

Declaration of Authorship
The content of this thesis is my own work, except for where indicated, and has not been
submitted for examination as part of a degree at any other institution.

Heather Rolfe

TABLE OF CONTENTS

LIST OF TABLES	v
LIST OF FIGURES	vi
ACKNOWLEDGEMENTS	vii
ABSTRACT	viii
CHAPTER 1	1
CHAPTER 2	7
2.1 Anger and disgust in the context of morality	7
2.2 What can research into moral panics and moral outrage moralization?	•
2.3 How can music come to elicit the moral emotions?	15
2.4 What elicits anger and disgust in a moral context?	17
2.5 The role of disgust in producing moral judgements	24
2.6 Reactions to offensive content, and how this may companie	
2.7 Anger and disgust at music: Morality-based hypotheses	29
CHAPTER 3	31
3.1 Anger and disgust outside of specific moral contexts	31
3.2 Anger and disgust as personal responses to music	31
3.3 Music as a method of assisting intragroup cohesion	34
3.4 Music as a method of expressing intergroup differentiat	ion40
3.5 Anger and disgust as mixed aesthetic and moral respons	ses45
CHAPTER 4	48
CHAPTER 5	68
CHAPTER 6	93
6.1 The consequences of anger and disgust at music	93
6.2 Evidence supporting a unique pairing of anger to approx	0.4
6.3 Evidence against a unique pairing of anger to approach,	disgust to avoidance
	98

6.4 Other concepts influencing anger and disgust effects on behavioural tendence	ies
	102
6.5 Methodological concerns in research exploring anger, disgust and resulting behavioural tendencies	103
6.6 The present study	105
CHAPTER 7	124
7.1 Existing evidence for the cleansing hypothesis	124
CHAPTER 8	143
8.1 Moralization of identity-threatening music	143
8.2 What motivates the moralization of identity-threatening music?	_144
8.3 The present study	149
CHAPTER 9	183
9.1 Summary of findings	183
9.2 Importance of findings in regards to moral panic at music	187
9.3 Situating the present thesis within the wider field of psychology	190
9.4 Limitations of the current research	196
9.5 Future research directions	_199
9.6 Concluding remarks	201
REFERENCES	202
APPENDIX A: Coding Scheme, Experiment 1	226
APPENDIX B: Coding Scheme, Experiment 2	229
APPENDIX C: Measure of reasons for emotional responses to disliked music, Experimental Experimental Control of the Control of	ent 2 233
APPENDIX D: Rehavioural consequences of disliked music measure. Study 3	234

LIST OF TABLES

Table 1: Experiment 1: Descriptive statistics	_57
Table 2: Experiment 1: Chi-square tests by condition for coding scheme categories	59
Table 3: Experiment 1: Significant chi-square tests by genre for coding scheme categories	62
Table 4: Experiment 2: Descriptive statistics	_73
Table 5: Experiment 2: Chi-square tests by condition for coding scheme categories	75
Table 6: Experiment 2: Significant chi-square tests by genre for coding scheme categories	77
Table 7: Experiment 2: Factor loadings (Varimax rotation) of reasons for emotional response to disliked music	
Table 8: Experiment 2: Descriptive statistics and tests of simple effects for factors underlying the reasons for emotional response to disliked music measure	_
Table 9: Experiment 2: Frequency of words used to describe identification-through-music style8	33
Table 10: Experiment 2: Descriptive statistics for quantitative measures of identification through music	_84
Table 11: Experiment 2: Correlational matrix	86
Table 12: Study 3: Estimate of fixed effects on hostile approach, avoidance and moral contagion fears1	17
Table 13: Study 4: Estimates of fixed effects on hostile approach and avoidance13	34
Table 14: Study 5: Codes derived from forum responses, organised by category16	60

LIST OF FIGURES

Figure	1: Experiment 2: Anger and disgust in response to disliked music being listened to and enjoyed by others of increasing levels of relationship intimacy to the participant82
Figure	2: Study 3: Felt anger and disgust in response to different types of disliked content in music114
Figure	3: Study 3: Behavioural tendencies in response to different types of content in disliked music115
Figure	4: Study 4: Felt anger and disgust in response to different types of disliked content in music131
Figure	5: Study 4: Behavioural tendencies in response to different types of content in disliked music133
Figure	6: Study 4: Required changes to disliked music by content type136
Figure	7: Study 5: Initial map of themes showing eight major themes and seven subthemes168
Figure	8: Study 5: Mid-point thematic map showing one major theme, five subthemes and four components of subthemes169
Figure	9: Study 5: Final thematic map showing three major themes, five subthemes and six
	components of subthemes170

Acknowledgements

I cannot thank my primary supervisor, Roger Giner-Sorolla, enough for his help and guidance over the last few years. With his support I have grown not only as a researcher and academic, but also as a person, and I look forward to continuing our work together. I also thank my second supervisor, Dominic Abrams, and the psychology staff here at the University of Kent for the support and assistance they have provided throughout my studies.

Special thanks also go to the friends and family who have helped to support me across the course of my time here at Kent. Without the unconditional support of my parents, the determination of my close friends Caitlin and Jamey to keep me in one piece, and the support, empathy and general community spirit amongst the PhD students here at Kent this journey would have been nearly impossible. I am grateful to you all, and look forward to seeing what the future holds for us.

Abstract

In media examples throughout history, discussion of controversial music often features emotional condemnation of the music on moral grounds. This makes little intuitive sense given that the moral emotions are usually associated with objects which are harmful or contaminating. Music is neither capable of causing direct harm nor contamination: as such, exploring anger and disgust in this context may shed new light on how these emotions are elicited and what action tendencies they may motivate. The first two studies presented in this thesis were carried out using open-ended methods: in Study 1 (n = 90), participants asked to describe a time they were disgusted by music most frequently mentioned a variety of immoral content types. This finding replicated in Study 2 (n = 94), which also suggested that anger responds to music which is harmful for personal reasons. Quantitative measures in the second study suggested five underlying factors of reasons for anger and disgust at music, which supported the qualitative findings by demonstrating a pattern of disgust at immoral factors and anger at personal factors. In Studies 3 (n = 106) and 4 (n = 85), the pattern of action tendencies elicited by anger and disgust at music suggest that disgusting music leads to interest in approaching the music in a hostile manner to cleanse its content from society, thus preventing the spread of immoral values. Bad aesthetics was found to elicit similar levels of disgust as immoral content but without the resulting higher levels of hostile approach tendencies. Study 5 presents a preliminary study into moralization of music which contaminates a preferred genre amongst highly-identified fans. The implications of these results for the wider field of research into the moral emotions, as well as the viability of ongoing research into this topic, are then discussed.

CHAPTER 1

Introduction and the present research

In today's society music is omnipresent, broadcast through our car radios, our televisions, and the airspace in nearly every public venue. Given the vast quantity of available music, it is unsurprising that some of it, at times including entire genres of music, has elicited controversy. In many examples, this controversy has included the expression of emotions such as anger and disgust. Examples of anger and disgust at music can be found in numerous media examples, both modern and historical.

During the 18th century, reactions to the Volta, the Waltz, and the dances associated with these styles often included condemnation on moral grounds: these dances were seen as overtly sexual, resulting in expressions of disgust (Knowles, 2009). Decades later, similar comments would be made about the music and dancing of Elvis Presley. One report of a live performance by Elvis went as far as to describe it as "the most disgusting exhibition of mass hysteria and lunacy this city has ever witnessed" (Kirkwood, as cited in Mackie, 2010). Elvis was also accused of inflicting harm upon society, with one reporter describing him as "a definite danger to the security of the United States" and his show as "the filthiest and most harmful production that ever came to La Crosse for exhibition to teenagers." (La Crosse Register, as cited in Leigh, 2017).

Jazz music, too, has elicited accusations of being "disgusting" by writers who called it a "craze of which many young people are the victim" (Smits van Waesberghe, translated by and cited in Bennet, Frith, Grossberg, Shepherd, & Turner, 2005, pp. 40). It was also compared to opiate use, with the conclusion that "To the young and inexperienced jazz music is dangerous" (Rawlins, as cited in Spencer, 1996, pp. 77).

A more recent example of anger and disgust at popular music can be found in response to the song *Blurred Lines*, released in 2013. The song contains lyrics implying that verbal consent to sex is unnecessary, and much of the song's content can be perceived as encouraging the sexual assault of women. As a result, there was widespread condemnation. It was nominated as the "most controversial song of the decade" (Lynskey, 2013), and once again, resulted in the expression of disgust: "Seriously, this song is disgusting—though admittedly very catchy." (Huynh, 2015).

Moral and emotional responses to music can also occur independently of the music's content: for example, by causing conflict regarding groups defined by music preference.

Moral panics (Garland, 2008) occur when society becomes suddenly, frantically concerned about the existence of a group of people or an object deemed to be a threat to the structure of society. One example given by Garland was the backlash against the mods and the rockers: two groups defined by their aesthetic and musical tastes. Later research by Salerno and Peter-Hagene (2013) would suggest that concepts such as moral outrage are best explained by a combination of anger and disgust at the target. As such, it is possible that moral panics towards a musically-defined group may be anger and disgust directed at groups whose preferences are seen as potentially threatening to society. Given this example, there is a possibility that moral responses to music may be connected to intergroup processes, and the resulting emotional consequences thereof.

Previous research into the moral emotions suggests that expressions of moral anger are typically associated with responses to issues such as unfairness or with concerns about harm to others (Kuppens, Van Mechelen, Smits, & De Boeck, 2003; Giner-Sorolla, Bosson, Caswell & Hettinger, 2012). A typical expression of moral anger would be directed at the actions of someone who has caused another person to be injured, or who has acted to deny rights, justice or autonomy to another person. Contrasting this, moral disgust is most

commonly associated with concerns about impurity and abnormality (Horberg, Oveis, Keltner, & Cohen, 2009; Giner-Sorolla et al., 2012; see also Russell & Giner-Sorolla, 2013). A disgust reaction is therefore likely to involve reminders of bodily functions, abnormal sexual behaviours, or actions which mark another person as malicious and therefore untrustworthy (Hutcherson & Gross, 2011).

On the surface, music is neither explicitly harmful, unfair, or obviously impure in any manner. However, the same could be said of many things- across multiple forms of visual, written and verbal communication, moral emotions are felt in response to mere references to immorality. This research therefore aims to use music as a demonstration of a more general process: the use of anger and disgust to negotiate interactions with technically harmless but offensive content. While this will naturally overlap with responses driven by intergroup processes involving larger-scale identities such as race or nationality, by primarily focusing on music-centred identity processes this thesis will remain focused on explaining the media examples described previously, using clear, streamlined analyses, while also exploring the minimum circumstances under which moralization of music is elicited. This will create a foundation upon which future research can explore the more complex nature of music responses in the context of multiple competing group identities.

This research also allows for the opportunity to explore moralization in a unique manner. Away from the standard use of prompts and vignettes designed specifically to elicit anger or disgust, by studying these emotions in response to music it is possible to shed new light on reactions to perceived immorality, which both lack a direct connection to harm and/or impurity, and which are also elicited by a more naturally-occurring object. It also provides an opportunity to test for a role of non-moral versions of anger and disgust, which could also theoretically arise in response to music for reasons explored in chapter three of this thesis.

