Sound branding: The role of music in consumer perceptions, behaviours, and practitioner beliefs

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Abstract

This thesis investigates the role of music in branding and its impacts on consumer perceptions and behaviours. Sound branding (also called 'audio branding' or 'sonic branding') is the use of sound to represent a brand, build a brand identity, and influence consumers. It is both a complex, multidisciplinary research topic and a real world practice. This thesis examines the relationship between academic and practitioner perspectives, and uses this as the starting point for examining how music (rather than the larger category of 'sound') is used in sound branding to influence consumer perceptions and behaviours.

A series of interviews with sound branding practitioners sought to understand their beliefs about how sound branding can influence consumers' perceptions and behaviours (Study 1). Practitioners argued that sound can deeply connect consumers to brands through eliciting emotional responses and increasing brand relevance to consumers, and interacting with other sensory modalities but, in their terms, they have yet to 'prove' the value of sound branding in order to develop it into an expert discipline within the broader branding industry. Some practitioners expressed interest in understanding how sound interacts with other sensory modalities in branding, but viewed their practice of multisensory branding as limited. The remainder of the thesis investigates the larger topic of sound branding through two foci this identified: namely the role of affective states induced by music (Study 2), and the contribution of music to perceptions of brand 'personality' and their relationship to consumer traits (Study 3). Study 2 used an online shopping task preceded by a music manipulation to investigate the effects of music (in sound branding) and colour on consumers' affective states and their subsequent buying behaviour using an online shopping task, which was preceded by music manipulation. The study showed that music-induced mood states affect consumers' willingness to pay a higher price for products that are associated with the same arousing qualities as the music. Moreover, congruency in the arousing qualities of the music and colour of the shopping website had an increased positive effect on consumers' brand perceptions and behaviour, extending understanding of congruence in multisensory branding. Study 3 used an online self-report design to investigate the influence of sound and logo in colour form on consumers' perceptions of a brand's personality, and whether this is mediated by consumers' own music preferences and personalities. The study showed that music can influence perceptions of a brand's personality and that brand personalities created using music are liked more by people with similar personality traits to that of the

brand. In addition, music genres can strengthen or mediate brand personality perceptions when presented in conjunction with colour. Together these findings highlight the importance of congruence within the practice of sound branding: sound branding is not experienced by consumers in isolation of other factors and should be considered in relation to other sensory modalities in branding.

Acknowledgements

Contents

List of figures

List of tables

Chapter 1 – Understanding sound branding as a multidisciplinary research topic

1.1 Introduction: the emerging practice of sound branding

This thesis investigates the role of sound in branding and the impacts it has on consumer perceptions and behaviours. Historically, companies have used sound across multiple consumer 'touchpoints'; 'touchpoints' being defined as opportunities where a brand can communicate with consumers, i.e. where a potential or actual customer comes into contact with the brand. The use of sound in branding can typically be found in touchpoints of TV or radio advertisements, physical establishments (such as supermarkets, hotel lobbies, offices or on airplanes), or within customer service channels such as telephone hold music (Jackson, 2003) and has existed for decades. However, there is a widespread belief that saturation in advertising in recent years has meant it is getting harder for brands to attract consumers' attention. As a result of this, brand marketers are exploring new ways to get noticed, such as using multisensory elements to communicate the brand's identity and sharpen the image of the brand as perceived in consumers' minds (Lindstrom, 2005; Hultén, 2011). This exploration of the possibilities of branding coincides with a rise in sound branding specialists who are both practicing and advocating for sound to be incorporated into touchpoints in ways that are strategic, holistic, and reflective of the brand (Beckerman, 2014). Several of these practitioners have gained prominence from publishing books on the topic of sound branding or multisensory branding that includes sound (Jackson, 2003; Lindstrom, 2005; Gobé, 2001; Beckerman, 2014; Treasure, 2007). Alongside this, other practitioners in 2009 formed the Audio Branding Academy that describes itself as a 'think tank [that] possesses a strong, global network of experts and is constantly developing excellent competency clusters' (http://audio-branding-academy.org/about/aba/). The Audio Branding Academy now hosts an annual competition for sound design, an annual summit for its members to discuss and share their work, and it also maintains an online database of sound branding logos. While these are clear signs that there is interest from sound designers and branding practitioners to develop and influence the use of sound in branding, there is much that is unknown about how sound in branding works and the extent to which it can affect consumer perceptions and behaviours.

This thesis is a study of sound branding comprising three empirical studies guided by two main research aims: the first aim is to extend our current knowledge of how sound branding influences consumers' perceptions and behaviours. This is clearly too

broad of an aim for a thesis; I address this through the examination of case studies (chapters 4 and 5) that are shaped by the literature review (chapter 2) and a qualitative study consisting of interviews with sound branding practitioners (chapter 3). Conducting interviews fulfils the second research aim, which is to address the lack of integrated literature that includes both empirical research and practitioners' perspectives as highlighted in the literature review. The main body of literature is presented in chapter 2 and additional, more specific literature is introduced as needed for the case studies in chapters 4 and 5.

The remainder of this chapter is intended to position the thesis as it relates to the topic of sound branding. The next section presents an overview of relevant terminology, followed by research considerations. A brief summary of key branding terms is presented before an overview of the current state of knowledge about the role of sound in branding and the impacts it has on consumer perceptions and behaviour. Finally, I present research questions and a summary of the subsequent chapters.

1.1.1 Terminology.

As mentioned in the previous section, there is interest from some practitioners to shift the way in which sound in branding is used toward it being used as a brand element, one that communicates the brand's identity and sharpens the image of the brand as perceived in consumers' minds, but there is no consensus on a new name that represents this shift. Practitioners seem to have settled on several variations: 'sound branding', 'audio branding', 'sonic branding' and to a lesser extent 'acoustic branding'. A fairly comprehensive review of these names is provided by Gustafsson (2015) that highlights some differences in interpretation: for example, according to Gustafsson 'audio branding' refers to the approach of developing auditory branding elements, while 'acoustic branding' refers to the practice or application of implementing sound in branding. Nevertheless, there is sufficient agreement amongst practitioners that all labels can be defined as branding with music and sound (Gustafsson, 2015) or 'music and sound in brand communication' (Bronner & Hirt, 2009, p. 86). The challenge with not having consensus on a name is that it hinders the creation of a unified, and therefore stronger, presence within the broader branding industry (Gustafsson, 2015). I have chosen to use the term 'sound branding' throughout this thesis because I consider it to be the most straightforward name to interpret and I believe it best reflects the research area that I focus on, which is the approach to using sound to represent a brand, build a brand identity and influence consumers.

1.1.2 Research considerations (methodological approach, research participants, ethical considerations).

Sound branding is multidisciplinary, covering brand management, consumer psychology, cognitive psychology, music psychology, and many sub-disciplines such as business strategy, music management and marketing, therefore a holistic approach to research is appropriate. Sound branding is a relatively new and understudied academic topic and so this thesis is exploratory in character. The research methods undertaken represent a pragmatic choice relevant to the research aims and questions. In the absence of sufficient existing knowledge with which to construct a framework that can be tested, I use interviews with sound branding practitioners to investigate practitioners' perspectives and their relationship to academic research, and I use case studies to extend current knowledge of how sound branding influences consumers' perceptions and behaviours.

There are a number of research considerations specific to studying sound branding. In one of the few accounts of sound branding research, North and Hargreaves (2008) called for future research to hold greater ecological validity: they point out that sound branding is a real world practice and practitioners have criticised academic research for being too challenging to put into practice, either because the work is overly theoretical or limiting in scope. It could be beneficial for researchers to include more practical guidelines or clearer direction for brand marketers on how to understand, interpret and apply empirical findings. Another criticism called out by North and Hargreaves (2008) is that participants in applied psychology studies are all too often students who perform in laboratory experiment settings. Branding is experienced by the general public in consumer environments, so it is difficult to know how generaliseable such results may be. This is also pertinent because brands typically have target audiences they are trying to reach and students may respond differently compared to the target audience. Finally, in consideration of ecological validity, many academic studies measure participants' purchase intent as a proxy for whether they were influenced by branding stimuli to make a purchase. Actual purchase behaviour, including which products were purchased and amount spent for individual participants is often difficult to obtain when studies are conducted in the field due to ethical reasons of gaining permission and getting businesses to share customer data. These considerations highlight the methodological challenges presented when trying to conduct empirical research into sound branding.

1.2 Conceptualising branding: a brief review

This section presents an overview of key branding terms relevant to the thesis, and their place within the context of two paradigms that represent different perspectives within branding, namely the positivistic and the constructivist. Seven different approaches within the two paradigms have evolved since the mid-1980s (O'Reilly, Larsen & Kubacki, 2013; Heding, Knudtzen & Bjerre, 2015). The positivistic paradigm conceptualises the ways in which brands can create and represent their identity, while the constructivist paradigm represents approaches that comprise relationships between a brand and consumers that result in the continuing development of the brand (Figure 1). For the purposes of the thesis that is focused on how brands create their identities through the use of sound, the approaches within the positivistic paradigm are relevant and reviewed below.

There are four approaches a brand can adopt in order to create a unique identity (O'Reilly, Larsen & Kubacki, 2013; Heding, Knudtzen & Bjerre, 2015). The 'economic' approach refers to the development of the brand as it relates to its marketing activities, such as pricing and promotions. The 'identity' approach connects the brand's identity with the company behind the brand. For example, Google is reputed to have a difficult interview process in order to hire high performing employees and the company is known for solving large scale, challenging problems. The 'personality' approach identifies the brand as having a personality, possessing the same types of traits as people. Representing a brand in the form of brand personality may have the advantage of attracting consumers who self-identify with the brand, such as Apple users consider themselves to be creative, passionate, and innovative. The 'consumer-based' approach is based on Keller's Brand Equity Framework (1993) that suggests a brand's identity creates a series of associations to the brand that forms the brand image, otherwise known as the consumer's perceptions of the brand.

Two paradigms	Three periods of time	Seven brand approaches
Positivistic	Company/sender focus	The economic approach
		The identity approach
	Human/receiver focus	The consumer-based approach
		The personality approach
Constructivist	Cultural/context focus	The relational approach
		The community approach
		The cultural approach

Figure 1. Approaches of the brand paradigm (Heding, Knudtzen & Bjerre, 2015)

Brand Equity (Keller, 1993; O'Reilly, Larsen & Kubacki, 2013; Heding, Knudtzen & Bjerre, 2015), is derived from brand knowledge, which is what consumers know about the brand. It is built upon two concepts, brand awareness and brand image, as shown in Figure 2.
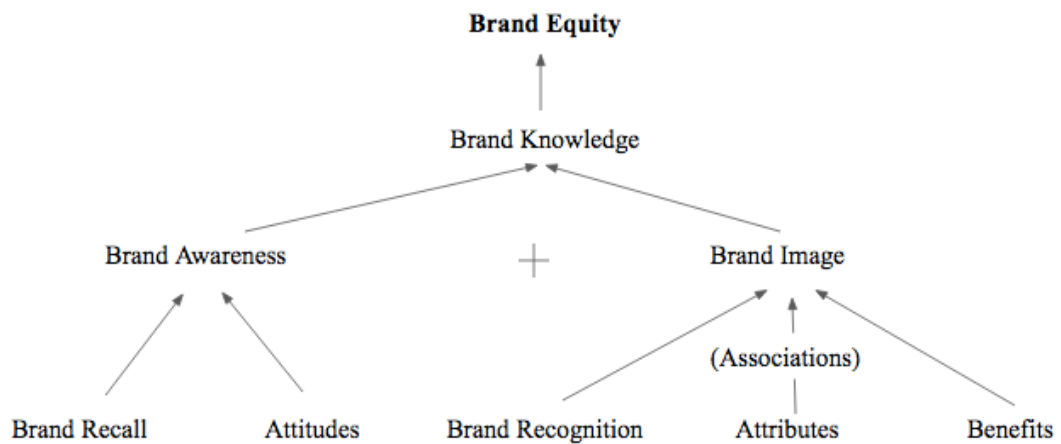
Figure 2. Brand Equity framework (Keller, 1993)

Brand awareness is considered to be the extent to which consumers recall and recognize the brand, whereas Brand image refers to what consumers think of when they think about the brand (Keller, 1993; Heding, Knudtzen & Bjerre, 2015). Brand image comprises brand associations, which are anything about the brand that comes to the consumer's mind. Keller (1993) identifies three ways in which brand associations are formed. Brand attributes are characteristics or features of the brand that brands express from which consumers may come to identify with the brand. Brand benefits are the value that consumers believe the brand can provide to them.

Brand attitudes are the formation of consumers' evaluation of the brand that often determines consumers' behaviours, such as likelihood to purchase, toward the brand. Consumers experience brand associations from direct experience or interaction with the brand and its products, or from information communicated by the brand through its marketing or advertising activities (Keller, 1993).

One point emerging from these branding approaches that will be important for this thesis is the idea that a unified Brand Image is due to the 'congruence' of brand associations that is the extent to which there is coherence and consistency between attributes, benefits, and attitudes (Keller, 1993; Heding, Knudtzen & Bjerre, 2015). A brand can actively manage its identity in order to maximize congruence. A cohesive brand image may be more likely to affect holistic or gestalt reactions to the brand that results in increased positive perceptions of the brand. Gestalt reactions refer to the central principle of Gestalt psychology that the mind forms perceptions of a whole based on organising tendencies, therefore the degree of cohesiveness between Brand Associations will affect the extent to which consumers positively perceive the brand or how easily they may recall or recognise a brand.

When studying sound branding, it is necessary to consider it within the general construct of branding in order to be able to evaluate its contribution to branding and effectiveness on consumers.

1.3 Current state of knowledge & scope of research

In this section I present the current state of knowledge on the role of sound in branding. I begin with the definition of sound branding and the existing challenges surrounding it that have research implications. Following that, I present findings on the effectiveness of sound in branding from the perspective of the functional uses of sound. Finally, I review the psychological concepts and approaches to explain the effects of sound on consumers' perceptions and behaviours.

1.3.1 Defining sound branding.

Sound branding is challenging to define because it is debatable the extent to which sounds in consumer touchpoints are or should be considered 'sound branding.' Sound branding is referred to in sound branding books written by practitioners as pertaining to the larger category of sound that includes music, voice, ambient sounds, and artificial sounds (Jackson, 2003; Treasure, 2007; Beckerman, 2014). Treasure (2007)

also includes silence as an element of important consideration in sound branding because too much sound may become a distraction and unwelcome noise can create negative brand perceptions.

Kilian (2009) argued that sound branding should be defined as consisting of sounds that 'affect us emotionally and increase brand recognition, oftentimes beyond our awareness and our field of action' (p. 42). Based on this definition, sound in branding is any sound that can elicit an emotional response and is beneficial to the brand, even when consumers are not consciously aware of it (Gustafsson, 2015). Kilian's definition and Gustafsson's interpretation of it are both problematic and helpful. Gustafsson suggests that only sounds that generate a positive response to a brand should be considered 'sound branding.' The problem with this is that consumers associate both positive and negative responses to a brand, the latter of which are not beneficial to the brand. Sunchips introduced a biodegradable bag in 2009 that received a negative response from consumers due to the loudness of the bags and sales reportedly dropped 11% in the first 12 months post-launch as a result (Wilburn, K. & Wilburn, R., 2015). Whether or not the sound of the new biodegradable bags was intentionally executed as a branding opportunity for Sunchips, consumers associated the sound negatively with the brand as demonstrated by the decrease in sales.

Kilian's definition of sound branding (see above) is helpful because it frames the definition in terms of the use of sound as an identifier for the brand. In other words, if the sound serves to differentiate the brand from another, then it should be considered a sound branding element. However, consumers typically experience brands holistically and sound interacts with other sensory stimuli in branding executions, therefore a sound heard on its own may not be a brand differentiator, and may need to be experienced in conjunction with other sensory stimuli in order to contribute toward identifying the brand. For example, the sound of a soda can tab being pulled does not identify which brand of soda the sound is associated with, but when it is heard together with the colours red and white being shown, it becomes an identifier for Coca Cola. The sound of Muzak (background music) playing in a supermarket may not distinguish the supermarket brand, but when it is heard together with the 'M' logo being shown, it becomes an identifier for Morrison's. As these examples illustrate, it may be necessary to include under the umbrella definition of sound branding those sounds that can contribute to a brand in multisensory conditions.

The range of applications of sound in branding represents challenges and potential confusion for defining sound branding. This is problematic for the purposes of research and also in development of the practice because the range is both broad and relatively undefined making it difficult to comprehend (Gustafsson, 2015). On the one hand, it could be interpreted as relating to how well the sound 'fits' or *represents* the brand's identity (Bode, 2009; Beverland, Lim, Morrison & Terziovski, 2006; Gustafsson, 2015). For example, if a brand's identity is 'fun and youthful,' sounds associated with the brand that are perceived by consumers to represent 'fun and youthful' attributes are considered to be congruent with the brand's identity, whereas sounds that are perceived as 'boring and old-fashioned' are considered to be ill-fitting. On the other hand, sound branding could be interpreted as a 'typology of brand elements' ranging from 'narrowly defined' to 'broadly defined' (Kilian, 2009) that relates to the degree to which sounds are *associated* with the brand. For example, a sound logo such as the Intel Chime is solely associated with the brand Intel because it holds no other interpretation or meaning beyond communicating the brand's identity. Therefore, sound logos are considered to be 'narrowly defined', whereas a celebrity's endorsement of a brand may be considered 'broadly defined' because an endorsement holds another reference that is the celebrity, and the celebrity is associated with the brand only when they are endorsing the brand. Gustafsson (2015) references both interpretations in her review of sound branding literature and describes the interpretations as being similar, but it can help to think about these in terms of dimensions of operation instead. If we consider that sound branding can be defined according to the relative *association to* and *representation of* a brand, this may be visualised on two perpendicular axes (or 'dimensions') as such in Figure 3.

Strong 'fit'
(representation of a brand)

'Broadly defined'
(association to a brand)

'Narrowly defined'
(association to a brand)

Weak 'fit'
(representation of a brand)
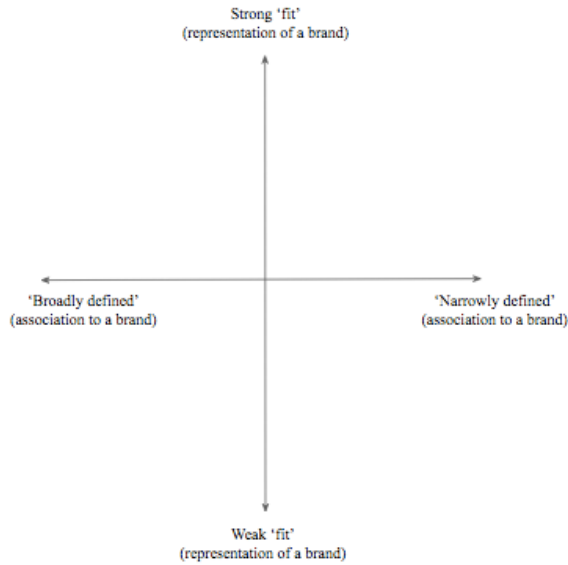
Figure 3. Dimensions of sound branding (Gustafsson, 2015)

According to the perspectives presented above, sound branding can be defined in several ways. It can comprise multiple categories of sound types, exist within any and all consumer touchpoints, and it can relate to a brand's identity by association and representation. There is currently no consensus on the definition of sound branding and given that my thesis takes an exploratory approach, therefore I use a broad definition of sound branding that includes sounds which can communicate a brand's identity, as well as those which may not communicate a brand's identity on their own but are used in consumer touchpoints because sounds can contribute to a brand in multisensory conditions. The next section examines research on the effectiveness of key uses of sound in branding under the umbrella of this definition.

1.3.2 The functional uses of sound branding.

One way in which existing empirical research investigating the effectiveness of sound branding can be categorized is according to the functional use of sound in consumer touch points. Branding effectiveness includes aiding memorability, recognition, recall, and evaluation of the brand. Sound in particular is believed to be effective in branding by practitioners because it has strong ability to create recognition and build brand awareness among consumers that results in 'positive feelings' about the brand (Lindstrom, 2005, p.79). Four categories of functional uses of sound branding identified from sound branding books by practitioners (Jackson, 2003; Lindstrom, 2005; Beckerman, 2014; Treasure, 2007) are considered: (1) sound as a brand

identifier, (2) sound as auditory icons in products, (3) sound to enhance brand image, and (4) sound to elicit emotional responses from consumers. Each of these will be reviewed in turn with regard to their contribution to sound branding.

1.3.2.1 Sound as a brand identifier.

Jingles and sound logos are popular uses of sound in branding that are narrowly defined branding elements because they are solely associated with a brand (Kilian, 2009). While slightly different, they both primarily serve as memory devices or 'mnemonics' (Tom, 1990):

> A jingle is a short slogan, verse or tune designed to be easily remembered ... It usually has a single purpose – to be memorable – and is a sign for the brand whereas the logo is a symbol. The jingle is a mnemonic (intended to help the memory); the sonic logo a vessel for associations. (Jackson, 2003, p.9)

The first jingle was the NBC chime introduced in 1936, originally conceived to identify NBC on radio airwaves (Jackson, 2003). While jingles are now less popular than sound logos, the objective of jingles and sound logos is the same: they are intended to be easily recalled and their brevity enables quick memorisation. Brand identification is an important function because consumers often base purchase decisions on their attitudes towards a brand that they have formed over time and, at the time of purchase, the strength of brand recall could be a deciding factor. Recognition and recall are created through repeated exposure, and sound logos should be designed to facilitate both. Certain groups of sounds may be easier to remember because they repeat patterns or 'chunk' groups of similar sounding tones (Krishnan & Kellaris, 2010). Jingles are considered to be sonic versions of mnemonics because they employ deliberate techniques to enhance memory, such as rhymes or melodic tunes (Jackson, 2003) and have been reported to increase brand recall. Yalch (1991) conducted two experiments with the objective of understanding the conditions under which musical jingles enhance memory. By presenting mnemonics and verbal information with or without music, the results showed that slogan information presented with music was easier to retrieve than similar information presented without music. The findings in this experiment supported that of Wells, Burnett, and Moriarty (1989), who reported that finger-snapping, toe-tapping songs have tremendous power because they are so memorable. Wallace (1991) investigated the ease of recall in jingles using three verses of a ballad that were either spoken or sung. Results showed that the sung version was easier to remember because it had higher recall than the spoken version. However, Wallace (1991) suggested that repetition is a

variable that aids memorisation: when only one verse was heard, recall was not as strong. While jingles are effective for brand identification and recall, their functions are otherwise limited because they cannot convey a broad range of brand attributes therefore impression formation of the brand may be weak (Yalch, 1991; Wallace, 1991).

The speed and ease with which sound can be recalled in branding is a benefit to gaining consumers' attention. During radio and TV commercials, consumers will often not pay attention or turn down the volume. Through repeated exposure, a sound logo can serve as a mnemonic to recall the brand even without the consumer having to give full attention to the commercial; it can also contextualize or activate memories, as well as create associations between consumers and the brand:

> I was listening to a radio commercial ad for, I assume, computers. You see, I speak very little Italian. That is why my brain had decided not to listen to the radio station that was playing in the cafe. What I do understand, though, is the universal language of sound. The sound that had nearly pulled my ears out of their sockets was a strange one. In words: 'dum, da da da dummmm!' In sound, it is much more powerful and the Intel Pentium sonic logo, perhaps the most famous three seconds of music in the world, was the sound that took me 2,000 miles back to London and my job in commercial radio. (Jackson, 2003, p.2)

This quotation illustrates that, through memorisation, sound logos can be powerful tools for brand recognition and it also suggests that sound logos may potentially have long lasting recall benefits. Sounds used in products can also be brand identifiers if they are distinct from their competitors. This is reviewed next.

1.3.2.2 Sound as auditory icons in products.

According to Aaker (1996)'s Brand Identity theory, the 'Brand as Product' construct refers to the product that the brand is associated with. Brands build awareness for their products by creating product-related attributes and associations. Product sounds are intended to convey information about the product in one of two ways: the mechanics or functionality of the product based on product materials, such as the sound of the motor of a juicer that can communicate the strength of the juicer (Ludden, 2007), or to confirm users' interactions with the product, such as the wholly artificial start up sound of a computer turning on or a mobile phone's ringtone

(Gaver, 1998). Product sounds can also be brand signifiers if they are distinct from those of their competitors.

Research has shown that the visual design of a product can contribute to consumers' expectations of the product's sound. Ludden (2007) investigated how sounds contribute to the overall experience of a product by measuring people's reactions to first seeing the product and their reactions to then hearing the sounds of two electronic products, dust busters and juicers. The hypothesis was that, upon seeing the product, participants would form an expectation of how the product would sound when it is turned on that is based on its appearance. By performing sound manipulating, Ludden adjusted the sounds of dust busters and juicers to either fit or not fit the characteristics of the products' appearances. The results showed increased surprised response when the sound did not fit the perceptions of the product, confirming the hypothesis. Ludden also reported that, in some cases, the expression of a product's sound can amplify the overall expression of the product in question: a juicer rated to have a 'cute' sound was rated 'cuter' than when the sound of the juicer was not rated 'cute.' However, the same results were not found for dust busters, which may be because there are variances based upon the product type, the complexity of sound, and user interactions that make predictions difficult. Ludden's study shows how multisensory interaction between sound and visual effects can contribute to gestalt perceptions of the product. It also raises questions of how effective the effects of gestalt perceptions are in influencing consumers' responses to a brand. Does increased fit between multisensory stimuli lead to increased liking for a brand and behaviours, such as spending and branding choice? What is the impact of misfit between multisensory stimuli to consumers' responses to a brand?

1.3.2.3 Sound to enhance brand image (through endorsement partnerships).

Since the mid-1980s brands have increasingly found success in partnering with artists to expand their visibility and credibility through the transference of the artist's image to the brand's own, as well as to attract the artist's fans to become fans of the brand (Phillips, 2001). While brands typically form the partnership with the artists, the success from the artist-brand pairing is largely determined by consumers and based on whether they favour the partnership. Fans of an artist or band can react negatively against a brand if they believe the brand is not a good fit with the artist or band

(Englis & Pennell, 1994). This approach has the potential to create negative attitudes towards the brand and perhaps, in the longer term, for the artist or band. Congruence between artists and brands as it relates to target consumers should be an important consideration in branding. If incongruence is created, it could have a negative impact on consumer perceptions of the brand, as well as on consumer behaviour, because fans of the artist cannot identify themselves with the brand and therefore will not support it.

Music plays a significant part in defining younger consumers' identities which makes them likely to prefer or choose a brand if they associate it with music that reflects their identities (Pincus, 2005). A market research study conducted by Pincus showed a relationship between brand choice and favourite music genres, specifically for consumers under the age of 25. Additional results showed correlation between music genre and brand preferences: listeners of indie music were more likely to favour Vans, Doc Martens, and Gibson, while fans of dance music favoured Red Bull, Smirnoff and Technics, and fans of Pop music favoured Top Shop, Levi's and Evian.

There is evidence that music can increase brand preference through leveraging artist endorsements to transfer the image of the artist to the brand. In turn, this can enable brands to attract consumers based on the theory that consumers positively evaluate music, and therefore brands, with similar identities as their own.

1.3.2.4 Sound elicits emotional responses from consumers.

There has been consistent interest over the last few decades in the use of sound to affect consumers' mood states and emotions, from both academic researchers and practitioners. Sound can influence people's mood states and emotions (Juslin & Sloboda, 2010) and consumers often base their decision making on an evaluation of their feelings (Pham, 1998; Schwarz & Clore, 1983). Within the psychology of affect, mood states are generally understood to be low intensity and temporary states of feeling (Gardner, 1985), and are different from emotions, which are high intensity, last a few seconds, and hypothesised to influence consumers' attitudes and behaviours. Both have been argued to influence consumer behaviour. Dunbar (1990) argued that 'music makes you watch or listen [to advertising] in a different way' (p.200) than adverts without music because music can elicit from consumers an emotional response to the brand. Published in the same year, Bruner (1990) suggested that music can influence consumers' mood states and their behaviour in non-random

ways and, as a consequence, brands can intentionally and strategically use music in their marketing.

Sound branding books by practitioners present similar perspectives and beliefs that sound can influence consumers' emotions. There is a belief that an effective use of sound can create brand associations that elicit emotional responses from consumers:

> Recognition comes with association to very positive feelings – people who hear the Nokia name mentioned says it makes them feel positive – generally 'pleased,' 'excited,' 'satisfied,' 'cheerful,' or 'in control.' (Lindstrom, 2005, p.79)

It has also been suggested that sound in branding can lead to an increase in brand loyalty as demonstrated by consumers' lack of consideration of other brands in purchase decisions and the decision to purchase one brand over another (Jackson, 2003; Lindstrom, 2005; Gobé, 2001), although it is unclear whether sound can in fact increase brand loyalty.

The majority of research investigating the effects of sound on consumers' emotions has measured behaviours in consumer environments rather than brand perceptions. However, consumer environments are a consumer touchpoint and therefore fit within the broader definition of sound branding. Companies manage atmospheric variables, such as background music, noise, sizes, shapes, scents, as well as colours that can convey messages and influence customers' moods and feelings towards store environments and associated products and services (Kotler, 1973). Store atmospherics created with background music comprising characteristics that may induce low arousal states have been found to increase spend and time spent in a supermarket store (Milliman, 1982). In a subsequent study, Milliman (1986) reported that patrons in a restaurant took longer to eat their food and spent more on drinks when slow music played in the restaurant compared to fast music. Atmospherics that may induce high arousal states have been shown to increase purchase intent, spend and time spent shopping in clothing stores (Sherman, Mathur & Smith, 1997). Background music that increased consumers' pleasure states in a bank and a women's clothing store showed an increase in 'approach' behaviours that included intent to engage with staff and positive evaluation of the shopping experience (Dubé, Chebat, & Morin, 1995; Sweeney & Wyber, 2002).

One challenge with existing studies that examine the effects of sound on consumers' affective states is that they can generalise the extent to which sounds elicits emotional responses. For example, both of Milliman's studies (1982, 1986) used an observational method that did not measure participants' mood states, therefore it is unknown if the atmospherics (slow tempo music) induced low arousal states in participants. Recent development in music and emotion research has produced a firmer basis for conceptualising, measuring and inducing affective states (Juslin & Sloboda, 2010). This presents an opportunity for the field of sound branding to better understand how sound influences consumers' emotions and the impact it can have on behaviours. There is also opportunity to investigate impact on brand perceptions, as this is something that is relatively understudied in consumer environments to date.

This brief review indicates that sound can serve multiple functions in branding that can apply across consumer touchpoints. There is evidence that sound can affect consumers differently depending on how it is used that can lead to multiple perceptual and behavioural outcomes as it relates to a brand. The next section reviews the psychological processes that have been proposed to understand how sound can influence consumer perceptions and behaviours.

1.4 Psychological processes underlying the effects of sound on consumer behaviour

Three main psychological mechanisms have been identified to explain how sound can affect consumer behaviour: classical conditioning (Gorn, 1982), Elaboration Likelihood Model (ELM) (Petty & Cacioppo, 1981; Park & Young, 1986) and priming/musical 'fit' (North & Hargreaves, 2008). Classical conditioning in advertising is a process that suggests consumers may develop positive attitudes and demonstrate positive behaviours (such as product choice) towards an advertised product because it is shown in association with stimuli that are positively reacted to (Gorn, 1982). In his study, Gorn found that participants were more likely to select the advertised product over the non-advertised product when the advertised product was shown with 'liked' music compared to when it was shown with 'disliked' music (the music samples were pre-tested to be 'liked' and 'disliked'). Conversely, Gorn found that participants were more likely to select the non-advertised product over the advertised product when the advertised product was shown with 'disliked' music compared to when it was shown with 'liked' music. From these results, Gorn suggested that the music stimuli influenced consumers' choice of product based on

their liking for the music. Since this study was conducted in 1982, it has been replicated numerous times without the same success or degree of statistical significance (Kellaris & Cox, 1989; Allen & Madden, 1985; Bierley, McSweeney, & Vannieuwkerk, 1985; Stuart, Shimp, & Engle 1987). It has been suggested that Gorn's results may have been affected by demand characteristics (Kellaris & Cox, 1989). Numerous studies using sound have proven classical conditioning to be effective in marketing conditions, yet results are so varied that the cause of conditioning effects are unclear (North and Hargreaves, 2008). As a theory, classical conditioning is both limiting and too broad to be definitive, although it remains a consideration for explaining how sound can affect consumer behaviour.

Elaboration Likelihood Model (ELM), developed by Petty and Cacioppo (1986), proposes that attitude formation can occur via two different processing routes, central and peripheral. When the central route is employed, consumers process advertising messages cognitively and that results in deeper engagement with the narrative and persuasive argument. Attitude formation under the central route is considered to be long lasting and a likely indicator of purchase decision making because consumers are motivated to evaluate the information presented in the advert in question. When the peripheral route is employed, consumers are more influenced by stimuli in the advert that serve as ancillary cues to support the main advertising message than the main message itself. Attitude formation under the peripheral route is considered to be ephemeral compared to attitude formation under the central route because the consumers' level of involvement in processing the ad information is lower. Background music is considered to serve as a peripheral cue because it supports the main advertising message. Park and Young (1986) investigated the use of background music in low and high involvement advertising situations and found that it was effective in influencing attitude formation in low involvement settings, but potentially distracting in high involvement settings. These findings confirm that background music can function as a peripheral cue. In a later study, MacInnis and Park (1991) found that background music is distracting in high involvement situations when it is not an effective accompaniment to the message. In other words, consumers' attention is more likely to be distracted by the music when there is no congruency or 'fit' between their perceptions of the music and the ad message, which in turn contributes to less positive attitude formation.

The concept of congruence or 'fit' between music and the brand proposes that music has communicative properties that can 'prime' relevant beliefs about the advertised product or brand (North, Hargreaves, & McKendrick, 1997, 1991) which can increase positive attitude formation and behaviours in favour of the brand. Priming is defined as the use of sound to activate consumers' knowledge networks that influences their perceptions or behaviours (North & Hargreaves, 2007). In addition to findings by MacInnis and Park (1991) that showed a lack of congruence has the potential to distract consumers from evaluating an ad message, there have been numerous studies that have reported the effects of congruence on both consumers' brand perceptions and their behaviours across a wide range of consumer settings. For example, congruence between music and other atmospheric in-store elements is associated with consumers having stronger brand perceptions (Beverland, Lim, Morrison & Terziovski, 2006). Music genres can communicate stereotypes about consumers and products they may be interested in. For example, classical music has been shown to prime stereotypes of affluence such that playing it in a jewellery store prompted greater intentions to purchase (Grewal, Baker, Levy & Voss, 2003). Music can also prime associations to countries of origin that affect product choice: playing French music in a supermarket led to a significant increase in sales of French wine and playing German music led to a significant increase in sales of German wine (North, Hargreaves & McKendrick, 1997, 1999). Congruence can also exist between music used in store and the consumers' self-image that can lead to an increase in store patronage (Sirgy, Grewal & Mangleburg, 2000). Music can also interact with other sensory stimuli, such as ambient scent: when there was congruence between multisensory stimuli in arousal quality, consumers reported higher levels of satisfaction with the store and likelihood to purchase than those who experienced incongruence between stimuli (Mattila & Wirtz, 2001). The majority of research in this area shows how musical fit in consumer touchpoints can influence consumers' behaviours and there is rather less evidence regarding its influence on brand perceptions. Nonetheless, this evidence indicates that music can prime a broad range of beliefs and associations and this raises the possibility that it may prime brand perceptions.

As indicated above, there is evidence that sound branding can affect consumer perceptions and behaviours. The numerous studies that examine the psychological processes highlight its effectiveness in increasing consumer engagement and sales in commercial environments, and it is encouraging that many of these studies have been

conducted in the field. However, it is currently unclear how and under what
circumstances priming is effective in influencing consumers' responses, in part
because of the broad range of beliefs and behaviours that priming has been shown to
activate that suggests there may be other mechanisms or factors and warrants closer
examination. For example, as reported in previous sections, consumers' affective
states and brand relevance as it relates to self-identity can influence consumers'
response toward a brand, so it would be worthwhile to understand how they may
interact with the effects of priming. It is also unclear the extent to which the effects of
congruence between sensory stimuli may influence brand perceptions, decision
making and other consumer behaviours, such as brand loyalty or price sensitivity.
There are numerous variables to account for when testing the effectiveness of priming
that more research is needed.

Sound branding is a complex topic for a number of reasons. It is relatively undefined,
in part because it represents a current shift in how sound is perceived and used in
branding by practitioners, and it can cover a broad range of sound applications that
serve different functions in consumer settings. It is multidisciplinary, so it has to be
understood within brand strategy and management frameworks, as well as consumer
psychology and music psychology theories and concepts. Consumers experience
brands holistically and therefore sound branding should be considered for its effects
on consumers and how it interacts with other sensory stimuli in branding.

1.5 Thesis research aims and questions

The brief review presented above indicates the current state of the study of sound
branding. The first aim of the thesis is to extend current knowledge of how sound
branding influences consumers' perceptions and behaviours. The second examines
the level of integration between empirical academic research and practitioners'
perspectives given that sound branding is a real world practice. The research
presented in this chapter highlights three questions for further investigation.

1.5.1 Question 1: How does sound influence consumers' perceptions of the brand?

Consumers develop brand perceptions from brand associations that are created and
maintained by the brand (Keller, 1993). Empirical evidence of the psychological
process of priming has shown that sound has communicative properties that can

'prime' relevant attributes or beliefs about the advertised product or brand (North, Hargreaves, & McKendrick, 1997, 1991). The evidence is less clear about what the communicative properties of sound are that activate priming and further research is needed to understand the conditions under which priming through sound is effective.

There is also evidence that suggests music can influence how consumers perceive a brand through the image transfer of artists used to endorse the brand (Pincus, 2005). Consequently, brands may attract consumers who are fans of the artist. While the market research by Pincus (2005) indicates that artist endorsement is a tactic used by brands, it raises a broader question about the role that music preferences play in consumers' perceptions of a brand how that relates to characteristics of the consumer such as and their preference and liking for a brand, or even their own personality characteristics.

1.5.2 Question 2: How do the interactions between different sensory stimuli affect consumers' perceptions of the brand and consumer behaviours?

Branding exists in multimodal consumer environments, so it is relevant to consider branding as a multisensory phenomenon and evaluate how interactions between sound and other sensory stimuli make a difference to how consumers respond to a brand. According to Aaker (1996), a cohesive brand image is likely to create holistic or gestalt reactions to the brand that results in increased positive perceptions of the brand. As reported by Ludden and Schifferstein (2007), predictions for how different product stimuli interactions may be perceived are difficult to make because of variances based on types of interactions, the specific stimuli in question, and the products. This raises the question of whether and how sound interacts with other stimuli such that it that affects brand perceptions and behaviours.

