actions such as exercise, gardening and cookery. Mobile sound devices

were commonly used to mediate experience, altering the perceiver's relationship to what was seen and heard. In dissociative terms, the wearing of headphones enabled individuals to block out surroundings, avoid social interaction, standing outside external experience and looking in, almost as a detached, unseen voyeur. Thus use of technology facilitated the demarcation of a private (and so externally dissociative) world within a public space:

> On train listening to radio… contained in cocoon-like world of sounds. Aware that I feel more self-content and confident in my detachment from everything, especially people in carriage – don't want to be like THEM! …sad and resigned to the commuting experience… feel sort of invisible with 'phones on. Thoughts wander in and out of listening to radio... soothed by rambling voices – tired, vacant, non-specific feelings. Become aware that I am totally oblivious to surroundings – possibly half asleep. Train goes into tunnel, [radio] signal goes to audio static, but keep 'phones on, comforted... [Max]

The 'comforting' audio static signal creates a sonic wall that both blocks out external situation, reducing personal introspection to the point of non-thought and semi-wakefulness.

One way in which music was used to bypass thought or cut off from unpleasant situations was via active recreation. One participant regularly played the piano for this purpose:

> It's sometimes as if the mind separates somewhat. The same thoughts go round - usually stress, paranoia, bad thoughts generally - but they don't evoke emotional states when I'm playing. At the same time I feel very centred i.e. very "me" which

gets lost in the day to day treadmill...the pieces I was playing were old favorites... which connect me to my reasonable childhood before bad things happened. [Clara]

The dissociative nature of this episode is made clear by the phrase 'the mind separates'. Music provides a distraction on different levels: as physical skill; as suggesting alternative mood states; by evoking positive memories. The participant detaches from a 'day to day' self, with its habitual preoccupations, accessing a more positive self-essence not defined by external interaction.

3. CHANGE IN SENSORY AWARENESS (DEREALIZATION)

Instances of changed perception in this category commonly occurred spontaneously. Activities included driving, drinking alcohol, looking at art or surroundings and were characterized by multi-sensory engagement and sense of derealization. Sensory perception was typically either sharpened - as if the 'volume' level of experience had been turned up - or muted and distorted with a sense of events happening in slow motion. Sensory overload provided one trigger for dissociation from external surroundings, as in this account of a drink before a football match:

> Get to the bar I normally use... It's extremely packed… the sound of a couple of hundred conversations is almost overwhelming. As I am on my own, I find myself standing in the middle of the bar with a pint in each hand, watching Sky Sports. You have to watch only as you cannot hear the TV above the din…I find that I am less and less aware of the throng around me, and the sound of conversation almost disappears – I drift off into another world. I am aware of the TV screen, but not

> really what is happening… It's almost like I am making an effort to shut everything out. I have done this before … and I find it easier to do each time. [David]

External awareness – visual and aural - is gradually pared down. At the same time there is a disconnection from the meaning content of what is seen on television. The process of dissociation emerges as a well-practised defensive technique.

Music (or sound) often functioned to facilitate a move away from usual ways of perceiving surroundings. Such 'visual listening' (looking and listening) often served to create a sense of dissociation from external environment. One participant described the experience of listening to Steve Reich's *Music for 18 musicians*, in the car:

> Steve Reich is in the CD player ... feels risky, like driving on a glass of wine ... feel absorbed in emotionless patterns ... cotton-wooled by the pulsing rhythms and playful little figures, but make myself simultaneously alert at junctions. Reaching the roundabout on a dual carriage way, the sharp clarity of the yellow and black chevron pattern shouts at me to appreciate it…traffic slows as we approach town outskirts and I feel curiously remote… Pedestrians at junction look paper thin, almost alien, I have no connection with them: or rather, I do have a connection but am observing it and them. [Will]

Absorption with certain qualities afforded by the music (fascination with abstract 'emotionless patterns') blends with and heightens visual perception of external environment, then extends to a sense of being detached from experience and watching it ('I do have a connection, but am observing it'), altering perception of people observed ('alien,'

'paper thin'), indicating a dissociation from affect. A change of music restores emotional connection to surroundings:

> Compared to the bleached out abstractions and 'distance' of the Reich, the Bach ('cello suite) seems so laced with warm human emotion…see people not so very different from those seen earlier, yet now feel more connected and compassionate – aware of them as people, not abstractions. [Will]

4. IMAGINATIVE INVOLVEMENT **AND** CHANGE IN SENSORY AWARENESS (DEPERSONALIZATION AND DEREALIZATION)

Some of the most intensely dissociative experiences featured changes in sensory awareness informed by internal memories, associations or fantasies. The sense of resulting dislocation appeared at once self-regulatory and disorientating:

> When walking home after school the music became a soundtrack to my life. I could imagine the opening scene of a film with me walking, seen from my right side. Felt quite sad and lonely (seen subtly in my expression) and this song playing in the background… I was focused on the music, the pavement in front of me and my steps… my body moving in time with the music…The street was completely empty. It reminded me of times in my life when I have felt as though I was dealing with things on my own…. I think about things I would otherwise hide away… (family issues and my brother's depression). I think about things and my mind is empty. I almost didn't know where I was… I couldn't remember what had come before or what would follow. [Jimi]

The episode begins with what seems to be a double awareness of surroundings. Effortless, non-volitional selective external concentration on the pavement fuses with a physical entrainment that is linked both to what is heard and seen. Both music and pattern of the pavement possess a repetitive quality. So far the experience appears to be primarily absorbing, rather than dissociative. However, physical self is also viewed via a broader, imagined external awareness, from the side as if in a film; self is observed from third person perspective. Acute awareness of physical and mental self eventually collapses, to be replaced by an empty mind, external disorientation and partial amnesia concerning the journey.