As such, exploring anger and disgust in response to music may offer the chance to learn more about moral anger and disgust in a technically harmless context, in response to a stimulus which has been repeatedly demonstrated as an effective elicitor of these emotions in a natural setting. It also offers a chance to compare these responses to their non-moral counterparts.

Despite this long history of anger and disgust responses to music, and the research opportunities this presents, little to no empirical research has been performed to explicitly connect anger, disgust, and music in a way that can determine what the underlying reasons for these responses may be. The purpose of this thesis is therefore to provide this empirical groundwork to explore why anger and disgust are felt in response to music, how this process occurs, and what the consequences may be. This will then be used to examine what research regarding anger and disgust at music can contribute to the overall field of research into the moral emotions.

At this point, it is of course important to recognize that anger and disgust are not the only emotions which may be elicited by controversial music. Anxiety, fear, annoyance and a range of others may be felt in many of the scenarios that will be discussed. However, this thesis will primarily focus on anger and disgust for two reasons. Firstly, as two-thirds of the other-condemning triad of moral emotions (Haidt, 2003) anger and disgust have a wealth of literature to examine, which can be used to situate the findings of this work within a well-established field. While contempt is part of this triad, it has much in common with emotions such as fear and annoyance in that the literature examining it is comparatively sparse, and therefore may be of less assistance when examining a new topic such as moralization of music. Secondly, by focusing initially on the two emotions most commonly seen within media examples of condemnation of controversial music (as well as the two initially selected as a potential explanation for moral outrage by Salerno & Peter-Hagene, 2013), this thesis

aims to create a baseline theory against which future research may compare other emotional responses to condemned music.

Chapters Two and Three of this thesis will therefore explore the body of literature that exists in reference to anger and disgust. Chapter Two will discuss these emotions in a moral context, with a focus on what specific content types can result in these emotions, as well as to what extent they may be elicited simultaneously or separately. Chapter Three will concentrate on reasons for anger and disgust outside of a strictly moral context, beginning with personal reasons for anger and disgust such as elicitation of emotionally-relevant memories and emotional regulation techniques, then examining the use of music as an identity source and the resulting use of anger and disgust to maintain group boundaries. The potential for anger and disgust in a mixed aesthetic and moral context will then be discussed. From these chapters, an overall list of hypotheses will be drawn, summarizing what the literature suggests could explain anger and disgust in response to music.

Chapters Four and Five will cover two experiments with open-ended methods, designed to elicit from participants explanations of why they have felt anger and disgust at music. These will be compared to the literature, and conclusions drawn about the most common causes for anger and disgust at music. Chapter Five also presents the results of quantitative measures from the second experiment, which comprise measures of underlying emotional responses to condemned music, as well as methods which look at identity-relevant aspects and social consequences of condemned music.

Chapters Six and Seven present two follow-up experiments which examine the consequences of condemned music, including behavioral tendencies towards hostile approach and avoidance of the music, as well as fears about moral contagion from that music. The

findings from this will be summarized as an overall theory of the causes and consequences of emotions condemning music.

Chapter Eight of this thesis contains a fifth study, designed to both add onto the overall theory of the thesis and demonstrate the potential for new lines of research. The experiment presented is a qualitative examination of the content of online music forums, exploring moralization as a way of policing content that threatens the communities and group norms associated with specific genres. This will provide insight into moralization as an intergroup and interpersonal communication technique in a musical context.

Finally, Chapter Nine of this thesis will summarize the overall content and conclusions presented in the main body of the text. It will demonstrate how research into moralization of music can give new insights to existing research into anger and disgust in both moral and non-moral contexts. It will then discuss potential limitations of the work, before exploring the implications for the subject in the wider field of psychology as well as potential avenues for future research.

CHAPTER 2

2.1 Anger and disgust in the context of morality

"Moral emotions" are emotions that some research suggests may be associated with moral judgements- judgements about the behaviours or attitudes of others in morally relevant domains such as autonomy and divinity (Rozin, Lowery, Imada & Haidt, 1999). They can be elicited by a number of different types of content and result in different consequences depending on context. Due to their classification as moral emotions, both anger and disgust have been studied in response to a number of categories of morally-relevant content, both together and individually. In this chapter, the literature regarding anger and disgust in the context of moral judgements will be reviewed to determine to what extent morally-relevant explanations for anger and disgust could explain expressions of these emotions towards controversial music types. It is important to note here that while some of the following research will make reference to contempt (an emotion regularly measured alongside anger and disgust) the choice has been made for this research to focus on anger and disgust. This is due both to its more frequent appearance in the historical examples of moralization listed previously, and due to the nature of contempt as being particularly difficult to define and measure in the context of research into emotion (for more information, see the review paper by Fischer & Giner-Sorolla, 2016).

The larger category of "moral emotions" can be sub-divided into four main groups: the other-condemning (negative moral emotions in response to immoral behaviour by other people), the self-conscious (negative moral emotions in response to one's own immoral behaviour), the other-suffering (negative moral emotions elicited by viewing the suffering of other people) and the other-praising (positive moral emotions felt when witnessing prosocial actions by others) (Haidt, 2003). However, amongst these it is the other-condemning triad,

which responds to the wrong-doing of others, which has been found to have the strongest implications for discussion of controversial issues. Consisting of anger, disgust, and contempt, this triad has been found to both increase an individual's sense of certainty regarding their own viewpoints and reduce their likelihood of meaningful debate with those who hold conflicting viewpoints. As discussed by Skitka (2010), morally-relevant issues such as abortion and gun control are often seen in very extreme ways: as right vs. wrong, or good vs. evil. This sets them apart from beliefs that are a result of personal preference, or that are held due to conventional attitudes in society. Moral convictions are perceived by their holder to be universal and self-evident, which can result in both a refusal to compromise and a stronger tendency to engage in action against perceived violations.

Alderman, Dollar, and Kozlowski (2010) explore the different implications of each of the three other-condemning emotions in the context of a real-world scenario. In discussions of the use of smokeless tobacco, each of these emotions were found to influence debate in a distinct manner. Parties that argued for the use of smokeless tobacco expressed anger at the perceived threat to the autonomy of individuals to make their own health decisions. Those opposed were strongly influenced both by disgust towards smoking behaviours and contempt for those on the other side of the debate. Conflicting moral emotions such as in this case could lead to reduced interest in co-operating with those on the other side of a debate, and therefore prevent a compromise from being found. It is therefore theoretically possible that a similar pattern may be found when discussing controversial music.

These pieces of research suggest that real-world discussion of controversy can draw heavily upon the moral emotions, including the felt anger and disgust, of those debating the topic. However, unlike abortion, gun control or smoking, music has no physically harmful or disgusting characteristics to react to. It therefore seems unusual that moral emotions usually reserved for controversies that have harmful or disgusting attributes would become attached

to it. By exploring how controversies arise, and what role the different emotions play in this process, some light may be shed on how music may come to acquire moral value.

2.2 What can research into moral panics and moral outrage tell us about the process of moralization?

Before examining individual emotional responses to music, it is important to consider what moral responses have already been explored by psychological literature. For example, previous research suggests that moralization of music may be related to group-level and society-level moral panics. Examples of this include parents' groups, who often raise concerns over the content of controversial music such as rap or heavy metal on the grounds that it may lead to deviant behaviour in the youth they seek to raise. This has been reviewed at length by Chastagner (1999) who detailed the rise of the Parent's Music Resource Centeran organisation set up in the early 1980s to campaign for more strict control over the marketing of perceived offensive content in music. As the name might suggest, this organisation specifically focused on offensive music as being particularly harmful to children and to adolescents, drawing connections between music and potential negative outcomes such as violent behaviour and suicide. Religious and political organizations also have been known to raise concern over music which infringes on the values they consider important. As quoted by Knowles (2009), in the earliest examples of anti-dance movements couple dancing was referred to as "the work of the devil" due to encouraging sexualized behaviour- antithetical to the position of the church at the time.

In some cases, moralization of music on a group level can lead to public discourse on a societal level, especially when a case involves groups who may have competing values (as in the research by Alderman et al. (2010). Consider for example a song which encourages women to champion their own autonomy in the context of sexual encounters. Such a song

would simultaneously elicit positive responses from groups with whom its message was compatible- for example feminist groups- while eliciting condemnation from groups who disliked the overt sexual content. Not only would this then lead to moralization of the music itself, but the music would then become a public arena in which an ongoing conflict between two moral values was re-examined on a societal level. Media representations could also influence moralization on both an individual and cultural level. Not only would it provide a place from which an individual could enlist others to join their condemnation of the music, but also could provide a platform where a large, physically dispersed group could be collectively encouraged to adopt a stance condemning that music. This would allow for opinions to be changed on both an individual and cultural level. As such, when examining the research into the moral emotions, it is important to keep in mind that emotions arising from individual responses to music will need to be separated from responses to music in the context of group membership.

In response to the various outcries against moralized content such as those described above, a significant amount of research has already been undertaken by the social sciences in an attempt to explore what a moral panic is and how it may arise. The most common definition of a moral panic was provided by Cohen (1972): under this definition, a moral panic involves a target becoming perceived as a threat to society, leading to backlash from moral guardians and action being taken against the perceived deviants, before eventually the panic passes. McRobbie and Thornton (1995) would later expand on this theory, explaining how moral panics are a process involving emotional investments by the media and its consumers. They suggest that where previously moral panics were an accidental by-product of media coverage of events, people or objects, now they have become goals in and of themselves. Pearson (1983) would also contribute to the definition of moral panics, referring to them as a form of ideological cohesion relying on nostalgic language. As explained by

McRobbie and Thornton (1995) these processes lead to the general feeling amongst those involved that something must be done to address the situation.

Hunt (1997) outlines three theories of where moral panics may initially arise from. In the "interest-group theory" moral panics are generated by particular interest groups to publicise their concerns. This is most in line with the original work by Cohen (1972). The "elite-engineered theory" draws on work by Hall, Critcher, Jefferson, Clarke and Roberts (1978), and suggests that when the media creates news and images, these can come to form the foundations of an eventual moral panic. Finally, in the "grassroots theory" drawing on work by Goode and Ben-Yehuda (1994), the panic emerges when genuine concerns that already exist amongst the general public become boosted by media reports.

Critcher (2008) carried out a review of analyses regarding moral panics and came to the conclusion that moral panics are a method of public discourse (society-level communication comprised both of what is said about the issue and how it is said) through which society reaffirms its values. In a qualitative analysis by Altheide (2009) moral panics in media were found to be discussed with increasing frequency over time. Patterns in media reports also suggested that moral panics were associated with public discourse around fear, crime and social deviance. In their comparison of moral panics to other processes of moral regulation, Hier (2002) suggests that moral panics are a localised, explosive variation of the more overarching societal goal to regulate morality. They suggest that moral panic can be understood as a subset of moral regulation behaviours, where the goal is not to reshape or rehabilitate the deviant other, but instead to forcibly limit their actions and agency. In this understanding of moral panic, the panic arises during public discourse surrounding preexiting targets of anxiety such as sexuality. In regards to the exact method by which a moral panic may arise, Blumer (1971) suggests a set of five steps. These are the emergence of a problem, the problem becoming legitimised, action being mobilized against the problem,

formation of a plan and implementation of the plan to target the problem. It is of course important to remember that these steps will manifest differently, and less obviously differentiated from one another, when applied to different incidences of moral panic.