1.5.3 Question 3: How do the effects of music on consumers' affective states influence their responses to a brand?

In the review above I showed that one way in which sound branding is defined is it can elicit emotional responses from consumers that benefit the brand (Kilian, 2009; Gustafsson, 2015). These responses can range from developing 'positive feelings' about the brand (Lindstrom, 2005, p.79) to experiencing changes in affective state as induced by music that result in influencing consumer evaluations and approach behaviours toward the brand including intent to engage with staff (Dubé, Chebat & Morin, 1995; Sweeney & Wyber, 2002). This raises the question of how consumers' emotions influenced by music can affect not only their brand perceptions and

approach behaviours, but also purchase behaviours such as brand and product choice and spend.

1.6 Chapter overview

In this chapter I have argued that sound contributes to a brand in multisensory conditions. The remainder of this thesis examines the topic of sound branding under the definition that it includes sounds which can communicate a brand's identity, as well as those which may not communicate a brand's identity on their own but are used in consumer touchpoints. Chapter 2 presents a literature review that addresses more closely the research questions presented above by examining existing knowledge from academic research and grey literature, and uses this to consider how music is used in sound branding and how it can influence consumer perceptions and behaviours. Empirical chapters follow, as these arise out of the research questions refined by the literature review and are organised according to a progression of topic exploration. Chapter 3 reports on interviews with sound branding practitioners in order to address the lack of integrated literature that includes both empirical research and practitioners' perspectives as highlighted in the literature review. The combined findings from the literature review and the evidence from these interviews indicates the need for a better understanding of how consumer behaviours and perceptions are impacted by different sensory modality interactions in branding, and the way branding engages consumers' affective states and preferences. Chapter 4 presents a study investigating the effects of music in sound branding on consumer mood states and their purchasing behaviour in an online store. Chapter 5 presents a study which probes the influence of sound on consumers' perceptions of a brand's personality and whether perceptions of a brand's personality and liking for the brand are mediated by consumers' own music preferences and personalities. Finally, Chapter 6 concludes the research, drawing together data from each study, and evaluates the main findings in their broader context and contribution to knowledge before concluding with a discussion of practical implications of the findings and potential areas for future research.

Chapter 2 – Two perspectives on understanding sound branding

2.1 Introduction

The focus of this literature review is to better understand the current state of the role and effectiveness of sound in branding that brings together two relevant bodies of literature: academic research on the effects of sound on consumer perceptions and behaviour, and non-academic books on the topic of sound branding written by current practitioners (Jackson, 2003; Treasure, 2007; Beckerman, 2014; Lindstrom, 2005; Gobé, 2001; Jackson, Jankovich & Sheinkop, 2013). It is relevant and important to consider both sets of literature because neither wholly covers the topic of sound branding, but together they provide a more comprehensive representation of the sound branding landscape. Non-academic books on sound branding by practitioners focus mostly on definitions and strategies of sound branding as understood and applied by the authors. This literature is particularly useful for examining the research questions identified in the previous chapter, but its drawback is a lack of supporting evidence and what exists is often imprecise because the practice is in its infancy and has yet to define success measures (Jackson, 2003). Academic research into sound branding is mostly empirical and draws from consumer psychology, marketing, and brand management fields that highlight specific influences of sound on consumer perceptions and behaviours. It has rarely studied the relationship between sound and a brand's identity (Brodsky, 2011; Baker, Trahan & Müllensiefen, 2016). However, this body of research is valuable in its contribution to understanding the mechanisms or processes that inform how sound functions as a sensory stimulus in branding. Neither body of literature sufficiently references the other, yet for the most part they reflect the same interests and phenomena. This embodies a division between academic and non-academic spheres. This literature review has the potential to benefit both the study and practice of sound branding because both are interested in understanding the effects of sound in branding and this presents an opportunity to better transfer knowledge between academics and practitioners.

This chapter is organized by examining the research questions identified in the Introduction (chapter 1) and what is currently known about how sound branding works. Insights are drawn from sound branding books and empirical research that underpin the relevant mechanisms or processes in sound branding. Several topics related to the original research questions are discussed: the concepts semiotics and 'priming' of associative knowledge networks are reviewed in relation to the use of

sound to build brand associations; crossmodal correspondences, Gestalt psychology, and processing fluency are reviewed to better understand the theory and impact of multisensory branding; finally, the consumer psychology of brands and the role of affect in sound branding are reviewed to provide critical insight into the concept of 'emotional branding.'

2.2 How does sound influence consumers' perceptions of the brand? (Building brand associations)

This section considers how sound influences consumers' brand perceptions and behaviour, drawing on theories of semiotics and semantic priming that provide one causal explanation of brand associations. It is commonly understood that brand associations derive from a brand's identity in the form of attributes, benefits, or attitudes created from sensory stimuli that are key to building brand image (Keller, 1993). For example, Starbucks is associated with upscale yet familiar European-style coffee shops (Aaker, 1996; Jackson, 2003). Each of its coffee shops embody these associations in its decor that includes the use of soft lighting, comfortable leather chairs where space permits, friendly employees, and soothing background music; consequently, Starbucks has become known as a place where patrons can come to enjoy coffee and relax in the environment. Brands also create associations to differentiate themselves from their competitors. In 2005 Starbucks used music by new and emerging artists in their coffee shops to create an atmosphere of discovery that differed from other mainstream coffee chains (Dominus, 2006). Consumers noticed the music played in the stores and sales of promoted artists spiked; as a result, Starbucks became associated with and valued as a place where consumers could discover new music:

> The company decided to stock 'Careless Love'; a CD of sophisticated pop-jazz songs by Madeleine Peyroux, who had attracted only a modest following in the United States, plying her craft in small bars. Peyroux soon found herself at No. 81 on the Billboard chart and has become a mainstay of jazz. (Dominus, 2006)

Brands often use sound to build brand associations and influence how consumers perceive and behave towards the brand. The next section considers the different ways sound contributes to brand associations and its effects on consumers.

2.2.1 Sound as a signifier of brand associations.

Brand associations are powerful because they contain information that contributes to brand image once the associations are stored in memory, ultimately shaping and influencing consumers' perceptions of the brand and behaviours (Keller, 1993; O'Reilly, Larsen & Kubacki, 2013; Heding, Knudtzen & Bjerre, 2015). Brand image is the impression of the brand held by consumers. One function of sound within sound branding is to convey meanings about the brand. The suggestion that sound contains information that serves as a signifier of brand associations draws from the field of musical semiotics (Monelle, 2000; Tagg & Clarida, 2003) that is predicated on the idea that musical materials have meaning that, in turn, can come to be representative of the brand. Through enculturation, listeners have come to associate particular sounds with particular meanings that contribute to the formation of brand associations. Evidence for musical signification comes from music listening studies (Tagg & Clarida, 2003) and behavioural and neuroimaging studies (Koelsch, 2003, 2004), through which multiple dimensions of musical meaning have been identified, including iconic meaning (musical sounds that resemble sounds or qualities of objects); emotional meaning (suggestion of a particular mood (happiness)); associative meaning (extramusical associations (national anthem; 'our' song)); musical tension and musical resolution (Koelsch, 2003, 2004). The experience of music is often multi-dimensional, such that it can simultaneously include some or all of these kinds of musical meanings.

Books on sound branding by practitioners cite these same psychological processes as evidence that sound can build brand associations. The sound branding book authors are inspired by film music that uses musical archetypes because they are easily recognized by consumers and communicate meaning almost instantaneously:

> The role of sound in films is to enhance the experience, make the action more believable and make it more memorable. This, coincidentally, is also a major role of music in branding ... Films have become a common cultural experience and have created a language of musical archetypes that we can harness for enhancing elements of the brand experience. Just think again of the stabbing scene in Psycho or music from Jaws. These and many others are clichés that we can use to create emotional reactions in almost any audience and the movies gave them to us. (Jackson, 2003, p.16)

In order to show how Jackson's quote relates to musical meaning, as conceptualized in the theories above, I will elaborate on his examples. The shower scene in the movie *Psycho* (Jackson, 2003) and the sound of Darth Vader's breath in *Star Wars*

(Beckerman, 2014) both afford iconic meaning, as well as musical tension and resolution: In *Psycho,* the punctuated sounds of high pitched strings in the shower scene accompanies the downward motions of the stabbing knife on screen, while the breathing of Darth Vader is heard repeatedly before he appears on screen to heighten the anticipation of his arrival. Furthermore, these sounds have become culturally associated with their respective movies: heard on their own, they conjure references to the characters and the movie, and there may also be external associations relating to when and where a person may have the strongest memories of watching the movie.

One question is how music's meanings become attached to a brand. Two concepts have been proposed within academic research: the first is that music has meaning by its 'internal structure,' as well as by 'the context of its creation, the context of its performance, and the context of its reception; here the assumption is that music acquires meaning through its mediation of society' (Cook, 1998, p.3). Through descriptive analysis, Cook demonstrates how an excerpt of a Mozart symphony shapes meanings of a TV advert for a Citroen car and illustrates how the musical attributes can be transferred to the advertised product:

> Through its association with the car, the music communicates the liveliness of its engine, the precision of its road-holding. That is, the attributes of the music are transferred to the car; the liveliness and precisions of Mozart's score (and these are two of its outstanding qualities) become the liveliness and the precision of the ZX 16v. (p.6)

The second concept is that sound can affect or 'prime' consumer perceptions of the brand that may also affect their behaviour through the activation of knowledge networks (North & Hargreaves, 2007). According to North and Hargreaves (2007), sound accesses an existing knowledge base customers have that can affect positive consumer perceptions and behaviours, such as liking for the brand, likelihood to purchase, and repeat purchase. The degree to which there is a positive relationship between sound and consumer perceptions and behaviours is described within academic research as 'fit':

> From a psychological perspective, it might be most apt to characterize sonic branding as a special case of musical fit, an instance in which the music used in advertising (and other forms of marketing) aims to raise the salience of certain brand attributes in the minds of potential customers ... if this process works in advertising, it seems reasonable to assume that it should also work in specifically sonic branding. (North & Hargreaves, 2007, p.265)

Specific to branding, Yeoh (2010) outlined the process of priming throughout the customer experience from exposure to sound to purchasing behaviour using classical music as the example:

> Implicit to all the existing work is the well-known concept of spreading activation (Anderson, 1983; Collins and Loftus, 1975), in which priming of one cognitive concept (e.g., identification of the music as representative of 'classical music') primes all those concepts related to it (e.g., stereotypes of classical music as 'upmarket'), which in turn primes the behaviours observed (e.g., spending). (p.369)

The concept of priming is supported in branding literature that describes brand associations as anything 'linked' in memory to a brand (Aaker, 1991). The strength of association is relative to the number of other links connected to the brand, as well as how closely connected the links are to one another. An example of this is evident in the following quote of how two car brands, Volkswagen and Audi, use music with nationalist characteristics to transfer 'German' attributes in their brand taglines that prime associations of precision and quality:

> Secondary brand elements enrich a brand's identity by establishing a link to other objects. Thereby, brand awareness can be increased and the brand image can be augmented or adjusted. One way of doing this is by stressing the country-of-origin of a brand. Acoustically, this can be done, among others, by using stereotypical music of a country, e.g. German 'oompah' music (for brass instruments) or by applying a country-specific language brand. *Volkswagen*, for example, used the German term 'Fahrvergnugen' in the US for a while and *Audi*, still to this day, employs the German claim 'Vorsprung durch Technik' worldwide. (Killian, 2009, p.256)

Priming is an appropriate umbrella concept to explain how sound used in branding can affect consumer perceptions and behaviours towards a brand because it helps to explain certain influences. In recent years, a sufficient number of studies have been conducted in a variety of different contexts that a clearer understanding of the effectiveness of sound to create priming has emerged. This will be reviewed in the following section.

2.2.2 How sound influences consumers' perceptions and behaviours.
The previous section considered the theory that sound can contribute to brand associations through musical meaning and through priming that activates consumers'

existing knowledge networks. This section considers the empirical evidence of these two contributions.

In spite of the theory that sound can contribute to brand associations through musical meaning, there is relatively little direct empirical evidence that shows this. The evidence that does exist, however, is supportive. Brodsky (2011) emphasises that the importance of understanding the links between sound and brand characteristics is to help brands make decisions regarding the music they associate with their brand because consumers have come to expect a brand's assets to be closely and authentically representative of the brand and its related products. As part of a pre-test, Brodsky commissioned a music studio to create multiple audio files using brand documents for two different brands. The brand documents comprised brand attributes, picture posters, and psychographic data (values, attitudes, and interests) about the brand. The brand attributes were presented in word form of two American car brands, Chevrolet and Cadillac, which were presented to professional sound designers in similar presentation to the concept and design functionality of a visual identity document. Picture posters of the different brand logos and cars were shown to the designers, and the psychographic data based on brands' personalities were provided. Two validation tests were conducted by asking participants to designate different audio files to their respective brand. Once it had been confirmed that the composed music did accurately represent the brands, four field tests were conducted with different participant groups: non-American consumers without familiarity with the brands, non-American sales clerks of the brands, non-American consumers with familiarity of the brands, and American consumers without pre-existing bias towards the two car brands. The results found that all participants consumers could decode and recognize distinct car brand characteristics from the sounds, and with repeated trials, participants were able to associate the composed sounds to the appropriate brand.

There is more evidence that shows sound can prime consumer perceptions of the brand through the playing of background music in consumer environments, as measured by its influence on customer behaviours. North, Hargreaves, and McKendrick (1997) conducted a study that measured the sales of wine in a supermarket when stereotypical French music was played and when stereotypical German music was played in the background. Results found that sales of German wine doubled compared to French wine when German music was played, and vice versa. In a different study using background music in a shopping environment, Areni

and Kim (1993) tested playing different music genres in a wine shop and found that customers spent more in a wine cellar when classical music was played compared to Top 40 music. The results suggest that classical music activates thought associations in customers, such as classical music fitting with notions of affluence and sophistication, that influenced higher spend. Similarly, North and Hargreaves (1998) found that people in a university cafeteria were willing to pay more for food items when classical music was played in the background than other music genres. Additional benefits of priming in branding include a positive effect on brand recall. Kellaris, Cox, and Cox (1993) found that 'musical-message fit' enhanced brand name and message recall. These results are supported in a similar study by North, Hargreaves, MacKenzie, and Law (2004), who found that a close degree of musical fit was able to better prime recall of the specific brands and also the classes of products named in several radio adverts.

The studies cited above demonstrate some effects of background music in consumer environments on consumer behaviour. Specific musical genres or styles can prime decision making on purchases and spend. Associative references to nationalist music can influence product choice and associative references to classical music can prompt higher overall spend. There are a number of outstanding questions that arise from the results of these studies. Firstly, does priming work consciously or unconsciously? It is unclear the extent to which customers were conscious and aware of the music, or the extent to which the music influenced their purchasing behaviour, although North et al. (1997) included an optional post-purchase questionnaire and reported that, of the consumers who responded, they were unaware that the background music affected their choice of wine. Understanding whether consumers notice the music and whether an awareness of the music influences their buying behaviour is important for brands to know so that they can create the optimal consumer environment.

Secondly, musical semiotics and priming appear to be effective in creating brand associations, but there is as yet little evidence regarding the conditions under which they are effective in branding and whether there are limitations to their effectiveness. For example, it would seem that background music has a strong influence on consumer purchasing behaviour that may be independent of other stimuli, such as the consumer environment. Both North and Hargreaves (1998) and Areni and Kim (1993) reported that classical music prompted higher spend or willingness to spend in two different environments, a wine shop and a university cafeteria. Was classical music the optimal music genre that fit both environments, or were consumers'

purchasing behaviours influenced solely by the background music? While these studies show that background music can influence consumer behaviour in the direction of the music's associative properties, neither study intended to investigate whether the use of music that communicates a brand's identity influences perceptions of the brand that, in turn, primes consumers' behaviour.

Finally, it is unknown whether there is a relationship between musical preference and priming, and whether this may have different effects on consumer behaviour. Does priming have a greater effect on consumer behaviour when consumers prefer the music that is used? Areni and Kim (1993) found that people bought more expensive wine when classical music was played, and North and Hargreaves (1998) found that people were willing to spend more on cafeteria food when classical music was played. Conceivably, the participant groups in these two studies may have been different: wine shop customers may be older than students in a university cafeteria, and their music preferences may have been different. If this is the case, it suggests that priming is effective outside of music preferences and of any personal relevancy a consumer may have to the brand, but this is important to understand because brands target specific consumer demographics that likely have similar music preferences.

This section presented evidence of how sound can be applied to create fit specific to building brand associations and priming that influences outcome behaviours. The studies focus on the effects of sound as a single stimulus. However, in the real world situation multiple sensory stimuli exist in consumer environments and therefore it is necessary to understand how multisensory stimuli interact.

2.3 How do the interactions between different sensory stimuli affect consumers' perceptions of and responses to the brand? (Multisensory branding)

Multisensory branding is defined as the use of two or more sensory stimuli to create brand associations and influence consumer perceptions and behaviours (Hultén, 2011). This research question investigates the effects of multisensory branding, specifically with a focus on sound, in two parts. Firstly, it considers the evidence that multiple sensory stimuli presented simultaneously can affect consumers' brand perceptions. Secondly, consumers experience brands and products holistically and, in sound branding books, there is a common belief that brands using multiple, congruent stimuli creates a more powerful effect and has greater influence on perceptions and

behaviours. Within the field of cognition, this relates to the concept of gestalt psychology and processing fluency.

2.3.1 Crossmodal correspondences and semantic congruence.

Researchers have been aware of relationships between sensory stimuli for quite some time, but only recently have attempts been made to categorize the relationships, or *crossmodal correspondences*, in ways that can help inform how multisensory stimuli influence consumers' judgments of brands and products (Spence, 2011; 2012). The categorization of crossmodal correspondences is a means to identifying the psychological mechanisms that underlie the relationships between multisensory stimuli and has found that at least some of these relationships are non-arbitrary, leading to the beginnings of a framework against which brands can apply findings (Spence, 2012). The majority of early brand and product research was focused on establishing that crossmodal relationships exist with minimal investigation on measuring the differences between types of crossmodal relationships and their effects on consumers' perceptions and behaviours. At the present time, the evidence as it pertains to sound branding supports simple theoretical assumptions that crossmodal stimuli influence perception and congruent crossmodal stimuli increases positive consumer experiences (Spence, 2012).

Congruency between sensory stimuli is the compatibility effect between different sensory modalities that is recognised by the majority of people and may even be universal (Spence, 2011). Spence identifies three types of crossmodal correspondence: statistical, structural, and semantic. Statistical correspondences follow the laws of physics and are correlated in nature, for example, the larger the object, the lower the frequency. Structural correspondences are neurally connected and tied to the perceptual system, for example, the larger the animal, the louder the noise it makes. Semantic correspondences describe stimuli that use descriptors within the same category, for example, the elevation of a mountain (high) and the pitch of a boulder hitting concrete (low) (Spence, 2011). Numerous studies have provided early validation of crossmodal correspondences: altering the sound of biting into a Pringle chip can alter the perception of the chip's crispness and staleness (Zampini & Spence, 2004). The chips were perceived as being both crisper and fresher when either the overall sound level was increased, or when just the high frequency sounds (in the range of 2 kHz−20 kHz) were selectively amplified.

The relationship between multiple sensory modalities and semiotic associations created by priming and knowledge activation networks is relevant to sound branding. Compared to crossmodal correspondences as defined by Spence, the connections between sensory modalities and semiotic associations may occur at a more abstract level, such as stimuli communicating the same meaning or information derived from cultural education and experiences. These connections may also occur if the stimuli happen to increase a person's response in the same direction, such as greater arousal or increased pleasantness (Spence, 2012; Stach, 2015). Bronner, Frieler, Bruhn, Hirt, and Piper (2012) found that the contrasting flavours of orange and vanilla can be acoustically differentiated and, in a follow up study, participants were reliably able to distinguish different degrees of citrus-sounds through the assessment and manipulations of the intermodal attributes intensity and sharpness. In studies on product sounds, associations have been found that connect the perception of a product to its attributes, such as the 'heavy' sound of a car door closing with the perceived image of the 'quality' of the car (Parizet, 2008). Musical attributes and food products have an effect on taste perceptions (North, 2011). In a study involving wine tasting and background music, red wine was described by participants as tasting heavier and full bodied when consumed while listening to an excerpt from *Carmina Burana* by Carl Orff, a cantata scored for a large orchestra, than when listening to Tchaikovsky's *Waltz of the Flowers (from The Nutcracker)*, considered to be more subtle and refined. Conversely, white wine was considered to taste lighter when consumed while listening to *Waltz of the Flowers* than *Carmina Burana*. North concluded that the taste of the wine was influenced by the attributes of the background music and associated the findings with priming based on previous research that showed music can prime thoughts and influence perception (North et al., 1997; Areni & Kim, 1993).

The crossmodal correspondences framework created by Spence, together with multisensory semantic associations, to highlight qualifying criteria and categorize different types of interactions is useful to begin understanding the different degrees of compatibility between multisensory stimuli. In particular, a key area for research includes understanding the types of interactions that are effective in the context of sound branding. What is the relationship between crossmodal relationships and semantic associations? There is currently no consensus on this and it is beyond the scope of this thesis, however, it should be a topic for future research. To what extent do different types of crossmodal interactions influence consumer perceptions and behaviours? A current limitation of the research is that it focuses on proving that interactions between crossmodal correspondences exist, but there has not yet been

established a systematic approach towards understanding their effects in real world application. Of equal importance, but currently overlooked in research, is the need to understand the effects of incongruence because the potential impact can result in consumers' dislike for a brand or purchase avoidance. In other words, understanding the effects of incongruence would enable brands to realise the importance of achieving congruence across multisensory stimuli.

2.3.2 Gestalt psychology and processing fluency.

The previous section considered how multisensory stimuli interact to influence perceptions and behaviours. This section considers a common belief in sound branding and sensory branding books by practitioners that multiple sensory stimuli working in concert create a more powerful effect on consumers' perceptions and can potentially lead to emotional attachment to the brand (Lindstrom, 2005; Gobé, 2001). This section reviews evidence of how crossmodal stimuli are processed and their effects on perception and behaviours, while the relationship between consumers and brands is reviewed in the subsequent section 'Emotional branding.' The belief that multisensory branding is more effective than visual branding, which is more traditional, is supported in academic literature by two related concepts: Gestalt psychology and processing fluency, both of which underscore the theoretical assumptions that crossmodal stimuli influence perceptions and congruent crossmodal stimuli increase positive consumer experiences.

The central principle of Gestalt psychology is that the mind forms perceptions of a global whole based on self-organising tendencies. When presented with multi-attribute stimuli connoting various meanings, consumers seek to integrate these meanings into an overall impression, therefore arguably, products high in congruent stimuli facilitate impression formation through fluent processing (Hekkert, 2006) and can be tested to a degree using reaction speed and psychophysical measures (Spence, 2011; Van Rompay & Pruyn, 2011). In theories of branding, there is a postulation that 'the cohesiveness of the brand image may determine consumers' more holistic or gestalt reactions to the brand' that include increases in consumer response in brand satisfaction and buying behaviours (Keller, 1993, 2003). This is shared in branding books and academic research. Lindstrom (2005) believes that a multisensory methodology can lead to better memory and recall through increased exposure and improved encoding through multiple senses. However, there are limitations to the amount of exposure that consumers can have when a brand only engages one of the

senses. Lindstrom (2005) proposes enhancing the repetition technique with 'sensory synergy' (p.17), suggesting that if brands engage more than one of the sense, consumers could have gestalt reactions to the brand where the brand experience is greater than the experience of individual sensory elements:

> Let's look at movies as an example. Remove the dialogue, the sound effects, and the music and I'm sure you'd agree that we're not left with much that entertains us. Conversely, remove the images and listen to the soundtrack …. The value of movie entertainment is the combination of audio and visual working together. Only then do we have cinematic magic. Magic enough to make a 2+2 =5 equation work! (p.17)

There is empirical evidence to support this: Mattila and Wirtz (2001) conducted a study on retail environments that evaluated the congruency of scent and background music as a driver of in-store evaluations and behaviour. The study hypothesised that the arousing quality of ambient (scent and background music) stimuli could promote holistic evaluations, and that pleasant ambient stimuli are perceived more positively when their arousing qualities are congruent. Results supported the hypotheses: when the scent and background music were congruent in their arousing qualities, consumers were more positive in their ratings of the retail environment and they exhibited an increase in approach and impulse purchase behaviours than when the environmental cues were incongruent with each other.

Gestalt perceptions have been shown to exist in multiple elements within a single sensory stimulus, as well as across elements in multisensory stimuli. For example, in product design, Van Rompay and Pruyn (2011) found gestalt perceptions exist in tactile cues across different visual product features. Congruence between visual elements positively affected various consumer responses of brand image, such as brand choice, brand impressions, and perceived (product) value. Consumer response was also more positive in measures of brand value (price expectations), brand credibility, and brand aesthetics where there was congruence between different visual product elements that connote symbolic meanings, such as product shape and typeface design, rather than functional information. Using luxury and casualness as congruence/incongruent dimensions, Van Rompay and Pruyn (2011) demonstrated the effects of fluent processing and measured price expectations to simulate a real world consumer situation where participants would indicate expecting to pay more for products that are congruent in visual design. A tall and slim bottle with a label using a typeface called 'Empire' was perceived to be more luxurious than a short and wide bottle with the same label. Conversely, a short and wide bottle with a label

using a typeface called 'Dom Casual' was perceived to be more casual than a tall and slim bottle with the same label. Results also indicated that participants expected to pay more for the bottles that were congruent in visual design.

Gestalt perceptions have also been implicated in the multisensory expressions or personality characteristics of products. The 'flip' open sound of a lighter was found to be associated with hedonic attributes, including luxury, pleasant, and discrete when the sound of the lighter was matte, even, and low in pitch, or clear and resonant (Lageat, Czellar & Laurent, 2003). In a study investigating sensory congruity and incongruity, Ludden and Schifferstein (2007) manipulated the sounds of two electronic products, juicers and dust busters, intended to be congruent or incongruent with the visual expression of the products. The two juicers were rated on their expressions of flimsy versus robust, while the dust busters were rated on appearing tough versus cute. The results reported that sound that was evaluated as fitting less well with the product it evoked stronger feelings of surprise than sound that was perceived to fit the product, suggesting that people have expectations on how a product will sound based on how the product may look. While the study did not measure product preference or purchase intent, the researchers conclude that an experience that is congruent in its sensory elements is likely to increase product preference.

When multiple sensory stimuli are experienced together, they can affect how consumers perceive brands or products. The next section considers the effects of multisensory stimuli on consumers' emotions.

2.3.3 Multisensory stimuli elicits emotional responses.

Multisensory stimuli can increase the intensity of emotions perceived and induced. In an anecdotal illustration of this, Jackson (2003) reported that the absence of sound when watching a football video clip eliminated any emotional response he had to the clip. Jackson suggests that sound can create the aural atmosphere to amplify the visual image and that it will amplify the visual image rather than change the interpretation of it. If taken this way, it is a rather one-way assumption and there is evidence that suggests this is not the case (Tan, Cohen, Lipscomb & Kendall, 2013). In a non-scientific, self-conducted test of 'with sound' and 'without sound,' it is 'with sound' that Jackson reports he had an emotional response, describing it metaphorically as 'my hair stand[ing] on end', to the video:

Sound provides the atmosphere in many media as well. I tried an experiment at home with a video-recorded copy of Michael Owen's wondergoal for England versus Argentina at the World Cup 1998. With the sound on, the video clip still makes my hair stand on end. When I hit the mute button all the drama seems to drain away. The same things still happen; a cute first touch, a drop of the shoulder and a reverse shot, but the emotion is gone. It turns out that sound conveys the emotion while the pictures convey the information. (p.24)

Within mass media, music has served as a primary function to bring clarity to ambiguous visual images that persuades listeners to respond accordingly (Tagg & Clarida, 2003) and there is evidence that music can increase the emotional impact of films (Cohen, 2010). In studies that examine the effects of music and images through the use of magnetic resonance imaging, music has been found to increase the response to affective pictures. Emotional pictures presented without music evoke emotion perception, while the presentation of emotional visual and musical stimuli is likely to automatically evoke strong emotional feelings and experiences (Baumgartner, Lutz, Schmidt & Jancke, 2006). Psychological research on film music has shown that music can affect the perception, memory and interpretation of the film (Boltz, 2004). Film music 'conveys not only the characters' dialogue but a musical score that can contribute to the story's meaning' ... 'through the structural interplay of pitch, timing, and loudness characteristics, music can evoke different moods that are then incorporated into the ongoing visual action.' (Boltz, 2004, p.1194). Boltz, Ebendorf, and Field (2009) conducted two experiments on the impact of visual information on music perception and memory. The first experiment tested whether affect (positive, negative) and format (video, montage) of visual information differentially influenced the perception of melody, while the second experiment tested whether the differences in melody perception leads to memory distortion. In both experiments it was discovered that music cognition can be influenced by the presence of visual information and suggests that there is a reciprocal relationship between music and visual information that results in a unified perception. These findings are similar to a study using music and language stimuli (Koelsch et al., 2004), which demonstrated that emotional reactions (e.g. emotional experiences or feelings) are relatively weak if only visual stimuli are used. In fact, in most cases, the visual-only stimuli did not evoke emotional feelings, highlighting that a more cognitive, less arousing emotional perception process is employed. From this, it would at least appear plausible that sound can express emotional characteristics that are part of a brand's identity with the potential of inducing emotional responses that may result in an increase in feelings towards the brand.

The research presented in this section shows the relevance of, and theoretical basis for, studying multisensory interactions in the context of sound branding. However, there is, as yet, relatively little research that investigates the differences between the interactions of the five senses in branding, although there is empirical evidence on the relations between the different senses (Hultén, 2011). For example, smell can relate to feelings of pleasure and memories due to its inherently hedonic nature of odour (Engen, 1982), and the physical relationship between olfactory nerve fibers and the brain's limbic system has been found to mediate human emotions (Fiore et al., 2000). Beyond understanding how senses interact together, it is important to understand under what conditions might sensory stimuli be considered congruent or incongruent. Background music in TV advertising can increase positive brand attitudes when consumers are engaged at a low level of affective involvement when watching a shampoo commercial, but it has a distracting effect when consumers are focused on the understanding the advert's message that requires a higher level of cognitive involvement (Park & Young, 1986). Further research into information processing of sensory stimuli under different conditions of involvement or engagement would be useful to better develop multisensory branding.

2.4 Emotional branding

In the previous section, Jackson (2003) described an experience of watching a video clip without sound that, in his experience, failed to elicit an emotional reaction. When he watched the clip with sound, the totality of the experience caused his hair to stand on end and he concluded that 'sound conveys the emotions while the pictures convey the information' (p.24). This section considers two questions that arise from Jackson's experience: to what extent is there an emotional component or experience associated with branding? To what extent does sound contribute to affect in branding and what impact does this have on consumers' relationships with brands?

2.4.1 Emotions in branding and the consumer psychology of brands.

This section focuses on understanding consumers' engagements with brands that may include emotional reactions to the brand, such as increase in liking for the brand. In a review of different psychological processes involving affect, Schmitt (2012) presented a relevant framework because it comprises varying levels of consumers' engagement with brands. The framework is segmented into five brand-related

processes (connecting, identifying, experiencing, integrating, and signifying), each with three levels of consumer engagement based on the strength of the consumer-brand relationship (object-centred, self-centred, and social engagement). Of the five processes, 'connecting' and 'experiencing' are pertinent to understanding the contribution of affect in sound branding. 'Connecting' refers to consumers' personal relationships with brands, while 'experiencing' refers to different experiences consumers can have with brands that include sensory, affective, and participatory experiences.

The 'connecting' process refers to the degree to which consumers may like a brand. There are three levels of engagement organised on a continuum of strength from the weakest, attitude formation, to the mid-level, brand attachment, to the strongest, advocating and participating in a brand community (Schmitt, 2012). Attitude formation is a well-researched construct in consumer psychology that is based on the positive or negative evaluation of a brand (Fishbein & Ajzen 1975; Murphy & Zajonc 1993). According to Fishbein and Ajzen (1975), attitudes are activated automatically with little dependency on cognitive processes or conscious intent to evaluate the brand and can occur as a result of classical conditioning. Consequently, attitudes typically represent a weaker, unstable connection to the brand that manifest in outcome behaviours such as purchase consideration or intent, or brand preference, and can be formed without the consumer having direct experience with the brand. For example, a consumer can have a preference or liking for Nike running shoes without ever having tried or purchased Nike shoes. At the mid-level of the connecting process, brand attachment represents a stronger relationship between consumers and brands that can be distinguished by a rich set of schemas and memories that link the brand to the consumer in a personal, self-relevant way (Thomson et al., 2005). According to Thomson et al. (2005), consumers may exhibit different behaviours when they form a personal attachment to a brand that includes a willingness to pay a price premium and loyalty to a brand. Schmitt (2012) identified that brand attitude and brand attachment are conceptually different, therefore they have different processes and behavioural outcomes; the main differences are that brand attachment behaviours require greater consumer effort and resources such as monetary spend, consideration, and time. For example, brand attachments develop over time, whereas brand attitudes may be formed instantly and are more susceptible to change. The third and strongest level of engagement, brand community, is when consumers want to advocate for the brand.

The brand 'experience' process in Schmitt's framework (2012) refers to the sensory and affective experiences that a consumer may have with a brand across contact points that engage one or more senses. The three levels of engagement in this process, from weakest to strongest, are multisensory perception, brand affect, and brand participation. Multisensory perception was reviewed in the previous section, so its definition is not presented here. The level of consumer engagement associated with multisensory perception is typically objective and functional and, similar to brand attitudes, can occur between the brand and the consumer on a non-personal level. For example, a consumer may perceive Dyson vacuum cleaners to be powerful, effective, and of high quality based on seeing the design of the vacuum cleaner and its packaging, as well as hearing the vacuum cleaners in demonstrations or commercials, without having tried or owned one. As reviewed in a previous section, brand sensory perception can occur from single or multi sensory stimuli. While single sensory perception, such as sound, is not mentioned in Schmitt's framework, the brand 'experience' and level of engagement is considered to be the same as multisensory perception. Brand affect represents a deeper level of engagement because emotions are induced by the brand experience due to the brand evoking positive or negative moods that make consumers feel happy or sad (Schmitt, 2012). This is particularly effective when consumers engage with the brand in a personal, self-relevant way. It has been suggested that emotions are induced when consumers employ a 'how do I feel about it?' heuristic (Pham, 2004), the effects of which lie on a continuum from weak (positive or negative moods) to strong affect (specific emotions, such as love). At the weakest level, feelings enter into evaluation directly by mere association, similar to priming and the formation of brand attitudes. Feelings enter into evaluation indirectly by changing people's perceptions or beliefs about the target. This is consistent with a major explanation of incidental mood-congruency effects on evaluations. At the mid-level of feeling, evaluations tend to be assimilated towards people's incidental mood states because those states cue mood-consistent materials in memory, which then colour people's perceptions of the target (Isen et al., 1978). At the strongest level of feeling, people will examine their current feelings and use them as information upon which to make decisions (Schwarz & Clore, 1983), however, people may fail to recognise that the actual source of their feelings is not the target being evaluated but some incidental factor, such as sunny weather (Pham, 2004). Using Schmitt's definition of brand affect and Pham's heuristic of 'how do I feel about it?', I will apply this to a consumer scenario that involves sound branding: an example of brand affect could be when an artist and a brand, such as Pharrell Williams and Adidas, enter into an endorsement partnership whereby both the artist

and the brand share the same target consumers – young, urban, and fashion-conscious. Consumers may form positive attitudes towards Adidas because they both like Pharrell Williams and approve of the Pharrell Williams-Adidas partnership. Now imagine a situation where a consumer enters into an Adidas store undecided whether to buy new shoes that day. The store begins to play Pharrell Williams in the background and the consumer's mood improves because they hear music from an artist they like, it reinforces their positive attitudes towards the brand and, subsequently, they decide to purchase new shoes. While this is a hypothetical consumer scenario, it would be a worthwhile study to conduct because artists and brands do often partner together and this model would provide some validation of the effectiveness of artist and brand partnerships.

Emotional branding is an important construct within the branding literature written by practitioners (Jackson, 2003; Lindstrom, 2005; Gobé, 2001) that shares some similarities in perspectives with academic research. Gobé, (2001) defines emotional branding as 'how a brand engages consumers on the level of the senses and emotions; how a brand comes to life for people and forges a deeper, lasting connection.' (p.xviii). Furthermore, Gobé describes it as:

> … [focusing] on the most compelling aspect of the human character: the desire to transcend material satisfaction and experience emotional fulfilment. A brand is uniquely situated to achieve this because it can tap into the aspirational drivers that underlie human motivation. (p.xix)

The behaviours identified as a response to emotional branding include brand loyalty that is demonstrated by consumers' lack of consideration of other brands in purchase decisions, as well as the decision to purchase a brand over another (Jackson, 2003; Lindstrom, 2005; Gobé, 2001). Based on this definition, emotional branding is most closely aligned with the concept of brand attachment described in Schmitt's framework. However, the branding strategy outlined by Lindstrom (2005) that leads to brand attachment only references the weakest levels of engagement within the 'connecting' and 'experiences' processes proposed by Schmitt (2012): brand attitude formation and multisensory perception. Lindstrom identifies two brand building stages: 'unique Selling Proposition (USP)' to distinguish brands from one another and where no two products are alike, and 'Emotional Selling Proposition (ESP), a successive, future stage of USP, where products are perceived as different primarily because of an emotional attachment.' (p.7). USP is based upon traditional branding methodologies that primarily employ visual stimuli to convey the brand identity and

differentiate brands from one another. For example, Coke is recognised by their red cans, while Pepsi is known for their blue cans. The ESP stage involves a multisensory methodology that is a necessary evolution from USP because:

> … we have become visually sophisticated when it comes to branding but we are lacking in the other four senses …. Our senses are our link to memory and can tap right into emotion.' (p.10)

Jackson (2003) presents a similar perspective in the form of 'positive emotional investment' (PEI) that focuses on highlighting a brand's emotional benefits through the use of sound and other sensory stimuli.