At other times, multi-sensory dissociative episodes demonstrated a positive valence. One participant described the experience of mentally replaying recently heard music when on a train:

> Translate landscapes from train window into bird's eye perspective – hard to explain really, basically seeing things from above. It's a combination of things – claustrophobia of a train, staring out of window at blurred, changing views, repetitive movement & recent music memories running through my head, altering my perception of reality a bit. Takes me away from humdrum internalized thoughts and worries & gives me a different 'bigger picture' angle on things. Hard to rationalize exactly what's going on – some sort of (slight) out-of-body experience thing... I'm not "me" looking out... Mind kind of declutters itself of internalized thoughts… The music running through my mind "scores" the birds-eye visual. [Max]

The listening episode is informed by an established belief in a state of mind/consciousness possibly unfamiliar to others ('hard to explain') and represented visually ('seeing things from above'). The use of phrases such as 'out-of-body experience' indicate this perception of a move away from a familiar base-line state of consciousness. Such an experience is perceived as restorative ('takes me away from thoughts and worries') and involves standing outside a familiar self to view a 'bigger picture'. Music is seen as a soundtrack to this state ('scores the bird's eye visual'). There is an emphasis on selective outwards attentional focus, coupled with balanced detachment/dissociation from what is seen. Thought is reduced; sense of self recedes. The multi-sensory combination of music, repetitive train movement and blurred changing views combine to create a state of what seems to be positive depersonalization/derealization.

5. SPONTANEOUS VACANCY OR (TOTAL ABSENCE)

A small number of participant reports referenced what appears to be an extreme form of normative dissociation where self and surroundings spontaneously recede from awareness. This state was recognized by William James (1890) who termed it 'vacancy' or 'absence':

> Most people probably fall several times a day into a fit of something like this: The eyes are fixed on vacancy, the sounds of the world melt into confused unity... the foreground of consciousness is filled, if anything, by a sort of solemn surrender to the empty passing of time...it is not sleep; and yet when roused from such a state, a

person will often hardly be able to say what he has been thinking about. (1890: 404).

Instances of vacancy were connected to administrative tasks apparently not intrinsically stimulating:

> Filling in children's assessment files. Music track finishes; I stretch and yawn. Gaze at the shadows on the wall created by chair legs…one spot about three metres away where my eyes came to rest. Mind quite blank. Realise that I am still tapping the rhythm of the music on to my highlighter pen – unaware of this before... [Gabrielle]

> As I sit at my desk I am filled with a sense of dread as I realize I have been staring aimlessly at the document I was supposed to be scrutinizing for errors… I reassure myself that it can't have been as long as it seemed…it always seems like you have been away for a long time... [Gary]

Changes of awareness (to a dissociated state) happened effortlessly, and the sense that there had been an absence of consciousness only emerged at the end of episodes, when participants abruptly noticed themselves (as if momentarily detached from physical body) acting in unconsciously determined ways (e.g. staring aimlessly; tapping rhythm on pen). Episodes were described as reveries or daydreams (though lacking internal content); the sleep comparison being extended by the notion of being somewhere else during the experience ('away a long time').

PARTICIPANTS COMMENTS ON THE INITIAL ANALYSIS

Participant checking indicated that informants felt compiling written reports had not distorted experience, although taking part in the project left many participants with heightened conscious awareness of and more reflexive approaches towards musical and non-musical interactions in daily life, as indicated by the following comments:

> I can see a lot of truths about what's happening in my mind that I've kind of been aware of but never dared to rationalize in any depth. [Max]

> The experience of writing the notes has made me think about my listening in new ways ... it makes me see that I often have quite positive purposes in mind when choosing to listen to music. [Will]

> I think that really all of my actions have been done subconsciously… I've not really paid much attention to what I was actually doing. It has slightly changed the way I now listen. [David]

> It has made me realise that I should consider the 'health' of the creative parts of my brain in day-to-day life [Gabrielle]

One unpremeditated consequence of the participant checking process was that it prompted individuals to compare personal experiences that would ordinarily remain unvoiced and private, providing rare opportunities to normalise subjectivity:

> ...one of the things I have taken from the study is that I am not unusual and that others share the same feelings and emotions [David]

> What struck me was how honest everyone seemed to be in describing their experiences and how interesting they were… a bit like reading someone else's diary not intended for publication. [Hazel]

> No man is an island kind of thing.. it's reassuring to see your own experiences reflected in others. [Max]

Discussion

A number of findings emerge from cross-comparison of data. Participant reports suggest that subtle, often brief dissociative episodes are a ubiquitous feature of everyday life. At times, experiences are spontaneous, arising as a coping response to situations e.g. before hospital appointments; on overcrowded trains. On other occasions, dissociative experiences are deliberately sought, and participants describe what seemed well-rehearsed techniques of volitional detachment e.g. after an argument; to block out negative introspection.