Moral panics have been studied in relation to a number of areas of society. Research suggests that the concept of moral panic has been seen in response to school shootings (Burns & Crawford, 1999), youth gangs (Zatz, 1987) and terrorism (Rothe & Muzzati, 2004). In some cases, these moral panics have been deliberately invoked: Robinson (2008) outlines how politicians have been known to deliberately generate moral panics around perceived threats to childhood innocence to reaffirm conservative, heteronormative social norms during times of potential change- such as during debates about same-sex marriage. This deliberate invocation of moral panic has also been seen in the context of music. McRobbie and Thornton (1995) describe a case where relatively inoffensive music was branded by marketers as "Acid House" music, connecting it to drug use, and explicitly referring to it as the next big moral panic. This became a self-fulfilling prophecy, as first the music press, then the tabloids, then the general press began to run stories connecting the music to drug use- and therefore providing free advertising for the music as intended by the marketers.

Research into moral panics has so far had some successful influence on public discourse. As outlined by McRobbie and Thornton (1995) following the rise of moral panic theory agents of society and the media are now aware of the dangers of moral panics and the resulting isolation of the targeted groups. Attention has also been drawn to the importance of giving a voice to the targeted groups in order to dispel myths and allow for understanding. However, with this greater understanding has also come the risk of moral panics being deliberately invoked as described above.

Other potential concerns raised during discussion of moral panic research include those of Waddington (1986), where the author cautions against labelling official concern over specific societal issues as moral panic by default, as genuine concerns are not inherently incidences of panic. Hunt (1997) also suggests caution in discussing moral panics, as conflating the concepts of morality and panic may leave society feeling that the two are inherently linked, making the concepts difficult to separate in the future.

Finally, it is important to remember that research into moral panic is still ongoing. Rohloff and Wright (2010) suggest that research into moral panics currently suffers from three assumptions: that of temporality (where moral panics are seen as temporary episodes, despite evidence to the contrary), normativity (where the reaction against the object of the panic is assumed to be misguided) and (un)intentionality (where moral panics are assumed to be accidental, even though some research suggests otherwise). They suggest that by being guided, not limited, by previous work, it may be possible to explore moral panics in a more objective fashion.

Taking into account research into moral panics, it is possible that moralization of music is a sub-form of moral panic, where society labels certain music types as being inherently harmful or damaging to moral values. This would lead to an attempt to reaffirm the values at stake. While there may be conceptual overlap between moral panics and moralization of music, not all examples of anger and disgust at music fit the pattern of a moral panic. Some are less explosive, more individualised, and less focused on specific violations of moral values. As such this present thesis will be mindful of the evidence previously produced by research into moral panic, but will also remain open to competing theoretical concepts.

One last area of research which this thesis must be situated in regards to is that into moral outrage. Papers such as Salerno and Peter-Hagene (2013) explore the concept of moral outrage, which they suggest is a combination of moral cognitions, affect and behaviours. Across two studies, this paper demonstrates that moral outrage may be best predicted by a combination of anger and disgust, where felt levels of each emotion interacted with the effects of the other on a range of outcome variables. While this thesis remains open to the possibility that moralization of music may be an example of moral outrage or overlap with this concept in some way, the decision was made to start from an open-minded approach when exploring the reasons why people react strongly to moralized music. This choice was made for two reasons.

Firstly, research into the moral emotions suggest that they may have a range of effects on attitudes, affective states, behavioural intentions and actual behaviours (literature reviewed below). This thesis therefore wanted to explore how music could elicit expressed attitudes, experienced affective states, and resultant behavioural patterns without assuming a co-occurrence between these different component parts of a moral reaction. Additionally, the literature reviewed in the rest of this chapter suggests that anger and disgust may have a varied range of outcomes both independently and when co-occurring. Exploring this range of potential outcomes, and allowing for the possibility of separate reactions of anger and disgust as well as potential covariance, was seen as the best method by which this thesis could gather enough information to explore the novel concept of moral emotions in response to music in a way which was not overly constrained by a-priori hypothesising. As such, the remainder of this chapter will be devoted to exploring what previous literature has said about the potential reasons for and consequences of anger and disgust, and consider the implications of these findings for moral emotions in response to music.

2.3 How can music come to elicit the moral emotions?

One method by which by which people could come to view music as a moral concern is through moralization: the conversion of preferences to moral values (Rozin, 1999). This can occur both on an individual and a cultural level, and generally may take place through two methods. Through moral expansion, a person who has a new experience (for example, reading a book about vegetarianism) may adopt a new moral value (such as belief that meateating is harmful) as a result of what they have learned from that experience. Through moral piggybacking, new information or experiences can cause a previously-existing moral value (such as preventing harm to animals) to become applied to a previously neutral object or behaviour (for example, by finding out that a supposedly vegan product actually contained animal products), resulting in that object or behaviour now eliciting moral judgements.

In their earlier paper, Rozin, Markwith, and Stoess (1997) discuss how this process can be best illustrated by someone who becomes a vegetarian for moral reasons. Individuals who indicated that their avoidance of meat was for primarily moral reasons demonstrated stronger condemnation (and therefore moralization) of meat-eating behaviours as compared to individuals who avoided meat for non-moral (e.g. health) reasons. This has also been demonstrated in more recent research: Sheik, Botindari, and White (2013) explored the effect of overeating on desire for physical cleanliness: the relationship was fully mediated by moral processes. In essence, their participants had moralized overeating. When they then performed the moralized action, they came to feel moral judgements against themselves, and desired the removal of this feeling through cleansing behaviours.

These studies demonstrate how a preference, such as type or amount of food intake, can attain moral value. When a preference, such as food intake, becomes relevant to a moral value, such as preventing harm to animals or living a healthy lifestyle, that preference

becomes seen in a new, moralized, light. The behaviour in question stops being a matter of preference and begins to be a method of either following that moral value or not. For example, if a person prioritises care for animals as a moral value, then eating meat would change from being a dietary preference to being a method of either following the moral value (by rejecting meat, preventing animals being harmed) or not (by eating meat, necessitating the killing of an animal to provide that meat).

It is possible that music may attain moral value in a similar manner. For example, if a person holds preventing harm to others as a core moral value, music seen as threatening to others would become moralized. In the previous chapter, a description of "Blurred Lines" was given: the song can be interpreted as encouraging men to ignore the withheld consent of women and abuse them sexually. This would count as a form of harm encouraged by music, changing it in the eyes of the listener from a preference (whether or not one wants to listen to a specific piece of music) to a method of either following the moral value (rejecting the music, and with it the concept of abusing women) or not (by accepting the music, and implicitly the call to harm contained within it).

It is also important to consider that individual differences may affect the likelihood of expressing moral concerns (Lovett, Jordan, & Wiltermuth, 2012), and therefore to what extent a person is likely to condemn music on moral grounds. Bjorklund (2000) studied the concept of moralism (a difference between individuals in regards to what extent they see the world in terms of right and wrong). He found that moralism was associated with defence mechanisms such as isolation of affect: essentially, not only are some people more likely to view things in a moral light, but this may also lead to them using techniques designed to protect themselves from further harm. This research may elaborate on the findings above, by suggesting that there is a role for individual differences in how likely a person is to apply previously held moral values to neutral objects. A person who is already prone to

moralization may be more likely than others to see music as a threat to their personal values, and therefore more likely to adopt a stance against that music as a method of ensuring they both remain true to their values and prevent harm from coming to others through that music.

2.4 What elicits anger and disgust in a moral context?

A significant body of research has been dedicated to what exactly results in the formation of moral judgements. For example, Haidt (2001) created the social intuitionist model to try and explain how moral judgements take shape: he suggests that judgements are made intuitively, with verbal reasoning following behind to justify the choice one has made. This could imply that when exposed to music they dislike an individual may feel an intuitive negative reaction to that music and use moralized language to describe that reaction to provide a more elaborated justification for their responses to themselves and others.

Later research would claim that these intuitive judgements may be responses to specific content types, implying that anger and disgust at music may be responding to a perceived moral violation within that music. Building on the social intuitionist model, Graham et al. (2013) created the moral foundations theory. This theory argues that not only is moral reasoning intuitive, but that moral judgements can be categorised into five factors of morality: care/harm, fairness/cheating, loyalty/betrayal, authority/subversion, and sanctity/degradation. These foundations can also elicit third-party judgements. As such, music (through sound, lyrical content or contextual details) could be seen as somehow violating one of the moral factors. For example, music encouraging the listener to cheat on one's partner would violate the "loyalty/betrayal" factor. The listener would be intuitively disgusted and/or angered by the suggestion, and then would apply existing moral arguments to that feeling in order to justify it. This is similar to the individual moralization outlined above, but in this case is intuitive rather than reasoned.

Similarly to the intuitionist models, work has been done exploring emotions as processes emerging from cognitive appraisals. Moors, Ellsworth, Scherer and Frijda (2013) explain that in these "appraisal" theories of emotion, emotions are defined as adaptive responses to aspects of the environment which may be relevant to the wellbeing of the individual. Due to this, emotions are seen as processes, rather than states of being, with the "feelings" component of emotion being the conscious reaction to changes in the other components of the process. Scherer (2009) defines four aspects of an event which can affect how an individual's appraisal may vary. These are relevance to the self, implications for the individuals' wellbeing, the coping potential of the individual and the significance of the event for the self-concept. Later research would suggest that appraisals of facial actions, such as those of implied valence and arousal, may form part of the process of reading emotions in the facial expressions of others- not just in the creation of one's own emotions (Mehu & Scherer, 2015; Scherer, Mortillaro, Rotondi, Sergi, & Trznadel, 2018). Appraisal theories also suggest that some components of the appraisal process can have implications for later action tendencies such as approach or avoidance (Sander, Grandjean, & Scherer, 2018; Scherer, 2013). Anger and disgust at music may therefore be responses to appraisals made about aspects of the music, such as its self-relevance or significance to one's social norms or potential required actions. They also could potentially act as reactions to appraisals of the anger or disgust felt by other people in response to moralized pieces of music.

Some research suggests that objects which elicit moral judgements can result in simultaneous feelings of anger and disgust. For example, as described above Salerno and Peter-Hagene (2013) found that expressions of public moral outrage are comprised of both of these emotions. However, while the two can frequently co-occur, many examples of research suggest that anger and disgust may be different from one another in the extent to which they respond to specific moral violations and contextual information.

In opposition to intuitive models of emotional reasoning, much research is devoted to the concept that anger and disgust may be conscious reactions to specific moral violations. Rozin et al. (1999) explore a set of unique pairings between contempt, anger, and disgust, and the moral domains of community, autonomy, and divinity respectively (originally hypothesised by Shweder, Much, Mahapatra & Park, 1997). In this case, anger would be elicited by violations of the autonomy of others, such as harm or prevention of access to their rights. Disgust would be elicited by violations of divinity, such as bodily functions and actions which ruin the higher moral standing of humanity. This connection between anger and autonomy, and disgust and divinity (also referred to as purity) has been both supported and refuted by a number of studies.

Giner-Sorolla et al. (2012) found that when exposed to stories about various types of sexual violation, participants responded to stories of sexual harm (such as cheating) with anger and to sexual abnormality (conceptually overlapping with impurity; including examples such as incest) with disgust. The disgust-impurity connection has also been found by Horberg et al. (2009), who found that disgust had a unique relationship with the purity domain and was not found in response to judgements of harm. A similar response pattern to these studies was found using sounds: Seidel and Prinz (2013a) found that irritating noises induced anger in their participants, whereas 'icky' noises (such as the sound of vomiting) led to disgust. This may suggest a potential explanation for anger and disgust at music: music which is perceived to be harmful or sound irritating could induce anger, where music which is abnormal or has unpleasant aesthetics could lead to disgust.