The perspectives presented in the branding books by practitioners raise interesting questions that are worthwhile to consider. Both Lindstrom and Jackson seem to propose that consumers are more likely to develop emotional or deep attachments to brands that use a multisensory approach because consumers store values and emotions about brands within their memory, and the more senses a brand engages to create such values and emotions, the more likely consumers are to develop memories that lead to emotions and attachment for the brand. Do congruent multisensory stimuli result in stronger or quicker development of brand attachment, or do they only result in consumers having stronger liking for the brand that does not extend to brand attachment behaviours? Is there a causal link between memories and emotions that may increase liking or attachment for a brand? The multisensory strategies reference only the weakest levels of engagement within the 'connecting' and 'experiences' processes proposed by Schmitt (2012): brand attitude formation and multisensory perception, but according to Schmitt, neither of these levels of engagements involve induced emotions, so it is currently only an assumption that a deeper attachment to a brand can be achieved through these levels. Furthermore, Schmitt states that it is currently unclear if or how the connecting and experiences processes relate to each other, or if these levels of engagement are truly linear in progression. Schmitt acknowledges the framework does not imply that the engagements are one-directional and linear, despite being presented on a continuum of weakest to strongest, nor is the process distinct and non-interacting with other processes. For example, do brand attitudes always precede brand attachment? Do consumers develop brand attachment without brand affect? Additional insight into brand experiences from the consumer perspective could help to validate the relationships between processes.

The literature on emotional branding is further challenging to substantiate because of its broad contextualising of the term 'emotion' with little differentiation to the

intensity of affective states or experiences, and of their duration. Within the consumer psychology of brands, Schmitt's framework has proposed evidence that consumers can engage with brands in ways that resemble relationships with emotions that manifest in increased liking for and interactions with the brand. The next section considers the extent to which sound contributes to affect and emotions in branding, beginning with an overview of emotions.

2.4.2 The role of affect in sound branding.

If emotional branding is a composite of multisensory branding, and sound branding is a component of multisensory branding, an overview of emotions and moods within academic literature as regards its relevance to branding needs to be considered here. The term 'emotion' in this context refers to an experience of brief duration and typically greater intensity that is a subset of a larger group of affective experiences that includes moods, which typically last longer and are lower intensity than emotions. The distinction is worth noting because it is possible these other affective experiences occur in consumer responses to sound branding. Scherer (2005) identified that, while the concept of emotion remains complicated, there is consensus among emotion experts that there are multiple components of emotions. The components include subjective feeling, physiological arousal, cognitive appraisal, expressive motor behaviour, as well as emotions can also include action tendencies. Emotions can also be conceived of as dimensional and a widely accepted framework proposes that affective experiences are characterised on two dimensions, valence and arousal (Russell, 1980; Lang et al., 1992). Valence ranges from positive to negative and arousal ranges from calm to exciting. The two dimensions are not exclusive of each other: experiences can be negative and exciting, positive and calm, and so forth.

In academic literature on theories of music and emotion, there are two main areas of study, emotions perceived and emotions induced, which are empirically differentiated. With regard to branding, it would appear that sound can be used to express emotional characteristics or attributes that are part of a brand's identity through the use of sound as a signifier (emotions perceived) or be used to elicit an emotional reaction or response from consumers with respect to a brand or product as manifested through sound across particular touch points (emotions induced). Despite the growing popularity of this topic, as yet, there have been very few studies investigating emotions perceived or emotional reactions as a result of sound branding (North & Hargreaves, 2010). There are two primary reasons for this. Firstly, theories

of emotion and music have only recently gained attention and applied exploration of these theories is still in the early stages (Juslin & Sloboda, 2010). Secondly, the notion that brands should appeal to their consumers by eliciting emotional responses through the use of sensory elements does not yet have broad appeal within traditional branding, perhaps due to lack of understanding and proven results (Thompson et al., 2006). However, there is strong theoretical support and empirical evidence in consumer behaviour for researching emotions in sound branding. In a theoretical article, Bruner (1990) presents three postulates, one related to emotions perceived, one related to emotions induced, and he draws an inference from these to the third postulate that sound can be used effectively in branding. To start, he states that 'human beings nonrandomly assign emotional meaning to music,' followed by 'human beings experience nonrandom affective reactions to music,' and from these, he infers an assumption that 'music used in marketing-related contexts is capable of evoking nonrandom affective and behavioural responses in consumers.' (Bruner, 1990, p.99) The three postulates draw from six propositions based on a review of past studies that can be applied to branding and marketing. In summary, two propositions state that music has structural components that have an effect on moods, cognitions, and behaviours that are of interest in branding. This is followed by two propositions that state there is a relationship between the emotions perceived to be expressed in musical stimuli and the corresponding affective reactions in consumers. Finally, music may be most effective under conditions of peripheral route processing and low cognitive involvement (Park and Young, 1986). The article provides an argument that sound can and should be used intentionally by brands because sound has communicative properties that can effectively and predictably elicit emotional reactions from the majority of people. There is some supporting empirical evidence, which is discussed next.

There is evidence of emotions elicited by background music affecting consumer perceptions from studies conducted in physical commercial spaces that may have learnings for sound branding. Sweeney and Wyber (2002) investigated the effects of music on consumers' emotions that, in turn, influenced their perceptions of service quality and merchandise quality in an apparel store. The music characteristics used to affect emotional states were tempo (fast, slow) and music genre (classical, top 40 pop), and the study collected data on participants' pleasure and arousal emotional states using Mehrabian and Russell's (1974) self-reported measures. Participants in the study were asked to watch a video simulating the browsing experience of an apparel store that was accompanied by a background music treatment. Similar to

Donovan and Rossiter (1982) and Donovan et al. (1994), Sweeney and Wyber (2002) found that higher pleasure states are more likely to derive approach behaviours in store environments. Arousal had a positive effect on approach behaviours in pleasant environments and an insignificant effect on avoidance behaviours in unpleasant environments. Faster tempo music led to higher ratings of arousal, which is congruent with other research that tempo can mediate arousal and impact physiological alertness (Berlyne, 1971; North & Hargreaves, 2010). Furthermore, analysis of consumers' liking of the music and familiarity of the music as covariates revealed that liking was a significant factor in explaining consumers' increased perceptions of service quality and merchandise quality, while familiarity had no impact. The results of this study has possible implications for sound branding, such that consumers may demonstrate greater approach behaviours towards the brand if the music associated with the brand is liked by consumers.

While the presented evidence shows that emotions can positively affect consumer perceptions and behaviour, the studies show only the short-term impact of sound on behaviour. To my knowledge, there has not been longitudinal research investigating whether or how emotional branding or deeper attachments to a brand may be formed from liking and experiencing of a brand's sound, as suggested in the branding books by practitioners. It is unclear whether a brand that simply maintains consistent, longer term exposure to sound stimuli will subsequently result in increased liking for the brand or brand attachment, although Schmitt (2012) suggests that consumers form attachments to brands when there is personal relevance to the brands.

2.5 Conclusions

This chapter has summarised different ways sound is used in branding and the multiple intersecting concepts and processes presented shows the complexity of the topic. Fortunately, through the current literature, there is some evidence that sound branding can be created and implemented such as to achieve purposive consumer responses. The review of the relevant literature has shown that music carries meaning by its internal structure that becomes attached to the brand. Sound can tap knowledge networks that influence perceptions of the brand and consumer behaviours. When sound is experienced with other sensory stimuli, there are relationships between stimuli that the majority of people recognise as congruent, of which some are non-arbitrary and others can convey semantic associations. The effects of multisensory

stimuli can increase positive consumer experiences through gestalt perceptions and processing fluency. Finally, music can affect consumers' emotions that influence their perceptions and behaviours because consumers use their feelings as information to make decisions. They may also demonstrate greater approach behaviours towards the brand if the brand's music is relevant or liked by consumers. While these findings can all serve as guidelines to companies seeking to integrate sound into their brand, it is unclear the extent to which sound branding practitioners are aware of them or how they apply these concepts and processes in practice.

A confounding issue is some disparity between academic research and sound branding books by practitioners that may impact the development of a consistent body of literature and understanding about sound branding that can be leveraged in practice. Neither body of literature sufficiently references the other, although sound branding books by practitioners suggest underlying psychological processes similar to academic research referenced in this chapter. In order to better understand how sound is used in branding, an interview study with sound branding practitioners will be conducted focused on the research questions identified in the Introduction (chapter 1) together with the findings from this chapter.

Chapter 3 – Understanding sound branding practitioners' beliefs about how sound branding can influence consumers' perceptions and behaviours

3.1 Introduction

An interview study was conducted to gain insight into sound branding practitioners' beliefs about how sound branding can influence consumers' perceptions and behaviours. Three sub-topics were covered: how sound is currently used in branding; the effectiveness of sound in branding; the challenges faced by the sound branding practitioners. Within the first sub-topic, the thesis' research questions outlined in the Introduction (chapter 1) were asked in order to gain insight into sound branding practitioners' perspectives. One key theme emerged from the interviewees' responses: they have a desire to 'prove' the value of sound branding which in their view was needed in order to develop the sound branding practice. The search for proof is entirely theirs; I remain at a critical distance from it in this analysis in order to understand why this desire exists and what proof the interviewees believe is needed. As mentioned in the Introduction (chapter 1), very little is currently known about the views and motivations of sound branding practitioners, while there is growing research focused on investigating the effects of sound on consumers' brand perceptions and behaviours.

3.2 Method

3.2.1 Interviewees.

Interviewees were selected based on their participation in LinkedIn's global Sonic Branding and Identity group. LinkedIn is an employment-oriented social networking service that was acquired by Microsoft in 2016. At the time the interviews were conducted in 2010, there were approximately 200-250 members in the group, the majority of whom were sound branding practitioners holding titles of CEOs or Directors at agencies that specialise in sound branding or companies that explicitly advertise offering sound branding services. There is a strong European presence within the LinkedIn group, particularly from Germany and the Nordic countries, but interviewee selection preference was given to those who worked in the US or had partnerships or offices in the US because branding tends to be country-specific and I did not want to lose in interpretation any references that were culturally specific.

After doing a search of activity within the LinkedIn group, 28 members were identified to be recently and frequently active. These members were emailed via

LinkedIn a request to be interviewed. Fourteen responded, constituting a 50%
response rate. While there is no minimum number of participants required for
qualitative interviews, Guest et al. (2006) found that 12 interviewees of a
homogenous group is likely to be needed in order to reach saturation. Prior to the
interviews, participants were emailed an information sheet describing the purpose of
the study. The confidentiality, withdrawal and complaints policies were also included
and the interviewees were required to sign a consent form for their voluntary
participation. All interviewees were assigned a pseudonym to ensure anonymity and
the study received approval from the University of Sheffield's ethics approval
system.

All interviewees were asked to briefly speak about their background and how they or
their company entered into the sound branding business. They were asked to define
sound branding, the services or specialties that their company offers, the processes by
which they operate, how success is defined or measured, and the challenges they
faced.

Table 1. List of sound branding practitioners interviewed, the country in which they
practice, their title, and the type of company at which they work

Interviewee	Country	Title	Company
AH	UK	CEO, Founder	Sound branding agency
AL	USA	Managing Director	Sound branding agency
AR	USA/EU	CEO, Founder	Sound branding agency
CW	USA	Former CEO	Sound branding agency
EA	USA	Founder	Sound branding agency
ET	USA	Branding Director	Music branding agency
KB	USA	CEO, Founder	(Visual) branding agency
KG	UK	Sound Designer	Sound branding agency
MC	USA	Principal	(Visual) branding agency
MK	USA	VP, Sonic Branding	Music licensing agency
SC	USA	Sound Designer/Producer	(Visual) branding agency

3.2.2 Sonic Branding and Identity LinkedIn group.

The 'Sonic Branding and Identity' LinkedIn group was created in August, 2008. It described itself as a 'group for sonic branding and identity (audio branding and identity) practitioners, clients, vendors and significant others. We're interested in building brand value through the strategic use of sound in advertising, online, digital media, physical environments and other touchpoints. [This] group includes strategists, planners, experience designers, psychoacousticians, musicologists, composers, musicians, sound artists, engineers, etc.' At the time this part of the study was carried out in 2010, there were just over 200 members. As of June, 2017, there were almost 2,000 members. This significant increase in membership is likely due to the growth of LinkedIn rather than a real growth in the sound branding industry because the majority of newer members in the group appear to be general branding and marketing professionals, and not sound branding practitioners. Online research uncovered blogs and company websites of some group members that provided validation that these were active people working in companies that were a combination of music licensing companies, composition houses, and new specialty sound branding agencies.

Sound is a branding element within the general practice of branding. The LinkedIn group includes general brand strategists, two of whom responded to the interview request, and their interviews confirm that there is awareness and interest in the use of sound as a branding component within branding, but it was not considered a priority at this time. However, both interviewees acknowledge that traditional forms of branding (visual branding) are beginning to lose their potency due to the significant increase in branding communications. They indicate that brands are beginning to seek out other ways to build and convey their brand identity.

At the time the interviews were carried out in 2010, there was no consensus on the name of the industry. Amongst those names used during the interviews included sound branding, audio branding, audio identity and sonic identity. The terms acoustic branding and music branding were also used, but they were in the context of reflecting specialized areas within the main branding industry. For consistency, this industry is referred to in this study as the 'sound branding industry' and this term is meant to distinguish the companies or individuals who are actively promoting the use of sound as a branding component. The term 'branding industry' is used to refer to the broader, established branding industry that is predominantly visual. The term

'sound' is used to imply both sound and music, unless otherwise specified. The terms 'vision,' 'visual,' and 'image' are used synonymously.

3.2.3 Analysis.

14 semi-structured phone interviews were conducted and recorded between August-November 2010. Each interview lasted between 45-60 minutes. The recordings were transcribed and analysed using a grounded theory approach (Corbin and Strauss, 2014) through creating memos and axial analysis to compare and contrast emerging themes. The process began with a review of each interview transcript, where initial thoughts were noted and, as similarities in the data emerged, they were grouped together in a separate memo. Once all of the transcripts were reviewed and the data was reduced, selective coding of the core categories was conducted, and emerging themes were noted and analysed until theoretical saturation appeared. At this point, the themes were compared to the published literature on the topic of sound branding in order to gain insight into how sound branding practitioners today understand sound branding.

3.3 Results

When the interviewees talked about sound branding, one main theme emerged from their comments. This theme consists of their need to 'prove' the value of sound branding in order to develop the sound branding practice into an expert discipline. Through the interviews, it appeared that the interviewees equate 'proving' the value of sound branding to gaining external validation for it from the general branding industry rather than demonstrating empirically that sound is an effective branding component. Their motivations could be seen as a reflection of their own need as professionals to bolster their position within the general branding industry because they refer to overcoming legacy challenges and needing to grow the perception of sound branding as an expert discipline. Legacy challenges are the ways in which sound is currently used in branding that are preventing sound branding from progressing in the direction the interviewees would like it to. These include the dominance of visual branding (Theme 1), as well as how sound is currently used in branding that is not aligned with what the interviewees consider to be best practices (Theme 2). According to the interviewees, in order to overcome the legacy challenges, the use of sound needs to be incorporated intentionally and strategically into branding, out of which the perception of sound branding as an expert discipline will likely evolve. The results examine the interviewees' definition of an expert

discipline that comprises their beliefs about sound branding (Theme 3) and the need to further acquire knowledge about sound that will inform decision making within the practice of sound branding (Theme 4). The analysis showed that the interviewees consider a pivotal point in the development of sound branding to be when it is perceived and accepted as an expert discipline within the current branding industry. Furthermore, the interviewees believe acceptance includes being equitably compensated for their work, and it is out of this observation that the main theme of 'proving the value of sound branding' emerged. The next section discusses legacy challenges beginning with a brief overview of how sound is currently thought of by the interviewees and its place within the current branding industry.

3.3.1 Legacy challenge: The branding industry is dominated by visual branding (Theme 1).

There was consensus amongst the interviewees that the overarching challenge of their work is to intentionally and strategically incorporate sound into branding. According to the interviewees, this is a key point of distinction from how sound in branding has been used historically. They described their current practice as comprising one-off designs of a sound logo and soundtracks that support a physical space or background music used in TV or radio commercials, and which vary seasonally or with the change of an advertising campaign. This use of sound does not adhere to what the interviewees consider to be 'branding best practice,' which is that companies must intentionally and strategically keep their brands consistent with very little (if any) variation in order to build recognition in the marketplace: as stated by interviewee CW, what is needed in sound branding is, 'it's two words, consistency and differentiation [from your competitors]. It's really a very simple concept. Best practice.' For example, this does not mean that a soundtrack is played in a retail space repeatedly over extended periods of time, but instead, sound is purposefully designed to align or fit to the brand's identity and it is carefully maintained over time. The analysis revealed informants' belief that the dominance of visual branding currently impedes sound branding from developing as a core branding component that is separate from visual branding and, specifically, two issues were identified: processes and personnel.

Firstly, according to the interviewees, visual branding practitioners lead the brand development process and sound is typically added after the messaging and visuals have been finalized. The quote below by JH, comparing sound to Cinderella, implies

that he believes sound is as relevant as copy and image, and therefore should be incorporated into the process at the same time, but it is not recognized as such within the branding industry:

> JH: Sound is a Cinderella of the brand world, and she's left in the kitchen whilst her ugly sisters copy and image go to the ball. That's the way I put it. And it's a bit fanciful, but it kind of is like that.

Other interviewees agree with JH's sentiment with suggestions that the current process represents a significant missed opportunity for sound branding. The interview transcripts included comments such as 'we don't get to show what sound can do for a brand' (ET) and 'we're boxed in by the time we're brought in, so much has been decided already that there's no room for us' (JS). Furthermore, it creates a sense of being taken for granted: 'it's all too common to be given just a few days to come up with a playlist when months of work has gone into the rest of the campaign' (JS). However, AL highlighted a contradiction between the current brand development process and the expectations from those leading the process regarding what sound can contribute to branding, which are not in-line with each other:

> AL: yet they expect magic, that sound is the finishing touch that's going to make it come alive and bring it all together [laughs].

AL's quote suggests there are expectations within the branding industry that sound can significantly enhance a visual branding initiative or campaign. These expectations are found in the sound branding books by practitioners when they reference multisensory branding and their beliefs that congruent crossmodal stimuli can influence perceptions and increase positive consumer experiences (Jackson, 2003; Lindstrom, 2005; Gobé, 2001). The interviewees' quotes hint at dissatisfaction with their own status; this discourse of the lowly position of sound relative to vision may be an expression of a self-perceived lower status of the interviewees themselves.

According to the interviewees, the second issue highlights their belief that there are currently very few personnel or decision makers within the current branding industry whose expertise is in sound. As they described the branding industry, the interviewees highlighted that decision makers are typically creative directors and brand managers whose expertise is in visual branding and they have little knowledge

or experience in audio. This can explain why sound is usually left until the end of the branding process and why it has a limited role. In CW's quote, he believes the solution is to change the existing resourcing strategy in the branding industry:

> CW: First, this is a visual business. It recruits mostly visual people, art directors and copywriters. And so their skills don't automatically extend to audio. Audio requires not only an interest in it, which many have, but also a good ear, the skills for it, some training and also a different agenda. These people don't currently exist and they should. This needs to change.

According to the interviewees, they believe that current branding practice recruits people who are not only talented in visual design and writing, but are also trained in these areas. As I reflect on this belief, perhaps an example of this may be interpreted as a person can be a naturally good writer, but copywriting is a specific technique that requires developed skills. Therefore, the same may be said for sound design: a sound designer not only needs to be able to compose or select the appropriate sounds to use, but s/he also needs to be trained in using production or special effects tools and software. Interviewee MK described such requirements for sound designers, but he placed more emphasis on people having both sound and branding expertise, not just sound expertise:

> MK: These people will be a combination of sort of music savvy branding people and you need both the music and the branding pieces. Without the branding piece, you can't be effective and influential upstream, in the beginning when concepts are being drawn and those key decisions are being made.

In the interviewees' opinions, sound is currently not integrated into the branding process as a core branding component because the branding industry is too focused on visual branding. The interviewees believe this has consequences in the inconsistent and misuse of sound that could be prevented if the branding industry included more personnel who have expertise in sound branding. In order to better understand what the interviewees perceive as the misuse of sound and why they believe it to be so, the next section explores the challenges surrounding how sound branding is currently practised. According to the interviewees, expertise is central to the development of sound branding and this is discussed in Themes 3 and 4.

3.3.2 Legacy challenge: The tactical execution of sound branding (Theme 2).

When asked the initial question 'how does sound contribute to branding?' most interviewees began their responses by saying that the use of sound in branding and advertising has existed for decades without significant development. Two primary executions were cited: jingles (or sound logos, as interviewees tended to refer to them) and background music in commercials or physical retail environments. It became clear that the interviewees believed that the current approach to sound logos and background music does not always adhere to what they say are branding best practices of maintaining consistency and differentiation from a brand's competitors. They describe the current approach as a 'misuse' of sound; however, the interviewees believe there is the potential to adopt an effective approach to developing sound as a core branding element.

3.3.2.1 The Sound logo.

The sound logo is a short aural mnemonic that represents a brand or product. The most cited example of a sound logo by the interviewees was the Intel chime:

> CW: The Intel logo, people go to that right away. It's done more harm than good I think in the long run. But, it is a very effective mnemonic device. It's Pavlovian.

In this quote CW describes the purpose of a sound logo as an aid to recalling a brand. He further describes the effect as 'Pavlovian,' referring to the classical conditioning study by Pavlov (1927), meaning that if you hear the sound logo repeatedly over time, whenever you hear the sound logo, you will associate it with the brand Intel. While the Intel logo is widely considered by the interviewees to have been extremely successful because it is so easily recognized, some believe it has had a detrimental effect on how people think sound can be used in branding:

> CW: I've found that sometimes all you need to do is play that first chord [sings] 'dum' and people immediately know or can finish the rest of the logo. But it's certainly not - it's the tip of the iceberg when it comes to audio branding. And unfortunately, most people think that's all there is to it.

AH criticised the success of the Intel sound logo because it limits what brands think of as sound branding:

AH: So many brands come to us because of the Intel logo, thinking they only need a [sound] logo and that's all they've budgeted for, so there's no room to do anything else.

Although CW and AH seem to suggest that the idea of what sound branding is has been negatively impacted by the industry fame and success of Intel chime, LO believes there is opportunity to capitalize on the success of the Intel logo to promote the potential of sound branding:

LO: We should use it to help brands understand why it's worked so well so they get the potential of sound branding. Intel needed a sound logo to *represent* its product because, you know, it's a chip processor that's stored in a computer and that isn't something you see. It's really not what you're buying, either. You're buying the computer. They did a really smart thing by creating a sound logo because it was a way to make consumers aware of its brand. And so that's why a logo was perfect. They could tag it onto the end of all the computer commercials, and it would stand out and be remembered. The sound of the logo itself, though, they also hit that out of the park. It sounds like tech, you know? It's bright, has resonance and vibrating-like qualities that makes you think of machines, and it's got four notes that match to 'In-tel In-side.' This is how I explain what good sound branding is, in context, whenever a brand wants their version of the Intel logo.

According to LO, Intel's sound logo is a good example of sound branding because the logo has iconic meaning (Koelsch, 2003, 2004); it uses musical sounds that resemble what people typically associate with technology products (Jackson, 2003), as well as sound symbolism of the brand name (Klink, 2000).

AL agrees that there are opportunities to expand the potential of the sound logo. She described her company's relatively new approach to 'intentionally and strategically create full logo expressions.' Expressions are similar to how a person may sign their name, where the form or tone of the signature can change in each iteration depending on the context, for example casual or formal. The identification of the logo remains the same. In musical terms, the 'signature' translates to the key musical component that identifies the logo. For example, in the Intel logo, it is the melody or the intervals between the notes that make the logo recognizable. Other musical components, such as rhythm, instrumentation, texture, timbre, can change in order to create different expressions intended to convey meaning. In AL's example of a signature, she

describes it as similar to the different ways a person can sign their name that reflect the context in which the signature exists:

> AL: And we do think about it like a signature. Sometimes you just sign AW, sometimes you sign the middle initial alone, sometimes you sign very carefully because it's a deed on a contract or something, and sometimes you just very quickly sign it because it's a birthday card and you're just rushing to get it out. Each one of those has a different expression, and our philosophy in music is no different - that your signature is your signature and it's as recognizable like the Coke bottle is, or that American Express card is or anything else if you think about as an iconic or symbolic piece of a brand. That symbolism should be represented, that how it manifested itself is dynamic.

As AL described her example, she said that it reflects the same execution that is applied to visual logos, but admits that getting brands to understand and adopt the same approach for sound logos is difficult: 'they believe it once they hear it, but getting them to hear it, that's a real challenge.' Similarly, KB expressed frustration that companies offer fewer opportunities for sound branding practitioners:

> KB: There's a lack of willingness, I'd say, or is it openness? I don't know what we need to do to break through. You'd think what the Intel chime has proven in its success should have been a catalyst for audio branding to really take off, but it hasn't. It's seen more like an anomaly instead of what should be by now the norm.

The sound logo is considered by the interviewees to be a core branding element. The Intel chime has shown that the sound logo can both aid brand recall and sonically represent the brand's attributes. However, the Intel logo is viewed as an anomaly and the interviewees are unclear as to why more companies have not incorporated sound logos into their brand strategies.

3.3.2.2 Background music.

Background music used in advertising or physical environments was the second most common example given by interviewees of how sound is currently used in branding. The interviewees believe that background music is more easily 'misused' compared to the sound logo because it is, as its name implies, less autonomous in nature. According to CW, the 'misuse' of sound is when it is neither 'strategically nor intentionally applied' as a branding element (CW). In the quote below, SC describes how background music can be a strategic branding component:

> SC: People talk about sound branding on two levels. One, to the point that it equates, a jingle, an audio logo, what have you, and that's direct. But, in background music, it's associative or influencing or persuasive music that's being played. And it's always connected to something, whether that be a TV commercial or in a shop. It's got its own challenges that way. Strategically, it needs to fit what it's connected to, but it's also got to be part of the brand identity. Unfortunately, more often than not, it's just not executed that way.

The word choice of 'misuse' can be seen as a way for CW to assert his status as a sound branding professional and to reinforce his belief that sound is a core branding component that should be treated in the same way as vision. The interviews highlighted two issues regarding background music as a sound branding element. The first issue was discussed in the previous section: the interviewees face the challenge of working with creative directors who, in their opinion, are unaware or lacking in knowledge as to how to select and apply music. KG describes the experience of creating background music as 'all too often disheartening and the least favourite part of the job,' while LO explained the difficulty of creating background music as 'problematic all around, but starting from the top' and further explains:

> LO: At the get go, the brief is unclear. What do you want the background music to do? The director often doesn't know. It's twofold: they don't know what music can do and they don't know what it should sound like. And so often you just get a line of instruction that's like 'add music and make it sound good' and, ahhh, that's just so difficult to work with.

Despite this, SC believes that the 'incremental benefits of background music can be significant.' SC describes using background music that fits with the visual elements as a 'successful execution,' but the 'holy grail' is when it also accurately represents the brand's identity:

> SC: Most of the time, background music is just there to fill space, but when it fits the visuals or the environment, it's dynamic. But when it does that *and* it's on brand, it's magical. That's the holy grail. It just works and pretty much everyone can feel it. There's little dispute.

SC describes how background music can be used in a variety of ways, from serving a functional purpose ('fill space') to creating congruence between multisensory stimuli ('fits the visuals') to being a branding element ('it's on brand, it's magical'). His assessment is that background music is typically used in a functional capacity and seldom as a branding element. This has similarities to how the interviewees talked about the sound logo rarely being used to its full potential as a branding element.

The second issue was the belief amongst interviewees that there is a prevalent practice of working with record labels that has become heavily dependent on brands and creative agencies to promote their artists. Changes in music licensing laws have meant that the record industry has had to seek alternate ways to generate revenue and, in his experience, CW observed that this has evolved a mutually beneficial relationship between the record industry and agencies because those working in the agency industry are primarily attracted to the opportunity of working with famous artists (Tessler, 2016). This contributes to the observation that background music can often reflect current trends in music, rather than be aligned to brand identity:

> CW: What's changed in ten years is now the easy access to licensed tracks. Ten years ago bands didn't license their music. Now that CD sales and music sales have plummeted, they're looking for other revenue. And all of a sudden, yeah, anything's for sale. And that's part of the problem is agencies tend to be star chasers. They love working with celebrities and rock bands. And it's so much cooler to hire U2 to do a song for you or to license one of their songs to work with their people than it is to hire an unknown studio musician to write original tracks It's being pushed very heavily by the record companies. The weight of all of this easily available licensed music all of a sudden has thrown a real monkey wrench into this.

The 'monkey wrench' in CW's quote refers to potentially competing identities being presented by brands and artists that may alter and affect consumer perception when they are combined. An artist may not necessarily complement or reinforce a brand's identity and, in some cases, an artist's identity may be stronger than that of the brand's, resulting in what interviewee MC calls 'reverse branding':

> MC: It's called reversed branding, where you attach an artist to a brand and people remember, 'Hey! How about those cool ads with Led Zeppelin playing that song, 'Rock and Roll?' I can't remember what the car was though.' That's actually a state of disconnect in branding as a result of poor strategic planning.

According to the interviewees, the mutually beneficial relationship that has developed between labels and creative agencies is detrimental to sound branding because the motive is misaligned to what they feel is best practice. This can easily result in a representation of the brand through the use of sound that does not fit the brand's identity. As mentioned earlier, this belief can possibly be seen as emerging from a position of the interviewees struggling to establish their professional identity and battling against self-perceived low status. However, the interviewees believe that the

strategy of a brand-artist partnership can effectively strengthen brands' relationship with their consumers. This is discussed in the following theme.

The dominance of visual branding that includes valued skill sets, established processes, and established relationships with record labels, was identified as limiting the effectiveness and creativity of the sound branding practitioners. The current use of sound in branding was described as comprising sound logos and background music, neither of which typically follows best practices of consistency and differentiation from a brand's competitors as defined by the informants. In particular, background music often serves a functional role and is not considered to be a branding element. The Intel sound logo is considered to be successful, but according to the interviewees, it has not increased the perspective that sound is an effective branding component. The interviewees believe sound should be strategically and intentionally incorporated into branding, from which the perception of sound branding as an expert discipline, their underlying aim, will likely occur. The next section reviews how the interviewees are trying to overcome the legacy challenges in order to build the perception of sound branding as an expert discipline.

3.3.3 Building an expert discipline: Beliefs about sound branding (Theme 3).

This section examines how the interviewees would like the sound branding industry to change using analysis of their responses to the question 'what is it about sound in particular that makes it effective in branding?' Through the answers, it became obvious in the fluidity with which they spoke that they had thought about this question before and that they pitch their answers to companies as the unique selling points of sound branding. It is also possible to detect this through the length of the text as many of these responses were longer and included fewer hesitations or pauses. The main theme that emerged from the interviews was in the form of a belief: sound can deeply connect consumers to brands. The primary supporting tactics described by the interviewees are that sound can elicit emotional responses by activating relevant consumer memories that have a connection to the brand, and brands can form relationships with consumers through partnerships with artists and bands. A secondary tactic mentioned is that multisensory branding, of which sound can be a

component, can create a more unified and consistent representation of the brand that strengthens the relationship between the consumer and the brand.

3.3.3.1 Sound can deeply connect consumers to brands.

The most common response given by the interviewees to the question 'what is it about sound in particular that can make it effective in branding?' is that sound can deeply connect consumers to brands because it can elicit emotional responses that increases consumers' liking for a given brand. This belief is congruent with views expressed in sound branding books by practitioners (Lindstrom, 2005; Jackson, 2003; Gobé, 2001). A deeper connection means that consumers are likely to be loyal, repeat purchasers, think favourably of the brand, and choose its products over those of other brands. The deepest connection a brand can have with consumers is when the consumers will advocate or persuade other consumers to also like the brand, simply by virtue of the consumers' own love for the brand (Schmitt, 2012):

> What we like about music and the advantage that we sort of evangelize by it is from what we have experienced, that brands are especially keen to develop these emotional bonds with their audiences. They want audiences to love their brand and to be not just loyal but to be enthusiastic and apostatize, ultimately. And because the ultimate goal of branding is about emotion as far as we're concerned, we think it's especially formed to pay close attention to the medium that is pure emotion, and that is music. (MK)

ET also emphasized that 'emotion' is the single biggest contributing factor that music can add to brand identity, and he applies this as a selling point he uses for how he practices sound branding that implies this is the value that he brings to the companies:

> AW: What is it about music that you believe can contribute to a brand's identity?

> ET: Sure. One thing that - well, in a word, it's *emotion*. And the connection between a brand and a customer is an emotional connection. So there's all research out there that shows people generally buy products not because it's the best product or because it's the cheapest product but because they have an emotional connection to the brand for a variety of differences. Music is an area in which that can be strengthened. And I'm definitely on the creative side. I'm into the selection of music that's emotionally relevant to the customers and that's brand-appropriate based on the music itself.

ET's description of the 'emotional connection' between brands and consumers is referenced by Thomson et al. (2005) as related to the concept of brand attachment,

whereby the consumer's relationship to the brand is an emotional, personal, and self-relevant one that results in the consumer exhibiting behaviours such as loyalty to the brand in choosing it over other brands and willingness to pay a price premium. According to ET, he believes that sound can be used to create brand attachment and he indicates that this is the objective of his work. While Thomson et al. (2005) found evidence of consumers' demonstrating emotional attachment to brands, there is currently no known research that shows whether sound can create an emotional attachment between consumers and brands.

MK and SC spoke of sound information being processed differently to vision and, according to them, it is a result of this difference in processing that creates a deeper connection between consumers and brands. According to MK, sound 'communicates feelings first,' whereas vision leads with 'a more intellectual parsing or reading the sign first, after which emotion may arrive out of your understanding of the image.' Similarly, SC believes that people are likely to have 'stronger, more visceral reactions to sound compared to vision.' Both MK and SC said that brands are usually very receptive to learning more about sound after they open their presentations with this point. In his experience, MK said that brands are less concerned with understanding how sound as information is processed, the 'theory behind it all' (MK) as he referred to it, than hearing about specific examples that they can apply to their brand. MK said that his most well-received slide in presentations is 'IFTTT (if this, then that),' within which he shares sound branding concept ideas ('if you did this') together with the expected outcome ('then you'll get that'). MK seems to be suggesting that the causal effects of sound branding are obvious to brands. He mentioned that two concepts in particular resonate with brands: sound can elicit emotional responses by activating relevant memories and brands can connect with consumers through partnerships with artists and bands. MK observed that the common thread between these two concepts is that they both focus on relating to the brand's consumers, which reinforces his original point that brands want to connect deeply with their consumers.

3.3.3.2 Sound can activate memories and elicit emotional reactions to the brand.

According to EA, brands use sound to activate relevant memories as a way to elicit emotional responses from consumers in order to increase their liking for the brand. EA gave an example of sound that he says can instantly trigger recognition as 'that

one litmus test,' meaning it has a very high recognition success rate. The sound is the opening chord of a song, but for a specific group of people, just hearing that one chord will enable them to immediately identify the song:

> EA: But here's how I explore it: the first note of Elton John of 'Bennie and the Jets,' it's just a simple piano strike and anybody over, say 35, maybe might have grown up with that song at some point, and they get it immediately, which tells us that sound has a certain ability, even at just a small amount of sound, to go to a very specific spot in our brain that triggers memories.

EA is making two points in this quote: the first is that sound can have a very strong recall effect, to the extent that just hearing one chord can bring to mind an entire song. The second point is that this test, since it relies on activating recall, is only effective on anyone who is familiar with the song. In this case, the audience criteria EA uses is based on age. Since the song was released in 1973, anyone over the age of 7 will know this song because it would have received significant playtime on the radio after it was released. He described sound as having the ability to 'evoke memories that have emotional weight in baggage tied to them,' meaning that people associate certain sounds with personal memories that may generate an emotional response:

> EA: And those memories have emotional weight in baggage associated with them, which is kind of cool. And so, if that's possible with one little note, how can we use either existing associations that we have with sound, as a culture, whether those are pop songs or whether those are environmental songs of like let's say the amusement park growing up, calliopes and that sort of thing that make us feel fun.
>
> There are all sorts of triggers that we can use out of existing associations in which it takes very little time to accomplish an emotional response. And we've all felt that or experienced that whether it's through something like that 'Benny and the Jets' example or two notes from the Jaws theme or something else. We live in a world of sound, and so there are many ways to leverage that simple and immediate connection.

Similarly, MK refers to a 'prescription' that comprises a 'triangle of audience sensibility, musical attributes, and desired emotional experience' (MK) to facilitate recall. Using sound to activate memories is related to what North and Hargreaves (2007) calls fit or priming of associative knowledge networks that has been found to influence consumer perceptions or behaviour towards a brand (Areni & Kim, 1993; North & Hargreaves, 1997, 1998; North et al., 2004) (see chapter 2). Interviewee JH

recognises the complexity of 'dealing with emotions' and cautioned that increasing consumers' liking for a brand may not be so straightforward:

> JH: People think that if you put these one and one together you're going to get two and if you do it... And they can't quite understand why you don't get two, and you may get six. Well, quite often, you get zero in all these things. The branding companies think that, 'Oh, if you get the right emotion with this song and you apply it to this commercial, it will resonate with our customers, and there you have it.' But that often doesn't do it. Dealing with emotions is complicated. The secret sauce is whether it does anything for the brand. And, [laughs] therein lies my job: figuring out the secret sauce.

Despite JH's caution, his description of 'secret sauce' echoes ET's earlier quote that he's 'definitely on the creative side.' Both interviewees believe their value to companies lies in their ability to increase consumers' affinity with the brand through the use of sound. However, their articulation of their process highlights a tension between wanting to be strategic and demonstrate what sound can do in branding, while at the same time not really being able to articulate how or why it works when it works:

> JH: I think our biggest issue is in recognizing that music is an emotional, subjective thing, and yet trying to convince people that you can be more strategic with this, and you can be more data driven with that decision-making. I talk to companies about needing to be strategic, which I can get them to buy into, but, at the end of the day, it is still something that just has to be good that works for the brand. And this is where it can get tricky. Like I could have all the data in the world that recommends using Nickelback's song for the new Apple commercial, but I just know that's not the right decision.