COMPARISON OF DISSOCIATIVE AND ABSORBED EXPERIENCES

There appears to be some degree of phenomenological similarity between dissociative and absorbing experiences. In both, attention is narrowed or selective and aspects of self or surroundings recede from awareness. However, the interplay between state of mind, motivation, habitual ways of responding, properties specified by stimulus or activity determines whether experience feels primarily integrative (absorbed) or disengaged (detached).

Generally, absorbed experiences display higher levels of positivity whereas dissociated experiences may possess either a negative or positive valence. Additionally, the reports show that a proportion of experiences - particularly those that accord with the phenomenon James described as ‘vacancy' or ‘absence’ - appear to be without either positive or negative valence, indicating instead complete detachment from self and surroundings. A sense of altered consciousness appears intrinsic to subjective 'feel' of dissociative episodes as they unfold, whereas participant reports of absorbed experiences (Herbert, 2011a, b, forthcoming 2012) confirm Butler's observation that alterations of consciousness tend to be noticed retrospectively (Butler, 2006: 47). One individual comment (submitted during participant checking), highlights differences between dissociative and absorbed modes of experiencing:

> When I took part in the project I was at the apex of feeling depressed generally, so I chose music that didn't demand attention, as a means of escaping. After a period of counseling I found structure and purpose which opened up a different way of

listening… I was happy to engage with the music and more aware of emotional content. [Gary]

Free descriptions also support Butler's (2004; 2006) predictions regarding functions of normative dissociation i.e. dissociative episodes provide a means of escape from everyday life concerns; reinforcement of skilled activities via positive states of benign depersonalization and derealization; a forum for mental processing and mental rejuvenation. Dissociation, as described by participants, does not refer to lack of attentional focus or engagement, but instead attaches to experiential involvement characterized by a changed relationship with aspects of self and/or environment. Detachment is experienced as a definite move away from a baseline state of consciousness, although not generally perceived in terms of an 'unusual disconnection or disengagement' as Cardeña has asserted (1994: 23).

CHARACTERISTICS OF DISSOCIATIVE EXPERIENCES

This data indicates that a range of activities, including music, may afford dissociative transformations of consciousness. Everyday dissociative experiences are shaped not only by the interaction between perceiver and attributes of activities, butby situational and personal factors (mood, energy levels, motivation, behavioural and perceptual patterns of response accumulated over time, preferences). This perhaps explains why travel is a common context for dissociation. Journeys are often regarded as 'transitory gaps' in-between work/leisure landmarks (Bull, 2003), times when individuals lack energy and

attention for absorption, instead using particular stimuli and activities primarily as a means of insulation or escape from demands of daily life.

Across activities, self-reports show dissociative episodes characterized by reduction or exclusion of internal dialogue often feature focus on physical attributes of stimulus or activity (e.g. sounds, textures, shape, movement), rather than meaning, leading to lowered arousal levels and emotional detachment. Episodes marked by changes in sensory perception also center on simple awareness, rather than thoughts and feelings, facilitating dissociation from self via deautomatization of thought i.e. 'undoing of the automatic processes that control perception and cognition' (Deikman, 1982: 137). Temporary absence of habitual ways of perceiving trigger the sense of surroundings being unreal or preternatural. Situations involving changes in sensory awareness that are also informed by an interaction with internal thoughts and fantasies are particularly disorientating and often described as 'dream-like'.

For some, situational factors (immediate context plus personal/social circumstance) may be catalysts for dissociation. For others, established tendencies towards dissociative styles of experiencing is key. A brief example illustrates this. The majority of participants submitted examples of both absorbed and dissociative experiences but reports of two participants, Louise and Gary, referred almost exclusively to dissociative experiences. The reason was primarily situational in Louise's case; at the time of the project she was caring for her parents, both seriously ill, whilst still attempting to work fulltime. Her descriptions accord with the notion of dissociation as coping mechanism in response to specific, finite difficulties. By contrast, Gary's free descriptions indicate an enduring, default mode of

response, acquired over time, functioning to access a familiar 'non-state' (dissociation as escape) regardless of contribution of particular stimulus attributes ('I really just lock into it whether I am listening to music or not'), and which, elsewhere in his diary, he likens to a previously experienced pattern of drug use.

Another influence on choice of activity/stimulus is preference. Some individuals simply do not engage in certain activities; for example, the diary of one participant (Liz), included no music episodes, but did include dissociative episodes (mostly in conjunction with visual stimuli) Others (particularly older participants, whose diary entries suggested they expected to attend closely to music, in accordance with the Western concert model) associate music with absorbed responses, and would not expect to respond in dissociative ways.