Important to note when considering the roles of harm and abnormality is that in some cases, abnormality can lead to perceptions of harm. Gutierrez and Giner-Sorolla (2007) presented participants with descriptions of abnormal situations, where it was made explicitly clear that no-one was harmed during the event described. Despite this, participants insisted

that some harm had been done: when asked to elaborate, many suggested that even if no individuals were harmed, the overall morality of society had been. This could lead to a potential explanation for anger and disgust at music: music which is abnormal or seen as encouraging abnormal behaviour could lead to perceptions that society itself is being harmed by that music.

This tendency to infer harm where none is present has been found in other contexts, such as in research examining moral typecasting. Gray and Wegner (2009) suggest that descriptions of an immoral event can lead to people "filling in the blanks" of a situation. Moral events are perceived as consisting of a moral agent (who acts upon others) and a moral patient (who is acted on by others). The presence of one may lead the mind of the viewer to assume the presence of the other (Gray, Schein, & Ward, 2014). As such, music which is perceived as encouraging immoral behaviour may result in moral responses due to the listener mentally filling in the presence of someone who is being harmed by that music, even if no harm has actually been done.

Further research which supports the idea that inferred harm may result from the mere inclusion of moral violations, regardless of whether harm is actually taking place, includes work by Gutierrez and Giner-Sorolla (2011). Their results suggest that even when a hypothetical situation (for example, a scientist eating a cloned steak grown from a cell from their own body) was explicitly described as having caused no harm, the existence of the moral, taboo, violation allowed participants to presume harm. What exactly was presumed to be harmed by this "harmless" violation differed in response to the nature of the violation, with a mediating effect of elicited emotion. Taboo violations seen as disgusting resulted in participants describing more perceived harm to nature; taboo violations seen as angerinducing resulted in participants describing more harm to an individual. As such, music which contains reminders of a moral violation of any kind may become seen as harmful.

Music which elicits disgust could be seen as harming nature, or perhaps society. Music which elicits anger could be seen as harming people on an individual level, even if fans of this music were to take precautions while listening to ensure neither they nor others were harmed by consuming this music. For example, if a piece of music contained incitements to harm women, an individual who enjoyed this music but took active precautions to prevent the described harmful behaviours from manifesting in their own romantic relationships would still be perceived as having committed harm.

Inferred harm can also come as a result of negative traits associated with certain music genres: Mulder, Ter Bogt, Raaijmakers, and Vollebergh (2007) described how some forms of music may be linked to problematic behaviours, such as a tendency to internalise distress or externalise problems. They found that while having a preference for mainstream music types acted as a buffer against these concerns, specific music genres were associated with maladaptive coping mechanisms. This may have implications for the moralization of music: if a music type becomes associated with increased mental health concerns, it could therefore be perceived by outsiders as harmful (by being believed to induce mental health concerns in the listener). This would result in moral value being attached to that music. This could then lead to the music becoming morally relevant in that culture (for example, eliciting beliefs that merely listening to the music could lead to one manifesting mental health concerns, and therefore that music being labelled as harmful), and therefore experiencing the consequences of moralization, such as being banned.

In addition to perceiving harm from music, it is also possible that some may perceive music types as resulting in a form of moral depurification, or corruption. This idea was explored by Sabo and Giner-Sorolla (2017) who found that moral violations in a fictional context- which were described as only taking place in a video game or a film- were condemned on the grounds that they were diagnostic of poor moral character, as well as

potential sources of future corruption. Music may therefore be moralized in a similar fashion, where lyrics encouraging wrongdoing are not only seen as harming the listener themselves, but also as indicating that the person is of poor character and at risk of further corruption. For example, a person who listened to music describing harmful behaviours to women could be seen as potentially sexist. The music they enjoy could therefore also come to be seen as a threat to wider society: if it is capable of corrupting one individual into holding discriminatory beliefs, then other individuals may also be at risk of listening to the music and developing similar beliefs. These beliefs would then potentially spread further throughout society, damaging its moral stability.

Contextual information can also change how moral violations are perceived. Research by Chakroff and Young (2015) suggests that harm and abnormality may affect perceptions of who or what is to blame for an immoral event. They found that harmful events were blamed more on the situation, whereas impure events were blamed more on the person. This is a similar pattern to the results of Giner-Sorolla and Espinosa (2011), who determined that anger led to perceptions that the negative emotion was directed at the actions of a person, whereas disgust was perceived as being directed at the person themselves. In regards to disliked music, this suggests that music eliciting anger, or containing inferences of harm, may result in condemnation of the situational factors that led to the music containing a perceived moral violation. Music eliciting disgust, or containing inferences of impurity or abnormality, may be seen as a reflection on either the person who created the music, or the person who is listening to it.

Other contextual information that can affect anger and disgust includes the perceived intentions of the person who has carried out a moral violation. If that violation would normally elicit anger, less anger tends to be felt towards the actions of a person who has violated that moral norm unintentionally. However, when a moral violation is seen as

disgusting, equal levels of disgust are felt regardless of whether the person has performed the wrong intentionally or unintentionally (Russell & Giner-Sorolla, 2011a). This may have implications for condemned music by suggesting that if music is seen as harmful, it may be easier to reduce moral condemnation in situations where the implied harm was unintentional. However, music which contains impure or abnormal content may receive just as much condemnation regardless of whether or not that content was deliberately included.

One more potential difference in content that elicits anger and disgust may be suggested by the findings of Hutcherson and Gross (2011), who found that disgust was felt more in response to general immorality, and anger in response to personal concerns.

Similarly, Kupfer and Giner-Sorolla (2016) would later find that expressions of anger arose more in situations which were more personally relevant, and expressions of disgust more to indicate that condemnation was based on moral grounds. In the context of music, this could imply that anger would be felt towards music which elicited more personal concerns, whereas disgust would be elicited by and used to condemn music that was perceived as immoral.

Contextual information has also been found to affect how anger and disgust behave once elicited. For example, anger may be more flexible due to its increased sensitivity to changes in the situation than disgust. When asked to generate things that could change their mind about a situation, participants found it easier to generate ideas that could reduce their anger, but struggled to produce ideas that could reduce their disgust (Russell & Giner-Sorolla, 2011b).

Disgust and anger may also behave in different ways regardless of context. Disgust (vs. anger) has been found to be significantly harder to produce verbal reasonings for: although when reasonings are provided, people will make use of them (Russell & Giner-Sorolla, 2011c). Part of the reason for this lack of ability to change and reason with one's

disgust may be because unlike anger, disgust appears to be more primitively appraised, which makes it more difficult to consciously debate (Russell & Giner-Sorolla, 2013).

The above research contains a number of important ideas which may have implications for the role of anger and disgust at music. Firstly, anger and disgust may be methods by which intuitive dislike of a piece of music may be transformed into a more justified response. This intuitive response may be as a result of that music being perceived as violating one or more moral foundations, or due to appraisals that it could act as a source of harm to the future wellbeing of the listener. Anger and disgust may be elicited at the same time, resulting in moral outrage. Alternatively, they may be elicited by separate moral violations, such as harm/autonomy violations or purity/divinity violations. Music may be inferred to be harmful, even when no harm has taken place, due to the perception that it contains a moral violation or is associated with negative consequences for the listener. It may also be seen as diagnostic of poor moral character, and a sign of potential future corruption. Contextual information such as who is to blame for the immoral content may affect levels of felt anger and disgust at music, as can whether or not the music is seen as being intentionally immoral. There is also a possibility that anger may be felt towards personally harmful music, with disgust responding to music which is immoral. Finally, which emotion is elicited by music may affect how likely the person condemning that music is to change their mind, as disgust is less easy to explain and to reason with than anger.

2.5 The role of disgust in producing moral judgements

As well as being elicited by moral judgements, an increasing amount of evidence suggests that disgust may also be the cause of some moral judgements. Evidence from Jones and Fitness (2008) suggests that sensitivity to disgust can lead to harsher moral judgements. However, the connection between disgust and moral judgements is not completely clear. As

outlined by Avramova and Inbar (2013), there are three major theories regarding the relationship between disgust and moral judgement: these are elicitation, amplification, and moralization. In the first of these, disgust is elicited by moral judgements, but does not influence moral judgements in turn. In the second, disgust is both elicited by moral judgements, and in turn makes these moral judgements more severe. Finally, the third theory suggests that disgust can result in a morally neutral scenario becoming perceived as immoral. To what extent these theories are considered valid varies across research. In a review carried out by Pizarro, Inbar, and Helion (2011), mixed evidence was found for all three theories.

In regards to the moralization and amplification theories, some empirical evidence has been found that suggests that disgust can either moralize neutral objects or amplify judgements that are already being made. When participants were hypnotised to feel disgust at neutral words, they rated non-moral scenarios including those words as immoral (Wheatley & Haidt, 2005). Schnall, Haidt, Clore, and Jordan (2008) found that exposure to novelty stink spray led to their participants making more severe moral judgements about issues seen as potentially disgusting such as marriage between first cousins, while Inbar, Pizarro, and Bloom (2012) found exposing their participants to a disgusting work environment led to more severe moral judgements towards social groups such as gay men. However, Landy and Goodwin (2015) argue that the extent to which these findings support the concept of disgust as an amplifier is limited. They carried out a meta-analysis of all available research into disgust as an amplifier, and found that while some evidence did exist, the overall significant trend in the data became insignificant when publication bias was controlled for. Additionally, they argue that one issue with the research they examined was a difficulty in separating the physical disgust that the researchers intended to induce, and associated moral disgust that participants may have felt towards either the stimulus itself or the researchers for exposing them to that stimulus.

However, work by Chapman and Anderson (2014) may address this concern: across two studies, the researchers found that participants that were higher in trait physical disgust judged vignettes about moral transgressions (such as theft or violence) more severely than individuals lower in trait physical disgust. They were also more likely to make severe judgements about violations of social conventions, such as ignoring social hierarchies or wearing clothing inappropriate to a situation. Their paper therefore suggests that trait physical disgust can influence moral judgements even when these judgements are about purely moral situations. By measuring trait physical disgust, which is unlikely to change in response to specific stimuli or situations, the researchers may prevent some of the confounding variables discussed by Landy and Goodwin (2015). Given the uncertain nature of this area of the literature, it may be most appropriate to be open to evidence for these theories, but also be sceptical when addressing results in the light of these theories.

Some research has been carried out to test the relationship between non-moral anger and disgust and moral judgements in the context of both visual art and music. Rabb, Nissel, Alecci, Magid, Ambrosoli, and Winner (2016) had their participants drink disgusting, bitter fluids before rating artwork on moral grounds. Although disgust did not directly affect judgements of artwork, it did increase severity of moral judgements in both purity and harm domains. However, it is important to keep in mind that this experimental design is relatively unlikely to occur outside of a laboratory- the repeated co-occurrence of condemned music and disgusting food or drink seems unlikely. Despite this, elicitation of disgust by media has also been found in the context of music: Seidel and Prinz (2013a, 2013b) tested for the effects of disgusting 'icky' noises and loud, irritating noises on moral judgements. The disgusting noises resulted in more severe judgements of moral purity, and the irritating noises in more severe judgements of harm: patterns of judgement very similar to those of the moral versions of anger and disgust. This was supported by their tests involving "noise music", which also

led to stronger condemnation of harm. From these studies, it appears possible that anger and disgust at incidental noises and some forms of music can influence moral judgements in a way similar to the amplification and moralization theories described above. As such, there may be some support for the idea that in the context of aesthetics, non-moral anger and disgust can act as a moralizing force when interacting with disliked content.