JH seems to rely on his intuition in his sound branding work: 'I just know that's not the right decision.' Similarly, ET suggests that it's due to his skills that he's able to identify 'the selection of music that's emotionally relevant to the customers and that's brand-appropriate based on the music itself.' Both quotes indicate that the extent to which sound branding may be compelling and effective is due to the abilities of the practitioner. This is again a reference to the theme of expertise, but it should also be remembered that the interviewees have a vested interest in presenting the situation this way because it reassures them of employment and reaffirms their professional identity status. JH reiterated this point with the 1973 Hovis commercial made by film director Sir Ridley Scott as an example of what he called 'secret sauce.' The commercial depicts a boy pushing a bike up a hill while carrying loaves of bread in

the front basket. In the background, a brass band arrangement of Dvorak's New World Symphony played with voiceover narration of a man with a Yorkshire accent, speaking as the older version of the boy, reminiscing on his childhood delivering bread. The imagery of the 'cobbled streets and flat caps,' together with the music of brass bands, is quintessentially English and the connection to Hovis is that bread is a part of the staple English diet. The narration conveys the man's positive memories of his childhood and the central role that bread played. According to JH, the key to the commercial's success was Scott's ability to create nostalgia through the imagery and sound:

> JH: One of the most successful ads was the Hovis ad. Tremendous. Powerful. But the cleverness behind that... Now, that was a genuine match. It was Sir Ridley Scott, who pulled that together with a huge degree of sophistication. That's someone who gets it. He took this piece and it was a piece that everybody knew, or had an idea about, but had it played by a brass band. And brass bands, to people in England, it gave them that sense of home and all these pictures of people with cobbled streets and flat caps. It was a no-brainer to put that together to create nostalgia. Very cleverly done.

The interviewees believe that sound can activate relevant memories in the form of shared cultural associations between music and extra musical meanings, and elicit emotional responses that increases consumers' affinity for a brand. This belief is a selling point or differentiator from visual branding that, according to the interviewees, resonates with brands. There is empirical evidence that sound can activate memories and influence consumers' perceptions and behaviours (see section 2.2.2).

3.3.3.3 Brands can connect with consumers through partnerships with artists and bands.

Brands are attracted to partnering with artists in order to reach the artists' fans, who they hope may be influenced to also like them because of the artist's promotion or endorsement (Doonar, 2004). In his interview, ET played on the word 'fan' to emphasise his point that brand-artist partnerships can be particularly effective. In the music world, people who like an artist or a band are referred to as 'fans' and, in the consumer world, a 'fan' is considered to be more loyal than a customer:

> ET: ... individual tastes vary, but for people, music is important, and it's something that they have an almost irrational emotional attachment to. And I think it's interesting. When you look at products and you look at the people who buy a product, we call them a customer. When we look at the people

who buy music, we call them a fan. And I think that brands can help convert customers into fans through music.

AL described two strategies for a brand-artist partnership: first, the brand can name the artist as the spokesperson for the brand, in the same way actors and models are sponsored to be the face of brands. An example of this is the 2014 Diet Coke and Taylor Swift partnership. The second strategy is when a brand partners with an artist to promote or write a song that is specific to the brand resulting in a closer association between artist and brand. For example, Nivea retained Rihanna as their spokesperson and her song 'King Bed' became a digital marketing campaign called 'Co-Star with Rihanna' where Nivea's Facebook fans were able to edit themselves into the video of the song:

> AL: Nivea, for one, is using music very creatively and very innovatively, and they are really going after Rhianna's fan base. It's a good fit. And the fit has to feel genuine. Fans won't go for it if they think it's all about money.

'Fit' is mentioned again here by AL and highlights the sound branding practitioners' focus to connect brands to their target consumers. The earlier mention of fit referenced a strategy of the activating memories within consumers that are relevant to the brand, whereas this strategy targets an artist's fans to become consumers of the brand. In this example, Nivea targeted Rihanna's fans by associating the brand with one of her songs. The association to Nivea is subtle: if you like Rihanna, you will also like Nivea, but there is no direct selling message from Rihanna to her fans to buy Nivea products. Instead, Nivea creates a new opportunity or venue for Rihanna fans to engage with the artist's music through becoming a fan of Nivea on the social networking site Facebook. Brand awareness is increased as the call-to-action of becoming a fan of Nivea circulates via a person's News Feed to their Facebook friends and, as a fan of Nivea, a person will receive Nivea updates via Facebook that may increase their likelihood to purchase.

The interviewees believe the strategy of brands leveraging an artist's relationship with their fans can be particularly effective when the brand's target consumers are the same as the artist's fans. If the brand-artist relationship is successful, the fans of the artist will have increased liking and subsequent loyalty for the brand.

The interviews showed that the sound branding practitioners believe sound can elicit emotional responses from consumers that builds relationships with brands. Their focus on emotions appears to be an attempt to draw a distinction from visual branding that they can use as a selling point when pitching to brands about their work. The interviewees did not draw on empirical research to substantiate their belief, but it was clear from the interviews that this belief is derived from their instincts that they can identify optimal brand sounds that resonate with consumers.

3.3.3.4 To what extent is multisensory branding effective?

As the interviewees spoke about building the relationship between consumers and brands, a few briefly suggested they believe that multisensory branding, of which sound is a component, can create 'a unified, stronger representation of the brand that can build relationships with consumers' (AR). While the interviewees who spoke about multisensory branding seemed convinced about it conceptually, even to the point of explaining why it has not been pursued by brands, they admitted that they understood little about how the different senses communicate information and interact with each other.

AL believes in multisensory branding because 'people have five senses, so branding should target all five. Why only focus on vision? They have to work together, though, and that's something we're tackling now.' She spoke of a proprietary multisensory study her company commissioned that she claimed reported encouraging results for growth in this area:

> AL: But what I would say to you is that there are lots of neuroscience studies being done right now that indicate there is value in what we are doing. We were asked to partner with a guy by the name of _____. He is a sensory branding guru, and his philosophy is that we experience life with all five senses. We just did a study with him that showed us what kinds of parts of the brain were lighting up when different senses were engaged. And again, because the neuroscience techniques are coming into the forefront, there is more that we're able to discern.

The results were not well received by EA. He mentioned this study in his interview, the findings of which he described as 'quite trite':

> EA: And that is _____'s consultancy in conjunction with company _____. And he is, of course, looking for a larger role of the entirety of the sensory experience. I think they managed to get Time Magazine to write about it,

which is great, but overall the study seemed quite trite. It used big words but the findings lacked substance. Or any real explanation, at the very least. I wrote a blog posting that ribbed them for that. But at the same time, it's still moving the meter forward, and I'd rather have it go forward than back.

There is some empirical evidence that multisensory branding creates gestalt perceptions of the brand when the sensory elements are congruent (Keller, 1993, 2003) and multisensory branding is a key focus in books by practitioners (Lindstrom, 2005; Gobé, 2001). This seems to be what AL meant in her earlier quote in describing the sensory engagement in branding: 'they have to work together.' The interviewees appeared to be convinced about its effectiveness, but were less informed about it than when they were speaking about their beliefs about sound. Despite his opinion of the multisensory study conducted by AL's company, EA readily claims to be a believer in multisensory branding, that it can create stronger perceptions of the brand, even though he has no evidence of its effectiveness or understanding of how it works:

> EA: I haven't done any research in combining the senses, but if there's data out there that supports it, I don't have any reason to disbelieve it right now. I'm not an expert on the measurement in engaging multiple senses at once. But I am a believer. I definitely believe that it helps to make a brand's identity stronger.

AH believes in multisensory branding is because 'it's like common sense, you've got all the senses working together,' and while he wasn't able to articulate how the senses work together, his opinion is similar to AL that sound is of equal importance to the other senses and any progress towards multisensory branding will help to further promote sound branding:

> AH: I'll take it because sound is as important as vision and the other senses, so if there's advancement in multisensory branding, it's good for us. In branding, sound mostly works with vision anyway, so that by definition is multisensory.

JH has considered how senses interact with each other and how this can apply to multisensory branding, but he questions the impact that it has on the brand:

> JH: Ok, so I tend to think that visual and tactile go together quite closely, so what you see you almost imagine touching. Same as visual and sound. And in the same way smell and taste go together pretty closely because they are

very, very closely related senses, you can't taste anything without smelling it. But, let's say you put all of this into the brand and in marketing executions. It makes sense, right, but how much difference does it make? By that, I mean does it really drive sales? What does it say about the brand? What does it make people think about the brand? Does it make people like the brand more? How much more? I don't know how much it matters. I'd like to know how we should be thinking about this.

The second half of JH's quote shows that he questions how effective multisensory branding may be. This is unexpected because the interviewees hold strong beliefs about sound branding eliciting emotional reactions from consumers and, as AH stated, sound is a component of multisensory branding, so therefore I expected JH to hold similar beliefs about multisensory branding as sound branding. Instead he questioned how the interaction effects between different sensory stimuli may work that reflects a different perspective from how he thinks about sound branding.

The interviewees appear to be interested in multisensory branding, but it is clear that they think about it differently to sound branding. From the interviews, the interviewees believe multisensory branding is the interaction effects of how different sensory stimuli interact that may contribute to how a brand's identity is perceived, while sound branding is about increasing consumers' affinity for the brand.

The interviewees believe that sound can create deep relationships between brands and their consumers. Their belief appears to be driven by strong instincts that sound can elicit emotional responses from consumers that, when used in branding, will increase consumers liking for the brand. The interviewees substantiated their belief by referencing actual branding campaigns that highlight how sound can create relevant associations to brands through musical attributes and artist endorsements of brands. However, they only provided anecdotal evidence as to the effectiveness of the sound branding campaigns, so the interviewees were asked about how their work is perceived and how they validate their work. This is reviewed in the next section.

3.3.4 Building an expert discipline: Education is needed to change perceptions (Theme 4).

When the interviewees talked about validating their work and the potential of sound branding, a common theme was uncovered that they believe sound branding needs to

be recognized as either requiring 'expertise' or as being perceived as an 'expert discipline.' JH and ET in the previous section referenced the theme of 'expertise' when they talked about having the instinct to determine music that fits with a brand in order to generate an emotional response from consumers. To LO, being seen as possessing 'expertise' is crucial because 'it lends credibility and, to be honest, people are more open-minded.' KB described sound branding as needing to become an 'expert discipline, one that's accepted in the same way as (visual) branding is today.' MK used industrial design as an example of a recent profession that has grown to become an expert discipline. In his description, he lists a few criteria: firstly, to build an expert discipline takes time. In this case, industrial design took approximately 20 years to become considered an expert discipline. This is because an expert discipline has to be widely practiced by the majority of companies within the industry with evolved similar or shared ideas, processes and procedures, and it takes time for companies to adopt these. Within industrial design, packaging and product design are two of the most important features because they are unique to the discipline and they are also used to differentiate a brand from a competitor brand. Finally, an expert discipline is one where the consumers are aware of the output generated and they're willing to pay for it:

> MK: I like to say that sonic branding is where industrial design was about 20, 25 years ago. And by that, I just mean that even bottom-shelf brands are much more savvy about their packaging design and their product design. And I think consumers, on the whole, are savvier about design than they used to be, more conscious anyway on a more conscious level.
>
> AW: How did consumers get savvier?
>
> MK: I think once they were exposed to it, they knew it. It's like once you experience it, you can't un-experience it. It sets a new standard for others to follow. That's what Apple did. And now everyone puts a lot more effort into their packaging.

The interviewees who spoke about establishing an expert discipline view the end goal as being compensated appropriately or relatively compared to other industries, such as visual branding, that demonstrates value or worth for what your work. MC, a visual branding professional who also practices sound branding, described expertise as a combination of skill and knowledge, and said that there is a perception of expertise associated with visual branding that companies are willing to pay for, but sound does not hold the same value. He believes this to be because music, in everyday life, has become more affordable:

> MC: Over the years people have said to me, 'you do the logo,' and that's worth something. People value the expertise that's going to go into that and my knowledge of colour, shape, helping to craft the brand's message through a symbol. That seems to be worth something, it's more than just skill. But yet when you talk about sound branding and the ability for music to work as part of a brand, they're like 'hire somebody but don't pay a lot of money. I think it's congruent with where music lives now in our lives, which is it's only worth 99 cents a song, and even less in some cases.

CW agreed, citing that changes in the licensing of music over the last decade have caused the value of music to decrease, while MK contended that musicians don't uphold or protect the value of their work:

> MK: One of the problems that music has that, let's say architects and designers and photographers don't have, is musicians are too willing to give their work away. Photographers have done a great job. If you want good photography, you're going to pay a premium. And if you want beautiful, visual identity systems, you're going to pay a premium. Composers are poor and so an agency at any given time can approach an individual composer, a talented one at that, and then say, 'Well, we're going to tell you what to do and you bang it out. And you will do it until we're happy.

The interviewees define the perception of an expert discipline to be when people will appropriately compensate you for your work. They believe that visual branding is accepted as an expert discipline, but the current practice of sound branding is not. This may be seen as part of a cultural shift that is a reflection of the broader music industry's failure to monetise music streaming and manage copyright protection, which has arguably led to a situation where music is now devalued. The next section discusses what the interviewees believe is needed in order for companies to perceive sound branding as valuable and be willing to pay for it.

3.3.4.1 To get brands to value sound branding, you have to prove it is worth it.

All interviewees were asked how their work is 'measured' – a common term used in branding and marketing to mean a quantifiable result. While the responses differed broadly from no measurement to metrics, such as orders and sales, it was clear that demonstrable proof of the value of sound branding increases companies' willingness to pay for it:

MK: Well, that's a great question and that's the million-dollar question. When I got your e-mail initially, I thought 'Well, I'm not going to be able to help you much because that's the question that everyone is asking.' Ultimately, where that ends up is 'what's the ROI (return on investment)?'

LO agreed that proving the effectiveness of sound branding is key to understanding the 'ROI' because 'the 'return' is what's going to get companies interested in working with you.' EA equated effectiveness with 'building a knowledge base' that enables him to both understand how sound functions as a branding component, as well as speak to companies about sound branding:

EA: The more we can measure, the more we know. And, the more we know, the more information, or data, I have to share with companies when I'm pitching to them. It gives me a lot of leverage, especially when we get to talking about costs.

However, measuring the effectiveness of sound branding can be both costly and time-consuming, and companies are not always strict about enforcing it, perhaps because they don't want to pay for it, which can create a 'vicious circle' (AR) between the sound branding practitioners and companies:

AW: How do you measure the effectiveness of the sound branding work you do?

AR: And, there's one very funny thing about that. When we say to our clients, 'Would you like to measure whether we are totally correct or just make a test before we bring it out and start on a market?' All of them will say, 'No, we are convinced that what we have done now is perfectly correct and we don't want to waste money for market research.' It's a vicious circle. On the one hand, it's good that they have such conviction, but is it really conviction or are they just cheap because they don't want to pay for it? On the other hand, it's frustrating because we know sound branding works. But, if you can't prove it, how can you make progress?

According to some of the interviewees, proving the effectiveness of sound branding is as much about measurement as it is about educating the decision makers whose job it is to incorporate sound into their brand. JH described his company's process to educating decision makers on sound that is focused on 'participative learning,' the goal of which is to allow them to experience first hand how to create sounds to fit their brand's identity.

JH: If you can get people to become involved in music making, they understand a lot more. It's all about participative learning. This whole idea about learning by doing. And through that process, once you've actually given them a basic set of musical skills which everybody has, if they want to go make a little melody, they can do that and we can show them very simple compositional ideas. They will then start to construct their own pieces. And we'll also give them an image to go along with it so that it becomes more like a real branding exercise.

So this whole process is now moving towards looking at what the imagery is that they've got to run their brand. So they are now learning to articulate their feelings about other images or words or stories and then what is their back stories about that brand as well. So now that they're building up a whole brand picture, the whole brand character. This process gets the brand managers to look at what the story really is behind their brand because you need all that sort of information before you can actually start to look at what sort of audio that you need, or what sort of sound.

It is important to JH that decision makers experience 'how different sounds can result in different, and often erroneous, reflections of the brand.' This relates to overcoming the legacy challenge that current sound branding executions are typically not intentional nor strategic. If decision makers understand the necessity of incorporating sound with intent and strategy, this will alter the perception of sound branding to becoming one that requires expertise.

CW also believes in educating decision makers. His perspective is that knowledge and education are needed to balance decision makers' subjectivity and personal opinions:

CW: It's amazing how the common - the basic rules of branding seem to be totally forgotten when it comes to selecting music in particular with regard to differentiation. There was a point that I wanted - it was kind of comical actually. I think it was 2005 or 2006. Half the agencies coming in would start the meeting off by saying, 'I'd like to have some music that sounds like Coldplay.' And after you've heard that a thousand times you say, 'These people have no imagination.'

Sounding like Coldplay is not going to make your brand differentiated, and it's not going to make it differentiated from anybody else. It's going to make your brand sound like Coldplay, which isn't your brand. So it's funny when you're on the other side hearing people, how they make their decisions.

CW attributes the weight of decision making placed on subjectivity and personal opinions to two reasons: firstly, without musical knowledge or education, decision makers are too heavily influenced by their own musical preferences and that prevents

them from being objective. Secondly, people have a visceral reaction to music that they find difficult to override, particularly when it is in association with something else that they feel strongly about, such as 'their brands or in life':

> CW: Because every person you will talk to will have their likes and dislikes about music. And they will be very keen on expressing their view about music and what their tastes are, and they can't help but take those tastes into any decisions they're going to make about their brands or in life, generally. It says a lot about them as well. There's a very personal relationship people have with their music.

According to the interviewees, in order for sound branding to be perceived as an expert discipline, they need to be able to demonstrate the effectiveness of their work and educate decision makers on the sound branding creation process. They believe the ability to measure sound branding will increase the general knowledge of how sound can contribute to branding and educating decision makers will help to balance personal opinions about sound that can prevent it from being used effectively in branding.

3.4 Conclusions

A series of 14 semi-structured interviews were conducted with sound brand professionals who, at the time the interviews were conducted, were members of the LinkedIn Sonic Branding and Identity group. The interviews portrayed a group of professionals who were seeking to build sound branding as a separate discipline from visual branding that would position it as a sub-industry within the broader branding industry. This was apparent when the interviewees discussed how sound branding is currently practised and that it is not how they would like to be practising sound branding. They described the current practice as being viewed within the branding industry as subservient to visual branding, citing that the dominance of visual branding prevents sound branding from being intentional and strategic, which is ideally how they would want to practice sound branding. According to the interviewees, to be intentional and strategic means that sound should be incorporated into the branding process in the concept stage together with vision and copy development, thereby elevating its status as a branding element. The dominance of visual branding within the general branding practice currently prevents sound branding from being practised this way because visual branding practitioners

typically are not skilled in sound branding. However, there were suggestions from the interviewees that visual branding practitioners have expectations that sound can be an effective branding component, from which there was detected some frustration of unrealistic expectations given what the interviewees perceive to be limitations of the current practice.

The limitations of the current practice uncovered a subtheme that this group of interviewees were struggling to establish their position within the branding industry. When the interviewees talked about needing to have the skills to practice sound branding, they referred to it as possessing 'expertise' and they referred to the practice as a 'discipline.' The choice of words 'expertise' and 'discipline' highlights how the interviewees would like to be perceived and what they would like their position within the branding industry to be. One interviewee described expertise as inclusive of skill and knowledge and the interviewees correlate expertise with being compensated and recognised for their work within the branding industry. They consider educating decision makers on the benefits of sound branding and increased measurement of sound branding effectiveness as critical to the adoption of sound branding as an expert discipline. Interestingly, as the interviewees described their beliefs about sound branding, they appeared to equate expertise with instinct and suggested that what companies are really paying for is their instinct to identify optimal sounds that build relationships between consumers and brands.

It was clear from the interviews that these professionals do not entirely rely on instinct and that they are well informed about research relevant to sound branding, as evidenced by how they include empirical research in their business pitches to substantiate and lend credibility to their practice. Furthermore, the interviewees articulated a need for greater systematic evidence with which to support their practice. This also highlighted a tension that exists between what they called 'magic' that appears to be the idea that music is a magic arrow that will draw consumers to brands through an emotional connection on one hand, but which seems to be revealed as a lack of knowledge or having systematic data on what works why, on the other hand.

The interviews contributed data to the literature review (chapter 2) and highlighted a lack of integration between academic research and practitioners' beliefs. The interviewees demonstrated awareness that sound conveys brand attributes through its internal meaning that influences brand perceptions. They believe that brands can connect to consumers through the use of sound, particularly when the sound is personally relevant to consumers such as it matches with consumers' music preferences. There is a perspective from interviewees that music can elicit an emotional response from consumers that can increase liking for the brand, as well as influence purchase behaviour. This is similar to the perspectives found in sound branding books by practitioners (chapter 2). A few interviewees discussed multisensory branding; their perspectives and beliefs about it seemed different to their beliefs about sound branding. According to them, multisensory branding is about creating a stronger perception of the brand through the congruence of sensory stimuli as opposed to eliciting emotional responses toward the brand. There appeared to be less interest in pursuing the practice of multisensory branding, of which sound is an element, compared to sound branding. This highlighted that the interviewees are perhaps not proficient in understanding how different senses interact, which relates back to the subtheme of expertise. The key takeaway from the interviews is that (some) practitioners' believe congruency in multisensory branding is important but they lacked awareness of the psychological underpinnings of this (namely, crossmodal correspondences, Gestalt psychology, and processing fluency (chapter 2)).

The literature review (chapter 2) and the interviews with sound branding practitioners presented an opportunity to conduct two experiments to further investigate the research questions (chapter 1). The notion that brands should appeal to their consumers through the use of sensory elements does not yet have broad appeal within traditional branding (Thomson et al., 2005), therefore an experiment investigating how sound and colour can influence consumers' affective states that impacts their purchase behaviours and perceptions is presented in Chapter 4. Understanding and reaching the target consumer audience is key to branding effectiveness. However, existing research in sound branding has not taken into consideration the impact of differences between consumers on their perceptions and behaviours toward the brand, therefore an experiment investigating how consumers' music preferences and other characteristics, such as their personality traits, may influence brand behaviours is presented in Chapter 5.

3.4.1 Study limitations.

The interviewees are sound branding industry professionals who, at the time the interviews were conducted in 2010, were clearly concerned about their position within the branding industry. They expressed a common desire to establish sound branding as a discipline and for them to be viewed as experts in sound branding. It is possible that there is a bias in interviewee recruitment because this group does not comprise all sound branding practitioners and there are no qualifiers to join. For example, of the practitioners who wrote the sound branding books, only one was a member of the group. It may be that LinkedIn provided a forum or platform for these professionals to surface their concerns and that there are other, different perspectives from sound branding professionals who may not be members of the group. Further to the consideration of interview recruitment, preference was given to those who worked in the US because branding tends to be country-specific and I did not want to lose in interpretation any references that were culturally specific. There was a strong European presence within the LinkedIn group, particularly from Germany and the Nordic countries, so their perspectives may have differed. Finally, this data was initially collected in 2010, so the opinions of the interviewees and their approaches to the sound branding practice may have changed. It would be worthwhile to conduct follow up interviews to assess the current situation.

Chapter 4 – Do the effects of music on consumer mood states influence purchasing behaviour in an online store?

4.1 Introduction

Consumer behaviour is predicated on two sources of affect: the consumer's existing mood at the time of browsing, product consideration and purchase (Isen et al., 1978; Pham, 1998), and their perceptions of the brand under consideration (Keller, 1993). The interplay between these sources can influence judgment of the brand and decision making that manifest in outcome behaviours, such as spend and likelihood to repeat purchase. Central to these sources is the affective message or tone communicated by the brand using sensory stimuli or cues, such as music, lighting, colour or scent, across a variety of contact points with consumers, including store environments, ecommerce sites and apps, and in marketing collateral such as adverts and emails. Brands design contact points to maximise consumers' feelings of pleasure with the intention that this will lead to greater willingness to purchase (Jackson, 2003). While there is evidence that sensory stimuli, including musical characteristics such as tempo, can increase positive consumer behaviours, it is unknown to what extent these influences are due to changes in consumer mood state, how they might be mediated by factors such as congruence between sensory stimuli or the hedonic character of the product, or the extent to which they might affect consumers' willingness to pay a premium for a product.

4.2 Understanding the use of music in shopping environments

4.2.1 The influence of mood states on purchasing behaviour.

One of the most robust findings in the affective literature is mood-congruent information processing, defined as the tendency to make judgments that are consistent with one's current affective state (Bower, 1981; Cohen, Pham & Andrade, 2008; Forgas, 1995; Gardner, 1985). For example, a person who is feeling happy will expect sunnier weather for a picnic than a person who is feeling sad, because sunny weather is congruent with a happy mood state (Bower, 1981). Mood-congruent processing research has identified two processes by which judgments can be made: the increased accessibility of mood-congruent information in memory (Isen et al., 1978; Gardner, 1985) and the information value of the mood itself, i.e., 'how do I feel about it?' (Pham, 1998; Schwarz & Clore, 1983). The former process is based on the use of the current mood state – whether pleasant or unpleasant – to cue similarly valenced memories that consequently bias the perception of the target in evaluation,

while the latter process suggests that individuals examine how they are feeling at the time of evaluation and use those feelings to make judgments and decisions. The net result of both processes is similar because the valence of people's mood states affects their judgment and decision making. However, the difference between the two processes is dependent on the type of strategy employed by the individual. If a person is performing a systematic processing of the target, they are more likely to activate mood-congruent thoughts to inform their decision making, whereas a person engaged in a more heuristic evaluation of the target is more likely to use an affect-as-information process (Forgas, 1995; Gorn, Pham & Sin, 2001). Related to shopping experiences, companies manage atmospheric variables, such as noise, sizes, shapes, scents, as well as colours that can convey messages and influence customers' moods and feelings towards store environments and associated products and services (Kotler, 1973).

In order to research the effects of store environments on consumer behaviour, Donovan and Rossiter (1982) adapted Mehrabian and Russell's (1974) PAD (pleasure-arousal-dominance) framework from environmental psychology that was designed to examine the effects of the environment on individuals with an emphasis on four different categories of nonverbal actions or responses as determining factors of behaviour: time spent, willingness or depth of exploration, willingness or extent of communication, and degree of satisfaction. Donovan and Rossiter's modified framework measures individuals' reactions to shopping environments along two dimensions, pleasure and arousal, while omitting the third dimension, dominance. Pleasure is defined as whether or not individuals perceive the environment to be enjoyable. For example, a light ambient scent in a store may be more enjoyable than a strong, overpowering scent. Arousal measures the extent to which the environment is stimulating to the individual that may result in physiological or physical changes, such as the speed at which individuals may shop or walk through a store (Milliman, 1982). Their research found that the dominance dimension, referring to whether the individual feels in control (dominant) in the environment or not in control (submissive), was not present in store environments.

4.2.2 The effects of mood on different kinds of purchase behaviour measures.

Of the studies that have investigated the effects of shopping environments on consumer moods and behaviours, it has been found that pleasant environments produce positive increase in approach behaviours. Consumers who reported being in

a positive mood while shopping spent more time shopping than those in a less positive mood state (Swinyard, 1993; Sherman and Smith, 1997), as well as provided more favourable evaluations of the stores in which they were shopping (Bitner, 1992). In a study that evaluated consumers' mood states during a shopping experience, it was found that pleasure, as rated by consumers five minutes into the shopping duration was a significant predictor of extra time spent in the store and actual incremental spending (Donovan, 1994). Consumers' moods and satisfaction improved during the shopping experience in a store with a pleasant ambience and deteriorated in a store with a less pleasant ambience (Spies, Hesse & Loesch, 1997). Furthermore, upon examining their purchase behaviour, consumers in the pleasant ambience store spontaneously spent more money on items they liked. Interestingly, Babin and Darden (1996) found that consumers in negative moods did not report a significant decrease in monetary spend. Additional results also found that consumers' moods impacted their satisfaction with the store that was independent of money spent. Consumers in negative moods, despite not being affected by spend, were more likely to report significantly lower satisfaction with the store.

Unlike the consistent findings of the pleasure dimension effects, those of the arousal dimension are less clear (Menon & Kahn, 2002, Kaltcheva & Weitz, 2006; Ding & Lin, 2012). Store atmospherics created with background music comprising characteristics that may induce low arousal states have been found to increase spend and time spent in a supermarket store (Milliman, 1982), while atmospherics inducing high arousal states have also been found to increase purchase intent, spend and time spent shopping in clothing stores (Sherman, Mathur & Smith, 1997). It should be noted that Milliman's (1982) study used an observational technique of behaviour in the supermarket environment that did not measure participants' mood states, therefore it is unknown if the atmospherics (slow tempo music) actually induced low arousal states in participants. However, based on information load processing research, it has been shown that a low amount of information presented in a simulated ecommerce environment induced lower arousal states that subsequently resulted in increased approach behaviours and vice versa. In the case of induced high arousal states, the increase in avoidance behaviours was attributed to the necessity to conserve cognitive resources in decision making (Menon & Kahn, 2002).

Existing research has yet to fully investigate the differential effectiveness of arousal levels in store environments on consumer behaviour, however, there is some evidence

that suggests there are situational variables, such as product type characteristics, that may mediate arousal effects.

4.2.3 The effects of mood mediated by other factors.

The process of shopping is a multi-component task that involves consumers' motivations, involvement and processing of information. Stores can facilitate the task by creating shopping environments that complement the experiences and the different decision making elements. In particular, the utilitarian or hedonic characteristics of the product under evaluation have been found to be a mediating factor in purchasing behaviour. Utilitarian products, such as microwaves and minivans, serve a primarily functional purpose (Hirschman & Holbrook 1982; Strahilevitz & Myers 1998), while hedonic products, such as sports cars and luxury watches, provide more experiential pleasure and fun (Dhar & Wertenbroch, 2000). There are two types of consumer involvement, cognitive and affective, that influence the product assessment process (McGuire, 1974; Dhar & Wertenbroch, 2000). When consumers are assessing utilitarian products, they are more likely to be involved cognitively in the product argument because their goal is to complete the task as efficiently as possible (Dhar & Wertenbroch, 2000). Furthermore, consumers feel that environments with peripheral cues, such as sensory stimuli, distract them from completing their task (Dhar & Wertenbroch, 2000; Childers et al., 2001; Park & Young, 1986; Kaltcheva & Weitz, 2006). On the other hand, consumers engaged in assessing hedonic products are more likely to be influenced by environmental stimuli (Kaltcheva & Weitz, 2006). Specifically, the influence of arousal on pleasure increased when online shopping consumers were purchasing hedonic products, whereas the same effect was not found for utilitarian products (Ding & Lin, 2012). In their study, Ding & Lin (2012) tested the effects of background music tempo on purchase intent for both utilitarian and hedonic products and concluded that background music tempo is not recommended for utilitarian products because it showed no effect on purchase intent, in line with theoretical predictions.

While there is research on the effects of arousal on purchase intent towards utilitarian and hedonic products (Ding & Lin, 2012), it has not been investigated whether increased arousal results in greater spend of hedonic products than utilitarian products. This seems worthwhile to explore because there is some evidence that indicates consumers' spend behaviour may be different between the two product types. In a field survey, Dhar and Wertenbroch (2000) reported that owners of hedonic cars had a higher perceived value for their cars than owners of utilitarian

cars. The study used a 'willingness-to-accept [as the selling price for their car]' measure as a proxy for perceived value. In research on brand attachment behaviour, Thomson et al. (2005) suggest that brands in the strong emotional attachment condition tend to elicit greater consumer involvement including a willingness to pay a premium, and are symbolically or hedonically related (e.g. Hermut Lang, BMW, Prada). Therefore, consumers who experience an increase in arousal and are exposed to hedonic products for purchase may be more willing to pay a price premium compared to utilitarian products.

4.2.4 The influence of music on mood states.

Given that mood is a significant influence on consumer behaviour, as illustrated above, I turn now to present evidence that music is one way in which mood is influenced. It is well documented that music can influence mood states (Juslin & Sloboda, 2010). The majority of mood research concerns the self-regulation of mood. Thayer et al. (1994) presented 32 categories of ways to moderate moods, amongst which music was identified as a way to 'engage in a hobby,' 'seek pleasurable activities and distraction' (Thayer et al., 1994). In a self-regulation study involving music, North and Hargreaves (2000) found that when they placed participants in a high arousal activity, such as exercising on a bike, participants were likely to select music that matched the energy level of the activity. Furthermore, post-exercise participants were likely to select soothing music to regulate their mood in the post-exercise state. These studies indicate self-choice in music and its importance in mood regulation. In the shopping context, consumers may seek environments that complement their mood state, for example, those in a heightened state of arousal may want to shop in store environments that are perceived to be high energy and play loud music, and in situations where consumers have no choice, the store environment may produce avoidant behaviours, such as less time spent shopping or decreased spend.

Literature on music and moods in marketing typically focuses on how branding and marketing can employ music effectively to influence consumer behaviour. Adopting a more brand- or marketing-centric perspective, Bruner (1990) suggests that music has the ability to influence consumer mood state and behaviour because of three main postulates: people assign emotional meaning to music in non-random ways, people have emotional reactions to music that are non-random, therefore, music can be intentionally used by brands in consumer-related activities and environments to influence consumer behaviour. As evidenced by research on the self-regulation of mood, however, consumers' behaviours may not be so easily influenced due to the

conditions and activities under which music is used. Specific to product evaluation in TV commercials, for example, music has been found to be most effective under conditions of peripheral route processing and low cognitive involvement, and least effective when high cognitive involvement is required (Park & Young, 1986). This research suggests that congruence between shopping environment and consumers' mood states may be an important factor in order to influence consumer behaviour.

4.2.5 Evidence of music and other sensory stimuli on mood and purchase behaviour.

There are several key studies that have found background music to have a persuasive effect on consumers' purchasing behaviour through different routes: priming of semantic knowledge (Areni & Kim, 1993; North et al., 1997; North & Hargreaves, 1998); effects of music tempo on speed of consumer actions (Milliman, 1982; Milliman, 1996), and the influence of mood leading to mood-congruent behaviours (Bellizzi & Hite, 1992; Wu, Cheng & Yen, 2008; Ding & Lin, 2012).

In a study designed to test the influence of background music on product selection, North et al. (1997) measured the sales of wine in a supermarket when stereotypical French music was played and when stereotypical German music was played in the background. Results showed that sales of German wine doubled compared to French wine when German music was played, and the authors hypothesized that music had a 'knowledge activation effect,' through which the music primed the product purchase (North & Hargreaves, 2008). Areni and Kim (1993) found that customers spent more in a wine cellar when classical music was played compared to Top 40 music. This result suggest that classical music activates thought associations in customers, such as classical music fitting with notions of affluence and sophistication, and the authors suggest that therefore customers were more likely to make purchases that were congruent with the music. Similarly, cafeteria customers reported different perceptions of the cafeteria depending on the background music. Classical music created upmarket perceptions and an increased willingness to pay more for food items than easy listening music or no music for the same food items (North & Hargreaves, 1998). These studies provide evidence of music influencing product choice, spend and store evaluation but via a mechanism of knowledge activation rather than mood congruence.

Tempo in background music has an effect on shopping and consumption experiences (Milliman, 1982; 1986; Dubé, Chebat & Morin, 1995; Caldwell & Hibbert, 2002).

Using experimental treatments of no music, slow tempo music and fast tempo music, Milliman (1982) found that music can affect the pace of in-store foot traffic flow, as well as daily gross revenue. Slow tempo music was associated with slower foot traffic and higher consumer spending. Furthermore, shoppers' awareness of the background music was relatively low, suggesting that music has an unconscious effect on consumer behaviour. In a later study, Milliman (1986) found that background music played in restaurants had an effect on the dining experience of patrons. The study isolated background music as an atmospheric variable and found that, with slow tempo background music, patrons stayed longer, ate about the same amount of food, but consumed more alcoholic beverages. Both studies showed an association between musical elements, consumption and spend aspects of consumer behaviour that can occur when consumers are unaware of the music. The results suggest that the slower music may have contributed to a more relaxing environment that had a soothing effect on consumers, but neither study intentionally investigated whether the background music had an affective influence on consumers' spending behaviour.

Sound (and music) in shopping environments is one of a number of potential sensory stimuli, which can be manipulated. Therefore consideration of music as a mood-inducing device can be considered within this larger perspective to gain a fuller understanding. Mood states induced by music may lead to mood-congruent behaviours, such as higher arousal results in greater purchase intent of hedonic products but has no significant effect on utilitarian products (Ding & Lin, 2012). In a laboratory study, the effects of colour in simulated store environments on consumers' moods and purchase intent were investigated (Bellizzi & Hite, 1992). Participants entered into either a red room or a blue room, where they were shown four different TVs with different specifications and prices, and asked to select the TV they would purchase. Red, a warm colour, has been shown to elicit different physiological and psychological responses from blue, a cool colour (Gerard, 1957; Bellizzi & Hite, 1992). The study hypothesis was that participants shopping in the blue room would find the colour effects to be pleasant and, consequently, be more likely to demonstrate purchase intent, as well as willingness to purchase at higher price points, while shopping time in the red room would be shorter because red provides greater distraction and causes anxiety that may reduce shopping time. Results showed that shoppers in the blue room purchased significantly more than those in the red room ($458 vs. $314 on average, per shopper, an increase of 46%), attributable to 50% of shoppers in the blue room selecting the most expensive TV set compared to 19% of shoppers in the red room.

The colours red and blue were used in a different study together with background music that was designed to investigate interactions between effects of different stimuli including background music (Wu, Cheng & Yen, 2008). The combined effects of colour and background music on a simulated online shopping site were reported to alter participants' emotional states and their purchase intent behaviour. The study included fast and slow tempo music in a 2 (music - fast/slow) x 2 (colour - warm-red/cool-blue) between-subjects factorial design with one control group and measured in a survey participants' intention to purchase from a variety of purses, necklaces, pens, and watches from the simulated site. The results reported participants experiencing higher levels of both arousal and pleasure, as well as purchase intent, when the site was accompanied by fast-tempo music with a red background site colour that were significantly different from the slow-tempo music with a blue background site colour condition. Furthermore, the slow-tempo/blue background condition did not induce a significant emotional change from the control condition. These results are counter to those reported by Bellizzi & Hite (1992) and the authors suggest that cultural associations to colour (red is a happy colour in Taiwanese culture) may have contributed to the results. The study was limited to investigating purchase intent through a survey that included statements such as 'I intend to buy something in this online store'. It did not investigate whether colour-background music combinations had any effect on product selection or purchase behaviour, nor did it confirm that the colour-background music conditions influenced consumers' mood states accordingly.