A substantial proportion of dissociative experiences seem to occur when emotionally overstretched, tired or under-stimulated. This might accord with the notion of dissociation as a protective, psychobiological adaptive response (De Ruiter et al., 2006; Ludwig, 1983). On this view, daydreaming, fantasy and dreaming are conceptualized as functional, dissociative behaviours (Butler, 2006: 50-52). Kleitman (1963; 1982) has suggested that both sleep and wakefulness follow what he terms a "Basic Rest-Activity Cycle" (BRAC); in waking life, the REM phase of sleep (dreaming) is paralleled by inwardly directed alterations of consciousness ('rest phases'). Such waking 'rest phases' may equate with recuperative, normative dissociation. To date, the presence of a rest-activity pattern of consciousness in waking life has only been tracked, via diary and questionnaires, over two consecutive days (Duchniewska & Kokoszka, 2003). Further research is needed to

confirm the existence of the BRAC in waking life and to explore the phenomenology of 'rest phase' experiences in order to assess their relevance to normative dissociative processes.

DISSOCIATION AND MUSIC

As was the case with absorbing experiences, comparison of dissociative experiences with and without music did not suggest that different types of stimuli 'prescribed' different types of experience. Rather, in accordance with an ecological model of perception (Clarke, 2003, 2005), dissociative experiences arose from interaction between properties specified by external objects/activities, the perceiver (including habitual ways of responding, current state of mind, needs) and situational factors (Herbert, 2011a,b). However, although both musical and non-musical stimuli may afford dissociation, this study suggests that listening to, imagining or playing music are, for many, markedly effective methods of actively dissociating from self or surroundings. In particular the use of mobile technologies (iPods and MP3 players) enabled music use to 'get into the action' as DeNora (2003, 2005) puts it, in a way that non-musical stimuli did not. In everyday music listening literature, music has frequently been described as 'accompanying' activities in daily life (e.g.Sloboda, Lamont, & Greasley, 2011; Lamont & Webb, 2010). In its starkest form. this has been identified as a markedly passive consumption in which music is used as 'sonic wallpaper', forming the 'undemanding backdrop to some other task' (North & Hargreaves, 2004: 72). By contrast, the present study suggests that music *mediates* rather than accompanies experiences marked by dissociative and absorbed shifts of consciousness, confirming Bull's (2007) observations

regarding mobile musicking. Mobile sound technologies were frequently used by participants to configure environment, demarcating public and private spaces by filtering out some aspects of experience whilst emphasizing others, so promoting dislocation from surroundings and freedom from social interaction. At other times, listening to music on the move served to alter perception of surroundings, not simply by enhancing awareness of particular features (as Heye & Lamont (2010) have observed), but by leading to changed perceptual relationships with surroundings, familiar objects and scenarios being experienced dissociatively as unreal or preternatural. Music's invisibility (in recorded form), portability and polysemic potential means it is particularly able to 'blend' with and inform other elements of experience (particularly visual) and other modalities (particularly the imaginative faculty) to transform perception (i.e. in the case of dissociative experiences to effect a sense of derealization)

Free descriptions from the current study suggest that one of the most common dissociative functions of music appears to be to intentionally escape preoccupations or unwanted thoughts (effecting a sense of depersonalization, or even temporary substitution of another identity). This supports Sarikallio & Erkkilä's (2007) finding (from a study of music as mood regulation in adolescents) that music is frequently used as a means of diversion or distraction from undesirable moods or life events. For adolescents, such flights from what Baumeister (1991) has termed the 'burden of selfhood' are an understandable response, providing relief from the process of identity formation commonly observed in this age group (Clarke, Dibben, & Pitts, 2010; North and Hargreaves, 2008).

The reports also indicate that use of music as distraction from negative rumination is equally relevant for older age groups (up to the age of c. 60). Because music does not require an effortful decoding of informationally precise meaning, participants can turn to it when too tired or emotionally distracted to engage in a focused/semi-prescriptive activity e.g. reading. Music's semantic ambiguity allows it to be easily customized by individuals, making it an ideal 'technology' of consciousness transformation. Acquired listening behaviors condition the extent to which dissociative potentials of music are realized however. The oldest participants in the project (Judy, 66; Lilia, 71) expected to attend closely to music; their diary entries relating to musical experiences reflect absorbed rather than dissociative interactions.

DeNora has noted that the ways in which individuals use music to contribute to the 'cultural constitution of subjectivity' (2000: 47). Music is an especially rich repository for social and cultural meanings i.e. it has the capacity to specify a range of sources external to music (Dibben, 2001). Selecting ways of 'being-in-the-world' with music and meanings it affords implies a choice to avoid, escape or dissociate from other possibilities of self-identity.

One reason music appears to be a popular and efficient agent in the facilitation of dissociation seems to be the wide varieties of attentional loci or 'distractors' from unwanted concerns it offers. Those featuring in participants' accounts include:

1. Focus on qualities of sound itself, i.e. on sensation rather than meaning, enabling detachment from thought, emotion or situation, allowing temporary standing

outside clock time via entrainment to a time frame dictated by music and consequent sense of derealization.

2. Focus on sources specified by music i.e. cultural and personal associations, memories and fantasies or mood evocation, enabling disconnection from external concerns.
3. A multi-distributed but selective attentional focus, where music mediates experience, reconfiguring it by highlighting, submerging or blending together elements of external and internal awareness. Music's informational incompleteness appears to provide a 'cluster of semiotic potential' (Cook, 2001), that can afford a changed relationship with self, activity or situation.