When viewed in light of these theories, a number of possibilities for anger and disgust at music arise. It is possible that disgust at music may be elicited by the music itself, a response to unrelated disgust increasing the judgement that was already being made, or as a result of unrelated disgust becoming associated with that music. One potential method by which incidental disgust could affect judgements of music could involve that music's aesthetic qualities: music which contained uncomfortable or physically revolting sounds would naturally elicit feelings of disgust, with this incidental disgust acting as an amplifier for judgements made against music already seen as violating a moral value. However, aesthetically unpleasant music is relatively uncommon, and this explanation would not be relevant for anger or disgust at music which was aesthetically pleasant. It is therefore more likely that any disgust acting as an amplifier of judgement would be incidental to the music as a whole, for example from the surrounding environment.

2.6 Reactions to offensive content, and how this may compare to anger and disgust at music

One area of research that may be able to shed light on potential explanations for anger and disgust at music is research on the concept of offense. Some research has explored reactions to offensive content, such as that found in advertising. In a review of the existing literature, Chan, Li, Diehl, and Terlutter (2007) found evidence that offensive content included references to a variety of topics, for example private body parts or objects, sexuality

or feminist issues, as well as responses to perceived intrusiveness of the adverts. They also cited Dahl, Frankenberger, and Manchandra (2003) where offensive adverts were seen as those that violated norms, e.g. laws, customs, moral or social codes, and/or moral or physical senses. Chan et al. (2007) found that participants from different cultures had different reactions to offensive content, with Chinese participants finding adverts more disgusting and German participants finding them more irritating. Linton (1979) suggests that offensive content (for example pornography) may be perceived as offensive due to perceptions that it is blurring social categories or rebelling against society's structure. Certain situational factors may also affect processing of offensive content, for example gender (Schumann & Ross, 2010), situational power (Knegtmans, van Dijk, Mooijman, van Lier, Rintjema, & Wassink, 2018) or salience of one's identity as being a parent (Eibach, Libby, & Ehrlinger, 2009). Reactions to offensive content may also include social referencing behaviour, such as looking towards those who may be potentially victimised by the offensive content, to help the individual assess the situation (Crosby, Monin, & Richardson, 2008).

As such, anger and disgust at music, should they be similar to responses to offensive content, may be a reaction to content which violates social norms, for example of a sexual or social nature, a reaction to perceived intergroup boundary blurring or rejection of society, or a reaction to situational aspects for example power, gender or parental status. These findings from research into offense may fall in line with a number of hypotheses outlined previously. However, there may also be an additional social aspect which can be derived from research into offence, where expressions of anger and disgust act as a form of social referencing- by expressing the emotions, and seeing to what extent others respond in kind- individuals may be able to explore how much support for their condemnation they have from other people. Use of anger and disgust as interpersonal communication techniques will therefore be explored in more depth in the next chapter.

2.7 Anger and disgust at music: Morality-based hypotheses

Taking all of the above research into account, there are a few key points to consider when discussing the potential explanations for disgust and anger at music. Music may become morally relevant through the process of moralization (Rozin, 1999) and therefore come to elicit the moral emotions. Alternatively, anger and disgust may be elicited by violations of different moral domains: harm/autonomy violations for anger, purity/divinity/abnormality violations for disgust. Both of these predictions would suggest that anger and/or disgust arise in reaction to immoral content in music. Some research suggests a different approach: that anger may be reserved for personal concerns, whereas disgust is more responsive to general immoral content (Kupfer & Giner-Sorolla, 2016). Finally, it is important to remember that moral anger and disgust have non-moral counterparts. By considering these alongside the moral emotions, this research can ensure that non-moral aspects of condemnation of disliked music are not overlooked. If non-moral aspects of anger and disgust were not considered, valuable insight into the difference between music which elicits moral responses and music that does not would be lost. Given all of the above, a set of hypotheses has been created:

- 1) The "both-moral" hypothesis. Anger and disgust at music respond to different categories of content, both morally-relevant.
- 2) The "disgust-moral" hypothesis. Disgust at music responds to morally-relevant content; anger at music responds to personal content.
- 3) The "anger-moral" hypothesis. Anger at music responds to moral content; disgust at music to other attributes of the music.

The following chapter will present a review of literature designed to add detail to these hypotheses. Specifically, what personal concerns may come to elicit anger through music, and what non-moral contexts may elicit disgust at music.

CHAPTER 3

3.1 Anger and disgust outside of specific moral contexts

Research suggests that music serves a number of functions: important amongst these are processes relating to self-awareness, social relatedness and emotion/mood regulation (Shafer, Sedlmeier, Städtler, & Huron, 2013). None of these three functions are explicitly moral. However, each in turn may provide their own explanation for anger and disgust at music, as personal identity, social identity and emotional regulation functions have all been linked to the moral emotions. Taking this into consideration, this chapter aims to examine potential reasons for anger and disgust outside of a purely moral context. Specifically, it aims to examine to what extent various forms of personal and identity regulation functions may arise in response to music, and what the implications of this are for the examples of moralization of music seen previously. It will do so by addressing three separate variations of anger and disgust responses: the purely personal (e.g. emotion regulation), the social identity-relevant, and situations in which non-moral and moral responses may overlap. Evidence for each of these will be reviewed in turn, which will make it possible to explore what functions anger and disgust may perform outside of purely moral contexts.

3.2 Anger and disgust as personal responses to music

Music may be relevant to a number of personal processes which can result in anger and disgust. For example, some research suggests that music may be used as a method of emotion regulation. A paper by Behne (1997) suggests that music listening can be adapted to act as a coping strategy, with the most commonly-used strategy found being that of "compensating". This suggests that music can be used to directly affect one's emotional state. Music as a regulator of personal emotion can also be performed by a third party, as seen by the use of music in film soundtracks to trigger emotion in the viewer (Cohen, 2001).

A number of papers have suggested that some individual differences between people may interact with emotional responses to music. Gold, Frank, Bogert, and Brattico (2013) found that having more background experiences with music led to participants doing better or worse on tests and training in a different pattern to those with no musical experience. Specifically, participants who had more experience with musical training found neutral music more beneficial for training and pleasant music more beneficial to testing, where participants with less musical experiences demonstrated the opposite. Physical processes, such as prolactin levels in the brain, have also been found to influence how people interact with music (Huron, 2011) as does the ability of the music to provide a source of meaning (Cross & Tolbert, 2009). Personality variables can also interact with one's music listening experience, for example, Garrido and Schubert (2011) found that music empathy was associated with the enjoyment of sad music. Those higher in music empathy were more able to enjoy the negative emotions within that music. This can be used for both adaptive and maladaptive purposes (Garrido & Schubert, 2013). Other personality variables which can interact with one's music listening practices (in this case by increasing liking for and intensity of response to sad music) are openness to experience and empathy (Vuoskoski, Thompson, McIlwain, & Eerola, 2012).

A number of different reasons can lead to people using music to change their emotional and affective state. Van den Tol and Edwards (2015) found that individuals listening to sad music did so for seven reasons: re-experiencing affect, cognitive reasons, social mechanisms, retrieving memories, compensating for a missed friendship, distraction, and mood enhancement. Different types of emotion contained within music may also interact with its usage, with Sharman and Dingle (2015) finding that fans of extreme music use that music as a way of processing anger. As such, it is possible that anger and disgust expressions

in the context of music may reflect a listener who is using that specific piece of music to process pre-existing anger or disgust.

It is also possible that anger and disgust are deliberately elicited by the listener, in order to achieve emotionally-relevant goals. For example, Tamir, Mitchell, and Gross (2008) found that when anticipating a confrontational task, their participants opted to listen to angerinducing (versus exciting or neutral) music in order to help them achieve better during the task. It is therefore possible that anger-inducing music is used by some as a self-regulatory aid, to prepare themselves mentally and emotionally for potentially difficult confrontations or other situations where anger may be of use. It is also a theoretical possibility that some listeners could use music they deem disgusting to achieve some sort of emotional goal: Korsmeyer (2013) suggests that in some cases, disgusting artwork may lose its innate tendency to inspire withdrawal from the object, allowing some individuals to stay and savour something they would normally be incapable of enjoying. This ability to stay and savour something one finds disgusting could theoretically apply to music, should it serve some sort of emotional purpose. As such, there is a possibility that anger and disgust at music may follow similar patterns to previous research, where personal emotional goals are served by experiencing those emotions in response to music.

Finally, it is possible that other personal concerns such as elicitation of previous memories may also be associated with anger and disgust responses to music. Baumgartner (1992) explains how music can become attached to a specific memory, which can result in later exposure to that music creating vivid recollections of that event. While normally seen as a positive thing, in some cases participants described memories that were negative in some way. Janata, Tomic and Rakowski (2007) examined this in more detail: when presented with 30 musical excerpts, participants rated nearly 30% as being associated with some form of memory. While this was also mostly positive, some memories were negative and included

references to affective states such as "angry" or "repulsed". While infrequent, this does suggest that anger and/or disgust may be elicited by music that has become attached to a specific negative memory.

From the research reviewed above, two potential reasons for anger and disgust at music may be considered. It is possible that anger and disgust at music are directly induced by the listener themselves, in order to process these emotions that have arisen in response to other concerns or to achieve emotionally-relevant goals. Additionally, there is also a potential role for musically-induced memories. Through becoming associated with a specific memory which is emotional in its own right, it is possible that anger and disgust at music may later resurface in response to that music bringing back both the associated memory and the emotion felt at that time.

3.3 Music as a method of assisting intragroup cohesion

As outlined above, music is capable of assisting in both self-awareness and social relatedness functions, both of which are critical to the creation and maintenance of a person's identity, with self-awareness leading to identity formation on an individual level and social relatedness assisting in the creation of an identity on a group level. As such, if music is capable of eliciting the same processes as other identity-relevant content, then studying the effects of this may shed some light on how people interact with music, and in turn why they may feel strong emotions such as anger and disgust towards it.

Research suggests that identity maintenance is of great importance, as it allows an individual to derive self-esteem from their state of belonging (Tajfel & Turner, 1979).

Specific music preferences have been found to interact with individual levels of self-esteem: preferences for reflective/complex music for males, and energetic/rhythmic and upbeat/conventional music for women have been associated with lower levels of self-liking

(Shepherd & Sigg, 2015). Group-level "collective self-esteem" may therefore help to counteract this reduced self-worth, as it allows for self-esteem boosts though feelings of being a worthy and contributing group member (Luhtanen & Crocker, 1992). Identity structures such as these can also result in the formation of emotion profiles: a "how to feel" structure that a person can use to inform them how they should react emotionally to new situations (Coleman & Williams, 2013). This can include responses such as anger and disgust. As such, any content which is able to create an aspect of a person's identity may theoretically be able to trigger identity-relevant processes in that person, including the creation of emotion profiles and increased self-esteem levels, as well as intergroup behaviours. This research may provide insight into anger and disgust in the context of music, as music has repeatedly been established as an identity source by a number of pieces of research. For example, self-identification through music is one of the seven core functions of music found in research by Lonsdale and North (2011).