Research into music mood induction procedures (MMIP) has assessed the effects of different musical characteristics on mood induction (Västfjäll, 2002). This research is particularly important because of recent studies that investigate whether there is a distinction between emotions perceived in music and emotions induced by music (Gabrielsson, 2002; Sloboda & Juslin, 2001). Studies that have used MMIP have selected musical characteristics such as mode, pitch, and tempo directed by emotions perceived in music literature. Mode (major or minor) and pitch are often associated with inducing positive or negative moods and tempo is associated with both valence and arousal dimensions of mood experiences. It can be more effective to use music with faster tempo to induce a positive mood state, while slower music can induce negative mood states more easily. Faster tempo has been found to induce higher arousal (Dibben, 2004; Zhu & Meyers-Levy, 2005; Ding & Lin, 2012) and, separately, tempo can affect arousal without having an effect on valence (Balch and Lewis, 1996; Västfjäll, 2002). Less clear are specific parameters of mood induction,

for example, how fast should the tempo be in order to induce a high arousal state? There is evidence indicating that, in order to effectively induce a high arousal mood state, the music tempo should be faster than 94 beats per minute (BPM) (Gorn, 1982; Milliman, 1982; Wu, Cheng & Yen, 2008; Ding and Lin, 2012), and to induce a low arousal mood state, the tempo should be slower than 72 BPM. To induce a mood state using music, the consensus among studies is that a minimum of five minutes of music listening is needed (Västfjäll, 2002). There is a lack of evidence about how long an induced mood state lasts, although it is thought to be as limited a range as 5-40 minutes (Västfjäll, 2002). These are important factors to be considered in experimental design and in practical application.

Based on the research presented above, it is currently unknown as to whether high and low arousal states induced by music can affect consumer behaviours that include their willingness to pay (Hypothesis 1 and 1A). The focus on willingness to pay (hereafter also referred to as WTP) as an outcome behaviour contributes to the limited research reported in environmental and consumer psychology that has shown customers are willing to pay different amounts for the same product once exposed to different sensory stimuli (Bellizzi & Hite, 1992; North & Hargreaves, 1998). It is also unclear to what extent the influence of music-induced mood states on purchase behaviours and store brand perceptions might be mediated by factors such as the hedonic character of the product (Hypothesis 2) (Thomson et al., 2005; Ding & Lin, 2012) congruence with other sensory stimuli (i.e. background colour) (Hypothesis 3 and 3A) (Menon & Kahn, 2002; Wu, Cheng & Yen, 2008; Lalwani, Lwin & Ling, 2009; Guéguen, Boulbry & Sami, 2009; Demoulin, 2011), and time spent shopping (Hypothesis 4) (Milliman, 1982). As a consequence a new study, reported here, was designed to provide insight onto the following hypotheses.

4.3 Hypotheses

Hypothesis 1: Consumers' music-induced mood states influences their WTP.
Hypothesis 1a: Positive low arousal mood states influence higher WTP.
Hypothesis 2: There is a difference between music induced mood states on WTP for utilitarian and hedonic products, such that high arousal mood states influence higher WTP for hedonic products than utilitarian products.
Hypothesis 3: Consumers' music-induced mood states influences their brand perceptions of a simulated online shopping site.

Hypothesis 3a: Consumers in congruent music and colour shopping conditions increases approach behaviours, including WTP, brand perceptions, and time spent shopping.

Hypothesis 4: Music induced low arousal mood states increases time spent shopping.

4.4 Experiment design

A main experiment was preceded by two pre-tests, the aim of which was to validate the music and product choices to be used in the main study. Both pre-tests were delivered online. The objective of the music pre-test was to identify two pieces of music, one to induce a positive, high arousal mood state and one to induce a positive, low arousal mood state. The objective of the product pre-test was to assess whether different products within the same product category were similar in likability and the amount that participants were willing to pay for them. Participants for both pre-tests were staff from the University of Sheffield. Students were not considered to be representative of consumers due to their likely low amounts of disposable income. No additional criteria was necessary for the main study, therefore no qualifying questions were asked in order for the staff to participate in either pre-test. Both pre-tests and the main study received ethical approval from the University of Sheffield.

4.5 Music pre-test.

4.5.1 Participants.

35 volunteers comprising staff from the University of Sheffield completed the music pre-test. Participants were recruited for the pre-test by email to a University-wide volunteering list.

4.5.2 Materials (music selection).

The music pre-test used four pieces: two to test for their ability to induce mood states positive high arousal and two to test for their ability to induce positive low arousal mood states. Mood states were measured by a survey with six mood attributes, three valence and three arousal attributes, presented in a semantic differential scale.

The criteria for the music selections were length, BPM, and instrumental. Each piece had to be a minimum of six minutes in length. While there is no absolute minimum length needed to induce mood states using music as stimulus, a review of studies (Västfjäll, 2002) indicates that a minimum of five minutes of music listening is needed to effectively induce mood states. In order to induce a high arousal mood

state, the music tempo had to be faster than 94 beats per minute (BPM) (Gorn, 1982; Milliman, 1982; Ding and Lin, 1982), and to induce a low arousal mood state, the tempo had to be slower than 72 BPM. Pieces that were instrumental, without lyrics, were chosen to avoid any priming effects from lyrics (Västfjäll, 2002).

The two pieces of music chosen to induce positive high arousal mood states were 'Six Days at the Bottom of the Ocean' by Explosions in the Sky (109 BPM) and 'Colour of My Soul' by Pretty Lights (93 BPM). The two pieces of music chosen to induce positive low arousal mood states were from Relaxdaily (http://relaxdaily.net), numbers 90 (69 BPM) and 27 (65 BPM).

4.5.3 Procedure.

The pre-test was administered online. Participants were asked via emailed instructions to check that they either had speakers or headphones to listen to the music before listening to the pieces in their entirety and rating their mood state after each piece. The responses for valence and arousal attributes were measured in a semantic differential scale ranging from -3 to 3. The data was analysed using the mean rating and standard deviation for the mood attributes followed by a one-tailed paired T-test. The two pieces that induced the strongest positive high arousal and positive low arousal states were selected for the main study. In order to control for unwanted effects of the order of music pieces presented, a Latin Square was used and participants were assigned to one of four pre-tests based on their birth month (January-March, April-June, July-September, October-December).

4.5.4 Results.

Of the 42 participants who started the pre-test, 35 (83%) completed it. Three of the pre-test versions reported 8 completed tests each and one reported 7 complete tests. The average time to complete the test was 25 minutes. For reporting purposes the semantic differential scale was converted to a 7-point scale, ranging from 1 (negative/low) to 7 (positive/high), in order for mean ratings to be calculated. All four pieces were reported as inducing a positive mood state as predicted: the mean ratings for valence attributes, Bad/Good, Sad/Happy, Displeased/Pleased, were above the midpoint score of 3.5, where 1=Bad/Sad/Displeased and 7=Good/Happy/Pleased. Both the positive, high arousal music pieces were reported as effective in inducing a high arousal mood state. The range of mean ratings for the arousal measures Calm/Excited, Tired/Energetic, and Sedate/Aroused, where 1=Calm/Tired/Sedate and 7=Excited/Energetic/Aroused, of 'Colour of My Soul' by Pretty Lights indicated

induction of a stronger high arousal mood state (M = 4.20-4.34, SD = 1.37-1.62) than for 'Six Days at the Bottom of the Ocean' by Explosions in the Sky (M = 3.63-4.17, SD = 1.40-1.88).

Of the two low arousal pieces, only 'Number 27 from *Relaxdaily*' was reported as inducing a low arousal mood state. The range of mean ratings for the arousal measures was below the average score of 3.5 (M = 2.97-3.26, SD = 1.60-1.71). The mean ratings for the arousal measures for 'Number 90' were higher than the midpoint score of 3.5 and therefore interpreted as not inducing a low arousal mood state.

To confirm that the selected music encompassed the intended mood state induction and were significantly different from each other on the main criteria of arousal, the ratings of 'Colour of My Soul' by Pretty Lights and 'Number 27' from *Relaxdaily* on the six mood attributes were compared using a one-tailed paired T-test. Results were statistically insignificant for all three valence attributes and statistically significant for all three arousal attributes ($p < .01$).

The two pieces selected for the main study were 'Colour of My Soul' by Pretty Lights for the positive, high arousal condition and 'Number 27' from *Relaxdaily* for the positive, low arousal condition.

4.6 Product pre-test.

4.6.1 Participants.

119 volunteers comprising staff from the University of Sheffield completed the product pre-test. Participants were recruited for the pre-test by email to a University-wide volunteering list.

4.6.2 Materials (product selection).

The objective of the product pre-test was to find four similar products within a utilitarian product category and within a hedonic product category where there was no statistical difference in liking and WTP between the four products. Two sets of products, sofa and lamp, were tested within the utilitarian product category and two sets of products, trampoline and paddle board, were tested within the hedonic product category. The four products were selected following Voss, Spangenberg, and Grohmann (2003) as a guide. Voss et al. (2003) measured the degree to which products were judged to be hedonic or utilitarian. In general, household items were

found to have higher utilitarian value and toys were found to have higher hedonic value.

The products were selected from either a large UK-based department store (John Lewis) or a global online retailer (Amazon), and the retail price served as the average price. The range of prices presented was proportionate to the average price, ranging from 10%-20% below and above the mid-point. The lower priced product categories, lamp and trampoline, ranged 10% below and above the mid-point of the products, while higher priced product categories, sofa and paddleboard, ranged 20% below and above the mid-point of the products.

4.6.3 Procedure.

The pre-test was administered online. Participants saw 16 different product images with a brief one or two sentence description – four different products in four separate categories (sofas, lamps, trampolines, and paddle boards) – and were asked to rate each one in terms of their liking (Likert 7-point scale, where 1=strongly dislike and 7=strongly like) and willingness to pay (across a range of equal intervals with one open text field). Outliers in the results, such as responses for all products as 'strongly dislike' and £0 WTP, were removed.

4.6.4 Results.

Out of 167 participants who started the pre-test, 119 participants (71%) successfully completed the survey. Four outliers were removed. The average time to complete the test was 7 minutes 57 seconds.

Four one-way MANOVAs were performed with liking and WTP as the dependent variables and e the product category as the independent variable to determine if there was a significant different in liking and WTP between the products. There was a significant difference reported for lamps, $F(6, 852) = 5.176$, $p < .001$, and trampolines, $F(6, 854) = 3.14$, $p < .001$, on the combined dependent variables, which meant that participants considered the products to be different in liking and WTP. Consequently, both lamps and trampolines were eliminated from consideration for the main study. There was no significant difference reported for sofas, $F(6, 852) = 1.696$, $p > .05$, and paddleboards, $F(6, 800) = 1.803$, $p > .05$, which meant that participants considered the products to be similar in liking and WTP, as shown in Table 2. Sofa and paddleboards were selected for the main study.

It was observed the two products, sofa and paddle board, that received similar ratings in liking and WTP were the higher priced point products within each of their respective categories, but this was not considered to be of consequence to the main study.

Table 2. Mean ratings and SD of WTP and Liking for sofas and paddleboards

Product category	Product number	Willingness to pay (WTP)		Liking	
		Mean	SD	Mean	SD
Sofa	1	£501.86	300.97	4.26	1.63
(utilitarian)	2	£486.18	304.87	3.86	1.57
	3	£460.68	300.19	4.00	1.49
	4	£414.89	302.54	3.68	1.61
Paddleboard	1	£163.51	142.65	3.95	1.16
(hedonic)	2	£152.86	140.86	3.63	1.20
	3	£158.47	137.83	3.63	0.93
	4	£187.37	273.28	4.03	1.27

4.7 Main study.

4.7.1 Participants.

Participants in the study were friends and professional colleagues in the US. The study had a total of 226 participants ranging from 25-55 years of age, with an average age of 37.8. 59% were female and 41% were male. 24.8% reported in the lowest income bracket (<$75K), while 31.9% reported in the highest income bracket (>$150K). The second highest income bracket ($100-$149K) reported the smallest number of participants at 8.8%.

4.7.2 Materials (products and pricing).

From the results of the product pre-test, the two categories of products were sofas and paddle boards. Sofas were representative of utilitarian products and paddle boards were representative of hedonic products. In the pre-test, prices were shown in pound sterling because the participants were based in the UK. For the main study, prices were converted to US dollars for the US-based participants.

4.7.3 Procedure.

The main study was delivered online. Participants were emailed instructions that contained a unique user login and password to be entered during the checkout process of the shopping site and a link to click through to start the study. Participants were informed that clicking on the link was taken as proxy for giving consent. Participants were asked to check that they either had speakers or headphones to listen to the music before listening to the pieces in their entirety and rating their mood state after each piece. Similar to the Music Pre-Test, in order to control for unwanted effects of the order of music pieces presented, a Latin Square was used and participants were assigned to one of four pre-tests based on their birth month (January-March, April-June, July-September, October-December).

During the first phase of the study, participants listened to one of the two pieces of music selected from the pre-test in order to induce either a positive, high arousal mood state or a positive, low arousal mood state. The music played on an embedded player on a web page with a white background that displayed text instruction to finish listening to the music before clicking on the button to take the survey. The post-music listening survey was designed to measure mood state, using the same mood scale that was used in the pre-test. Additional questions were asked about the participants' liking of the music and their familiarity of the music because research has shown that people are positively influenced by music they like and/or are familiar with. Data from these questions would allow for controlling these variables in the results, if necessary.

At the end of the survey, participants were given instructions to click through to a simulated online shopping site, browse and purchase one item from each of the product categories. Participants were notified that the online shopping site was not real and that their purchase would not require them to submit either personal or financial information. Upon check out of the simulated store, participants were instructed to click through to take the post-purchase survey. The post-purchase survey once again measured mood state using the same scale. This was done to ensure the effects of the mood induction had not disappeared. Additional questions were asked to investigate participants' likelihood to re-visit and/or re-purchase from the shopping site, as well as their overall perceptions of the site, to understand if there was any correlation between liking of the site and WTP. Participants were also asked their likelihood to purchase either a sofa or paddle board in the next six months in order to understand whether a pending purchase might influence their decision making in the

study. Finally, participants were asked to answer demographic questions regarding their age, gender, and annual income.

4.7.3.1 Shopping sites.

The two shopping sites were created using an ecommerce store creation platform called Bigcommerce: https://www.bigcommerce.com. The software allowed for music to play in the background of the homepage; the same music used in the pre-test played on the homepage of the shopping site. All eight products with their prices were shown on the homepage of the shopping site and, by clicking on a product, participants were taken to a product-specific page where they could read a short description of the product and click to add to cart. The software allowed for each visit to the homepage to show a randomized ordering of the eight products. A hero carousel with two slides showed an enlarged image of a sofa and of a paddleboard. In order to avoid effects of priming, the enlarged images were different from the products available for purchase.
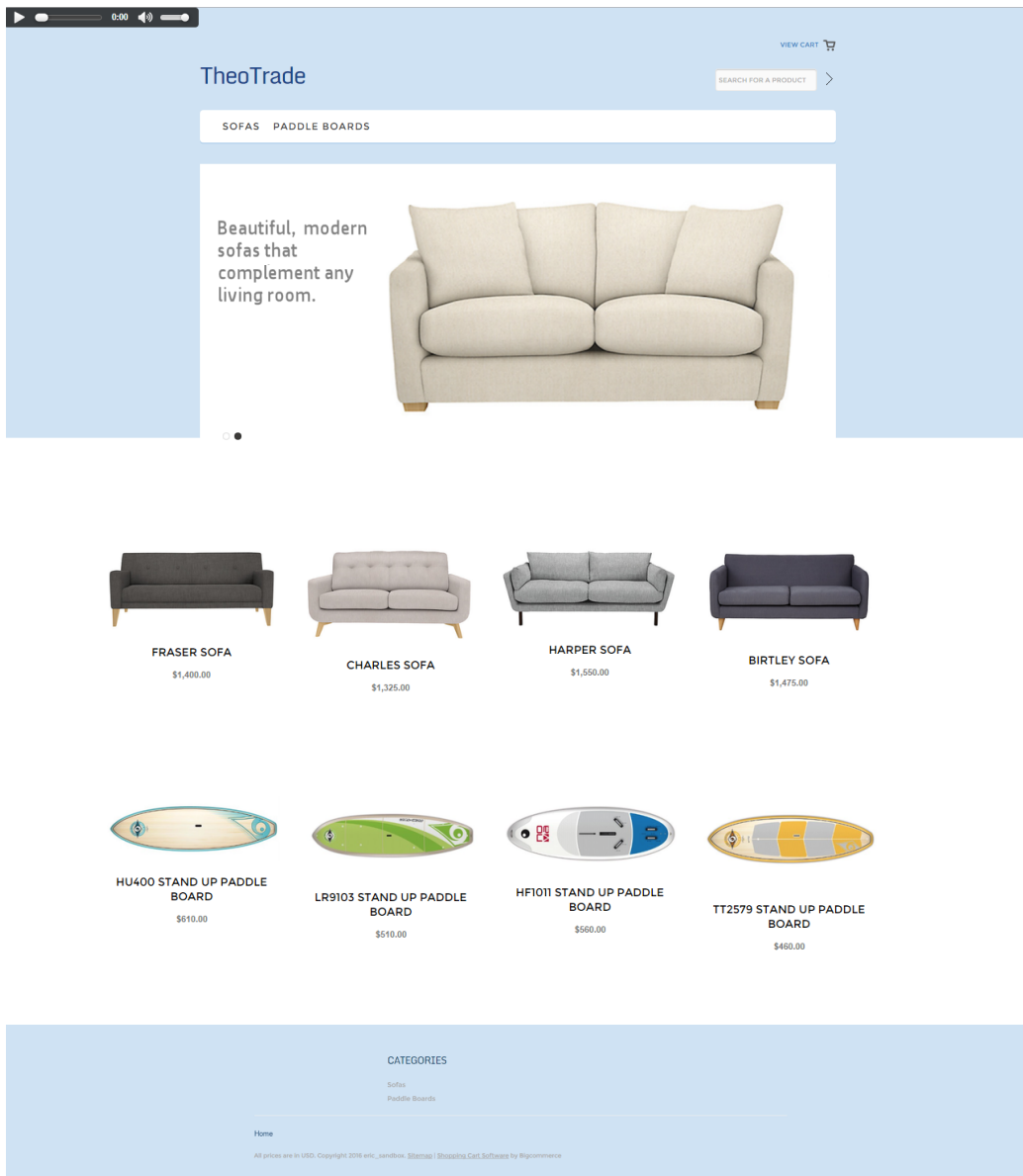
Figure 4. Screenshot of 'Theo Trade' - ecommerce site with blue background
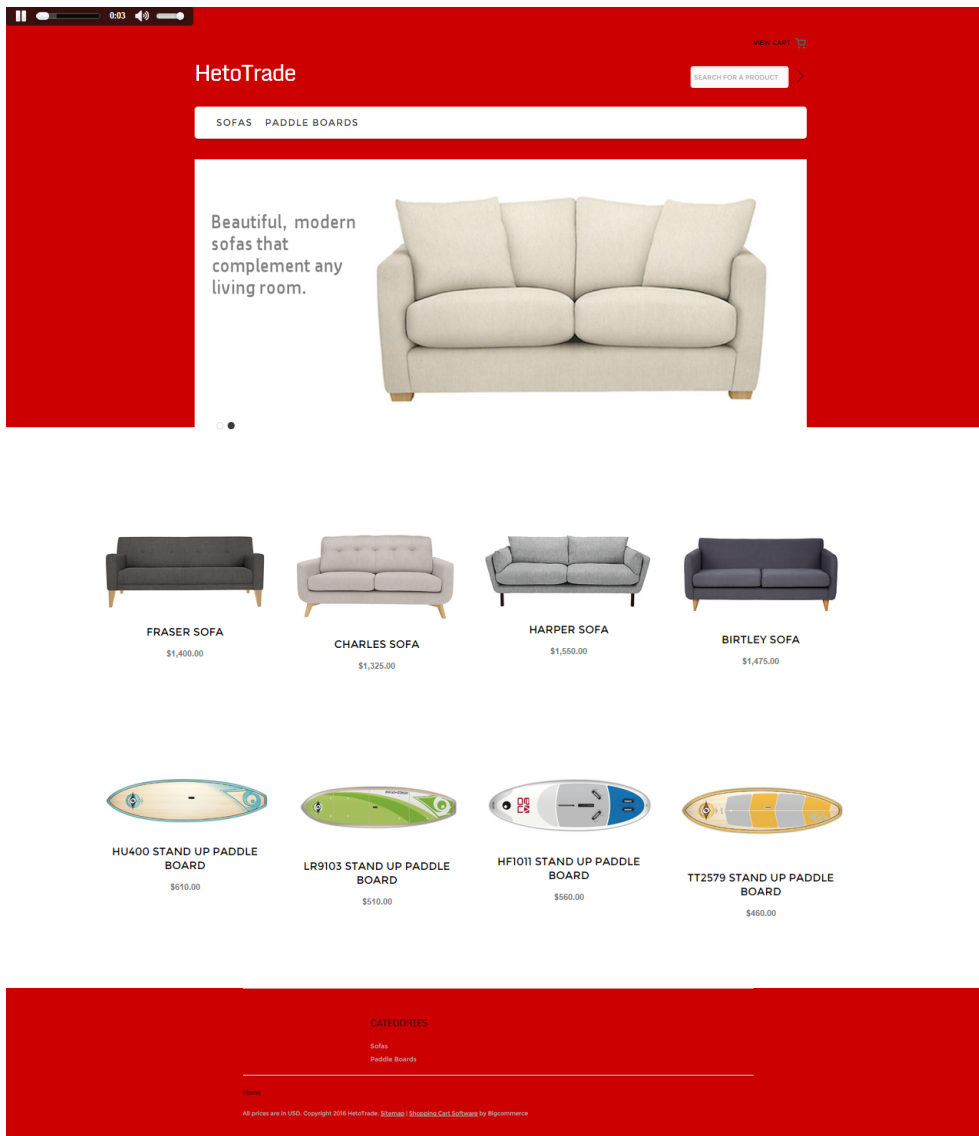
Figure 5. Screenshot of 'Heto Trade' - ecommerce site with red background

4.7.3.2 Study design.

Six music/background colour shopping site combination conditions were tested in a 2 (store colour) x 3 (positive high arousal music, positive low arousal music, no music) between-subjects factorial design with one within-subject factor (product category). The two music conditions were intended to induce either a positive, high arousal mood state or a positive, low arousal mood state. Two shopping sites, identical in layout, design, and products featured were created, but they differed in background colour. One store had a blue background to create a cool perception and stimulate a low arousal state, and the other store had a red background to create a warm perception and stimulate a high arousal state (Bellizzi & Hite, 1992). Mix-matching

91

the music and background colour of the shopping sites produced four conditions to test the hypothesis that congruence between music and colour would result in increased WTP and brand perceptions (liking, likelihood to repeat visit and purchase) than incongruence. As a control to test the hypotheses that consumers' music-induced mood states influences their WTP and consumers' music-induced mood states influences their brand perceptions of a simulated online shopping sites, two additional conditions using only the shopping sites and no music were tested. The six conditions are summarised in the table below:

Table 3. Six conditions of the main study

Arousal state	Branding design	Measures	Condition
Control / no music	Warm (red)	Mood state, brand liking, WTP, repeat purchase	
	Cool (blue)	Mood state, brand liking, WTP, repeat purchase	
Positive / low arousal (music-induced)	Warm (red)	Music, mood state, brand liking, WTP, repeat purchase	Congruent
	Cool (blue)	Music, mood state, brand liking, WTP, repeat purchase	Incongruent
Positive / high arousal (music-induced)	Warm (red)	Music, mood state, brand liking, WTP, repeat purchase	Incongruent
	Cool (blue)	Music, mood state, brand liking, WTP, repeat purchase	Congruent

4.7.4 Results.

4.7.4.1 Data transformation.

Mood induction: The responses for valence and arousal attributes were measured in a semantic differential scale ranging from -3 to 3. For reporting purposes that scale was converted to a 7-point scale, ranging from 1 (negative/low) to 7 (positive/high), in order for mean ratings to be calculated.

Willingness-to-pay: The price points for each of the product categories, sofas and paddle boards, were converted and recoded to a 4-point scale and ranked from 1 (lowest) to 4 (highest) in order for the comparison of different price points across products to be evaluated.

4.7.4.2 Participants and manipulation checks of mood induction by music.
A total of 452 friends and professional colleagues were asked to participate in the study via general messages posted on Slack, a messaging service, and LinkedIn, a professional networking site. 312 responded to the message (60% response rate) and 263 completed the study. Out of the 263 who completed the study, 37 responses were rejected due to incomplete data, therefore the final number of participants was 226, constituting a 50% completion rate.

This experiment design is predicated on successful manipulation of participant mood state so that the influence of mood on shopping can be determined. In order to check whether there were significant differences in the mood state of participants in each of the three different mood induction conditions (no music, high arousal inducing music, low arousal inducing music), scores on the six mood state Likert items (three for valence, 3 for arousal) were averaged to produce two variables: self-reported valence and arousal. A MANOVA was performed with mood attributes (valence and arousal) as the dependent variables and music conditions (high arousal, low arousal, and no music) as the independent variables to determine if the mood induction manipulation was successful. Using Pillai's Trace, there was an overall significant effect of music induced mood state, $V = 0.46$, $F_{(4, 446)} = 32.91$, $p < .001$, and the univariate ANOVAs showed there was a statistically significant difference in participants' arousal states between the three music conditions $F_{(2, 223)} = 73.68$, $p < .001$. There was a significant difference in mean scores of arousal state between the high arousal music and the low arousal music ($p < .001$), a significant difference between the high arousal music and no music conditions ($p < .001$), as well as a significant difference between the low arousal music and no music conditions ($p < .001$). The mean ratings (Table 4) confirm that the manipulation of the arousal dimension of the mood states was effective according to the intended high and low arousal induction. The results also show there was no statistically significant difference in valence states and the mean ratings show that both high arousal and low arousal pieces of music induced positive mood states in participants as intended. Overall, the results indicated that the manipulation of mood was effective and as intended by all three music conditions.

Table 4. Means, standard deviations, and standard errors for valence and arousal mood attributes (where 1=Calm/Tired/Sedate and 7=Excited/Energetic/Aroused) by music condition

Mood attribute measured	Music listened to for mood induction	M	SD	SE
Valence	High Arousal	4.96	1.24	.14
	Low Arousal	5.00	.98	.14
	No Music	5.03	1.35	.14
Arousal	High Arousal	5.42	.98	.14
	Low Arousal	3.12	.74	.13
	No Music	4.35	1.5	.13

A GLM repeated measures analysis was performed to assess the valence and arousal mood ratings taken after listening to music and before shopping, and immediately after shopping, in order to understand whether there was a significant change in mood state during the shopping activity. Using Pillai's Trace, there was an overall significant difference in mood states before and after shopping, $F_{(2, 222)} = 4.56$, $p < .05$. Contrasts revealed that there was a significant difference in arousal before and after shopping, $F_{(1, 6)} = 3.9$, $p < .05$ and no significant difference in valence. In the music induced high arousal condition, arousal decreased during the shopping experience, however, arousal increased during shopping in the music induced low arousal and no music conditions.

Table 5. Valence and arousal mood ratings with means and standard errors for before and after shopping

Mood attribute measured	Music listened to for mood induction	Before Shopping		After Shopping	
		M	SE	M	SE
Valence	High Arousal	4.96	.13	4.90	.11
Arousal		5.42	.10	5.24	.13
Valence	Low Arousal	5.00	.13	4.88	.11
Arousal		3.12	.10	3.51	.12
Valence	No music	5.03	.14	5.04	.17
Arousal		4.35	.13	4.67	.13

4.7.4.3 Effects of music induced mood states on willingness to pay (WTP),
brand perceptions of online shopping sites, and time spent shopping.

A chi-square test for association was performed to determine whether music induced mood states (positive high arousal or positive low arousal) influenced WTP for the nonhedonic (sofa) and hedonic (paddleboard) products differently compared to online shopping conditions without music. The results reported all expected cell frequencies greater than five. In the comparison between the music induced high arousal condition and the no music condition, the results showed a statistically significant difference in WTP for the paddle board ($\chi^2(3) = 9.249$, p = .026), but there was no significant difference in WTP for the sofa ($\chi^2(3) = 6.682$, p > .05). In the comparison between the music induced low arousal condition and the no music condition, the results showed a statistically significant in WTP for the sofa ($\chi^2(3) = 14.640$, p = .002), but there was no significant difference in WTP for the paddle board ($\chi^2(3) = 7.568$, p > .05). In the results that reported a significant difference in WTP, WTP was higher in the music induced arousal conditions than the no music conditions. Table 3 shows the observed and expected frequencies. The results suggest that shopping under music induced arousal states can influence WTP differently compared to shopping conditions without music, so Hypothesis 1 is supported. However, as the results showed, both arousal conditions reported higher WTP for one of the two products, so Hypothesis 1a is partially supported. The finding that high and low arousal conditions higher WTP for different products suggests that there may be mediating factors affecting WTP based on arousal state and product category. This was proposed in Hypothesis 2 and is reported in the next section.

Table 6. WTP by music induced mood state and music condition for products by category

Mood State and Music Condition	Frequency	Product Category							
		Sofa				Paddle Board			
		$1,375	$1,400	$1,475	$1,550	$460	$510	$560	$610
High Arousal – Music	Observed	9	11	14	6	6	9	16	9
	Expected	14.5	9.5	11	5	10.5	11	11.5	7
High Arousal – No Music	Observed	20	8	8	4	15	13	7	5
	Expected	14.5	9.5	11	5	10.5	11	11.5	5
Low Arousal – With Music	Observed	4	8	11	16	7	6	12	15
	Expected	9.9	9.9	8.9	10.4	11.5	7.5	9.5	11.5
Low Arousal – No Music	Observed	16	12	7	5	16	9	7	8
	Expected	10.1	10.1	9.1	10.6	11.5	7.5	9.5	11.5

A 3 (high arousal music, low arousal music, no music) x 2 (red store, blue store) MANOVA was carried out to determine whether music-induced mood states influence brand perceptions, likelihood to visit or purchase again of the online shopping site. Using Pillai's Trace, there was an overall significant effect of low-arousal, high-arousal and no music condition, $V = 0.224$, $F (18, 459) = 2.06$, $p < .05$, and significant effects on three of the six brand variables: Overall liking ($F = 3.64$, $p = .01$), brand good/bad ($F = 4.29$, $p = .006$), and brand appeal ($F = 2.87$, $p = .04$). No significant differences were found for the remaining three brand variables: brand favourability, likelihood to visit again, and likelihood to purchase again. Post-hoc Tukey tests confirmed that the music induced arousal states increased the liking of a brand: there was a significant difference on brand good/bad ($p < .05$), overall liking ($p < .05$), and brand appeal ($p < .05$) between the music induced low arousal state and the no music condition, thereby partially supporting Hypothesis 3 that consumers' music-induced mood states influences their brand perceptions of a simulated online shopping site. Interestingly, the means in Table 4 showed that participants in the blue store/music induced low arousal state reported the highest ratings of brand perceptions across all six brand variables. This suggests that the experience of this shopping condition was particularly attractive or pleasing compared to the other conditions.

Table 7. Mean and SD for brand attributes by music induced arousal condition

Brand Attribute	Music and Mood Condition	Mean	SD
Visit Again	Red Store – High Arousal Music	3.75	1.46
	Red Store – No Music	3.78	1.75
	Blue Store – Low Arousal Music	4.03	1.94
	Blue Store – No Music	3.43	1.45
Purchase Again	Red Store – High Arousal Music	3.15	1.31
	Red Store – No Music	3.26	1.86
	Blue Store – Low Arousal Music	3.60	1.61
	Blue Store – No Music	3.28	1.60
Overall Liking	Red Store – High Arousal Music	3.36	1.48
	Red Store – No Music	3.66	1.42
	Blue Store – Low Arousal Music	4.23	1.56
	Blue Store – No Music	3.23	1.44
Brand Good / Bad	Red Store – High Arousal Music	3.43	1.63
	Red Store – No Music	3.75	1.43
	Blue Store – Low Arousal Music	4.56	1.45

	Blue Store – No Music	3.63	1.51
Brand Appeal	Red Store – High Arousal Music	3.63	1.70
	Red Store – No Music	3.06	1.22
	Blue Store – Low Arousal Music	4.0	1.66
	Blue Store – No Music	3.1	1.41
Brand Favourability	Red Store – High Arousal Music	3.7	1.71
	Red Store – No Music	3.6	1.60
	Blue Store – Low Arousal Music	4.08	1.59
	Blue Store – No Music	3.58	1.52

An independent-samples t-test was performed to determine if there was a difference in time spent shopping between music induced low and high arousal mood states. The results reported that the shopping time was longer in low arousal states with an average time spent shopping at 15 minutes 45 seconds compared to the high arousal states at 13 minutes 36 seconds. This was significant $t(78) = -4.21$, $p < .001$ and supports Hypothesis 4 that music induced low arousal mood states increases time spent shopping. This result is also consistent with previous research that slower tempo music (Milliman, 1982) and pleasant shopping conditions (Donovan, 1994) increases time spent shopping.

4.7.4.4 Effects of music induced mood states on WTP mediated by product type characteristics.

A chi-square test for association was performed to determine whether shopping in different music induced mood state conditions (high arousal or low arousal) influenced WTP differently depending on whether the product purchased was utilitarian or hedonic in character. Based on previous research (Ding & Lin, 2012), it was hypothesised that participants in the high arousal condition would be more willing to pay a higher price for hedonic products (paddle boards) than those in the low arousal condition, while participants in the low arousal condition would be more willing to pay a higher price for utilitarian products (sofas). All expected cell frequencies were greater than five. The results showed there was no statistically significant association between WTP and product characteristic according to the high arousal or low arousal conditions for either sofas, $(\chi^2(3) = 2.726, p = >.05)$, or paddle boards, $(\chi^2(3) = 6.422, p = >.05)$. Consequently, Hypothesis 2, which states that there is a difference between music induced mood states on WTP of utilitarian and hedonic

products, such that high arousal mood states influence higher WTP of hedonic

products than utilitarian products, is not supported.

Table 8. WTP by music induced high arousal and low arousal mood state by product category

Mood State induced	Frequency	Product Category							
		Sofa (utilitarian)				Paddle Board (hedonic)			
		$1,375	$1,400	$1,475	$1,550	$460	$510	$560	$610
High Arousal	Observed	21	13	19	18	15	13	20	24
	Expected	18.6	16.2	20.6	15.7	16.8	16.8	20.7	17.8
Low Arousal	Observed	17	20	23	14	19	21	22	12
	Expected	19.4	16.8	21.4	16.3	17.2	17.2	21.3	18.2

4.7.4.5 Effects of congruency (music induced mood states and background colour) on WTP and brand perceptions of online shopping sites.

A chi-square test for association was performed to determine whether music induced mood states (positive high arousal or positive low arousal) and store background colour (red or blue) influenced WTP differently depending on whether the shopping condition was congruent (music induced low arousal with blue background or music induced high arousal with red background) or incongruent (music induced low arousal with red background or music induced high arousal with blue background). All expected cell frequencies were greater than five. The results showed there was a statistically significant association between WTP and congruency conditions for sofas, ($\chi^2(3) = 9.482$, p = .024), and for paddle boards, ($\chi^2(3) = 9.767$, p = .021), therefore Hypothesis 3a, which states that consumers in congruent music and colour shopping conditions will have increased approach behaviours, including WTP, is supported.

Table 9. WTP by congruency condition for products by category

Congruency Condition	Frequency	Product Category							
		Sofa (utilitarian)				Paddle Board (hedonic)			
		$1,375	$1,400	$1,475	$1,550	$460	$510	$560	$610
Congruent	Observed	13	19	25	22	13	15	28	24
	Expected	20.7	18.0	22.9	17.4	18.6	18.6	23.0	19.7
Incongruent	Observed	25	14	17	10	21	19	14	12
	Expected	17.3	15.0	19.1	14.6	15.4	15.4	19.0	16.3

A 2 (high arousal music, low arousal music) x 2 (red store, blue store) between subjects MANOVA was performed to determine how congruence in arousal qualities between music and colour influenced brand perceptions compared to incongruence.

Using Pillai's Trace, there was an overall significant effect of congruence on brand perceptions, $V=0.88$, $F(6,139) = 2.23$, $p < .05$. The means for the congruent condition were consistently higher for all six brand attributes and a statistically significant effect was found for three of the six brand perception variables: overall liking ($F = 4.47$, $p = .04$), brand good/bad ($F = 3.6$, $p = .06$), and brand favourability ($F = 4.91$, $p = .03$), as shown in Table 7, therefore Hypothesis 3a, which states that consumers in congruent music and colour shopping conditions will have an increase in approach behaviours, including brand perceptions, is partially supported.

Table 10. Means and standard deviations for brand attributes by congruent and incongruent conditions

Brand Attribute	Congruency Condition	Mean	SD
Visit Again	Congruent	3.89	1.71
	Incongruent	3.45	1.43
Purchase Again	Congruent	3.38	1.48
	Incongruent	3.14	1.44
Overall Liking	Congruent	3.79	1.57
	Incongruent	3.27	1.32
Brand Good / Bad	Congruent	3.99	1.63
	Incongruent	3.50	1.43
Brand Appeal	Congruent	3.81	1.68
	Incongruent	3.65	1.51
Brand Favourability	Congruent	3.89	1.65
	Incongruent	3.29	1.60

An independent-samples t-test was performed to determine if there were differences in time spent shopping between congruent and incongruent music and background colour stimuli. Shopping time was found to be longer in congruent conditions ($M = 14.71$, $SE = .13$) than incongruent conditions ($M = 12.78$, $SE = .12$). This was significant, $t(144) = 14.32$, $p < .001$, and supports Hypothesis 3a.

4.8 Discussion.

This study investigated whether music induced mood states and whether congruence in arousing qualities between music and colour affect consumer behaviour, including willingness to pay, brand perceptions, and time spent in an online shopping environment. The shopping conditions which were tested comprised a condition without any music, and two conditions in which music was heard prior to shopping to

induce respectively a high and low arousal mood state. Once within the online shopping environment itself, the experiment tested the effects of a different atmospheric cue (colour) and its degree of congruence in arousing qualities with the previously heard music. The effects of product characteristics on outcome variables were also tested by evaluating willingness to pay in music induced high arousal and low arousal states for products with utilitarian and hedonic characteristics. The music induced arousal state conditions compared to shopping conditions without music produced mixed results, while there was a clearer and stronger pattern of effects from the congruency conditions as I describe below. After summarising the design I explore the results in relation to the effects of music on mood, and the effects of that mood induction on willingness to pay, brand perception, and time spent shopping, overall and then comparing these effects in varying conditions of congruence.