Concluding remarks

Normative dissociative transformations of consciousness appear to occur in everyday life in conjunction with a variety of activities. Although dissociation results from interplay between perceiver, stimulus and context, rather than deriving from stimulus attributes alone, music emerges as an especially versatile facilitator of volitional and spontaneous dissociative experience. The small sample size in this study prevents generalization of findings to wider populations. Participants were white, mostly middle class and although drawn from a wide age range, age groups were not entirely evenly represented. Additionally, the study was solely qualitative in emphasis and employed one means of data collection only (unstructured written diaries). The main concern was to explore psychological qualities of subjective experience, rather than to attempt to assess frequency of dissociative experiences, or numbers of experiences occurring in conjunction with

different activities. Instructions to log as many or as few experiences was intended to minimize any feelings of pressure engendered by the potentially daunting task of submitting detailed retrospective self-reports, but this means that the research findings derive from experiences which individuals *chose* to log i.e. they do not reflect *all* experiences over the two week data collection period.

Three directions for future study emerge. First, qualitative research involving larger, demographically varied groups across a broader range of naturalistic settings and activities may yield sufficient empirical evidence to substantiate preliminary observations made here concerning music's role in dissociative experience. Such research could usefully employ both phenomenological report and semi-structured interviews. In addition to interviews prior to completion of informal diaries, follow-up interviews would serve to contextualize experiences reported by participants. Second, given that existing dissociation scales are not designed to measure dissociation in non-clinical populations, it would be useful to develop a normative dissociation scale (the equivalent of the TAS) to quantitatively tap benign (as opposed to pathological) instances of depersonalization and derealization in daily life. Finally, given that theoretical models of emotion possess limited utility as explicatory frames for experiences that 'do not clearly fall within the category of emotional responses' (Juslin & Sloboda, 2010: 940), future studies could profitably explore different ways of conceptualizing transformations of consciousness in conjunction with music. Outside the field of emotion and affect studies subjective experience has been mapped rather differently e.g. Pekala's (1991) *Phenomenology of Consciousness Inventory* (PC1) a retrospective self-

report questionnaire primarily used to assess altered states of consciousness could usefully be applied to music.

Although depersonalization and derealization are acknowledged as actively sought and normative components of meditative practices worldwide (DSM-1V-TR: 531), pathological manifestations of these construct have received most research interest. Yet participant reports in this study suggest that, together with absorption, they constitute common of normative self-regulation, arising consciously or unconsciously in response to demands of everyday life. Music appears to be an important means of effecting such everyday transformations of consciousness. Its role merits further study.

REFERENCES

Aldridge, D., & Fachner, J. (Eds.). (2006). *Music and altered states: Consciousness, transcendence, therapy and addictions*. London: Jessica Kingsley Publishers.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders*, 4th Edition, Text Revision. Washington, DC: Author.

Baumeister, R.F. (1991). *Escaping the self: alcoholism, spirituality, masochism and other flights from the burden of selfhood*. New York: Basic Books.

Becker-Blease, K.A. (2004). Dissociation and music. *Journal of Trauma and Dissociation*, *5*(2), 89-100.

Bernstein, E.M., & Putnam, F.W. (1986). Development, reliability and validity of a dissociation scale. *Journal of Nervous and Mental Disease, 174*(12), 727-735.

Bohm, D. (1997[1957]) *Causality and Chance in Modern Physics*. London: Routledge.

Boserman, C. (2009). Diaries from cannabis users: an Interpretative Phenomenological Analysis. Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine, 13(4), 429-48

Brace, N., & Roth, I. (2002). Memory: structures, processes and skills. In Miell, D., Phoenix, A., & Thomas, K. (Eds.), *Mapping Psychology 2* (pp. 111-69). Milton Keynes: Open University

Brown, S., & Katcher, A. (1995). The contribution of attachment to pets and attachment to nature to dissociation and absorption. *Dissociation*, *10*(2), 125-129.

Bull, M. (2003). Soundscapes of the car: a critical study of automobile habitation. In Bull, M., & Back, L. (eds), *The Auditory Culture Reader*, pp. 357-74. Oxford: Berg.

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

Butler, L. (2004). The dissociations of everyday life. *Journal of Trauma and Dissociation*, *5*(2), 1-11.

Butler, L. (2006). Normative dissociation. *Psychiatric Clinics of North America, 29*, 45-62.

Butler, L., & Palesh, O. (2004). Spellbound: Dissociation in the movies. *Journal of Trauma and Dissociation*, *5*(2), 61-87.

Cardeña, E. (1994). The domain of dissociation. In Lynn, J.S., Rhue, J.W. (Eds.), *Dissociation* (pp.1-31). Washington, DC: American Psychological Association Press.

Carlson, E.B., & Putnam, F.W. (1989). Integrating research on dissociation and hypnotizability: Are there two pathways to hypnotizability? *Dissociation, 2*(1), 32-38.

Carlson, E.B., & Putnam, F.W. (1993). An update on the dissociative experiences scale. *Dissociation, 6*(1), 16-27.