Music as an important source of self-identity may begin as early as adolescence. Fitzgerald, Joseph, Hayes, and O'Regan (1995) found that music was one of the most important leisure activities to the adolescents in their study. Zillmann and Gan (1997) explored the nature of music tastes in adolescence, finding that adolescent music consumption is both large-scale and extremely diverse. The use of music by adolescents is important because adolescence is the time at which one's core values begin to take shape, strengthening as one enters adulthood (Waterman, 1982). Across this same time span, music tastes begin to become increasingly consistent (Mulder, ter Bogt, Raaijmakers, Gabhainn, & Sikkema, 2009). As such, the music a person enjoys in adolescence may play a role in creating the basis of their identity in youth, which in turn may have implications for their identity later in life. While music is therefore seen as important for identity during adolescence, its importance does eventually become superseded by other forms of identity

source. Regardless, belief in the importance of music remains stable throughout the lifespan (Bonneville-Roussey, Rentfrow, Xu, & Potter, 2013).

Music can also be used to form new in-groups, which can perhaps best be explained by Abrams (2009), who writes that music is a method by which individuals can create for themselves an "optimally distinctive" (Brewer, 1991) identity. Optimal distinctiveness theory suggests that group identification may be an important identity management strategy. Specifically, the individual is seen as having not only a personal identity (comprised of the unique aspects about themselves that differentiate them on an interpersonal level) but also a set of social identities. These social identities change the individuals' perspective in such a way as to reframe their existence- rather than being themselves as an individual, they become part of a larger context. When a social identity is salient, a person sees themselves as a component part in something bigger. This social identity is flexible, expanding to include more people as part of the shared identity, or contracting to reduce the number of people sharing the identity. This flexibility allows for a person to balance two competing needs. Firstly, they need to feel as though they are assimilated into a larger group. No individual wishes to stand entirely alone. However, there is a competing urge to stand out from the crowd and be distinctive from others. To what extent each individual feels these two urges may be influenced by the culture which surrounds them, but all individuals will feel both urges to at least some extent.

In order to balance these competing urges, a person will seek out what is known as an "optimally distinctive" (Brewer, 1991) social identity. This is an identity that allows them to both feel assimilated to a larger whole (by being part of a group) and feel distinct from other people (by being different from people who are not part of the group). In the context of music, this may take place through the selection of a specific music style through which to identify. An individual may feel drawn to a style of music they feel best represents who they

are and the type of people they wish to be identified with. How they then choose to present themselves in the context of this music style will then differ based on the relative distinctiveness of that music. A relatively obscure genre could provide optimal distinctiveness by providing unity with other fans and distinction from the mainstream. However, it must still be well-known enough that it acts as a meaningful indicator of identity to the outside world. If an individual chooses to identify through a larger, better-known genre, they may choose to increase the distinctiveness of their music choice by identifying as a fan of a specific subgenre or a specific artist within that genre. This therefore allows differentiation from non-fans and fans of other subgenres and artists, but also allows for assimilation with other fans of the selected subgenre or artist. In this way, an individual could use music to form an optimally distinctive identity- one which allows them to bond with and feel assimilated with other people, but also provides a source of distinction through which the individual can maintain a relative level of uniqueness.

Evidence for the use of music to define one's ingroup can be found in the paper by Lonsdale and North (2009), whose participants considered hypothetical strangers with their own musical tastes to be in-group members even if they had not met face-to-face. This led to them performing similar in-group behaviours to those seen in groups based on other identity-relevant content, such as preferentially distributing resources to those who shared their tastes. Music can therefore become important to an individual by acting as a source of ingroup identity.

One benefit of using music to define social groups is that it can then be used as a method of improving interpersonal communication. Rentfrow, Mcdonald, and Oldmeadow (2009) found that stereotypes of music preference groups were both wide-spread and consistent between people: this may shed light on why Rentfrow and Gosling (2006) found that music preferences are one of the most common topics of discussion people choose in

order to get to know one another. As such, a person who identifies themselves through a musically-defined group may gain benefits from this, as it allows them both to have a frame of reference for the values of other people and to clearly communicate their own beliefs and values to others.

Another benefit of using music as a form of group-level communication is that research has demonstrated that music can be used to engage with and negotiate the boundaries of existing social groups, including those which are not defined by music. Boer et al. (2013) explains how the use of traditional cultural music can assist with the formation of one's identity as part of that culture. In particular, collectivist cultures are more likely to use music that emphasises the ingroup for social bonding than individualist cultures do (Boer, Fischer, Tekman, Abubakar, Njenga, & Zenger, 2012). However, the interaction between shared culture and relevant music types can be complicated: Dixon, Zhang, and Conrad (2009) explored the effects of rap music consumption on black individuals. They found that while there was a positive relationship between consumption of rap music and collective self-esteem, some content such as eurocentrism and misogyny was also present in the music which instead was associated with negative effects on the listener.

Cultural tastes can also be used to negotiate boundaries defined by social class.

Reeves, Gilbert, and Holman (2015) explored how the expression of cultural tastes varied depending on the person to whom an individual is speaking. UK-born participants speaking to someone of a perceived lower social class were less likely to express interest in "highbrow" tastes, but when speaking to people of higher social class were more likely to express interest in those same tastes. This allowed them to situate themselves in a position which was most socially comfortable, either by preventing themselves from appearing "snobbish" or by raising their status in the eyes of a perceived equal. This is similar to a concept discussed by Veenstra (2015) who explores the possibility that cultural omnivorism

(enjoyment of both low- and high-brow tastes) was a method by which people could comfortably move between cultural realms, allowing them to form good social bonds regardless of who they were interacting with. While not music-specific, these studies suggest that cultural tastes can be used to negotiate group boundaries, and therefore further support their role in intergroup processes. However, it is important to note that Veenstra (2015) found evidence that so-called omnivorism fell away under scrutiny, with high- and low-class individuals professing specific tastes in line with class expectations. As such, it is important to explore the use of music preferences not only as a method of communication, but to see how this differs from genuine lived experience.

With all of the above research in mind, it becomes clear that how a person chooses to express their opinions of media types may act as a form of communication between and within groups. It is therefore theoretically possible that anger and disgust could be used in the same way. Expressions of anger and/or disgust at music, used appropriately by the speaker, could be a method by which they communicate their status as part of a certain social group or negotiate their place within it.

As well as negotiating the boundaries between groups, music can also be used to reduce these boundaries. When told that an outgroup shared similar music tastes to them, Bakagiannis and Tarrant (2006) found that participants showed lower levels of intergroup differentiation. This could have a number of implications for intergroup research, as which ingroup is salient in any given situation can affect consequent behaviour. Kuppens and Yzerbyt (2012) found that depending on which identity was salient, participants made different decisions about an outgroup based on whether or not that outgroup was seen as threatening to the salient ingroup. If music can reduce perceived differences between groups, it is possible that when a musically-defined identity is salient, conflict between groups defined by other aspects of identity could be reduced.

Given the above, it is clear that music may potentially have implications for intergroup behaviour. This could potentially affect not only intergroup processes involving traditional social groupings such as race or class, but also lead to the formation of social groups defined by their music preferences which then lead to intergroup behaviours in the same manner as other groups.

3.4 Music as a method of expressing intergroup differentiation

At this point, it becomes important to consider research which suggests that not all music-based intergroup processes may be positive. In addition to its role in protecting one's identity as part of a social group, it is possible that distaste at music can be used as a less socially unacceptable method of attacking a disliked social group. For example, research by Reyna, Brandt, and Viki (2009) found that negative attitudes towards rap music were correlated with anti-Black attitudes in American samples. In essence, by expressing distaste at music associated with a different social group, people may choose to express their true prejudice in a way that is less likely to result in their being criticised.

Which specific genre of music people select to identify themselves through may also have implications for how they may choose to interact with other social groups: Rubin, West, and Mitchell (2001) found that fans of extreme music styles had more negative intergroup attitudes than fans of other genres. For example, fans of both heavy metal and rap music were found to be more aggressive than fans of other music styles, with heavy metal fans having less regard for women and rap music fans being more distrustful of others than fans of other styles. As such, when music forms a part of an individual's identity it may have significant implications for that person's personal and social well-being.

An additional method by which disliked music could trigger intergroup hostility is described by Maher, Van Tilburg, and Van den Tol (2013): music may be capable of eliciting

meaning threat. In life, people seek meaning and reassurance from the world around them including from the media they consume. Non-standard music, such as that containing dissonant sounds or incoherent structures, may destabilise this perceived meaning, resulting in an individual trying to reinforce alternative aspects of their worldview in order to regain their previous peace of mind. In the case of this study, participants exposed to music which triggered meaning threat demonstrated stronger levels of outgroup derogation in order to reassert the desired stability in their self-concept. This effect may explain media reports regarding the riots that were caused by the premiere of a ballet, "The Rite of Spring", in 1913 (Hewett, 2013). Although not entirely clear which aspect of the performance caused the riots, a combination of the aesthetically unpleasant and graceless choreography and the dissonant musical performance which repeatedly defied musical expectations led to a large-scale riot breaking out amongst the audience (Hewett, 2013). As such, increased intergroup negativity such as those found by previous studies could be a result of meaning threat triggered by the relevant music types.

In regards to potential negative side-effects of music forming the basis for in-group behaviour, Roccas, Klar, and Liviatan (2006) found that identifying with a group can lead to both attachment to and glorification of that ingroup, with glorification increasing the risk of ignoring any negative aspects of that ingroup that may otherwise have been addressed. Similarly, work by Brewer (1999) and by Parker and Janoff-Bulman (2013) has found that identification through a group can lead not only to "ingroup love", where the ingroup is given preferential treatment, but also to "outgroup hate" where non-ingroup members are treated worse by comparison. It is therefore possible that people seen as outgroup members in the context of music preferences could be treated poorly by someone who strongly identifies through their music choices. In addition to this, de Hoog (2013) found that identification with a group led to the use of defence mechanisms to prevent damage from hearing negative

information about that group. As such, when considering anger and disgust in response to music it is important to keep in mind the potential negative aspects of identification with a musically-defined ingroup.

Examples of music as an intergroup communication mechanism have been seen outside of a lab setting. A report by Bensimon (2009) outlines how music was used as a communication technique by two opposing groups in the Gaza strip: a set of protesters and the police who were required to move them. The songs chosen by the protestors reflected the attitudes that they were trying to communicate to outsiders: unity and despair at losing their homes. When the police tried to join in with the music, the songs were abandoned, reflecting the urge of the protestors to remain separated from the group they were in conflict with. As such, music as a method of communication between groups has been demonstrated outside of a research setting.

In some cases, personal or identity-relevant functions of music may be able to take on moral value. One of the potential behavioural consequences of strongly identifying oneself through music is the possibility of it becoming necessary to protect that music. A person who desires to protect self-relevant objects can use moralization techniques to recruit outside support (Peterson, 2013). Specifically, people who lack in close allies who need to defend an object they consider important enlist the moral emotions such as anger and disgust, to trigger in third party viewers the urge to condemn anything which threatens that object. This may imply that anger and disgust at music could be a result of these music types being seen as threatening to something with which the moralizer identifies themselves. For example, a fan of a specific subgenre of music could use anger and disgust to turn others away from a subgenre of music that threatens to take over from or change the core values of that specific subgenre.