The study measured shoppers' mood states before and after an online shopping activity. Two groups of shoppers heard music before shopping that was intended to induce them into either high or low arousal states and one group, the control, heard no music. The results of the mood state manipulation check showed that music heard prior to an online shopping activity influenced shoppers' arousal state: the manipulation of the arousal dimension of the mood states was effective according to the intended high and low arousal induction. Specifically, there was a statistically significant difference in arousal states reported between shoppers who heard high arousal music, those who heard low arousal music, and shoppers who did not hear any music. The valence of the shoppers' mood states remained positive and unchanged as intended: there was no difference in valence states reported between the aforementioned three groups of shoppers. The shopping activity itself was associated with changes to arousal state but not valence: compared to their arousal states reported before shopping, the music-induced high arousal shoppers reported lower levels of arousal at the end of their shopping experience, while music-induced low arousal state shoppers and those who did not hear any music reported higher levels of arousal at the end of their shopping experience. This seems to suggest a tendency for arousal levels to move towards an optimal level over the course of the shopping experience from the initial difference immediately after manipulation. Drawing of previous research, arousal level during the shopping experience may have been influenced by consideration of different product characteristics (Ding & Lin, 2012), as well as task-orientation, motivation, and involvement with the decision making process (Park & Young, 1986). There was no difference in valence state measured pre- and post-shopping of the three groups of shoppers. Other studies have shown that store atmospherics can influence customers' valence levels, such that a pleasant store

environment can increase the positive quality of valence measured over the course of shopping experience that was associated with higher ratings of customer satisfaction with the store and increases in purchases of products (Bost, 1987; Spies, Hesse & Loesch, 1997). This could mean participants of my study did not experience satisfaction during the shopping experience and this may be attributed to the task criteria of having to select both a paddleboard and a sofa that could have increased the task complexity of having to evaluate both products within the same experience.

Having established that music influenced shoppers' mood states, I then looked for differences in shopping behaviours associated with those mood states. Participants induced by music into high and low arousal states compared to participants that shopped without hearing music (whose arousal states were lower than those reported by the music induced high arousal participants and higher than those reported by the low music induced arousal participants) reported on willingness to pay, brand perception measures, and time spent shopping. I deal with each of these in turn, reflecting on my findings in relation to other relevant research.

The association of willingness to pay with arousal condition differed with the product being purchased: compared to the no music condition, more participants were willing to pay a higher price for a paddleboard in the high arousal condition, whereas more participants were willing to pay a higher price for a sofa in the low arousal condition. The finding that both high and low arousal conditions influenced higher WTP for different products compared to the no music condition suggested that there might be mediating factors, such as arousal, product characteristics, and brand perceptions, affecting WTP. One possibility is that these effects of arousal on WTP may be mediated by particular product characteristics. For example, Ding and Lin (2012) reported a significant difference in the influence of arousal on pleasure and on purchase intent for both utilitarian and hedonic products when background music was used to influence arousal state, such that both pleasure state and purchase intent were higher for hedonic products in high arousal conditions. However, contrary to Ding and Lin, I found no evidence that the hedonic/utilitarian aspect of product characteristics influenced WTP because there was no significant difference when comparing WTP for the utilitarian product (sofa) and the hedonic product (paddleboard) between music induced low arousal and high arousal conditions; based on Ding and Lin (2012), I anticipated that more participants in the high arousal condition would report higher WTP for the paddleboard compared to the sofa, which was not the case. A possible explanation for the lack of a statistically significant

difference in WTP for hedonic versus utilitarian products in my study is that having both utilitarian and hedonic products in the shopping site could have diluted the product characteristic effects in the overall shopping experience. In addition, in a realistic shopping setting, it is likely to be a rare occurrence that a consumer would shop for both sofas and paddleboards in the same event and this may have increased the task complexity to evaluate both products within the same experience. A similar experiment using a between subject design where each participant group is exposed to only one type of product, hedonic or utilitarian, may provide a more robust test. Another possible explanation for the findings that the high arousal condition influenced higher WTP for paddleboards and the low arousal condition influenced higher WTP for sofas compared to the no music condition is that there were effects of mood-congruence priming on shoppers' WTP behaviour. Participants may have been primed by the music they heard that influenced them to choose the product that best matched the music and the implied arousal-mood characteristic of the activity the product was associated with (paddleboards associated with a high arousal activity (sport) and sofas with a low arousal activity (relaxing)). There is support for this explanation that priming influences WTP: North and Hargreaves (1998) reported that music genre has a persuasive effect on WTP for food products through semantic priming: classical music, associated with perceptions of sophistication, played in the background of a university cafeteria influenced higher WTP for food items, whereas easy listening music influenced lower WTP for the same food items. Additional research would confirm whether mood-congruence priming influences shoppers' WTP behaviour for products that match the mood characteristics of the music.

With regard to the effects of music induced arousal states on brand perception, the results from this study are consistent with previous results: participants induced into the low arousal state that shopped in the blue background condition reported highest liking for the shopping site and overall shopping experience. These results support those reported by Bellizzi and Hite (1992), which showed that participants selected higher priced versions of a product (TV) in a lab-simulated blue store than in a red store and they rated the blue environment as more pleasant than the red one. In a follow up study, Bellizzi and Hite measured approach-avoidance behaviours, as well as valence and arousal mood states using Donovan and Rossiter's (1982) PAD (pleasure-arousal-dominance) measures designed to examine environmental effects on shoppers, of participants who were exposed either to a blue or red lab-simulated shopping environment. Similar to the results of my study, participants exposed to the blue environment reported an increase in approach behaviours, including purchase

intent, compared to those exposed to the red environment. However, unlike my study, the blue environment did not induce lower levels of arousal in participants compared to the red environment. This suggests that music may be more effective than colour in inducing arousal state. Further testing is needed to confirm this.

The background colour of a shopping environment may have different effects on different consumers. There is both supporting and contradicting evidence that a blue shopping environment leads to an increase in positive brand perception and purchase intent from Wu et al. (2008), who used both music (fast and slow tempo) and colour (blue and red background) stimuli in their simulated online shopping study. They reported participants feeling more aroused in the fast-tempo music and red colour website experience, which supports the findings of my study. However, Wu et al. also reported that participants exposed to the red colour website had higher ratings of liking for the shopping site and intention to purchase, which contradicts the findings of both Bellizzi and Hite (1992) and my study that the authors suggest may be due to cultural differences: their study was conducted using Taiwanese students and, in Chinese culture, red connotes happiness, while in US culture where my study was conducted, red often connotes warning or anger. Further research is needed to confirm whether the differences between the results of my study and those presented by Wu et al. are attributed to cultural differences.

Shopping time was also impacted by the music-listening conditions: shopping time was longer in the music induced low arousal condition compared to the high arousal condition. This supports research that slower tempo music increases time spent shopping in physical retail stores (Milliman, 1982) and provides evidence that arousal state is an influencing factor. Bellizzi and Hite (1992) did not find an association between time spent shopping and exposure to blue or red colour shopping sites, which suggests that the use of music in an online shopping environment may have stronger effects than background colour on time spent shopping.

The results of online shopping under congruent conditions compared to incongruent conditions showed that congruency in arousing qualities between music and background colour had a positive effect on consumers' willingness to pay, brand perceptions, and time spent shopping. In the congruent conditions, more participants were willing to spend a higher amount on both the sofa and the paddleboard than in the incongruent conditions. These findings are consistent with Gestalt theory and previous research that participants evaluate their environment holistically (Mattila &

Wirtz, 2001; Cheng et al., 2009), and show that matching arousal levels and colour effects appear to have a mutually reinforcing effect on participants' brand perceptions that, in turn, increases their WTP. Participants also spent a longer time shopping in congruent conditions and this result is consistent with previous research that positive experience of shopping environments promotes an increase in shopping time (Swinyard, 1993; Sherman & Smith, 1997).

The positive effect reported on consumers' WTP, brand perceptions, and time spent shopping in the congruent conditions lends support to the evidence presented by Kotler (1973) and Bell et al. (1991) that the congruency of stimuli increases the perceived unity of the online store and influences shoppers' perceptions of the overall experience.

In summary, the evidence presented in this study shows that music heard prior to shopping online can influence the arousal dimension of shoppers' mood states and these are associated with differences in shopping behaviour. This study confirms previous studies that have shown music can influence mood states and that music induced arousal states influence purchase intent. It is currently known that consumers evaluate their environment holistically and that can have a positive effect on their shopping behaviour. This study contributes new knowledge by showing there may be mood-congruent effects on shopping behaviour that result in higher willingness to pay for products associated with activities that have the same arousal qualities as the music. In addition, congruence in arousing qualities between music and background colour can increase shopping behaviours that include willingness to pay and time spent shopping. By using the measure willingness to pay, this study has shown that consumers may be willing to pay a price premium for products when shopping in such congruent environments. This study shows the importance of multisensory congruence for consumer experiences, in this case in the arousing qualities in visual and auditory domains (chapter 2). It reinforces the need for practitioners to consider the interaction effects of multisensory stimuli on consumers' perceptions and behaviours, despite their apparent lack of interest in multisensory branding practices (chapter 3).

4.8.1 Study limitations.

One consideration and potential limitation of the study is the extent to which these findings from a controlled experimental design are relevant to 'real' shopping

experiences. With regard to the study design, a significant advantage of conducting this study using online shopping sites is that it allowed for a realistic shopping experience, from browsing through to checking out, and enabled accurate transaction reporting for each participant. Using online shopping sites also allowed for easy testing of multiple conditions, for example, altering the background colour of a website requires only a few clicks that is a much simpler endeavour than changing the wall colour of a physical store. It also diminishes any variability that may occur from sequenced testing that would be necessary with only one physical store. However, the limitations of testing in an online environment are that the results may not necessarily translate to physical shopping environments. For example, shoppers in a physical environment are exposed to other sensory stimuli, such as lighting and scent, and have been shown to influence their behaviours (Mattila & Wirtz, 2001). Shoppers also cannot control their exposure to the background music within a store, while shoppers on an online site can switch off or mute the music, or be influenced by other atmospheric stimuli. Finally, it is worthwhile to note that I designed my study so that music was heard prior to shopping in order to ensure the music had induced a mood state prior to shopping. This is not reflective of a real life online shopping scenario because companies cannot play music to consumers prior to them shopping, only while they are shopping. Nevertheless, the results can be extended to real life shopping scenarios because mood induction can still occur when background music is playing while consumers are shopping.

Chapter 5 – Do consumers' music preferences influence their brand choices?

5.1 Introduction

Brands actively manage external perceptions by maintaining unique identities that differentiate their products from their competitors' in order to increase consumer preference and loyalty (Aaker, 1991). In branding practice, perceptions are often managed according to four established perspectives within Aaker's Brand Identity framework: the brand as a product, an organization, a symbol, and as a person (Aaker, 1996). To identify a brand as a person is to conceive of it as a 'brand personality,' whereby brands express human personality characteristics. The idea is that a brand's personality can increase consumers' preference for the brand because they share the same personality that can, in turn, build loyal brand-customer relationships (Lin, 2010; Maehle & Shneor, 2010; Malär et al., 2011; Huang et al., 2012; Govers & Mugge, 2004). While the use of music as a vehicle to express brand identity is prevalent, it is unknown whether music can convey a brand's personality, and if it can, to what extent it influences consumers' perceptions of a brand, increases their preference or loyalty for the brand, and how these may be mediated by consumers' own music preferences and personalities.

5.2 Understanding the use of music in building brand personalities

      5.2.1 Evidence of brands as personalities.

Brand personality refers to a set of human characteristics associated with a brand (Aaker, 1991; Aaker, 1996) that can include demographics (gender, social class, race, age), lifestyles (interests and opinions) or personality traits, such as 'friendly' and 'sincere' (Aaker, 1996, p.142). As a construct within the Brand Identity framework, brand personality has gained popularity in academic research (Aaker, 1997) and in practice in recent years with the rise of celebrities endorsing brands and in market research focus groups, where consumers are asked to imagine and describe the brand as a person, including their personalities (Azoulay & Kapferer, 2003). Research has shown that brand personality can increase consumer preference and usage of the brand (Sirgy, 1982), evoke positive emotions in consumers (Biel, 1993), as well as increase the strength of the consumer-brand relationship (Doyle, 1990) and build brand trust and loyalty (Fournier, 1994).

The underlying theory that brands can build relationships with consumers by constructing and expressing their own brand personalities relies on a notion of self-congruity that suggest consumers prefer and positively evaluate brands with similar personalities to their own (Belk, 1988; Malhotra, 1988; Sirgy, 1982). The association of a personality to a brand can occur both directly through user imagery and indirectly through brand assets and attributes. The direct route involves transferring the human characteristics of the brand's target customer groups to the brand, such that the brand's personality is derived from the personalities of those who use it (McCracken, 1989). For example, masculine personalities of smokers create a more masculine image of the smokers' cigarette brands (Vitz & Johnston, 1965). The indirect route expresses characteristics through brand assets such as the logo, price, product or product category associations (Batra et al., 1993). For example, a logo depicted in graffiti font may communicate a rebellious brand personality due to graffiti being illegal in many places. Consequently, a brand becomes the extension or representation of its customers that is especially important in social contexts (Sirgy, 1982) and, due to its relatable characteristics to consumers, brand personality is considered to be well suited to serve a symbolic or self-expressive function (Keller, 1993).

Much of the work on brand personality builds upon widely accepted theories of human personality. There is consensus among contemporary personality psychologists on five main dimensions of human personality: Extraversion, Agreeableness, Openness, Conscientious, and Neuroticism. The majority of empirical studies that examine the validity of brand personality have either employed the Big Five framework or adapted Big Five personality scales for brands developed by Aaker (1997) or Geuens et al. (2009). Aaker tested participants' ratings of brands on personality traits and concluded that people perceive five distinct brand personality dimensions, two of which differed from the Big Five human personality dimensions. Sincerity, Excitement, and Competence dimensions were found to exist in brand personality that map to Agreeableness, Extraversion, and Conscientiousness respectively, however, Openness and Neuroticism were replaced with Sophistication and Ruggedness, due to the aspirational qualities that are of greater relevance to symbolic brands (Briggs, 1992). Aaker's 44-item brand personality scale has been tested extensively with a high degree of validation (Govers & Schoormans, 2005; Maehle & Supphellen, 2011; Mulyanegara et al., 2009; Huang et al., 2012). A revised version of Aaker's scale was produced by Geuens et al. (2009), which reduced Aaker's 44-items scale to 12-items and has also been reported to be reliable

(Goldsmith, R. & Goldsmith, E., 2012). Geuens et al.'s 12-items are grouped into five distinct brand personality trait groups: Responsibility, Activity, Aggressiveness, Simplicity, and Emotionality. While these group names are not considered to be human personality traits, each of the 12-items are human personality traits (see Appendix).

It has been found that different brand personality dimensions apply to different brand types. People were more likely to rate technology or car brands as Competent, cool design brands (such as Apple) as Exciting, and men's cosmetics brands as Rugged (Maehle & Supphellen, 2011). It has also been found that people prefer different brand personalities that can be attributed to differences in people's personalities, as I explain in the next section.

5.2.2 Consumers' preferences for brands that reflect their own personalities.

There is empirical evidence substantiating the hypothesis that consumers prefer brands that reflect their own personalities. Mulyanegara et al. (2009) applied the Big Five human personality test to investigate the relationship between consumer personality and brand personality using fashion brands. The results showed that participants with a Conscientious personality reported preferences for 'trusted' brands, while Extrovert personalities preferred 'sociable' brands. The results also showed a difference between male and female participants in their brand preferences: both dominant 'Neuroticism' males and dominant 'Conscientious' females preferred 'trusted' brands. In a different study, Mulyanegara and Tsarenko (2009) investigated whether consumers' personalities and values could predict brand preferences in the fashion market. In addition to personality, values are considered an extension of self-congruity theory and the authors hypothesised that congruity can exist between the human values symbolised by a brand and the values that individuals endorse. Furthermore, prestige sensitivity was used as a mediator between values and brand preferences because the greater the emphasis individuals placed on their self-value, the more likely they would prefer prestigious brands. While the results highlighted a relationship between values and brand preference, and prestige was found to play a mediating role, no relationship was found between personality and brand preference. These results suggest that personality may be a weaker predictor of consumer behaviour, but the significant relationship between values and brand preference shows that consumers prefer brands that reflect themselves.

Using similar constructs, a study employed Ekelund's Diversity Icebreaker scale (Ekelund, 1997; Ekelund & Langvik, 2008; Langvik, 2006), a personality test developed specifically for classifying different consumer market segments that require different communications strategies, to investigate what kind of brand personalities for retail brands are preferable for different types of consumers (Maehle & Shneor, 2010). The results indicated that, in general, study participants prefer brands with personalities that match their own. Participants who self-identified as having strong social perspectives preferred the Sincerity dimension, while those who self-identified as task-oriented exhibited strong aversion from the Excitement dimension of brand personality. Participants who self-identified as individualistic and nonconformist did not report a significant preference for a specific brand personality, possibly because these traits did not easily align with the Big Five brand personality dimensions.

5.2.3 Factors affecting perception and preference for brand personalities.

The evidence that shows consumers prefer brands with the same personality traits as their own also highlights mediating factors, including the functional use of products associated with a brand (Maehle & Shneor, 2010), the purpose the brand serves in the individual's life (Parker, 2009; Khare & Handa, 2009), and whether congruence between brand personality and consumer personality is based on the consumer's actual self or their ideal self (Malär et al., 2011). The conspicuousness of brand use (Parker, 2009) refers to whether brands are privately or publicly consumed that can affect the degree of congruence between the consumer's personality and brand's personality. It can also affect the consumer's preference for the brand. Parker (2009) reported that brands supporting social identity, i.e. 'public' brands such as clothing, furniture and car brands, are more likely to be matched in self-image and personality between the consumer and brand and to be preferred by the consumer. In other words, through brand personality and associations, consumers are communicating to others how they want to be perceived that reflects back onto themselves and enhances their self-esteem and self-image. 'Private' brands, such as supermarket brands serve everyday basic needs on the other hand, also reported a significant match, but to a weaker degree than public brands because the individual is less reliant on using the private brand to reinforce how they perceive themselves and to express themselves through the brand's image (Maehle & Shneor, 2010).

The findings reported by Parker (2009) are reinforced by Khare and Handa (2009) who tested college student preferences of mobile phones ('public' products) with different brand personality traits ranging from elite, modest, and attention-seeking. Results showed that different brand personalities affected the degree of congruence between self-image and brand image. There was no relationship between self-image and the elite and modest brands, but there was a significant relationship between self-image and the attention-seeking mobile phone brand that may be due to students being motivated to appear trendy and modern. These findings highlight the importance of brand personality for public brands because consumers use the brands to communicate their self-image.

5.2.4 Music preferences and personality.

A brand can express its identity through having a personality that may increase consumers' preference for the brand because it shares the same personality as the consumer. While the use of music as a vehicle to express brand identity is prevalent, it is unknown whether music can convey a brand's personality. However, a recent body of research has reported a relationship between individuals' personalities and their music preferences (Rentfrow & Gosling, 2003; 2006; 2007; Rentfrow & McDonald, 2009) that may be relevant. In the earlier studies, Rentfrow and Gosling (2003; 2006) reported a striking relationship between music preferences and personality: participants in their studies believed music preferences reveal as much about a person's personal qualities as their hobbies and bedrooms. This confirmed an existing premise that music preferences are meaningful and personal to the individual (North and Hargreaves, 1999; DeNora, 2000). Music can serve as a form of self-affirmation because individuals engage in a reflexive process of remembering and self-identity construction while listening to music. In a subsequent two-part study, Rentfrow and Gosling (2007) investigated whether personality, personal values, and alcohol and drug preference stereotypes exist about fans of different music genres. The results of the first study indicated that college students held stereotypical views about fans of different music genres. The second study tested the extent that the music stereotypes identified in the first study were true to actual music fans across multiple music genres. Results showed that stereotypes associated with religious, country, classical and jazz music genres exhibited the highest validity compared to stereotypes associated with pop, rap and soul music genres. While the results did not reveal definitive links between fans and their music preferences, the findings were sufficient to corroborate previous research that accurate impressions about a person could be formed based on their self-reported top 10 records (Burroughs et al., 1991);

people use music as a 'badge' to communicate their values and self-views (North & Hargreaves, 1999), and further extends our understanding that music preferences can be used for self-expression.

The contribution of research by Rentfrow and Gosling also included insight into how people talk about their music preferences that is useful for constructing future research. In the efforts to understand participants' music preferences, the authors uncovered a hierarchy to how people talk about their music preferences in the order of genres, subgenres, broader descriptive terms (e.g. loud or fast), and lastly artists or songs, suggesting that the higher levels, genres and subgenres, may be better suited to identifying patterns between music preferences and personality. In addition, by using the results of a music preference test and applying a factor analysis, the authors distilled fourteen music genres to four musical dimensions: Reflective and Complex, Intense and Rebellious, Upbeat and Conventional, and Energetic and Rhythmic. These musical dimensions were tested with several personality tests, including the Big Five Inventory (John & Srivastava, 1999), and revealed an important relationship between people's music preferences and their personalities (Rentfrow & Gosling, 2003): the Reflective and Complex dimension and the Intense and Rebellious dimension were related to Openness; the Upbeat and Conventional dimension was related to Extraversion, Agreeableness and Conscientiousness; and the Energetic and Rhythmic dimension was related to Extraversion and Agreeableness. Given that this research shows there is a pattern of preferences between human personality and music genres such that individuals' music preferences are influenced by their personalities, it is conceivable people may like a brand more when the music attached to it shares perceived traits similar to their own personality traits. The validity of this proposition is considered in the next section that presents research on the effects of other sensory stimuli on brand liking and preference.

5.2.5 Evidence of the influence of music and other sensory stimuli on perception and liking for a brand based on its personality.

The research discussed so far shows evidence that consumers are more likely to like brands that convey a personality that is congruent with the consumers' own, as well as evidence that individuals' music preferences may be influenced by their personalities. There is also evidence that consumer liking is predicated on the symbolic or social function of the brand, but there has been limited research into whether music used in branding can communicate brand personality and even less research that investigates how this influences consumer liking for the brand. This

section presents a review of studies that investigate the contribution of other sensory stimuli, such as colour and font type, to brand personality, as well as an examination of practical applications of music that convey brand personality, to supplement the limited research and provide a useful frame of reference.

The concept of 'fit' is often used to refer to congruence between branding stimuli as perceived by consumers (North & Hargreaves, 2007; Alpert et al., 2005; Brodsky, 2011). The theoretical framework underpinning this concept relies on semantic memory that depends both on a network of pre-existing associations activated upon exposure to stimuli to create referential meaning and associative learning that is based on the formation and activation of further associations. When applied to brand personality, associations are triggered in memory through the referential meaning of the stimuli that contribute to perceptions of brand personality. In a study designed to test the effects of colour in a brand logo on brand personality, the logo colour (hue, saturation) held referential meaning that activated colour associations, such as Intelligent and Reliable, that contributed to the perception of brand personality (e.g. Competent) (Labrecque & Milne, 2012). The results reported that colour was a key driver to brand personality formation and influencer to purchase intent, brand favourability, and brand liking. Similarly, logo font type can also influence brand personality perceptions through referential meaning (Grohmann et al., 2013).

With regard to music as a stimulus, study participants were able to associate 17 different musical genres with fonts, a key branding element, with a high degree of consistency through referential meaning (Holm et al., 2009). The extent to which the different musical genres and font associations influenced participants' liking was not measured. Music can influence perceptions of product endorsers and brands based on the degree of fit to the product and message (Zander, 2006). Zander's results showed that, while impressions of the brand could be influenced by music, the music had no effect on the participants' overall evaluation of the product. However, the study did not examine whether differences between participants, such as their personality traits, might have influenced product evaluation differently. It has also been shown that study participants are able to identify brands based on the music used to express the brand personality that was developed by employing a set of guiding brand assets, such as brand identity, visual design language, and product form (Brodsky, 2011), as a basis for music composition. Additional guidance was taken from Rentfrow and Gosling's (2003) study reported in the previous section that identified four musical dimensions from multiple music genres that correlates music preferences with

personality traits. While this study showed that brand personality can be expressed by music that has the benefit of also increasing brand recall, it did not investigate whether the music had any effect on participants' liking for the brand. Understanding the drivers of brand liking is key to influencing consumer behaviour because it is the precursor to purchase and brand loyalty.

Within the practice of incorporating music into branding, numerous brands have endorsed artists or sponsored music events as a way to reach consumers, connect brand products to the consumers' lifestyle choices, and create memorable experiential activities that increase brand equity (Batra & Homer, 2004; Doonar, 2004; Pincus, 2004; Pincus, 2005). The connection to consumers has been proposed to occur through McCracken's meaning transfer model that draws from cultural anthropology and ethnography (Batra & Homer, 2004). McCracken (1986) posited that advertising and other branding elements can transfer cultural meanings from external stimuli to a brand. When applied to brands endorsing celebrities or artists, brands can benefit from associations with the artists or events because a transfer of meanings occurs, such that the brand becomes more appealing or attractive to consumers due to the image of the artist or event being transferred onto the brand.

The sponsorship of music events can be an effective tactic for brands to build relationships with consumers because a brand's presence is typically non-invasive to the overall experience, yet has been found to be effective in increasing brand recall (Pincus, 2004; Hafez & Ling, 2006). The success of music sponsorship is dependent on consumers' perceptions of fit, whether the sponsoring brand's identity and personality are congruent with the music event or artist. Music event attendees should feel that the brand is one they would purchase from (Hafez & Ling, 2006; Smith, 2004). Similar to the transfer of image from endorser to brand, the sponsoring brand can also benefit from a transfer of image from the artist or event to the brand image, sometimes through personality traits, whereby consumers begin to view the brand with the same 'meaning' or associations that they have for the artist or band (Smith, 2004). However, in the situation where the brand is incongruent with the music event or artist in image, the brand can fail to attract the consumers it was targeting, alienate the music fans and event attendees, as well as dilute their brand identity (Hafez & Ling, 2006; North & Hargreaves, 2007).

Brands create connections with consumers through music event sponsorship of performing artist or bands whose fans are the brands' target consumers. This can be

particularly effective because the majority of music events cater to young adults for whom music has a strong influence on their lifestyles (Pincus, 2005). A study conducted by research company Jungle Jim, reported a correlation between music and brands preferred by participants under the age of 25. Those who liked Coldplay were more likely to prefer the brands Vans or Doc Martens, while those who enjoy pop music were more likely to shop at Top Shop and Levi's, and fans of Fat Boy Slim preferred Red Bull, Smirnoff, and Technics (Pincus, 2005). A different study by North and Hargreaves (1999) reported that adolescents held expectations of the characteristics of fans of different musical styles. Furthermore, music preferences conveyed information regarding the demographics and characteristics of those who listened to the music. This lends support to brands partnering with or sponsoring artists or bands to reach their consumers.

There is some research that shows brand personality can be constructed through referential meaning of sensory stimuli, such as colour or music genre, represented in the form of certain brand elements. There is evidence in practice of brands partnering with celebrities for the purposes of sponsoring the brand's identity that can result in the transfer of image from a celebrity's personality traits to the brand. Currently there are gaps in our knowledge as to whether music associated with a brand that expresses its personality influences consumers' liking for the brand.

5.2.6 Summary.

The research reviewed here highlights one way in which brands are conceived of in industry practice, which is having personality traits. Both music and brands can act as social signals with personal meaning to the individual that reinforces personalities and self-image (Belk, 1988; Sirgy, 1982; Rentfrow & Gosling, 2003, 2006; Parker, 2009). Moreover, there is evidence that consumers have greater liking for brands with personalities that match their own. The degree of liking is greater when the brand personality and human personality are congruent and the brand supports the individual's social identity. There is empirical evidence that shows music used in branding or advertising settings can influence consumers' perceptions of the brand. Moreover, brands often use music to try to build relationships with their target consumer markets. However, there is currently a lack of understanding as to the extent to which music in branding can communicate a brand's personality, and to whether and to what extent that influences consumers' liking for the brand because the consumer and the brand share similar personality traits. It is hypothesised that when the personality implied by an association with music used in branding is similar

to the consumers' personality traits, it increases consumers' liking for the brand. While it could be argued that this may be an overly complicated way of construing brand liking, where in its most reductive form this is a simple concept that consumers who like a particular type of music will show greater liking for the brand because of the music it is associated with, the added value of this research is to equip brands with a strategy in order to target and reach their desired consumers. As evidenced in the literature that has been reviewed, there is currently a lack of understanding as to how music influences consumers' liking for a brand, and the theoretical background suggests congruence between human and brand personality is an important factor.

In summary, the current state of research suggests that brands are experienced as having what can be described as human-like personality characteristics, partly created through design aspects (visuals/sound), and that when these brand personalities match the personality of a particular consumer the consumer is more likely to like that brand. So far this has been shown in respect to visual attributes, but based on research showing that music contributes meanings in crossmodal contexts it is likely that music contributes to creating brand personality (Hypothesis 1), even when that brand personality has already been communicated through visual aspects such as colour (Hypothesis 2). The final question is whether there is increased liking for brand personalities created using music (as opposed to visual design features) by people with the same personality as that brand. We do know that liking for certain music genres is associated with particular human personality characteristics which would mean that these music genres could potentially endow an associated brand with those same personality characteristics. Reframing this in terms of theories of brand personality, one could hypothesise that consumers whose human personality traits are similar to those of the brand (as communicated through music) will like that brand more than consumers whose personality characteristics are dissimilar to those of the brand. As a consequence, a new study, reported here, was designed to provide insight into the following hypotheses.

5.3 Hypotheses

Hypothesis 1: Music genres can communicate brand personality: When music accompanies the presentation of a visual brand logo, the brand will be perceived as having personality characteristics the same as those conveyed by the music genre.

Hypothesis 2: Music genres can influence brand personality represented by brand logo colour: Where a brand personality is conveyed by colour in a brand logo, the

perceived personality will differ according to personality conveyed by the music genre.

Hypothesis 3: Consumers whose personalities are similar to those of the brand (as expressed through music) will like that brand more than consumers whose personality characteristics are dissimilar to those of the brand.

5.4 Experiment design

A main experiment was preceded by two pre-tests, the aim of which was to validate the music and visual brand logo choices to be used in the main study. Both the pre-tests and main experiment were conducted online. The objectives of the main experiment were to determine whether music genres can communicate brand personality and whether consumers have greater liking for brands whose personalities, as denoted by colour logo and brand music, match their own personalities and music preferences. Therefore, the specific dimensions of the music and colour stimuli to be manipulated were selected based on empirical evidence that there is a relationship between brand personality and colour (Labrecque & Milne, 2012) and between human personality and music genre preferences (Rentfrow & Gosling, 2003). The objective of the music pre-test was to identify music stimuli for use in the main study that were representative of selected music genres and the associated human personality types identified by Rentfrow and Gosling, and which were differentiated in terms of how much they were preferred. The objective of the visual brand logo pre-test was to check that the logos (consisting of shape and colour) were unfamiliar to participants in order to avoid any effects of prior brand exposure in the main study.

5.5 Music pre-test.

5.5.1 Participants.

85 volunteers comprising staff and students from The University of Sheffield completed the music pre-test. Participants were recruited for the pre-test by email to a University-wide volunteering list. No pre-screening was considered necessary, nor was demographic information collected.

5.5.2 Materials.

The music pre-test was adapted from the music preferences test by Rentfrow, Goldberg and Levitin (2011). The pre-test used one excerpt per music genre for a total of 6 music excerpts. Consistent with Rentfrow et al. (2011), the 6 music genres

were selected because they mapped to one of three music dimensions 'Upbeat and Conventional,' 'Energetic and Rhythmic,' or 'Reflective and Complex.' Rentfrow et al. used excerpts lasting 15 seconds each, but in my study, I decided to use 30 second excerpts because commercials are typically 30 seconds long and this seemed contextually appropriate. The music selections (in table 11 below) were taken from Rentfrow, Goldberg and Levitin (2011) that used relatively unknown music in order to avoid familiarity bias.

Table 11. Music pre-test excerpt selection

Music Dimension	Genre	Artist	Song
Upbeat and Conventional	Pop	Owsley	Oh no the radio
Upbeat and Conventional	Country	The Mavericks	If you only knew
Energetic and Rhythmic	Hip-Hop	Ludacris	Intro
Energetic and Rhythmic	Electronica	Age	Lichtspruch
Reflective and Complex	Classical	William Boyce	Symphony No. 1 in B Flat Major
Reflective and Complex	Jazz	Oscar Peterson	The way you look tonight

5.5.3 Procedure.

The pre-test was administered online. Participants were asked via emailed instructions to check that they either had speakers or headphones to listen to the music before starting the pre-test. The music excerpts were presented in random order to each participant. Participants were asked to listen to each excerpt and rate it according to how well the excerpt represented the music genre (7-point scale, 1=not at all representative, 7=very strongly representative), as well as how much they liked the music excerpt (7-point scale, 1=dislike a lot, 7=like a lot). The data was analyzed using an exploratory factor analysis. The criteria for selection of stimuli to include in the final study was that there should be two music excerpts that were rated higher than 3.5 (the midpoint of the 7 point scale) in representation of the music genre, but which were maximally different in terms of liking.

5.5.4 Results.

Of the 88 participants who started the pre-test, 85 (96%) completed it. The average time to complete the test was 4 minutes and 51 seconds.

An exploratory factor analysis was initially conducted using principal axis factoring and an oblique rotation. However, the results did not yield clear factors, perhaps because there were a limited number of music genres making it difficult to identify distinct music dimensions (Rentfrow & Gosling (2011) used 26 genres in their study). I determined that this did not have negative implications for the purposes of this study because the main goal of this pre-test was to identify stimuli which were maximally differentiated in terms of the degree to which they were liked, therefore I reran the factor analysis to extract two factors using data from the question 'to what extent do you like this music excerpt?' The results (table 12) showed the greatest difference in liking between pop music and classical music. As these results relate to the findings by Rentfrow and Gosling (2003) on music preferences, pop music and classical music were categorized into two different dimensions, 'Upbeat and Conventional' and 'Reflective and Complex' respectively, based on music preferences that were also found to be correlated to different personality traits. Therefore, the pop music and classical music excerpts in this pre-test were considered appropriate for the main study.

Table 12. Factor matrix of music genre liking

How much do you like this music excerpt?	Raw		Rescaled	
	Factor		Factor	
	1	2	1	2
Pop-rock music	.979		.636	
Country music	.624	.203	.442	.114
Rap music	.745	-.576	.431	-.334
Jazz music	.473		.342	
Electronica music	.434		.277	
Classical music	.324	.512	.270	.427

Extraction method: Principal Axis Factoring.

a. 2 factors extracted. 13 iterations required.
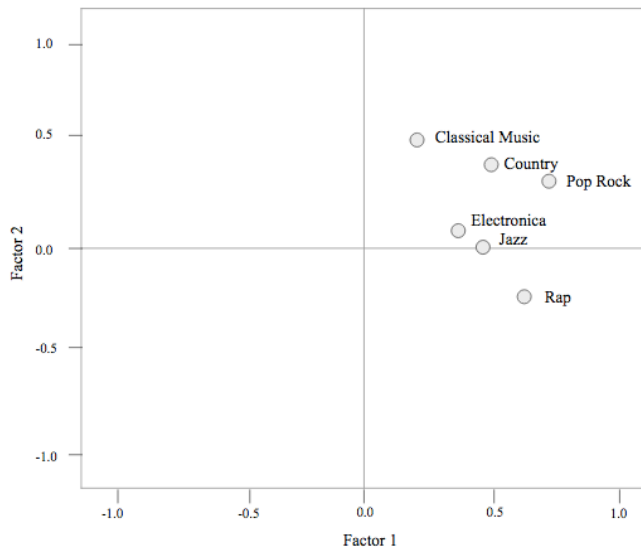
Figure 7. Factor plot in rotated factor space (PCA)

5.6 Visual logo pre-test.

5.6.1 Participants.

202 volunteers comprising staff and students from The University of Sheffield completed the visual logo pre-test. Participants were recruited for the pre-test by email to a University-wide volunteering list. The participants were pre-screened for colour blindness. Demographic information was not considered necessary and therefore not collected.

5.6.2 Materials.

The visual logo pre-test was adapted from Labrecque and Milne's (2012) brand logo and personality study. An independent graphic designer created three equally sized logos for the purposes of this study. I chose colour as the variable to manipulate visual communication of brand personality because Labrecque and Milne (2012) reported mappings between logo colour and brand personality traits (see table 13 below). Specifically, I chose red and white because I wanted colours that were congruent in association of personality traits between logo colour and brand personality and pop music, classical music and human personality traits for the purposes of testing Hypothesis 3. As can be seen in the relationships summarized in the table below, red was reported as mapping to brand personality 'Activity' (Labrecque & Milne, 2012), while pop music was reported as mapping to human personality trait 'Extraversion' (Rentfrow & Gosling, 2003), as was brand personality 'Activity' (Geuens et al., 2009). White was not found to map to brand personality 'Simplicity' (Labrecque & Milne, 2012), however, the authors reported that it has

been linked to sincerity as it is associated with simplicity, purity, hygiene, clarity, and peace (Fraser & Banks 2004; Mahnke 1996). Classical music was reported as mapping to human personality trait 'Openness' (Rentfrow & Gosling, 2003), as was brand personality 'Simplicity' (Geuens et al., 2009).

Table 13. Mappings between human personality, brand personality, music genres, music preference dimensions, and colour

Big 5 human personality (John & Srivastava, 1999)	Brand Personality (Geuens et al., 2009)	Music genres (Rentfrow & Gosling, 2003)	Music dimensions (Rentfrow & Gosling, 2003)	Colour (Labrecque & Milne, 2011)
Conscientiousness	Responsibility	Pop music	Upbeat and Conventional	Blue
Extraversion	Activity	Rock music; Pop music	Energetic and Rhythmic; Upbeat and Conventional	Red
Emotional Stability/ Neuroticism	Emotionality		No substantial correlations found	
Agreeableness	Aggressiveness		Energetic and Rhythmic; Upbeat and Conventional	White
Openness	Simplicity	Classical music	Reflective and Complex; Intense and Rebellious	White (Fraser & Banks 2004; Mahnke 1996)

5.6.3 Procedure.

The pre-test was administered online. Participants were asked via emailed instructions to complete a survey that showed all six logos and rate each one according to Kent and Allen's (1994) 5-point semantic differential scale (unfamiliar/familiar, not knowledgeable/knowledgeable, inexperienced/experienced). There was a pre-screening question that asked participants whether they had colour blindness.

5.6.4 Results.

Of the 220 participants who started the pre-test, 202 participants (92%) successfully completed the survey. The average time to complete the test was 5 minutes and 8 seconds.