Clarke, E.F. (2003). Music and psychology. In Clayton, M., Sager, R., & Will, U. (eds), *The Cultural Study of Music: A Critical Introduction* (pp. 113–23). New York and London: Routledge.

Clarke, E.F. (2005). *Ways of Listening: An Ecological Approach to the Perception of Musical Meaning*. New York: Oxford University Press.

Clarke, D.I., and Clarke, E.F. (Eds.), (2011). *Music and Consciousness*: *Philosophical, psychological and cultural perspectives.* Oxford: Oxford University Press.

Clarke, E., Dibben, N., Pitts, S. (2010). *Music and mind in everyday life. Oxford*: Oxford University Press.

Cook, N. (2001). Theorising musical meaning. *Music Theory Spectrum, 23*, 170-195.

Costa, P.T., & McCrae, R.R. (1985). *The NEO personality inventory manual*. Odessa, Florida: Psychological Assessment Resources.

Deikman, A.J. (1982). *The observing self: Mysticism and psychotherapy*. Boston: Beacon Press.

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

DeNora, T. (2003). Music sociology: getting the music into the action. *British Journal of Music Education*, 20 (2), 165-77.

DeNora, T. (2005). Music and Social Experience. In *The Blackwell Companion to the Sociology of Culture* (eds M. D. Jacobs and N. W. Hanrahan), pp.147-59. Oxford: Blackwell Publishing Ltd.

DeNora, T. (2010). Emotion as social emergence: perspectives from music sociology. In In Juslin, P.N. and Sloboda, J.A. (eds), *Handbook of Music and Emotion: Theory, Research, Applications* (pp. 159-83). Oxford: Oxford University Press.

De Ruiter, M.B., Elzinga, B.M., & Phaf, R.H. (2006). Dissociation: Cognitive capacity or dysfunction? *Journal of Trauma and Dissociation*, *7*(4), 115-134.

Dibben, N. (2001). What do we hear, when we hear music? Music perception and musical material. *Musicae Scientiae*, **5**[2], pp. 161–94.

Duchniewska, K., & Kokoszka, A. (2003). The protective mechanisms of the basic rest-activity cycle as an indirect manifestation of this rhythm in waking: Preliminary report. *International Journal of Neuroscience, 113*, 153-163.

Frith, S. *Performing rites: On the value of popular music*. Cambridge, Massachusetts: Harvard University Press

Gabrielsson, A., & Lindstrom Wik, S. (2003). Strong experiences related to music: A descriptive system. *Musicae Scientiae, 7,* 157-217.

Garrido, S., & Schubert, E. (2011). Individual differences in the enjoyment of negative emotion in music: a literature review and experiment. *Music Perception, 28(3)*, 279-95.

Greasley, A. E., and Lamont, A. (2006). Music preference in adulthood: Why do we like the music we do? In Baroni, M., Adessi, A.R., Caterina, R., and Costa, M. (eds), *Proceedings of the 9th International Conference on Music Perception and Cognition* (pp. 960-6). Bologna, Italy: University of Bologna.

Greasley, A.E., and Lamont, A. (2011). Exploring engagement with music in everyday life using experience sampling methodology. Musicae Scientiae 15(1), 41-71

Herbert, R. (2009). *Range of consciousness within everyday music listening experiences: Absorption, dissociation and the trancing process*. (Unpublished PhD dissertation: University of Sheffield).

Herbert, R. (2011a). Consciousness and everyday music listening: trancing, dissociation and absorption. In Clarke, D., & Clarke, E. (Eds.), *Music and consciousness* (pp. 295-308). Oxford: Oxford University Press.

Herbert, R. (2011b). *Everyday Music Listening: Absorption, Dissociation and Trancing*. Aldershot: Ashgate.

Herbert, R. (forthcoming, 2012) Musical and non-musical involvement in daily life: the case of absorption. *Musicae Scientiae, 16*(1).

James, W. (1950/1890). *The principles of psychology*. New York: Dover Publications.

Jankowsky, R.C. (2007). Music, spirit-possession and the in-between: Ethnomusicology and the challenge of trance. *Ethnomusicology Forum, 16*(2), 185-208.

Juslin, P.N., Liljeström, S., Västfjäll, D., Barradas, G., & Silva, A. (2008). An experience sampling study of emotional reactions to music: listener, music, and situation. *Emotion*, **8**, pp. 668–83.

Kihlstrom, J.F., Glisky, M.L., & Angiulo, M.J. (1994). Dissociative tendencies and dissociative disorders. *Journal of Abnormal Psychology, 103*(1), 117-24.

Kleitman, N. (1982). Basic rest-activity cycle - 22 years later. *Sleep, 5*(4), 311-317.

Kreutz, G., Ott., U., Teichmann, D., Osawa, P., Vaitl, D. (2008). Using music to induce emotions: Influence of musical preference and absorption. *Psychology of Music, 36*, 101-128.

Lamont, A., and Webb, R. (2009). Short and long-term musical preferences: What makes a favourite piece of music? *Psychology of Music*, *38*(2), 222-241.