Alternatively, anger and disgust at music could be a result of moralization to protect one's membership of other social groups. An example of this has been described in a blog entry by Pocho (2015). The writer describes how a lifetime of work in the music industry has led them to notice a pattern whereby the dislike of specific genres of music was often actually being used as an identity-protection mechanism for those who identified with specific social groups. For people who disliked country and rap music styles, often the group identities they were motivated to protect (and therefore remain associated with) were those of the "upper class" or "white" social groups. In this way, expressions of disapproval such as anger and disgust at music may form part of a mechanism protecting one's identity as part of a wider social group.

This use of music groups to communicate one's values may explain why some people choose to reject previously-enjoyed content when disliked others adopt the same preferences. Berger and Heath (2008) found that when a social group adopted a cultural object, a disliked group of others adopting the same object led the first group to abandon it. This was seen as a way to ensure that they remained distinct from the other group, by preventing perceptions that their group values were shared by the other group, and in turn to stop the other group's values from contaminating their own reputation. Abandoning the contaminated object therefore ensured a continued distinction between the groups. In this way, taste preferences can be used to enforce and maintain the boundaries between social groups and allow group members to ensure that their group remains consistent, united and undiluted by the values of other competing groups. This determination to maintain group boundaries through music may also be an explanation for the examples of disgust which were given in the first chapter: as explained by Cottrell and Neuberg (2005), threats to group values can elicit disgust. As such, it may be possible that music described as disgusting is seen to be a threat to social groups in some way, whether those groups be defined by music or other means.

The use of music to define social group boundaries may be further supported by research into the concept of distinctiveness threat. According to Jetten, Spears, and Manstead (2001) distinctiveness- to what extent other groups are seen as similar or different to one's own group in regards to relevant criteria- can become threatened, resulting in the individual taking action to differentiate competing groups. This individual's level of identification through the relevant group is also important, as researchers found that when high-identifiers felt threatened, they used differentiation techniques designed to favour the in-group, where lower identifiers used techniques designed to maximise overall resources. This suggests that differentiation is important enough to some group members that an individual will sacrifice resources in order to remain as distinctive as possible.

Spears, Jetten, and Scheepers (2002) suggest that there may be three kinds of distinctiveness processes. These are creative, reactive and reflective. When a group's identity is unknown, the individual wishes to create a suitably distinctive identity, and therefore takes action to build an identity which will allow for distinction from other groups. If an identity is already defined, but threatened by similarities to other groups, reactive processes will take place to emphasise differences between the in- and out-groups. Finally, reflective processes come in two forms: the reality principle function uses group differences as the perceptual basis for intergroup differentiation. This can assist with instrumental motives, where cohesion within the group and the differences between groups can lead to increased intergroup discrimination when there is competition for resources. Later research would also suggest that higher levels of identification through a group would lead to reactive differentiation processes, where lower levels of identification would lead to reflective differentiation processes (Jetten, Spears, & Postmes, 2004). Jetten and Spears (2004) also found that there was a difference in intergroup behaviours when the presence or absence of a superordinate category was manipulated. When the superordinate category was not salient, less

distinctiveness between groups led to more differentiation behaviours. When the superordinate category was salient, higher levels of distinctiveness led to differentiation behaviours.

Research into distinctiveness threat may therefore shed light on the process of anger and disgust at music. If intergroup distinctiveness is threatened, anger and disgust may be used as methods of separating an outgroup from the ingroup. This may be performed differently depending on the individual's level of identification with the ingroup. As such, moralization of music may be a tool by which individuals who are invested in the distinctiveness of a specific music type safeguard the boundaries of that genre or subgenre.

Overall, these studies suggest that identity functions may have a number of moral connotations which could explain anger and disgust at music: music may potentially be moralized due to its importance as a source of identity. If that music is how one has chosen to construct their identity, then it becomes increasingly important to prevent others from changing it in any way, hence the use of anger and disgust. Anger and disgust may also be methods by which intergroup boundaries can be maintained: by adopting and rejecting tastes, a person is able to easily communicate their boundaries and beliefs to others. As such, preventing those tastes from being contaminated by dissimilar others is critical to group maintenance- especially to prevent distinctiveness threat- and the use of these emotions can allow for communication to that effect. It is therefore possible that anger and disgust at music may be responses to intergroup mechanisms, as well as to the moral aspects discussed in the previous chapter.

3.5 Anger and disgust as mixed aesthetic and moral responses

In addition to the identification processes outlined above, one area which has been found to overlap with moral judgements is that of aesthetic responses. Disgust has been

regularly discussed in the context of aesthetics (Menninghaus, 2003; Kolnai, 1929/2004; Korsmeyer, 2012; 2013). In particular, Silvia and Brown (2007) discuss how anger and disgust may be elicited by artwork and the various aspects thereof. They found that in addition to moral responses, anger and disgust were used to communicate aesthetic concerns regarding contextual criticisms. In their paper, disgust was found to be elicited by works which were both unpleasant and against the values of the viewer. Anger was found to be a response to perceptions of more personal values being violated, and also towards artwork which was not necessarily unpleasant, but was instead deliberately offensive. It is therefore possible that anger and disgust in the context of art may be a response to contextual information. Later work by Silvia (2009) would support this pattern. This may have implications for behavioural responses to art that elicits anger and/or disgust, as Cooper and Silvia (2009) found that both anger and disgust led to rejection of controversial artworks. These findings therefore suggest a pattern of responses whereby visual artwork which is unpleasant or against one's values may result in anger, disgust and/or rejection of the work: a similar pattern to that demonstrated towards music by the media, and therefore a potential source of insight into musically-elicited anger and disgust responses.

In a similar study to those above, Dunkel and Hillard (2014) found that artwork which mixed the sacred with the profane elicited both anger and disgust, and further elicited desires to censor that artwork. Artwork which was only profane led to disgust only, and did not result in a desire for censorship. This may suggest that different content leads to differing levels of anger and disgust, which in turn drives different responses. However, given that the profane content in this research contained physically disgusting items (such as bodily waste products), it may be difficult to separate disgust at physical contaminants from disgust at aesthetics. As such, music which contains perceived moral violations, as well as aesthetic and contextual reasons for condemnation, would possibly be seen more harshly than other songs

with similar content. This would be due to a combination of both pure anger and disgust, and the associated aesthetic anger and disgust, together contributing to judgements made about that song's content.

This chapter has explored literature which suggests that anger and disgust may function as personal responses to music, as identity relevant material, and as overlapped moral and non-moral responses to identity-relevant content and aesthetics. These processes can be affected by a number of individual differences, such as previous experience in music training, biological factors such as prolactin levels, and personal factors such as memories attached to the music. Specific processes found to take place in response to anger and disgust at music include acts of deliberate emotional regulation, emotional processing, and attempts to achieve emotionally relevant goals.

Identification processes, such as the formation and maintenance of individual and group identities, have also been found to be important in regards to music through the creation of "how to feel" emotion profiles and the elicitation of anger and disgust as boundary defense mechanisms. Particularly important has been the role of anger and disgust as potential methods by which an individual may choose to protect the purity of their chosen genre, especially in situations which may trigger distinctiveness threat. Finally, anger and disgust have been found to respond to certain contextual details in artwork.

The next chapter will begin by providing a summary of all potential reasons for anger and disgust responses that have been suggested by the literature. The first in a series of studies designed to explore participant-generated reasons for anger and disgust at music, and how these compare to reasons suggested by the literature, will then be described.

CHAPTER 4

Exploratory examination of anger and disgust in response to music

Through reviewing existing literature, it has become clear that there are many competing reasons why anger and/or disgust may be felt towards disliked music. These can be summarised into three key hypotheses regarding the expected pattern of emotional responses towards music.

- The "both-moral" hypothesis: Anger and disgust may be elicited by music perceived to violate moral values, for example inciting harm and/or corrupting purity
- The "disgust-moral" hypothesis: Anger and disgust may be respectively elicited by music seen as containing personally offensive or immoral content
- The "anger-moral" hypothesis: Anger and disgust may be respectively elicited by music perceived to contain immoral content or unpleasant aesthetic content

Both the disgust-moral and anger-moral hypotheses leave open the possibility that anger or disgust are responses to non-moral content. As such, it is important to consider what aspects of the music may be responsible for eliciting anger or disgust for reasons that are not purely moral. Items suggested by the literature are listed below:

- Anger and/or disgust at music may be deliberately induced by the listener as a form of emotional regulation, or as a way to process these emotions.
- Anger and/or disgust may be responses to personally-relevant concerns, such as the elicitation of negative memories.
- Anger and/or disgust may be deliberately elicited by the listener in order to achieve emotionally-relevant goals.
- Anger and/or disgust at music may be used as a way of protecting something important to one's identity, preventing it from being diluted, changed, or damaged.

- Anger and/or disgust may be used to prevent distinctiveness threat, and increase differentiation between an ingroup and an outgroup, especially in situations which may involve distribution of limited resources.
- Anger and/or disgust at music may be a method of defending intergroup cultural boundaries
- Anger and/or disgust at music may act as a proxy for non-musical prejudice, for example against social groups defined by gender or race
- Anger and/or disgust at music may be elicited by irritating or "icky" sounding aesthetics or sound effects within that music.
- Anger and/or disgust at music may be elicited by the contextual information attached to that music, such as intentions of the creator.

Given the variety of research that exists, and the number of hypotheses and supporting predictions which can be derived from this, the first experiment conducted as part of this research used exploratory methods. Two key decisions were made as part of designing this experiment. Firstly, it was decided that research would begin by asking participants what made them feel anger or disgust in response to music in an open-ended manner, rather than seeking out quantitative measures. It was hoped that from this, a participant-generated set of factors could be created that could then be compared to the reasons produced by the literature. Secondly, by treating anger and disgust as two separate conditions, it would be possible to see how these spontaneously generated factors differed when these different emotions were salient in the participants. Testing anger and disgust as a repeated measures design was seen as potentially concerning, as participants may have re-used, overlapped, or become confused about appropriate content when presented with the emotions one after the other.

As such, the aims of Experiment 1 were to establish through qualitative methods that anger and disgust are elicited by music, examine what types of music are most likely to demonstrate anger and disgust responses, and attempt to distinguish the causes of anger from those of disgust. Analysis of the qualitative data also aimed to explore to what extent moral, social, or identity processes may underlie expressions of anger and disgust at music.

Method

Participants. It was decided a priori to recruit a sample of 90 participants, based on a power analysis for chi-square, as 88 participants give approximately 80% power to detect a medium effect size (w = .3). By the end of the study, 91 participants were recruited from Amazon's Mechanical Turk Programme. This website acts as a virtual marketplace, where workers can complete small tasks in return for compensation. This method was chosen due to the relatively quick and low-cost recruitment of participants. One participant's data was removed for being unusable, leaving 90 participants who received compensation of \$1.00 for their time. The mean age was 29.44, and the sample was 42% female, with one participant listing their gender as other/prefer not to say. To prevent cultural differences from acting as a confound, all participants were US citizens. Participants were only recruited if they were over the age of 18 and able to listen to music.

Measures. In order to gather as much data as possible, questions with open-ended responses were used for this study. Two questions were asked for each condition, with each participant only seeing one of the two conditions. The first question read as follows:

"Please take a moment to think about a time that music has made you feel [angry/disgusted], whether that be a whole genre, or a specific artist or song. When you are ready, please write below the music that you were thinking about"

Participants were allowed to enter text up to the length of a short sentence. The second question read:

"Please write a short paragraph explaining why you felt [anger/disgust] towards the music you named above. You will be allowed to move on from this page after five minutes have passed, but if you need more time to write then you may take as long as is required"

Responses to this question were recorded in a paragraph-length text box, to allow for the participant to write in as much detail as possible.