The data was analysed using Wilcoxon signed-rank tests in order to determine whether there was significant difference between the red and the white versions of the three logos in terms of participants' familiarity, knowledge, and experience of them. There was a significant difference between the red and white versions of logo 1 in Familiarity (Z= -2.25, p=0.27, r= -0.16), Knowledge, (Z= -1.98, p=0.05, r= -0.14), and Experience (Z= -2.17, p=0.03, r= -29.8). There was no significant difference between the red and white versions of logo 2 in Familiarity (Z= -0.61, p=0.55, r= 0.04), Knowledge, (Z= -0.54, p=0.59, r= -0.04), and Experience (Z= -0.27, p=0.78, r= 0.02). There was also no significant difference between the red and white versions of logo 3 in Familiarity (Z= -0.45, p=0.66, r= 0.03), Knowledge, (Z= -0.45, p=0.66, r= 0.03), and Experience (Z= -1.84, p=0.07, -0.13).

In order to determine which logo participants rated as least familiar, to have least knowledge of, and least experience with, I inspected the median of each logo on these variables. Table 14 shows that Logo 3 is rated as least familiar, and to be the logo of which participants had least knowledge and experience, therefore Logo 3 was selected for the main study.

Table 14. – Median for logo condition for familiarity, knowledge, and experience

Logo Condition	DV	Median
1 - White	Familiarity	1.1
	Knowledge	1.03
	Experience	1.04
1 - Red	Familiarity	1.21
	Knowledge	1.07
	Experience	1.11
2 - White	Familiarity	1.18
	Knowledge	1.06
	Experience	1.06
2 - Red	Familiarity	1.15

	Knowledgeable	1.05
	Experience	1.06
3 - White	Familiarity	1.11
	Knowledgeable	1.05
	Experience	1.08
3 - Red	Familiarity	1.10
	Knowledgeable	1.04
	Experience	1.03

5.7 Main study.

5.7.1 Participants.

170 volunteers comprising staff and students from The University of Sheffield completed the main study out of 225 volunteers who started it, constituting a 75% completion rate. Participants were recruited for the study by email to a University-wide volunteering list. It was not possible to identify and suppress the pre-test participants from taking the main study. However, more than six months had passed since the pre-tests were run, the pre-tests themselves were very short (4-5 minutes duration), and therefore this was considered to be a small risk.

The participants ranged from 18-69 years of age, with an average age of 34.5. 53% were female and 47% were male. The average time to complete the survey was 17 minutes.

5.7.2 Materials.

Based on the results of the two pre-tests reported above, stimuli for the study comprised a bespoke logo, presented in two colours (red and white) and with two music genres (popular and classical). From the results of the visual logo pre-test, the logo was chosen because it was the least familiar to the participants. From the results of the music pretest, classical music and pop music were chosen because the participants in the pretest who reported liking classical music were least likely to also report liking pop music.

As mentioned in the preceding section, the choice of colour (red/white) was determined by existing empirical evidence that red and white map onto two distinct

dimensions of brand personality: Activity and Simplicity (Labrecque & Milne, 2012).
The choice of music genres (classical/pop) was determined by existing empirical
evidence that classical music and pop music map onto two distinct dimensions of
music preferences: 'Reflective and Complex' and 'Upbeat and Conventional'
(Rentfrow & Gosling, 2003).

5.7.3 Study conditions.

The main study comprised one between subject factor with three levels (logo colour),
and one within subject repeated measure (music genre x 2). The study included 8
conditions presented in four separate surveys, comprising two conditions each: (1)
logo colour in red shown with two separate music excerpts, one for each music genre
(classical, pop); (2) logo colour in white shown with two separate music excerpts, one
for each music genre (classical, pop); (3) a control condition with no logo shown, and
two separate music excerpts were played, one for each music genre (classical, pop),
and (4), a control condition with red and white logos shown and no music played.
The 8 conditions are summarised in the table below.

Table 15. Main study conditions (logo colour, music genre, measures, congruence
condition)

Condition	Logo colour	Music genre	Measures	Logo colour/music genre congruence condition
1	Red	Classical	12-item brand personality test, brand liking and familiarity	Incongruent (between logo colour and music genre)
2		Pop	12-item brand personality test, brand liking and familiarity	Congruent (between logo colour and music genre)
3	White	Classical	12-item brand personality test, brand liking and familiarity	Congruent (between logo colour and music genre)
4		Pop	12-item brand personality test, brand liking and familiarity	Incongruent (between logo colour and music genre)
5	No logo (control)	Classical	12-item brand personality test, brand liking and familiarity	
6		Pop	12-item brand personality test, brand liking and familiarity	

| 7 | Red | No music (control) | 12-item brand personality test, brand liking and familiarity |
| 8 | White | | 12-item brand personality test, brand liking and familiarity |

5.7.4 Procedure.

The main study was delivered in an online survey. Participants were contacted by email, within which was a link to a document containing information about the study and what consent was being sought, together with a brief description of the study and four links which, upon clicking the one that corresponded to their birth month, would be taken as proxy for giving consent, per ethics permission granted. Participants were assigned to one of four study conditions by clicking on the link that corresponded to their birth month (January-March, April-June, July-September, and October-December).

Upon entering into the study, the participants were given the option to test to check the volume level of their speakers or headphones, followed by two pre-screen questions about whether they had colour blindness and/or a hearing impairment. No participant answered affirmatively to either pre-screen question.

In the brand logo and music conditions, the participants were asked to look at a logo that was either red or white while listening to a 30-second music excerpt presented in the online questionnaire, after which they completed a 12-item brand personality test (Geuens et al., 2009), and rated brand liking and familiarity on a five-point semantic differential scale (Henderson & Cote, 1998; used in Labrecque & Milne, 2011). Participants then repeated this step for the exact same logo that was paired with a second music excerpt, after which they completed the 44-item BFI (Big Five Inventory) human personality test (John & Srivastava, 1999), followed by the music genre preferences test STOMP (Short Test of Music Preferences; Rentfrow & Gosling, 2003) and questions about their age and gender. In the brand-logo-only and music-only conditions, the participants followed the same procedure assessing either the brand logos (without music) or the music excerpts (without the brand logos).

The logos and/or music excerpts were presented in random order to each participant. Upon completion of the questionnaires, participants were thanked and notified that the study had concluded.

5.7.5 Results.

5.7.5.1 Data transformation.
The responses for brand familiarity, knowledge, and experience were measured in a semantic differential scale ranging from -3 to 3. For reporting purposes the scale was converted to a 7-point scale, ranging from 1 (least) to 7 (most), in order for mean ratings to be calculated.

In order to analyse the results for all three hypotheses, the responses for the brand personality, human personality, and music preferences tests were coded according to the instructions provided for each test. For brand personality, per Geuens et al. (2009), the scores on each of the 12 personality traits of the 7-point Likert scale were aggregated so that scores could be derived from them for each individual on each of the five distinct brand personality trait groups (Responsibility, Activity, Aggressiveness, Simplicity, and Emotionality). For human personality, per John and Srivastava (1999), the scores on each of the 44 personality traits of the 5-point Likert scale were aggregated so that scores could be derived from them for each individual on each of the five distinct human personality trait groups (Conscientiousness, Extraversion, Emotional Stability/Neuroticism, Agreeableness, and Openness). For music preferences, per Rentfrow and Gosling (2003), the scores on each of the 12 music genres of the 7-point Likert scale were aggregated so that scores could be derived from them for each individual on each of the four distinct music preference dimensions (Reflective and Complex, Upbeat and Conventional, Intense and Rebellious, and Energetic and Rhythmic).

In order to analyse the results for Hypothesis 3 (consumers whose personalities are similar to those of the brand (as expressed through music) will like that brand more than consumers whose personality characteristics are dissimilar to those of the brand), participants who scored highest on human personality Extraversion out of the five personality traits and in music preference dimension Upbeat and Conventional out of the four music dimensions were grouped together, as were participants who scored highest on human personality Openness and music preference dimension Reflective and Complex.

A repeated measures MANOVA with the five brand personality traits as dependent variables and music genre and logo colour as independent variables was run. Using Pillai's Trace, there was an overall significant effect of music on perceptions of brand personality characteristics, V=0.184, F (15,480) = 2.095, p < .05.

The univariate ANOVAs of the colour logo conditions showed a significant effect of colour logo condition (white/red) on two of the brand personality characteristics: Aggressiveness F(2, 5) = 2.120, p < .001 and Emotionality F(2, 9) = 3.109, p < .05. The univariate ANOVAs of the music conditions showed a significant effect of music condition (pop/classical) on four of the brand personality characteristics: Responsibility F(2, 32) = 12.765, p <.001, Activity F(2, 48) = 16.652, p <.001, Aggressiveness F(2, 118) = 41.690, p <.001, and Emotionality F(2, 234) = 78.573, p <.001. The results of the univariate ANOVAs indicate that colour and music affected the same brand personality characteristics, Aggressiveness and Emotionality, and music also had an effect on Responsibility and Activity.

5.7.5.2 Hypothesis 1: When music accompanies the presentation of a brand logo, the brand will be perceived as having personality characteristics the same as those conveyed by the music.

Post-hoc Tukey tests confirmed that, compared to the no music condition, classical music significantly influenced the ratings of brand personality Responsibility (p < .001) and Emotionality (p < .001). Pop music significantly influenced the ratings of brand personality Activity (p < .001). Both classical music (p < .001) and pop music (p < .001) significantly influenced the ratings of brand personality Aggressiveness. These results showed that the presence of music can affect perceptions of brand personality and, furthermore, classical music and pop music genres affect perception of brand personalities differently. When considered together with the means (table 16 below), the results suggest that classical music was associated with the perception of increased Responsibility (4.62 vs. 3.76 no music), while pop music was associated with the perception of increased Activity (4.65 vs. 3.59 no music). Classical music was associated with the perception of decreased Aggressiveness (2.20 vs. 3.38 no music), while pop music was associated with the perception of increased Aggressiveness (4.36 vs. 3.38 no music). Classical music was associated with the perception of increased Emotionality (4.16 vs. 1.75 no music).

Table 16. Means and standard deviations for brand personality and music conditions

Brand Personality	Music condition	Mean (1=least / 7=most characteristic)	SD
Responsibility	Classical	4.62	1.00
	Pop	3.53	1.09
	No Music	3.76	1.41
Activity	Classical	3.93	1.29
	Pop	4.65	1.06
	No Music	3.59	1.40
Aggressiveness	Classical	2.20	1.09
	Pop	4.36	1.49
	No Music	3.38	1.48
Simplicity	Classical	3.48	1.25
	Pop	4.12	1.28
	No Music	4.34	1.50
Emotionality	Classical	4.16	1.81
	Pop	1.72	0.88
	No Music	1.75	0.99

Overall, the results of the MANOVA support Hypothesis 1: the brands were perceived as having different brand personality traits when music accompanied the presentation of a brand logo as opposed to when music was absent; and in the presence of music the perceived brand personality traits were the same as those conveyed by the music alone.

5.7.5.3 Hypothesis 2: *Where a brand personality is conveyed by colour in a brand logo, the perceived personality will differ according to the personality conveyed by the music.*

In order to analyse the results for this hypothesis, I will first report on the results of the univariate ANOVAs on the colour of the logo and genre of music conditions (hereafter referred to as the 'logo-music conditions') and no music conditions with the brand personality characteristics as the dependent variable. I will then report on each of the brand personality characteristics that reported a significant effect, noting

the direction of the effects of the logo-music conditions compared to the no music condition control.

The univariate ANOVAs showed a significant effect of the colour logo-music conditions on perceptions of three out of the five brand personality characteristics: Active $F_{(3, 4)} = 1.107$, $p < .05$, Aggressive $F_{(3, 16)} = 3.992$, $p < .05$, and Simple $F_{(3, 15)} = 2.804$, $p < .05$.

5.7.5.3.1 Brand personality Activity.

When considered together with the means (table 17 below), the results showed that the presence of pop music in the red logo condition increased perceptions of Activity. This is consistent with the findings from the test of Hypothesis 1 that showed pop music was associated with increased perceptions of Activity and also with the study by Labrecque and Milne (2012), who reported a positive relationship between red and Activity. In the white logo condition, both classical music and pop music increased perceptions of Activity compared to the no music condition (4.60 pop vs. 4.54 classical vs. 3.46 no music). The white logo shown on its own without music reported the lowest mean score for Activity. These results suggest that the addition of music, irrespective of genre, to a logo that is perceived to be low in Activity can increase perceptions of Activity, therefore Hypothesis 2 is supported for brand personality Activity.

5.7.5.3.2 Brand personality Aggressiveness.

Perceived Aggressiveness increased when pop music accompanied the red logo (5.03 pop vs. 4.22 no music). Perceived Aggressiveness decreased when classical music accompanied the red logo (2.53 classical vs. 4.22 no music). In the white logo condition, pop music also increased perceptions of Aggressiveness (3.91 pop vs. 2.54 no music). These results highlight a notable difference between the no music red and white logo control conditions (4.22 red vs. 2.54 white) that suggests the colours red and white are key elements in conveying Aggressiveness. Pop music is effective in increasing perceptions of Aggressiveness in both colour conditions compared to classical music and the no music control condition, therefore Hypothesis 2 is supported.

5.7.5.3.3 Brand personality Simplicity.

Classical music in the red logo condition increased perceptions of Simplicity compared to pop music and the no music control conditions (4.47 classical vs. 3.94

pop vs. 3.91 no music). The white logo presented without music reported highest ratings compared to both music genres (4.76 no music vs. 4.27 classical vs. 3.91 pop). These results support literature that links white to personality traits sincerity and simplicity (Fraser & Banks, 2004; Mahnke, 1996) and classical music to simplicity (Rentfrow & Gosling, 2003). Interestingly, though, the addition of music to the white logo decreased perceptions of Simplicity, but it is unclear why. It was expected that the white logo paired with classical music would have strengthened perceptions of Simplicity. Hypothesis 2 is supported in the case of brand personality Simplicity for the red logo condition, but not for the white logo condition.

Table 17. Means and standard errors for brand personality, logo condition and music conditions

Brand Personality	Logo Condition	Music Condition	Mean (1=least, 7=most characteristic)	SE
Responsibility	Red	Pop	3.31	.284
		Classical	3.98	2.84
		No music	3.74	.237
	White	Pop	3.59	.248
		Classical	4.92	.248
		No music	3.78	.237
	No logo	Pop	3.53	.227
		Classical	4.63	.227
Activity	Red	Pop	5.33	.307
		Classical	3.67	.307
		No music	3.73	.256
	White	Pop	4.60	.268
		Classical	4.54	.268
		No music	3.46	.256
	No logo	Pop	4.65	.241
		Classical	3.93	.241
Aggressiveness	Red	Pop	5.03	.298
		Classical	2.53	.298
		No music	4.22	.248

	White	Pop	3.91	.260
		Classical	2.62	.260
		No music	2.54	.248
	No logo	Pop	4.36	.238
		Classical	2.20	.238
Simplicity	Red	Pop	3.94	.337
		Classical	4.47	.337
		No music	3.91	.281
	White	Pop	3.91	.294
		Classical	4.27	.294
		No music	4.76	.281
	No logo	Pop	4.12	.265
		Classical	3.48	.265
Emotionality	Red	Pop	1.34	.305
		Classical	3.78	.305
		No music	1.48	.255
	White	Pop	1.69	.266
		Classical	4.57	.266
		No music	2.02	.255
	No logo	Pop	1.72	.244
		Classical	4.16	.244

Overall, there is support for Hypothesis 2. Where brand personalities Activity and Aggressiveness were conveyed by colour in a brand logo, the perceived personality differed according to the personality conveyed by the music. There were mixed results for brand personality Simplicity, where the addition of music to the white logo decreased perceptions of the brand personality (see Discussions section).

5.7.5.4 Hypothesis 3: Consumers prefer brands whose personalities and brand music matches their own personalities and music preferences.

It was hypothesized that participants who scored highest on human personality Extraversion and in music preference dimension Upbeat and Conventional would rate

higher in brand liking the Red/Pop music condition compared to those who scored highest on human personality Openness and in music preference dimension Reflective and Complex. Participants who scored highest on human personality Openness and in music preference dimension Reflective and Complex would rate higher in brand liking the White/Classical music condition.

A between-subjects t-test was run with brand liking of the logo-music conditions (Red/Pop music and White/Classical music) as the dependent variable, and personality and music preference (Extraversion/Upbeat and Conventional and Openness/Reflective and Complex) as the independent variable. There was a statistically significant difference in brand liking of the logo-music conditions between the personality and music preference groups in both the Red/Pop music condition, $t_{20}=2.084$, $p = 0.05$, and the White/Classical music condition, $t_{20}=2.365$, $p < 0.05$. The mean ratings (table 18 below) confirm that the participants whose personalities are similar to those expressed by the logo-music conditions liked that brand more than consumers whose personalities characteristics are dissimilar to the logo-music condition, therefore Hypothesis 3 is supported.

Table 18. Brand liking ratings for brand condition, personality and music preferences

Brand condition	Personality and music preferences	Brand liking (1=significantly dislike, 7=significantly like)
Red/Pop music	Extraversion/Upbeat and Conventional	5.2
	Openness/Reflective and Complex	4.6
White/Classical music	Extraversion/Upbeat and Conventional	4.3
	Openness/Reflective and Complex	5.0

5.8 Discussion

This study investigated whether music accompanying visual colour logos can affect perceptions of a brand's personality, and whether brand personalities created using music are liked more by people with the similar personality traits as that brand. A repeated measures test on the brand logo and music conditions and the two control groups was run. Dependent measures comprised brand personality (Geuens et al., 2009), human personality (John & Srivastava, 1999), and music preferences

(Rentfrow & Gosling, 2003) data. In general, there was support for all three hypotheses, although the interaction between logo colour and music genre produced mixed results.

The results showed that brands represented by music were perceived as having the same personality characteristics as those conveyed by the music. For example, classical music increased perceptions of Responsibility and pop music increased perceptions of Activity compared to perceptions of the same brand logo presented without music. Furthermore, classical music decreased perceptions of Aggressiveness, while pop music increased perceptions of Aggressiveness of the same brand. This provides support that music genres have referential meaning that relates to brand personality in the same way that colour and logo font type have also been found to influence brand personality perceptions (Labrecque & Milne, 2012; Grohmann et al., 2013). The results also support Brodsky (2011) who reported that brands' personalities could be expressed by music. The results of this study suggests that music genres express certain brand personalities and, as such, music genres may be used as a guideline for companies wanting to create a brand sound that reflects their personality. Further research is needed to understand how generalisable these results may be as there are likely other musical attribute considerations, such as tempo, that affect brand personality perceptions. For example, downbeat pop music may have different effects on perceptions of brand personality Activity compared to upbeat pop music.

The results of the interaction between music genre and colour on brand personality perceptions were mixed. Two types of interaction and their effects on brand personality perceptions can be identified from the results: the effects of congruence between logo colour and music genre and the mediating role that music genre may play in influencing perceptions. With regard to congruence, both colour (Labrecque & Milne, 2012) and music genres (hypothesis 1) have been shown to have referential meaning relating to brand personality, therefore it was anticipated that the combined use of congruent colour and music genre (i.e. colour and music genre that have the same referential meaning) brand elements would result in a stronger degree of fit (North et al., 2007) and, consequently, stronger perceptions of brand personality. Similarly, it was anticipated that incongruent colour and music genre brand elements would result in weaker perceptions of brand personality. In the results, the pop music and red logo (congruent) condition were associated with strongest perceptions of brand personalities Activity and Aggressiveness compared to incongruent conditions

(classical music and red logo; pop music and white logo). This was anticipated because the pop music excerpt was an example from the Upbeat and Conventional music dimension (Rentfrow & Gosling, 2003), a positive relationship between red and excitement has been reported (Labrecque & Milne, 2012), and Activity and Aggressiveness are somewhat similar as brand personality traits. These results indicate that congruence between colour and music genre in referential meaning can produce higher ratings in brand personality traits. However, there were conflicting results reported for a different congruent condition: with regard to brand personality Simplicity, the incongruent condition (classical music and red logo) reported higher ratings of Simplicity compared to the congruent condition (classical music and white logo). These results suggest that congruence between colour and music genre can be effective in producing higher ratings of certain brand personalities, but other factors may also influence brand personality perceptions.

One possible factor inferred from the results that may explain how the interaction between music genre and colour influences brand personality perceptions is that music may play a role in mediating brand personality perceptions. As discussed in the preceding paragraph, the pop music/red logo condition reported highest ratings of Aggressiveness that may be attributed to congruence between stimuli in referential meaning. In the incongruent condition with the white logo, pop music increased perceptions of Aggressiveness compared to classical music, which suggests that music can mediate brand personality perceptions. Interestingly, the reported perceptions of Aggressiveness highlight a notable difference between the red and white logo control/no music conditions (4.22 red vs. 2.54 white) that suggests colour is a dominant element in communicating the brand personality and music can enhance or decrease perceptions relative to colour.

The addition of music to a colour logo influenced how participants perceived brand personalities. The white logo shown on its own without music was reported as having the lowest characteristic rating for brand personality Activity and the highest rating for brand personality Simplicity. When the white logo was presented with music, irrespective of genre, it increased ratings for the brand personality Activity and decreased ratings for brand personality Simplicity. It may be that a brand represented by a colour logo and music increased perceptions of brand personality Activity because of the use of multi-sensory stimuli, and conversely, the addition of music to a colour logo added complexity to the brand's personality and decreased perceptions of Simplicity. This would indicate that the number of brand elements may have

influenced how participants interpreted some of the brand characteristics such that participants formed their perceptions based on the 'complexity' of the brand, as well as the referential meaning of the brand elements, as discussed above. Further research is needed to understand the effects of single versus multi-elements on brand personality perceptions.

This study shows that there is a relationship between human personality, brand personality, and music preference. Participants were more likely to prefer the brand that has the same personality (as represented by music) as the participants. This was reported in both of the two human personality types tested: participants who scored high in Extraversion and preferred music which scored high on the dimension of Upbeat and Conventional music were more likely to rate the red/pop music condition higher in brand liking than the white/classical music condition; participants who scored high in Openness and preferred music which scored high on the Reflective and Complex music dimension were more likely to rate higher the white/classical music condition in brand liking than the red/pop music condition. These results are consistent with previous research that shows consumers prefer brands that reflect themselves (Maehle & Shneor, 2010; Khare & Handa, 2009) and links to research that has shown there music preferences are related to human personality (Rentfrow & Gosling, 2003). This study confirms Rentfrow and Gosling's findings that there is a relationship between music preference and human personality traits for the personality traits Extraversion and Openness.

Previous research in understanding how music might function in branding has shown that congruence between branding stimuli influences consumers' perceptions of the brand and behaviours towards the brand through the referential meaning of the stimuli. This important body of research has not considered the extent to which liking for the brand may be based on differences between consumers, such as their personality characteristics. Separately, the theory of brand personality suggests that the greater the congruity between human personality and brand personality characteristics, the greater the preference for the brand. To my knowledge, this is the first study to investigate and show that music can express brand personality characteristics as perceived by consumers and that a brand is liked more by a consumer when its personality expressed by music is similar to that of the consumer's personality. In doing so, this study presents a different perspective towards assessing 'fit', the congruence between branding stimuli, by using brand personality as the

condition and highlights that future research should consider the impact of differences between consumers.

The evidence presented in this study is useful for companies to consider when they are incorporating music into their brand. Music genres can communicate brand personality characteristics and can strengthen or mediate brand personality perceptions when presented in conjunction with colour in logo form. This highlights that the role of music in conveying brand personality should not be incidental, but more research is needed in several areas to provide clearer brand guidelines: Firstly, this study investigated the effects of music genres and other classifications and attributes of music should be tested to determine whether they also convey brand personality. Secondly, a much deeper examination of colour and music is needed to understand interaction effects between stimuli and how they affect brand personality perceptions. Thirdly, there are other brand elements besides colour, therefore it is necessary to examine the interaction effects between music and other elements, such as font type (Holm et al., 2009; Grohmann & Parkman, 2013). Finally, research is needed to understand whether music's effects on brand personality extends beyond influencing perceptions to consumer behaviours such as likelihood to purchase and brand choice. In the context of the thesis as a whole, this study emphasises the importance of considering sound branding as part of a multisensory domain and one in which the individuality of the consumer is considered: firstly, the interaction effects between sensory stimuli, in this case music and colour in logo form, can influence brand personality perceptions. Secondly, congruence between brand personality, human personality and music preferences can influence the degree of consumers' liking of the brand.

5.8.1 Study limitations.

This study does not investigate different types of brands, such as functional or social brands, and may therefore be considered to be too theoretical and limiting in its real world validity (North & Hargreaves, 2007). This is potentially important because the context and consumers' use of the brand, whether private or public (Parker, 2009), can influence the extent to which consumers may prefer a brand based on a match between their personalities and the brand's personality (Maehle & Shneor, 2010). This is particularly relevant when music is used to convey brand personality for public brands because people use music as a 'badge' to communicate their values and self-values (North & Hargreaves, 1999). It would be worthwhile to investigate the

effects of music on brand personality perceptions and consumer preferences for private and public brands.

One consideration of the study is the mappings between human personality, brand personality, music genres, music preference dimensions, and colour (see table 13). The choices of colour and music genres for this study were determined by existing empirical evidence. It may be that the mappings between music dimensions and human personality traits are overly generalised for the purposes of this study. The relationships reported by Rentfrow and Gosling (2003) shows that music genres are associated with more than one personality trait. Pop music is associated with the music dimension Upbeat and Conventional and it is associated with three of the five Big 5 personality trait groups (Conscientiousness, Extraversion, and Agreeableness) (Rentfrow & Gosling, 2003). The mappings between all the variables are also incomplete as there is no empirical evidence to my knowledge that shows an association between emotional stability/neuroticism as a human personality trait and music dimensions or colour. In order to conduct further research into how music in branding can communicate a brand's personality, and to what extent that influences consumers' liking for the brand because the consumer and the brand share similar personality traits, more research is needed to better understand the relationships between colour and/or other brand elements and human and brand personality traits.

Chapter 6 – General conclusions

This is the concluding chapter of the thesis that reviews the findings from the empirical studies presented in the previous chapters with respect to existing literature and draws out the larger implications when viewed as a whole. I begin with a summary of the empirical work before considering the main findings in light of the new contribution to knowledge. Finally, I review research considerations before concluding with a discussion of implications and future research.

6.1 Summary

This thesis comprised mixed methods research on the topic of sound branding that was guided by two research aims. The first was to extend our current knowledge of how sound branding influences consumers' perceptions and behaviours. I fulfilled this aim by conducting two case studies (chapters 4 and 5) that were shaped by the literature review (chapter 2) and a qualitative study consisting of interviews with sound branding practitioners (chapter 3). The interviews fulfilled the second research aim, which was to address the lack of integrated literature on the topic that included both empirical research and practitioners' perspectives as highlighted in the literature review.

The literature review presented the current state of knowledge on the three research questions that were formed from the overview of sound branding presented in the Introduction (chapter 1). The first question was to understand how sound influences consumers' perceptions for the brand. Literature drawn from theories of semiotics and semantic priming provided a causal explanation of how sound can communicate brand associations that shape brand perceptions. Listeners have come to associate particular sounds with particular meanings that brands can use to form brand associations (Tagg & Clarida, 2003). Brands can also use sound to 'prime' perceptions and behaviours by activating consumers' knowledge networks. The second question was to understand how the interactions between different sensory stimuli affect consumers' perceptions of the brand and consumer behaviours. Research shows that congruency between sensory stimuli is recognised by the majority of people and may even be universal (Spence, 2011), therefore congruent crossmodal stimuli increases gestalt perceptions and positive consumer experiences (Mattila & Wirtz, 2001) as a result of information processing fluency (Van Rompay & Pruyn, 2011). The final question was to understand how the effects of music on

consumers' affective states influence their responses to a brand. Research into psychological processes involving affect (Schmitt, 2012) show that consumers interact with brands in varying degrees of engagement from weakest, attitude formation, to strongest, advocacy for the brand. Consumers also evaluate brands based on their feelings toward them. Music used by brands create brand associations that influences liking for brands (Mai & Schoeller, 2009), as well as induce affective states that influence decision making and behaviours toward the brands (Ding & Lin, 2012). The notion that brands should appeal to their consumers by eliciting emotional responses through the use of sensory elements does not yet have broad appeal within traditional branding, perhaps due to lack of understanding and proven results (Thomson et al., 2005). However, there is strong theoretical support and empirical evidence in consumer behaviour for researching emotions in sound branding (Sweeney & Wyber, 2002; North & Hargreaves, 2007).

I carried out the literature review by examining two bodies of work: academic research on the effects of sound on consumer perceptions and behaviour and sound branding books written by current practitioners. What I found from conducting the literature review is that neither body of literature sufficiently references the other, yet for the most part they reflect the same interests and phenomena, thereby highlighting a division between academic and non-academic spheres. When examined together, I uncovered some disparity between academic research and sound branding books that may be impacting the development of a consistent body of literature and understanding about sound branding that can be leveraged in practice. Academic research to date (as summarised above) has identified several ways in which sound branding can be created and implemented such as to achieve purposive consumer responses. Sound branding books by practitioners contain multiple anecdotes and use cases that suggest underlying psychological processes similar to those in academic research, but they conflate the processes with an overarching proposition that consumers engage emotionally with brands. When brands intentionally and strategically use sound in their branding, it leads to consumers developing a deep connection and love for the brands. I conducted interviews with sound branding practitioners in order to better understand their approach to practicing sound branding and how their perspectives relate to those presented in the sound branding books.

The empirical research reported in this thesis began with an investigation of sound branding from the perspective of practitioners (chapter 3). The interviews were conducted with sound branding practitioners who were, at that time, active members

of a 'Sonic Branding and Identity' group found on the professional online networking platform LinkedIn. The results presented the opportunity to understand how they approach sound branding as it relates to the three research questions that was beyond the insight gained from the sound branding books written by practitioners. The interviews also provided insight into the status of the practice as it currently exists within the branding industry. The analysis revealed challenges the sound branding practitioners face in developing the practice as a discipline that is of the same or similar status as a branding element to that of vision and copy. It highlighted aspects of their profession that are problematic to them, such as managing stakeholders whose decision making tends to be subjective and which runs counter to their belief that sound branding should be both intentional and strategic. An added benefit of the qualitative study is the rich data the interviewees provided in their descriptions of sound branding examples that supplements those given in the sound branding books by practitioners and contributes to a deeper understanding of the research questions.

The interviews revealed similarities to the perspectives found in sound branding books by practitioners that the use of sound can create an emotional connection between consumers and brands. Interviewee MK reported leading in his business pitches with 'sound communicates feelings first' as the value proposition of his work and to make a point of differentiation from visual branding. He stated that brands are usually very receptive to learning more about sound branding when they present use cases with 'IFTTT (if this, then that)' within which he shares concept ideas ('if you did this') together with the expected outcome ('then you'll get that'). Further analysis of the interviews observed a tension between their beliefs and empirical evidence that seemed to reveal a strong reliance on instinct, possibly to cover up or compensate for a current lack of knowledge or having systematic data on what works and why. Despite the observed tension, it was clear from the interviews that this group of sound branding practitioners had a desire to 'prove' the value of sound branding. Some of the interviewees saw this as a necessary precursor to establishing sound branding as an expert discipline in its own right, possibly because presenting evidence is a key part of their pitches to brands for new business. The observed tension highlighted an opportunity to conduct an experiment investigating how sound can affect consumers' emotions that influences their perceptions and behaviours.

The qualitative study (chapter 3) showed that the interviewees held strong beliefs that sound can draw consumers to brands through an emotional connection, but they lacked sufficient data to support their beliefs. Study 2 (chapter 4) served two

purposes, both of which arose from my interpretations of findings from the interviews that I identified as being important to practitioners. The first was to provide insight into understanding how sound branding can influence consumers' arousal states that may affect their purchasing behaviours. The second was to conduct a study in which it would be possible to 'measure' or provide quantifiable results that can demonstrate the effectiveness of sound branding. There were a few benefits to conducting an online study compared to an in-field study at a physical store. These included the ability to control for inducing participants into the desired mood state, creating a shopping environment that could easily be duplicated in order to switch the background music and colour, and the ability to track orders placed and time spent shopping for each individual participant. The results showed the association of willingness to pay with arousal condition differed with the product being purchased: compared to the no music condition, more participants were willing to pay a higher price for a paddleboard in the high arousal condition, whereas more participants were willing to pay a higher price for a sofa in the low arousal condition. This suggested evidence of mood-congruent information processing (Isen et al., 1978; Gardner, 1985), such that music-induced mood states primed consumers' willingness to pay a higher price for products that are associated with the same arousing qualities as the music (paddleboards associated with a high arousal activity (sport) and sofas with a low arousal activity (relaxing)). The study's results also indicated that congruency in arousing qualities of the music and colour of the shopping site has an increased positive effect on consumers' brand perceptions and willingness to pay behaviour.

Understanding and reaching the target audience is key to branding effectiveness. However, existing research in sound branding has not taken into consideration whether differences between consumers, such as their music preferences and personalities, affects their perceptions and behaviours toward the brand. In Study 1 (chapter 3), a few interviewees made references to sound's ability to activate relevant memories or to use sound to connect fans of an artist or band to a brand because of a shared affinity between the artist and the brand. Central to both references is the idea that consumers respond differently to sound branding because of a perceived relevance to the brand or their music preferences. Study 3 (chapter 5) explored the extent to which music preferences and similarities in personality between consumers and the brand may influence liking for the brand. The study brings together research streams across music preferences and human personality (Rentfrow & Gosling, 2003), brand preferences and human personality (Belk, 1988; Sirgy, 1982; Parker, 2009), and the communication of brand personality through brand stimuli such as

colour (Labrecque & Milne, 2002). The results showed that brands represented by music were perceived as having the same personality characteristics as those conveyed by the music. This provides support that brand's personalities can be expressed by music (Brodsky, 2011) and music genres have referential meaning that relates to brand personality in the same way that colour and logo font type have also been found to influence brand personality perceptions (Labrecque & Milne, 2012; Grohmann et al., 2013). This study showed that there is a relationship between human personality, brand personality, and music preference. Brand personalities created using music are liked more by people with similar personality traits to that of the brand. These results are consistent with previous research that shows consumers prefer brands that reflect themselves (Maehle & Shneor, 2010; Khare & Handa, 2009) and links to research that has shown music preferences are related to human personality (Rentfrow & Gosling, 2003). To my knowledge, this is the first study to investigate and show that music can express brand personality characteristics as perceived by consumers and that a brand is liked more by a consumer when its personality expressed by music is similar to that of the consumer's personality. In doing so, this study presents a different perspective towards assessing 'fit,' defined here as the congruence between consumers' personality and brand personality that is represented by music, and highlights that future research should consider the impact of differences between consumers.

The findings from the two quantitative studies contribute to a deeper understanding of how the use of sound in branding can influence consumers' brand perceptions and behaviours derived from psychological processes identified in the literature review and in the examples provided by sound branding practitioners in Study 1 (chapter 3). They also highlight the challenges of studying sound branding and the complexities given the many variables in question, which include brand identity, consumer affect, and interactions between multisensory stimuli that influence consumer perceptions and behaviours. In the next section, I consider the findings across chapters in relation to previous research.

6.2 Findings in relation to previous research

The empirical studies I conducted focused on gaining a deeper understanding of the three research questions outlined in the Introduction (chapter 1). I will now discuss the new findings for each question in relation to previous research.

6.2.1 How does sound influence consumers' perceptions for the brand? (priming).

Existing research, surveyed in chapter 2, shows that sound can contain information that serves as a signifier of brand associations (see chapter 2). I associate this with semiotic theory (Monelle, 2000; Tagg & Clarida, 2003) that is predicated on the idea that musical materials have meaning that, in turn, can come to be representative of the brand. Brands can use music to 'prime' or activate knowledge networks in order to influence and affect perceptions and behaviours (North & Hargreaves, 2007). There is empirical evidence that music genre priming can influence consumer behaviour (North et al., 1997; Areni & Kim, 1993). In Study 1 (chapter 3), the sound branding practitioners demonstrated knowledge of sound as a signifier of brand associations as they talked about sound logos as a primary tactical execution of sound branding. The most cited example of a sound logo was the Intel chime. Interviewee LO described the Intel logo as both an example of sound symbolism because the logo sounds like the brand name (Klink, 2000) and of sound as a signifier of brand associations because the logo incorporates sounds that people typically associate with technology:

> LO: The sound of the [Intel] logo itself, though, they also hit that out of the park. It sounds like tech, you know? It's bright, has resonance and vibrating-like qualities that makes you think of machines, and it's got four notes that match to 'In-tel In-side.

As interviewee AL talked about opportunities to expand the potential of the sound logo, she described her company's relatively new approach to it, which is to 'intentionally and strategically create full logo expressions' that uses different sound elements, such as rhythm, texture, and timbre, as signifiers to create different expressions of the logo. Expressions are similar to how a person may sign their name, where the form or tone of the signature can change in each iteration depending on the context, for example casual or formal. The identification of the logo remains the same. The interviewees believed they have instinct and skills to apply sound signification to form brand associations.

The interviewees also believed that sound could increase its influence on consumers' brand perceptions if similar treatment of sound signification was applied to other touchpoints, such as background music. Background music, as its name suggests, fulfills a functional capacity as a supportive role that is often not thought of as either needing to or being capable of representing the brand. The interviewees considered this to be a missed opportunity. The analysis revealed that the popularity of the sound

logo may in fact be preventing the sound branding practitioners from expanding sound signification to background music. CW described the Intel chime as 'a very effective mnemonic device,' but both he and AH complained that the popularity and success of it has limited the development of sound branding because 'so many brands come to us because of the Intel logo, thinking they only need a [sound] logo.' (AH)

There is empirical evidence of sound used for knowledge priming (North et al., 1997; Areni & Kim, 1993). The qualitative data in Study 1 (chapter 3) highlighted a belief that sound can also elicit emotions as a result of knowledge priming. Interviewee EA believed that priming in sound branding is particularly effective because sound can have a very strong recall effect, to the extent that just hearing one chord, such as the opening chord of Elton John's 'Benny and the Jets', can bring to mind the entire song. EA also suggested that priming can elicit emotions or feelings because 'those memories have emotional weight in baggage associated with them' (EA), which in turn can have an influential effect on consumers' perceptions and behaviours. Future research could investigate the extent to which sounds that are personally relevant to consumers can prime memories that elicit an emotional reaction and whether this can influence their perceptions and behaviours toward a brand.

Evidence for the effects of priming in the domain of affect comes from Study 2. The results of Study 2 (chapter 4) suggested there were effects of mood-congruent information processing, such that participants who were induced by music into different mood states may have been primed by the music they heard to choose the product that best matched the music and the implied arousal-mood characteristic of the activity the product was associated with (paddleboards associated with a high arousal activity (sport) and sofas with a low arousal activity (relaxing)). North & Hargreaves (1998) reported evidence that different music genres influenced how much people were willing to pay for cafeteria food. They suggested that this may be because certain music genres primed associations of the cafeteria with being upmarket (classical music) or upbeat (pop music) that resulted in increased willingness to pay. Study 2 (chapter 4) extends what we know about the use of sound to prime consumer behaviours by showing that music-induced mood states can prime consumers' willingness to pay.