Lamont, A. (2011). University students' strong experiences of music: Pleasure, engagement, and meaning. *Musicae Scientiae*, *15*(2), 229–249.

Ludwig, A.M. (1983). The psychobiological functions of dissociation. *American Journal of Clinical Hypnosis, 26,* 93-9.

Nell, V. (1988). *Lost in a book: The psychology of reading for pleasure.* New Haven and London: Yale University Press.

North, A., & Hargreaves, D. (2004). Uses of music in everyday life. *Music Perception, 22*, 41-77.

North, A., & Hargreaves, D. (2008). *The Social and applied psychology of music*. Oxford: Oxford University Press.

Pekala, R.J. (1991). *Quantifying consciousness: An empirical approach.* New York: Plenum Press.

Pica, M., & Beere, D. (1995). Dissociation during positive situations. *Dissociation, 8*(4), 241-246.

Putnam, F.W. (1997). *Dissociation in children and adolescents: A developmental perspective.* New York: Guilford Press.

Ray, W.J. (1996). Dissociation in normal populations. In Michelson, L.K., Ray, W.J. (Eds.), *Handbook of dissociation: Theoretical, empirical and clinical perspectives* (pp 51-66). New York: Plenum Press

Rhoades, G.F., & Sar, V. (Eds.). (2005). *Trauma and dissociation in a cross-cultural perspective: Not just a North American phenomenon.* Binghamton, New York: Haworth Maltreatment and Trauma Press.

Rhodes, L.A., David, D.C., & Combs, A.L. (1988). Absorption and enjoyment of music. *Perceptual and Motor Skills, 66*, 737-738.

Riley, K.C. (1988). Measurement of dissociation. *The Journal of Nervous and Mental Disease,* 176, 449-50.

Robson, C. (2003). *Real World Research*. Oxford: Blackwell

Rouget, G. (1985). *Music and trance: A theory of the relations between music and possession.* Chicago and London: University of Chicago Press.

Saarikallio, S. & Erkkilä, E. (2007). The role of music in adolescents' mood regulation. *Psychology of Music* 35(1), 88-109.

Smith, J.A. (1999). Identity development during the transition to motherhood: An interpretative phenomenological analysis. *Journal of Reproductive and Infant Psychology* 17(3), 281-299.

Smith, J. A. (Ed.). (2004). *Qualitative psychology: A practical guide to research methods*. London: Sage.

Smith, J.A., Flower, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, methods and research.* London: Sage.

Sloboda, J.A., O'Neill, S.A., & Ivaldi, A. (2001). Functions of music in everyday life: an exploratory method using the experience sampling method. *Musicae Scientiae, 5*(1), 9-32.

Sloboda, J.A., Lamont, A.M., and Greasley, A.E. (2009). Choosing to hear music: motivation, process, and effect. In Hallam, S., Cross, I., and Thaut, M. (Eds.), (2009). *The Oxford Handbook of Music Psychology* (pp. 431-40). New York: Oxford University Press.

Tellegen, A., & Atkinson, G. (1974). Openness to absorbing and self-altering experiences ("absorption"), a trait related to hypnotic susceptibility. *Journal of Abnormal Psychology, 83*, 268-77.

Tellegen, A. (1992). *Note on the structure and meaning of the MPQ absorption scale*. Unpublished manuscript, University of Minnesota.

Waller, N.G., Putnam, F.W., & Carlson, E.B. (1996). *Types of dissociation and dissociative types: A taxometric analysis of dissociative experiences*. Psychological Methods, 1(3), 300-321.

Zijl, A. & Sloboda, S. (2011). Performers' experienced emotions in the construction of expressive musical performance: An exploratory investigation. *Psychology of Music*, 39, 196-219.

Appendix A

Participants

Jimi, 18, year 13 student; Gabrielle, 27, primary school teacher; Clara, 28, accounts assistant; Gary, 33, fundraiser; Louise, 34, peripatetic music teacher; Liz, 40, artist and housewife; Hazel, 43, writer; Mary, 45, history of art and design lecturer; Joy, 46, author; Hugh, 46, financier; Max, 46, film recording mixer and professional musician; Tina, 46, podiatrist; Chaz, 47, clinical hypnotherapist; David, 51, finance manager; Tilly, 53 artist and therapist; Monty, 55, clinical hypnotherapist and psychotherapist; Will, 57, professional musician and storyteller; D.A., 60, film and cultural studies lecturer; Judy, 66, retired teacher; Lilia, 71, retired.

Appendix B:

INFORMATION and INSTRUCTIONS SHEET

Alterations of experience with and without music

Stage 3 of this project looks at similarities and differences between a wide variety of involving everyday experiences with and *without* music. You're being invited to record your experiences for fourteen days in an informal diary, including:

1. **Experiences involving music**
2. **Experiences involving music *and* another activity (e.g. travel, hobbies, work)**
3. **Experiences involving a non-musical activity.**

You can choose to do this in written (handwritten or typed) or spoken (e.g. Dictaphone) form. There's no need to include all your experiences – you can include as many or as few occasions as you wish. There are no 'hidden agendas'. At times, experiences may be quite brief, subtle and easily forgotten. At other times they might be longer and more memorable.

The main aims of the informal diary are:

- To describe your experience soon after it occurs, preferably within the same day.
- To describe your experience and reactions to it in as much detail as you can.

Sometimes these episodes might involve hobbies or pastimes e.g. listening to music, playing music, painting, exercise, walking in the country, reading etc. At other times they might involve work. People may not consciously set out to create these experiences. They might just have put on music or opened a book to pass the time. Alternatively, some episodes might involve other everyday activities such as eating or travelling.

Instructions

1. For each episode, please complete an experience response sheet. These are essentially 'tick sheets' that record the 'when and where' elements of the experience. They are brief (and very quick to complete!)
2. Log the experience in detail. Some people find it helps to write in the present tense.
3. If possible, **send your diary entries to me as you complete them**, rather than in one batch at the end of the two weeks. This means I can contact you if anything's unclear whilst the experience is still fresh in your mind.

If you have any queries feel free to contact me at any time.

Appendix C:

Project stage 3: EXPERIENCE RESPONSE SHEET Number:

Shifts of consciousness in experiences with and without music

Date_____ Time experience occurred_____ Time logged_____

Approximate length of episode_____

What had you been doing previously?_____

What was the **main** thing you were doing during the episode?
_____

What were the principal reasons for doing this particular activity? (tick as many as apply)

- I had to do it (i.e. it was part of my work/duty/responsibility)
- I wanted to do it (e.g. it gave me pleasure/satisfaction/fulfilment)
- It was a basic part of my routine (e.g. something so habitual that I don't think about my motivations for doing it)
- I had nothing else to do (i.e. I was filling in time)
- Other (please state)_____

Here are some ways in which moods or states can be described, paired as opposites. For each pair, put an 'S' (for 'start') in the category boxes that most closely describe the way you felt before the experience. If the way you felt changed during the experience, write an 'E' (for 'end') in the space that most clearly describes where you changed to. If the way you felt did not change, put 'S' and 'E' in the same place.

	Very	Quite	Somewhat	Neither	Somewhat	Quite	Very	
Alert								Drowsy
Secure								Insecure
Nostalgic								In the present
Lonely								Connected
Involved								Detached
Tense								Relaxed
Energetic								Tired

Are there any important ways you felt during the experience which are not covered by the above list? Please state them_____

Appendix D

Project Stage 3: PARTICIPANT FEEDBACK QUESTIONNAIRE

- Do you agree or disagree with what's being said about your experiences?
- Are there things there that you hadn't reflected on, but which seem to fit with how you experience different things?
- Do the similarities and differences identified between music and other activities ring true for you?
- Does it make you think about the way you experience things in new ways, or offer nothing that you weren't already aware of?
- Do the main ideas and conclusions capture something, for you, about the quality of everyday involving experiences?

Appendix E. IPA and its use in the study:

IPA was developed by the psychologist Jonathan A Smith. Its focus is on lived experience of individuals, i.e. it aims to access 'the individual's account of reality rather than an objective reality itself' (Smith, 1999: 282). IPA is well suited to the exploratory stage of qualitative research as it is 'especially useful when one is concerned with complexity, process or novelty' (Smith & Osborn, 2004: 53). Semi-structured interviews have constituted the most common data-collection method, allowing for ongoing real-time dialogue between researcher and participant, but unstructured diaries or personal accounts have also been used (as in Boserman's (2009) diary study of cannabis use) and are acknowledged to be compatible with IPA (Smith & Osborn, 2004: 55). IPA recognizes that access to subjective experience of participants 'depends on, and is complicated by, the researcher's own conceptions' (Smith & Osborn, 2004: 51), and therefore encompasses different interpretative stances, termed 'empathic' and 'questioning' hermeneutics (Smith & Osborn, 2004: 51), so minimizing ungrounded theorizing, yet offering an opportunity to highlight themes participants might be less aware of. As is the case with grounded theory methods (e.g. Charmaz, 2001), themes are derived inductively from the data, not pre-conceived hypotheses. IPA is iterative, involving repeated readings of interview and/or diary transcripts in order to gather emergent themes. The approach is idiographic, i.e

analysis focuses on detailed examination of individual cases before attempting to compare them. The interpretation begins at a descriptive level (summarising participant comments, use of language etc) before extracting themes from these summary statements. The researcher then looks for connections between these themes (‘thematic clustering’). As thematic groups emerge, the thematic connections are verified by checking the original transcript. In this way 'one is constantly checking one's own sense-making against what the person has actually said' (Smith & Osborne, 72). Thematic groups are eventually attached to superordinate concepts (Smith & Osborne, 2004: 71). The superordinate list from one transcript may then be compared with other transcripts to construct an overarching set of thematic categories.

However, in accordance with the aims of IPA, the themes arising from the current study were not simply selected on the basis of frequency of occurrence within the data. Other factors, including 'the [phenomenological] richness of particular passages that highlight the themes' (Smith & Osborn, 2004: 76) and contribution of themes to the holistic quality of individual experiences were taken into account. In addition, each theme was subsequently illustrated using instances in the documentation that would most clearly show the interpretative process to be traceable back to (and so spiral from) the respondent's comments.