6.2.2 How does sound influence consumers' perceptions for the brand? (connecting brands to consumers through music preferences and personalities).

According to some proponents of branding (Aaker, 1996), one way in which brands can build strong relationships with their intended and existing customers is through the creation of a brand personality that can encourage consumers to self-identify with the brand as an extension of themselves (see chapter 1). Research has shown that brand personality can increase consumer preference and usage of the brand (Sirgy, 1982), evoke positive emotions in consumers (Biel, 1993), as well as increase the strength of the consumer-brand relationship (Doyle, 1990) and build brand trust and loyalty (Fournier, 1994). Consumers may be more likely to prefer brands with personalities similar to their own (Maehle & Shneor, 2010) (see chapter 5). Whether music can communicate a brand's personality was investigated in Study 3 (chapter 5), and the role that music preferences may play in consumers' perceptions of a brand's personality and their preference and liking for a brand was investigated in both Study 1 (chapter 3) and Study 3 (chapter 5).

The results of Study 3 (chapter 5) showed that brands represented by music were perceived as having the same personality characteristics as those conveyed by the music (Brodsky, 2011). There is existing evidence that music holds referential meaning (Tagg & Clarida, 2003) and so the new contribution to knowledge made by Study 3 (chapter 5) is that music genres have referential meaning that relates to brand personality in the same way that colour and logo font type have also been found to influence brand personality perceptions (Labrecque & Milne, 2012; Grohmann et al., 2013). Further research should be conducted to better understand which aspects or characteristics of music are optimal for conveying brand personality so as to provide useful guidelines to brands. Music genres may be too broad as a category: for example, upbeat pop music has different characteristics to downbeat pop music that would likely result in different perceptions of the same brand personality.

Study 3 (chapter 5) showed that participants were more likely to prefer the brand that had the same personality (as represented by music) as the participants' own personality, and a music genre that matched the participants' own genre preferences. These results are consistent with previous research that shows consumers prefer brands that reflect themselves (Maehle & Shneor, 2010; Khare & Handa, 2009) and extends current knowledge by using consumers' preferences for music genres as a way to increase consumers' preferences for a brand. These results also link to

research that has shown music preferences are related to human personality (Rentfrow & Gosling, 2003) and extends the knowledge by showing music preferences are related to human personality that influences liking for a brand based on its personality. My study was limited to testing only two of the possible personality traits and more research is needed that investigates other personality traits, as well as the extent to which these findings may extend beyond influencing perceptions of a brand to consumer behaviours, such as likelihood to purchase and brand choice.

My research extends existing knowledge that brands can build strong relationships with their customers through the creation of a brand personality by showing that music genres can communicate brand personality characteristics. Furthermore, my research extends existing knowledge that consumers may be more likely to prefer brands with personalities similar to their own (Maehle & Shneor, 2010) by showing that consumers' music preferences influences their liking for a brand when the consumers' personality traits match those of the brand.

6.2.3 How do the interactions between different sensory stimuli affect consumers' perceptions of the brand and consumer behaviours?

Multisensory branding surfaced in the literature review as an influential concept in consumer psychology and in sound branding books by practitioners (Lindstrom, 2005; Gobé, 2001). However, the interviews with sound branding practitioners in Study 1 (chapter 3) highlighted a different perspective: the interviewees were interested in multisensory branding, but it was less of a priority to them to incorporate it into their work compared to sound branding. The analysis showed that this is because the interviewees view the dominance of visual branding within the general branding practice as preventing sound branding from developing in an intentional and strategic way. Consequently, rather than explore and pursue multisensory branding, which they admit to knowing little about, this group of professionals were seeking to build sound branding as a discipline separate from visual branding, that would position it as a sub-industry within the broader branding industry. Nonetheless, given the relevance of multisensory branding for this field, and indeed its ubiquity (brands are something experienced through multiple senses), multisensory stimuli were included in the empirical work in this thesis: multisensory stimuli were tested under different conditions and for different effects in Study 2 (chapter 4) and Study 3 (chapter 5). These are reviewed next.

In Study 2 (chapter 4), the effect of multisensory branding was considered in light of the perceived 'fit' or congruence between music and colour, specifically congruence between the arousing qualities of music (fast and slow tempo music that induced high and low arousal states) and colour branding stimuli, and the effects conguence may have on willingness to pay and perceptions of the shopping environment. The results of shopping behaviours in congruent conditions compared to incongruent conditions showed that congruency in arousing qualities between music and background colour had an effect on consumers, such that their willingness to pay and time spent shopping were increased and consumers reported positive brand perceptions. In the congruent conditions, more participants were willing to spend a higher amount on both the sofa and the paddleboard than in the incongruent conditions. These findings are consistent with Gestalt theory and previous research that participants evaluate their environment holistically (Kotler, 1973; Bell et al., 1991; Mattila & Wirtz, 2001; Cheng et al., 2009). The congruency of stimuli increased the perceived unity of the online store and showed that matching arousal qualities between music and colour effects appear to have a mutually reinforcing effect on participants' brand perceptions that, in turn, increases their willingness to pay.

In Study 3 (chapter 5), the effectiveness of multisensory branding was considered in light of the perceived 'fit' or congruence in referential meaning between music genre and logo colour stimuli (North & Hargreaves, 2007; Alpert et al., 2005; Brodsky, 2011) and the effects it may have on perceptions of brand personality. The interaction effects between logo colour and music genre on conveying brand personality is presented here for the first time. Other studies investigating brand personality have investigated single stimulus, colour or font type, only (Labrecque & Milne, 2012; Grohmann et al., 2013). In the tested conditions with congruence in referential meaning between colour and music genre, there was some evidence that congruence rated higher in brand personality traits compared to incongruent conditions. However, this evidence only applied to two of the five brand personality traits and there were conflicting results reported for a third brand personality trait. This suggests that congruence between colour and music genre can be effective in producing higher ratings of certain brand personality traits, but other factors may also influence brand personality perceptions. One possible explanation is that colour is more commonly used in branding and therefore people are more experienced in using or perceiving it. Another possible explanation is that colour may be 'stronger' in a perceptual sense in communicating brand personality and music can enhance or decrease perceptions relative to colour. Further research is needed to confirm this.

146

The findings from my research on multisensory branding contribute to existing knowledge that interaction effects between sensory stimuli can influence consumers' perceptions and behaviours toward a brand in two ways. Firstly, we know from existing research that congruency in arousing qualities between music and scent can increase perceptions of unity, impulse buying and satisfaction with the shopping experience (Mattila & Wirtz, 2001). The new contribution to knowledge from Study 2 (chapter 4) is that congruence in arousing qualities between music and colour stimuli can increase consumers' willingness to pay. Secondly, colour can hold referential meaning that influences brand personality perceptions (Labrecque & Milne, 2012). The new contribution to knowledge from Study 3 (chapter 5) is that congruence in referential meaning of colour and music can be effective in eliciting perceptions of certain brand personalities, but other factors may also influence brand personality perceptions and further research is needed. There is also new knowledge from Study 1 (chapter 3) that the sound branding practitioners who were interviewed are less interested in pursuing the practice of multisensory branding compared to sound branding. Given the new contribution to knowledge presented here, the importance of considering multisensory interactions in sound branding should be communicated to practitioners. This is discussed in the 'Implications of the findings for sound branding practitioners' section below.

6.2.4 How do the effects of music on consumers' affective states influence their responses to a brand?

The sound branding books by practitioners reviewed in Chapter 2 made reference to a proposition that companies that use sound in their branding can lead to consumers engaging with them in an emotional way, which includes increased liking or even deep attachment to the brand. Lindstrom (2005) and Gobé (2001) suggest that a multisensory approach is more likely to lead to an emotional attachment because consumers store values and emotions about brands within their memory, and the more senses a brand engages to create such values and emotions, the more likely consumers are to develop memories that lead to emotions and attachment for the brand. There was general consensus amongst the interviewees in Study 1 (chapter 3) that there is an emotional component associated with sound used in branding. Interviewee EA suggested that priming can activate memories that may lead to emotions or feelings resulting in an effect on consumers' perceptions and behaviours. According to Schmitt (2012), this can be effective because brands are using music to engage with consumers in a personal, self-relevant way. In addition, consumers may

employ a 'how do I feel about it?' heuristic (Pham, 2000) whereby their feelings enter into an evaluation of the brand or a purchase making decision. Using a framework of music induced mood states and their effects on purchase behaviour, Study 2 (chapter 3) was designed to investigate whether arousal states induced by music affect consumers' brand perceptions and willingness to pay, and the extent to which this may be mediated by factors such as the hedonic character of the product (Ding & Lin, 2012) or the congruence with other sensory stimuli (background color) (Mattila & Wirtz, 2001; Menon & Kahn, 2002; Wu, Cheng & Yen, 2008; Lalwani, Lwin & Ling, 2009).

The results of Study 2 (chapter 3) showed an effect of the shopping activity itself on consumers' music induced mood states. Specific to valence, there was no difference in valence state measured pre- and post-shopping of the three groups of shoppers. In contrast, other studies have shown that store atmospherics can influence customers' valence levels, such that a pleasant store environment can increase the positive quality of valence measured over the course of shopping experience that was associated with higher ratings of customer satisfaction with the store and increases in purchases of products (Berlyne, 1987; Spies, Hesse & Loesch, 1997). This could mean participants in my study did not experience satisfaction during the shopping experience and this may be attributed to the task criteria of having to select both a paddleboard and a sofa that could have increased the task complexity of having to evaluate both products within the same experience (Park & Young, 1986).

The music-induced high arousal shoppers reported lower levels of arousal at the end of their shopping experience, while music-induced low arousal state shoppers and those who did not hear any music reported higher levels of arousal at the end of their shopping experience. This seems to suggest a tendency for arousal levels to move towards an optimal level over the course of the shopping experience from the initial difference immediately after manipulation (Berlyne, 1971). Drawing on previous research, arousal level during the shopping experience may have been influenced by task-orientation, motivation, and involvement with the decision making process (Park & Young, 1986). Further research is needed to understand what factors may influence arousal levels during shopping experiences.

In my study I found no evidence that the hedonic/utilitarian aspect of product characteristics influenced willingness to pay or brand liking, which is in contrast to Ding & Lin (2012). Ding and Lin (2012) reported a significant difference in the

influence of arousal on pleasure and on purchase intent for both utilitarian and hedonic products when background music was used to influence arousal state, such that both pleasure state and purchase intent were higher for hedonic products than utilitarian products in high arousal conditions. Given this, I anticipated that more participants in the high arousal condition would report higher willingness to pay for the paddleboard compared to the sofa because of the hedonic characteristics of the paddleboard, which was not the case. This is dicussed in the 'Research considerations' section below. Instead I found significant differences between the arousal conditions and the no music conditions such that, compared to the no music condition, more participants were willing to pay a higher price for a paddleboard in the high arousal condition and more participants were willing to pay a higher price for a sofa in the low arousal condition. These results show evidence of mood-congruent information processing that primed willingness to pay behaviour. Existing evidence has shown evidence of mood-congruent processing between valence state and purchase intent (Alpert, J. & Alpert, M., 1990) and, while further research is needed, my findings show for the first time that mood-congruent processing can occur between consumers' arousal state and willingness to pay behaviour.

The findings of Study 2 (chapter 4) could provide a useful guideline to help brands in selecting music that can optimize consumers' shopping experience through the regulation of their mood states. If a brand is selling products that are associated with a high arousal activity, the shopping experience could include music with high arousal characteristics, such as a fast tempo, to induce consumers into a high arousal mood state. Similarly, if a brand is selling products that are associated with a low arousal activity, the shopping experience could include music with low arousal characteristics, such as a slow tempo, to induce consumers into a low arousal mood state and thereby leads to an increase in consumers' willingness to pay for the products.

6.2.5 General findings.

The central theme which connects the three studies presented in this thesis is the importance of congruence between multimodal stimuli, which suggests that the role of sound in branding can really only be understood in relation to other sensory stimuli, as evidenced by the studies presented in chapters 4 and 5. Moreover, the disjunction between practitioners' beliefs (chapter 3) and academic research (chapter 2) suggests an opportunity for practitioners to evolve their practice to take into

consideration the interaction effects between different sensory stimuli, along with consumer characteristics which might influence these.

6.3 Research considerations

This research has been conducted with the intention of advancing the current state of knowledge about the influence of sound on consumers' perceptions for the brand, the interactions between different sensory stimuli that affect consumers' perceptions of the brand and consumer behaviours, and the effects of music on consumers' affective states that influence their responses to a brand. Limitations and considerations relating to the individual studies are reflected upon in the relevant chapters. This section reflects on considerations related to the approach to research taken for the thesis as a whole.

I chose to investigate three related research questions instead of focusing on one single question because sound branding is a relatively young research area, and an exploratory approach seemed appropriate. This approach was effective in highlighting the breadth and complexity of sound branding as a multidisciplinary research topic. The trade off in taking this approach is that it was beyond the scope of the thesis to conduct follow up studies in order to further extend my findings. For example, Study 2 (chapter 4) was conducted in an online shopping site, the main limitation of which is that the results may not necessarily translate to physical shopping environments. This is significant methodologically because shoppers within a store cannot control their exposure to a store's background music, whereas shoppers on an online site can control the music they hear. Moreover, there may be other atmospheric stimuli in the space in which they are shopping, such as a living room or an office, that can influence their actions. A follow up study conducted in a physical shopping space would have provided richer data in understanding the influence of music-induced arousal state on shoppers' behaviours. The results of Study 2 (chapter 4) reported no evidence that the hedonic/utilitarian aspect of product characteristics influenced willingness to pay because there was no significant difference when comparing willingness to pay for the utilitarian product (sofa) and the hedonic product (paddleboard) between music induced low arousal and high arousal conditions. This was contrary to results reported by Ding and Lin (2012). A possible explanation for the lack of a statistically significant difference in willingness for hedonic versus utilitarian products in my study is that having both utilitarian and hedonic products in the shopping site could have diluted the product characteristic

effects in the overall shopping experience. A follow up study with a different design to control for the product characteristic effects may show different results.

The exploratory approach of this thesis also limited the scope of investigation at the onset for each research question. For example, in the Introduction (chapter 1) I raised the question about the role that music preferences play in consumers' perceptions of a brand and their preference and liking for a brand. I chose to research this question by examining whether music can convey a brand's personality, and if it can, to what extent it influences consumers' perceptions of a brand, and how these may be mediated by consumers' own music preferences and personalities. There are in fact numerous ways to investigate the role of music preferences in sound branding, including the extent to which music preferences affect liking for a brand based on consumer demographics. Music plays a significant part in defining younger consumers' identities which makes them likely to prefer or choose a brand if they associate it with music that reflects their identities and research has shown a relationship between brand choice and favourite music genres, specifically for consumers under the age of 25 (Pincus, 2005). In the era of music streaming and 'big data' analytics, future research could focus on better understanding the other ways in which music preferences can have an effect on consumers' perceptions of a brand.

The use of a mixed methods approach was an important consideration as I argued in Chapter 1 that ecologically valid research is needed because branding is a real world practice. As much as possible, I conducted research with that intention: in qualitative data collection, I interviewed active sound branding practitioners who provided me with insight into their beliefs about sound branding and how they were influencing the development of sound branding as a discipline. In the quantitative study investigating the effects of sound on consumers' mood states and their behaviours, I built an online shopping site using an ecommerce software platform for businesses so that I could collect data from a live shopping environment. I recruited participants who were adults in employment instead of students because I wanted participants who were representative of consumers with the financial means to make purchasing decisions for household furniture and recreational sporting goods. Finally, in the study investigating the use of music to convey brand personality, I used brand logos custom-created by a professional graphic designer. To my knowledge, this is the first study to have collected data from sound branding practitioners to understand what they think about sound branding and what influences their work in practice. While some studies have created online pages designed to look like shopping sites (Wu et

al. 2008), none have used a live ecommerce site where participants can evaluate products, add to cart, and (with the exception of omitting the step of adding credit card information due to University ethics regulations) complete an online transaction.

The format of the interviews in Study 1 (chapter 3) was semi-structured in order to ask each participant about the research questions formed in the Introduction (chapter 1). This was considered necessary because sound branding as a topic is challenging to define (see chapter 1) and I wanted to ensure I gained insight into how sound branding practitioners understand sound branding as related to the research questions.

As previously mentioned, sound branding books by practitioners highlight a belief (Lindstrom, 2005; Gobé, 2001) that sound can sound can create an 'emotional connection' between consumers and brands. One way of interpreting an 'emotional connection' as it pertains to psychological research is that sound can enable brand loyalty and attachment that results in behaviours, such as choosing a brand over a competitor (Thomson et al., 2005). There are methodological issues with examining brand attachment relationships and there has yet to be developed a reliable scale that can do so (Park et al., 2010), which was a barrier to investigation and outside of the scope of this research.

Finally, I briefly consulted two of the interviewees from Study 1 (chapter 3) about the music selection for Studies 2 and 3 during the initial design phase of the studies. However, due to scheduling conflicts, it was not possible to have worked with them on making the final selection. In hindsight, this could have been an opportunity to observe the process by which sound branding practitioners go through to select sound that is appropriate for the brand.

6.4 Implications and future research

There are suggestions for future research based on the findings and limitations of the current research. An important aspect of considering the implications of this research is evaluating how this actually helps sound branding professionals and academics to further develop their work.

6.4.1 Questions arising from current findings and future research.

This section presents questions that arise from the results of the empirical studies as they relate to the thesis as a whole. Questions relating to the individual studies are reflected upon in the relevant chapters and above in section 6.2.

Two different connotations of congruence between music and colour stimuli were tested in Study 2 and 3 (chapter 4 and 5). Study 2 investigated the effects of congruence between stimuli in arousing qualities on brand liking and spend behaviour, while Study 3 investigated the effects of congruence between stimuli using brand personality as the condition on brand perceptions and liking. Both reported positive effects on consumer perceptions and Study 2 reported positive effects on consumers' spend behaviour. The results of these studies contribute new knowledge to our understanding of the effects of congruence between sensory stimuli in branding and also highlight opportunities for further research: Does congruence between stimuli in arousing qualities have an effect on consumer behaviours if the music matches consumers' music preferences? To what extent does a brand's personality expressed by music which is similar to that of the consumer's personality influence behaviours toward the brand? Study 2 did not take into account consumers' music preferences and Study 3 did not measure behavioural metrics, such as willingness to pay or brand choice, so these questions would be worthwhile to investigate in order to better understand the effectiveness of different connotations of congruence.

In Study 1 (chapter 3), the main theme that emerged from the interviews was the sound branding practitioners needed to 'prove' the value of sound branding in order to develop the practice into an expert discipline. While the interviewees equated 'proving' the value to gaining external validation from it rather than demonstrating empirically that sound is an effective branding component, they revealed that brands were interested in hearing about specific examples of sound branding when the interviewees pitched to them which could lead to the interviewees gaining validation. Studies 2 (chapter 4) and 3 (chapter 5) were opportunities to conduct experiments to further investigate the research questions (chapter 1), as well as to provide evidence that practitioners can use. To what extent are the results and findings of these studies useful to sound branding practitioners to inform their practice? It would help to gain feedback from sound branding practitioners to better understand how empirical research can support them in developing their practice.

This research has identified several psychological processes associated with sound branding. In the future a framework or schema as it relates to the theories, research and findings would be helpful to understand how different processes may be connected to one another, as well as identify the gaps in our knowledge in order to

provide useful guidelines to branding decision makers. The next section reviews the implications of the findings from the three empirical studies for sound branding practitioners.

6.4.2 Implications of the findings for sound branding practitioners. Sound branding is a complex topic comprising many variables that contribute to influencing consumer perceptions and behaviours. The findings from these studies extend current knowledge and have application in the real world that are of benefit to sound branding practitioners as detailed below.

Study 2 (chapter 4) suggested that mood-congruent information processing (Isen et al., 1978; Gardner, 1985) can prime consumers' willingness to pay for products that share the same arousing characteristics as the music. Given this finding, sound branding practitioners can adopt similar testing strategies to determine the effects of mood-congruent priming in other consumer-oriented scenarios on a multitude of different consumer behaviours, such as product choice and number of items purchased. As mentioned, the complexity of sound branding is due not only to the number of contributing variables, but also contradictory evidence from different studies. At this nascent stage of research, it may be more beneficial for practitioners to conduct a series of tests in a methodical manner focused on gaining a deeper understanding of one process, such as how reliable and effective priming may be across different types of consumer perceptions and behaviours.

The importance of considering multisensory interactions in sound branding should be communicated to practitioners, particularly those in the interviews who appeared to approach the concept of multisensory branding with apprehension or caution. Studies 2 and 3 (chapters 4 and 5) both showed evidence that multisensory interactions between sound and visual branding elements can affect consumer perceptions towards the brand and their buying behaviours. Future research in sound branding should consider the implications of other sensory stimuli. A deeper understanding of how different types of crossmodal interactions (Spence, 2011) can influence consumers could have implications for how sound branding practitioners approach the development of sound branding as a discipline. Instead of trying to build sound branding as a separate sub-industry from visual branding, which has legacy challenges (Study 1), they could consider trying to expand the scope of visual branding to incorporate sound and other sensory stimuli under the umbrella of multisensory branding.

Sound branding practitioners should be mindful that the interaction between music and colour stimuli can affect brand personality perceptions. Study 3 (chapter 5) showed the effects of congruence in referential meaning between logo color and music genre and the mediating role that music genre may play in influencing perceptions can be contributing factors. Specifically, the results suggest that colour may be a 'stronger' (in the perceptual sense) element in communicating the brand personality and music can enhance or decrease perceptions relative to it. Further research should confirm these findings that includes comprehensive testing across different colours and music characteristics, as well as the interaction effects between music and other elements, such as font type (Holm et al., 2009; Grohmann & Parkman, 2013).

The sound branding practitioners interviewed in Study 1 (chapter 3) showed awareness that a person's music preferences can impact sound branding. In Study 1 (chapter 3), interviewee CW was of the opinion that brand marketers are biased by their own musical preferences when it comes to music selection. He called for education and knowledge to balance branding decision makers' subjectivity and musical preferences that prevents them from being objective. Study 3 (chapter 5) showed that consumers' music preferences affect their brand choice that may be linked to similarities between their personality traits and those of the brand's. Sound branding practitioners should take music preferences into account, both during the development process of sound branding and the effects it can have on consumers' responses to a brand.

Finally, by deepening our collective understanding of the different ways in which sound can be effective in branding, this can help sound branding practitioners to better communicate to business decision makers and stakeholders the value of their work. This will also help to manage sound branding practitioners from conflating psychological concepts that contributes to their own misunderstanding of how sound works, while still providing them with empirical evidence and a framework organised by different concepts and processes that they can apply to their work and in their pitches. There is evidence of academic researchers and practitioners starting to work together: the Audio Branding Academy has in recent years begun actively engaging with universities to supplement its own research efforts. Through collaboration, practitioners and researchers can develop and grow sound branding to become integrated within the branding industry.

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Appendix A

Study 2: Call for volunteers email / Product pre-test survey

Title: Volunteers sought for 5 min survey on online shopping.

Body: Volunteers are sought for a 5 minute survey. This survey is part of a study to investigate consumer behaviour in an online shopping environment. In the survey you will be asked to evaluate some consumer products.

You have been asked to participate in this survey because you are in the University of Sheffield's list of research volunteers. Information regarding the study and your participation can be found here:

https://docs.google.com/a/sheffield.ac.uk/document/d/18Lrn7KRPHHCqorz5V-YMihcjMwRRgCd3Z3IyiHpMVeU/edit?usp=sharing

The study has received Ethical Approval from the Department of Music and is conducted according to the University's Ethical Guidelines.

The survey can be completed online, here:
http://www.surveygizmo.com/s3/2107633/Pre-test-Products-2

Targeted list: All staff

Study 2: Call for volunteers email / Music pre-test survey

Title: Please consider taking a 30 min survey on online shopping.

Body: Volunteers are sought for a 30 minute survey. This survey is part of a study to investigate consumer behaviour in an online shopping environment. In the survey you will be asked to listen to and answer questions about four pieces of music.

You have been asked to participate in this survey because you are in the University of Sheffield's list of research volunteers. Information regarding the study and your participation can be found here:

https://docs.google.com/a/sheffield.ac.uk/document/d/1gMwHqmc_hQhl9b8gFzHvq dPhyB2hrsRzFD4aD1_YHA4/edit?usp=sharing

The study has received Ethical Approval from the Department of Music and is conducted according to the University's Ethical Guidelines.

The survey can be completed online, here:
http://www.surveygizmo.com/s3/1884808/Pre-test-Music-1

Targeted list: All staff

Appendix C

Study 2: Participation information for main study

Research Project Title: Exploring consumer behaviour in an online shopping environment.

This is a request for your participation in this study, the results of which will be used in academic research. Before you decide whether to accept, it is important for you to understand why the research is being done and what it will involve. Please read the following information carefully and let me know if there is anything that is not clear or if you would like more information.

This is a study to investigate consumer behaviour in an online shopping environment. You will be asked to listen to and answer questions about a piece of music, after which you will be asked to browse and place an online order on a simulated ecommerce store. The store is simulated, it is not a real store, so you will not be asked to make a payment or enter financial data, nor will your order be fulfilled. After you have placed your simulated order, you will be asked to complete a second survey and answer questions about your impressions of your shopping experience, as well as questions about yourself, including your age, gender, and income. You have been asked to participate in this study because you are within my professional network or you know someone who is.

Participation in this project is entirely voluntary. Refusal to take part will involve no penalty or loss of benefits to which you are otherwise entitled. If you do decide to take part you will be given this information to keep and, by clicking through from this email, you are giving your consent to participate. You are free to withdraw your participation at any time without reason or consequence.

All information that is collected about you during the course of the research will be kept strictly confidential. Any data collected will be anonymised. The data collected will be used in my doctoral research and any publications arising from it.

Please contact myself or my supervisor should you have any questions.

Thanks in advance for your participation.

Study 2: Initial email to potential participants

Hello,

My research investigates consumer behaviour is an online shopping environment. Your participation is essential to my research, so I hope you will take part in my study.

In order to participate, you must have access to a computer and speakers or headphones. You should not have a hearing impairment.

Please complete the study in one sitting. In total, this study will take about 15 minutes from start to finish. Full details of this study are attached.

Study specific instructions
- At various points during the study, you will be asked to enter an email address. Please use the following email address each time:

[a unique email address will be shown, e.g. **p1@theo.com**]

- During the check out process of the online shopping store, you should check out as a 'RETURNING CUSTOMER' by entering the same email address. The password is also the same email address:

[a unique email address will be shown, e.g. **p1@theo.com**]

To begin the [music condition] study
1. Please make sure you are either wearing headphones or your speakers have the volume turned on.
2. Please click on one of the two links below according to the month in which your birthday falls. By clicking the link below, you are entering into the study and giving your consent to taking part in this study.

January, February, March, April, May, June: http://theotrade.spinaria.com

July, August, September, October, November, December:

http://hetotrade.spinaria.com

To begin the [no music condition] study

1. Please click on one of the two links below according to the month in which your birthday falls. By clicking the link below, you are entering into the study and giving your consent to taking part in this study.

January, February, March, April, May, June:

http://www.surveygizmo.com/s3/1896897/Pre-purchase-no-music-condition-TheoTrade

July, August, September, October, November, December:

http://www.surveygizmo.com/s3/1896899/Pre-purchase-no-music-condition-HetoTrade

Many thanks for your help!

Study 2: Survey consent and music pre-test survey

Pre-test: Music 1

Survey Information and Consent

This survey is part of a study to investigate consumer behaviour in an online shopping environment. You will be asked to listen to four short pieces of instrumental music and answer questions about them. You will not be asked to answer questions about online shopping.

The survey will take approximately 30 minutes to complete. Please use headphones and ensure you have minimal interruptions during this time.

You have been asked to participate in this study because you are in the University of Sheffield's list of research volunteers. Participation is entirely voluntary and you are free to withdraw your participation at any time without reason or consequence.

By clicking "Next" you are giving your consent to participate. The survey begins immediately on the next page.

Many thanks for your help.

Next

0%

Pre-test: Music 1

Please listen to this piece of music. You will be asked a question on the following page, so make sure you listen to the entire piece without interruption.

▶ 00:00 ────── 08:43 ◀))────

Back   Next

11%

Pre-test: Music 1

1. Please indicate how you feel right now by selecting the appropriate responses on the scale below. *

	3	2	1	0	1	2	3	
Bad *	○	○	○	○	○	○	○	Good *
Sad *	○	○	○	○	○	○	○	Happy *
Displeased *	○	○	○	○	○	○	○	Pleased *
Calm *	○	○	○	○	○	○	○	Excited *
Tired *	○	○	○	○	○	○	○	Energetic *
Sedate *	○	○	○	○	○	○	○	Aroused *

Back   Next

22%

Appendix F

Study 2: Products pre-test survey

Pre-test: Products - 2

Sofas

The Charles sofa has a distinctive curved silhouette. Tapered legs enhance its modern look and the foam seats are fibre wrapped for extra comfort.

1. Rate how much you like this sofa. *

	Strongly Dislike	Dislike	Somewhat Dislike	Neither Dislike or Like	Somewhat Like	Like	Strongly Like
Like Sofa *	○	○	○	○	○	○	○

2. How much would you pay for this sofa? *
- ○ £850
- ○ £900
- ○ £950
- ○ £1000
- ○ other [   ]

The Fraser sofa has a single seat cushion for a very neat, tailored appearance. It has an integrated, low back and tapered legs for a contemporary look.

3. Rate how much you like this sofa. *

	Strongly Dislike	Dislike	Somewhat Dislike	Neither Dislike or Like	Somewhat Like	Like	Strongly Like
Like Sofa *	○	○	○	○	○	○	○

4. How much would you pay for this sofa? *
- ○ £850
- ○ £900
- ○ £950
- ○ £1000
- ○ other [   ]

The Birtley sofa has a modern design that fits well into contemporary living spaces. It features slim, top stitched arms and a fixed back for a clean look.

5. Rate how much you like this sofa. *

	Strongly Dislike	Dislike	Somewhat Dislike	Neither Dislike or Like	Somewhat Like	Like	Strongly Like
Like Sofa *	○	○	○	○	○	○	○

6. How much would you pay for this sofa? *
- ○ £850
- ○ £900
- ○ £950
- ○ £1000
- ○ other [   ]

The Harper sofa is contemporary with a slender frame that will fit in with any modern interior. Its two seat design provides a good look and great comfort.

7. Rate how much you like this sofa. *

	Strongly Dislike	Dislike	Somewhat Dislike	Neither Dislike or Like	Somewhat Like	Like	Strongly Like
Like Sofa *	○	○	○	○	○	○	○

8. How much would you pay for this sofa? *
- ○ £850
- ○ £900
- ○ £950
- ○ £1000
- ○ other [   ]

Back Next

20%

Study 3: Geuens et al. (2009) 12-item brand personality items and groups

Brand personality group	Brand personality item
Responsibility	Down to earth
	Stable
	Responsible
Activity	Active
	Dynamic
	Innovative
Aggressiveness	Aggressive
	Bold
Simplicity	Ordinary
	Simple
Emotionality	Romantic
	Sentimental

Study 3: Call for volunteers email / Logo pre-test survey

Title: Please consider taking a 5 min survey on brand logos.

Body: Volunteers are sought for a 5 minute survey. This survey is part of a study to investigate consumer perceptions of brand logos. In the survey you will be asked to evaluate some brand logos.

You have been asked to participate in this survey because you are in the University of Sheffield's list of research volunteers. Information regarding the study and your participation can be found here.

The study has received Ethical Approval from the Department of Music and is conducted according to the University's Ethical Guidelines.

By clicking through to the survey, you are giving your consent to take part in the study and for your data to be collected, as described in the Information Sheet. The data you provide will be anonymous and used only for research purposes. The survey can be completed online, here.

Appendix I

Study 3: Participation information – Logo pretest

Research Project Title: Exploring consumer perceptions of brand logos (five minute survey).

This is a request for your participation in this study, the results of which will be used in academic research. Before you decide whether to accept, it is important for you to understand why the research is being done and what it will involve. Please read the following information carefully and let me know if there is anything that is not clear or if you would like more information.

This is a five minute survey to investigate consumer perceptions of brand logos. You will be asked to look at brand logos and answer questions about your impressions of the logos. You have been asked to participate in this study because you are on the University of Sheffield's list of research volunteers.

Participation in this project is entirely voluntary. Refusal to take part will involve no penalty or loss of benefits to which you are otherwise entitled. If you do decide to take part you will be given this information to keep and, by clicking the appropriate button in the email, you are giving your consent to participate. You are free to withdraw your participation at any time without reason or consequence.

All information that is collected about you during the course of the research will be kept strictly confidential. Any data collected will be anonymised. The data collected will be used in my doctoral research and any publications arising from it

Please contact myself or my supervisor should you have any questions.

Thanks in advance for your participation.

Appendix J

Study 3: Call for volunteers email / Music pre-test survey

Title: Please consider taking a 5 min survey on consumer perceptions of music.

Body: Volunteers are sought for a 5 minute survey. This survey is part of a study to investigate consumer perceptions of music. In the survey you will be asked to listen to and answer questions about 6 music excerpts.

You have been asked to participate in this survey because you are in the University of Sheffield's list of research volunteers. Information regarding the study and your participation can be found here.

The study has received Ethical Approval from the Department of Music and is conducted according to the University's Ethical Guidelines.

By clicking through to the survey, you are giving your consent to take part in the study and for your data to be collected, as described in the Information Sheet. The data you provide will be anonymous and used only for research purposes. The survey can be completed online, here.

Study 3: Participation information – Music pretest

Research Project Title: Exploring consumer perceptions of music (five minute survey).

This is a request for your participation in this study, the results of which will be used in academic research. Before you decide whether to accept, it is important for you to understand why the research is being done and what it will involve. Please read the following information carefully and let me know if there is anything that is not clear or if you would like more information.

This is a five minute survey to investigate consumer perceptions of brand logos and music. You will be asked to listen to 6 short music excerpts, after which you will be asked to answer questions about the music. You have been asked to participate in this study because you are on the University of Sheffield's list of research volunteers.

Participation in this project is entirely voluntary. Refusal to take part will involve no penalty or loss of benefits to which you are otherwise entitled. If you do decide to take part you will be given this information to keep and, by clicking the appropriate button in the email, you are giving your consent to participate. You are free to withdraw your participation at any time without reason or consequence.

All information that is collected about you during the course of the research will be kept strictly confidential. Any data collected will be anonymised. The data collected will be used in my doctoral research and any publications arising from it.

Please contact myself or my supervisor should you have any questions.

Thanks in advance for your participation.

Appendix L

Study 3: Call for volunteers email / main study

Title: Please consider taking a 15 min survey on consumer perceptions of brand logos and music.

Body: Hello,

Volunteers are sought for a 15 minute study to investigate consumer perceptions of brands that are represented by logos and/or music. In order to participate, you must have access to a computer and speakers or headphones. Your participation is essential to my research, so I hope you will take part in my study and are able to complete it in one sitting.

Full details of this study can be found here:
https://docs.google.com/document/d/15PeNcl0HQbUTlmo75jfofhwhNAZkfoBHJj-1J0qfO_Q/edit?usp=sharing

To begin the study

1. Please make sure you are on a laptop or desktop computer. This study will not work on mobile devices.
2. Please make sure you are either wearing headphones or your speakers have the volume turned on at a moderate level as you may hear music.
3. Please click on one of the links below according to the month in which your birthday falls. Upon clicking the link below, you will enter into the study and be giving your consent to taking part in this study and for your data to be collected.

   January-March: http://www.surveygizmo.com/s3/2954923/brandstudy1
   April-June: http://www.surveygizmo.com/s3/3611303/brandstudy2
   July-September: http://www.surveygizmo.com/s3/3611319/brandstudy3
   October-December: http://www.surveygizmo.com/s3/3611316/brandstudy4

The study has received Ethical Approval from the Department of Music and is conducted according to the University's Ethical Guidelines.

Appendix M

Study 3: Participation information – main study

Research Project Title: Exploring consumer perceptions of brand logos and music.

This is a request for your participation in this study, the results of which will be used in academic research. Before you decide whether to accept, it is important for you to understand why the research is being done and what it will involve. Please read the following information carefully and let me know if there is anything that is not clear or if you would like more information.

This is a study to investigate consumer perceptions of brand logos and music. You will be asked to look at brand logos and/or listen to short music excerpts, after which you will be asked to answer questions about your impressions of the brand, as well as questions about yourself. You have been asked to participate in this study because you are on the University of Sheffield's list of research volunteers.

Participation in this project is entirely voluntary. Refusal to take part will involve no penalty or loss of benefits to which you are otherwise entitled. If you do decide to take part you will be given this information to keep and, by clicking the appropriate button in the email, you are giving your consent to participate. You are free to withdraw your participation at any time without reason or consequence.

All information that is collected about you during the course of the research will be kept strictly confidential. Any data collected will be anonymised. The data collected will be used in my doctoral research and any publications arising from it.

Please contact my supervisor or myself should you have any questions.

Thanks in advance for your participation.

Study 3: Logos used in main study

Study 3: Main study logo question example

2. Please rate this brand by its logo and music according to the following characteristics. *

	Very uncharacteristic	Uncharacteristic	Somewhat uncharacteristic	Neither uncharacteristic nor characteristic	Somewhat characteristic	Characteristic	Very characteristic
Down to earth	○	○	○	○	○	○	○
Stable	○	○	○	○	○	○	○
Responsible	○	○	○	○	○	○	○
Active	○	○	○	○	○	○	○
Dynamic	○	○	○	○	○	○	○
Innovative	○	○	○	○	○	○	○
Aggressive	○	○	○	○	○	○	○
Bold	○	○	○	○	○	○	○
Ordinary	○	○	○	○	○	○	○
Simple	○	○	○	○	○	○	○
Romantic	○	○	○	○	○	○	○
Sentimental	○	○	○	○	○	○	○

3. Please rate this brand by its logo and music according to how familiar/knowledgeable/experienced you are with it. *

Unfamiliar	○	○	○	○	○	Familiar
Not knowledgeable	○	○	○	○	○	Knowledgeable
Inexperienced	○	○	○	○	○	Experienced

4. Please rate this brand by its logo and music according to how much you like it. *

Strongly Dislike	Dislike	Somewhat Dislike	Neither dislike nor like	Somewhat Like	Like	Strongly Like
○	○	○	○	○	○	○