Procedure. On the MTURK summary page for this experiment participants were informed of the overall aim of the research, which was to examine a time they had previously experienced listening to music. They were informed that only those who were over 18 could take part, and that they would receive compensation of \$1 for their time. If they agreed to take part, the link to the Qualtrics survey page then became visible.

The first pages of the survey contained an information sheet and consent form: once consent had been obtained, participants were randomly allocated into separate conditions for anger and disgust. In both conditions, participants were presented with the stimuli described above, adapted as appropriate for their condition. In order to encourage well thought-out responses, the survey page did not allow the participants to move on for five minutes: this was explained in the question text and a visible timer at the bottom of the page allowed participants to know how much time was left. Finally, the participants were debriefed and given a completion code to put into the MTURK system.

Before data analysis could begin, the data were assessed to ensure they were usable. All participants gave their consent to take part, but one participant's data was unusable due to repetitive copy-pasting of the same six-word phrase. These data were removed, and another participant recruited in order to ensure the final total of 90.

Development of the coding scheme. In order to explore what types of music were most commonly described as eliciting anger and disgust, the first section of the coding scheme was designed to categorise responses for the first question of the survey: the specific music that participants were thinking of. This section was further subdivided into two parts: music type and music genre. For the type section of the coding scheme, each response was categorised as the participant having named an overall genre of music, a specific artist or a specific song. For the genre section of the coding scheme, all responses were allocated to 16 genre categories, derived from the Wikipedia page (Wikipedia, 2017) of musical subgenres (for example rock, RnB/soul music and jazz). Responses which named only an overall genre were labelled as whichever of the 16 categories most closely resembled the description given by the participant. For responses which named a specific artist or song, coders were instructed that for each response they should visit that music's Wikipedia page and categories them based only on the first genre they were listed under.

The second section of the coding scheme was designed to categorise potential reasons for moralization of the described music, using participant responses to the second open-ended question. Initial items for this section were inspired by those included in work from Rozin et al. (1997), whose paper contains items designed to capture reasons for moralization of meateating behaviours. Any items which could be reasonably adapted to apply to music listening behaviours were listed and reworded accordingly. These were then further summarised into more generic categories. For example, Rozin et al. (1997) included morally relevant items such as meat-eating increasing pain and suffering, and violating animal rights. This was condensed and adapted into Section 4 of the coding scheme, which tested the perception that the music resulted in harm to groups. Further categories were then added based on the list of hypotheses derived from the review of existing literature, and from an initial read-through of the data. Finally, the PEGI content warning system (Pan European Game Information, 2018)

for videogames was adapted into a section of the coding scheme. This acts as a short list of specific content commonly seen as objectionable and was therefore adapted into a section to determine which specific content types were being most frequently mentioned by participants. This draft coding scheme was refined and handed to two graduate student coders blind to the hypotheses. The full text of the coding scheme can be found in Appendix A.

Coding of the data. Before coding began, the data were formatted to ensure that only the user identification code and the responses to both open-ended questions were available to coders. All references to the emotions of anger or disgust were redacted, replaced with the phrases "appropriate emotion" or "other emotion" depending on if the participant had referenced the emotion they were assigned to discuss or the emotion assigned to the other condition. The first ten cases of this cleaned and redacted dataset were sent to both coders to ensure inter-rater reliability and that the coding scheme was appropriate for use. Following discussion with the coders, the remaining 80 cases were sent to and coded by both, with any differences between the two being resolved by the author of this thesis.

Later in the analysis, it became clear that the "emotion regulation" category had been applied too broadly. As such, the author reviewed the raw data for the category and removed any cases which had been incorrectly applied. Other than this error, the coders were considered appropriately accurate, and demonstrated a suitable level of inter-coder agreement, Cohen's k = .678 (95% CI, .667 to .689).

Results

Examples of participant responses- anger condition.

"I just think today's music is bad. No one plays instruments or experiments anymore. It is all on computers and just manufactured. It all sounds the same. I have to go looking for

different kinds of music and paying for it since regular radio just plays the same stuff over and over."

- 38-year-old male, describing "bad pop music"

"Modern hip hop angers me greatly. There are very few things I like about it. I think too much autotune is used, and I don't think the beats are as creative as the used to be. I also feel the lyrical content of the music is garbage. It is profane and insulting to almost every culture. I think modern hip hop glorifies ignorance, impulsiveness, and foolishness. I don't like the glorification of criminal behavior and the worship of money and material possessions. I don't like the extreme degradation of women."

- 31-year-old male, describing "modern hip hop"

"thrash metal is just super hard, and a really fast beat so it just pumps me up i guess. and if a good band has a really bad song or whole album, i just get upset and mad about it, cause i KNOW they can do better.."

- 25-year-old male, describing "thrash metal"

"I hate it because it teaches hate, violence and fear of the unknown. Children are being taught to hate for no reason at all. It would be better if that music no longer existed because it is not benefiting society. Hate music can range from racial, gender and sexual discrimination. Not only is it not good it makes people become violent and do things with a group that they would never do alone. but because of free speech it will never go away."

- 53-year-old female, describing "hate lyrics"

Examples of participant responses- disgust condition.

"I feel disgust towards his music because it lacks sincerity. It is nothing more than manufactured and over-produced pop garbage that takes opportunities in the music industry away from real musicians. The lyrics are usually written by someone else, as is the music.

Also, the only people who really buy his records are uneducated kids who would not know good music if it hit them over the head. Furthermore, this singer has a horrible singing voice, and constantly gets himself in the headlines due to his inappropriate behavior. No doubt he will continue to make awful music into the future, but one can hope he does not."

- 36-year-old male, describing music by Justin Bieber

"I think her message encourages people to gain weight and not care about their appearance. It feels very sexist to women in some ways, and demeaning. Overall, I just can't stand her, or her message to young girls. It is one of the few songs that I will immediately turn off when it comes on the radio."

- 34-year-old female, describing "All about that Bass"
- "There was a rap song playing that was extremely vulgar beyong just curse words. I happened to have kids with me at the time. I didnt want to hear it and most definitely didnt want the kids to hear it."
 - 31-year-old female, describing "A really graphic rap song that described detailed sex"

"The piece, Fables of Faubus, while a well written piece, has an underlying meaning that made me feel disgusted and sick to my stomach. The dissonant chords and at times rushed and sad moments, with peppered in happiness in the song really struck me. As I was listening to it, I could almost sense the emotional turmoil that Mingus, the composer was trying to communicate to me, the listener. I could hear in the music the disgust he had with the institutionalized racism at the time, and specifically Governor Faubus of Arkansas, who at the time of this piece's composition used the National Guard to prevent integration. At times

in the piece, the saxophones let out almost human, dissonant wails that make me really see and feel the disgust that Mingus had for Faubus."

- A 27-year-old male, describing "Fables of Faubus by Charles Mingus"

Descriptive Statistics for coding scheme sections. Descriptive statistics were obtained for each section of the coding scheme. Participants most frequently mentioned an overall genre, as opposed to either a specific artist or song. Of the genres, hip hop, rock and pop were most frequently mentioned, with country, electronic, folk, jazz and RnB/soul music receiving infrequent mentions. Eight genres (African, Asian, Avant garde, blues, Caribbean, comedy, easy listening and Latin) received no mentions by participants.

Across the two conditions the most commonly mentioned reasons for disliking the music were aesthetics, group harm, genre concerns and intrusiveness. Of the specific objectionable content from the PEGI classification system, sexual content, violence, and profane language were the most commonly mentioned. The full descriptive statistics for each category can be found in Table 1.

Table 1.

Experiment 1: Descriptive statistics

	Disgust		Anger		Total	
	(n = 49)		(n = 41)		(n = 90)	
Category	M	SD	M	SD	M	SD
Genre	0.67	0.47	0.51	0.51	0.60	0.49
Artist	0.33	0.47	0.41	0.50	0.37	0.48
Song	0.22	0.42	0.24	0.43	0.23	0.43
Country	0.02	0.14	0.12	0.33	0.07	0.25
Electronic	0.02	0.14	0.00	0.00	0.01	0.11
Folk	0.00	0.00	0.02	0.16	0.01	0.11
Нір Нор	0.55	0.50	0.29	0.46	0.43	0.50
Jazz	0.02	0.14	0.00	0.00	0.01	0.11
Pop	0.27	0.45	0.15	0.36	0.21	0.41
RnB/Soul	0.02	0.14	0.05	0.22	0.03	0.18
Rock	0.10	0.31	0.37	0.49	0.22	0.42
Emotion Regulation	0.02	0.14	0.10	0.30	0.06	0.23
Genre Concerns	0.29	0.46	0.22	0.42	0.26	0.44
Disliked Outgroup	0.12	0.33	0.07	0.26	0.10	0.30
Group Harm	0.39	0.49	0.20	0.40	0.30	0.46
Negative Experiences	0.12	0.33	0.20	0.40	0.16	0.36
Aesthetics	0.59	0.50	0.63	0.49	0.61	0.49
Artist Behaviour	0.04	0.20	0.05	0.22	0.04	0.21
Intrusiveness	0.16	0.37	0.24	0.43	0.20	0.40
Objectionable Content	0.59	0.50	0.27	0.45	0.44	0.50
Violence	0.22	0.42	0.10	0.30	0.17	0.37
Language	0.24	0.43	0.05	0.22	0.16	0.36
Horror/Frightening Content	0.06	0.24	0.02	0.16	0.04	0.21
Sexuality	0.31	0.47	0.20	0.40	0.26	0.44
Drug Use	0.18	0.39	0.05	0.22	0.12	0.33
Gambling/Materialism	0.06	0.24	0.02	0.16	0.04	0.21
Discrimination	0.08	0.28	0.10	0.30	0.09	0.29
Other	0.06	0.24	0.07	0.26	0.07	0.20

Note. All categories reported, excluding those which received zero mentions by participants.

The influence of demographic variables on categories of the coding scheme. A series of binary logistic regressions were run in order to test for a potential effect of age on each category of the coding scheme. Age was marginally associated with the likelihood of reporting a previous negative experience with the music: the likelihood ratio chi-squared test of the full model was significant, $\chi^2(1) = 4.099$, p = .043, explaining 77% of the variance (Nagelkerke R^2) and correctly classifying 84.4% of cases. However, the Wald Chi-Square test

was only marginally significant, $\chi^2(1) = 3.037$, p = .081. Age had no significant effect on any other category, all p-values > .1.

Chi-square tests of independence were carried out to test for a relationship between gender and categories of the coding scheme. One marginally significant association was found: women were more likely to express concerns about rock music than men, $\chi^2(1) = 2.65$, p = .087.

Differing levels of the moral emotions. Chi-square tests of independence were performed to examine the relationships between condition (anger/disgust) and each category of the coding scheme. Which condition participants were assigned to had a marginal effect on their likelihood of describing an overall genre but was not found to be associated with the likelihood of mentioning a specific artist or song (both p-values > .1).

For the next section of the coding scheme, condition was found to be associated with a number of categories: disgust resulted in more mentions of hip hop music, and anger in more mentions of rock music. Anger also resulted in marginally more mentions of country music than disgust.

For the second half of the coding scheme, condition was associated with the following categories. Disgust resulted in significantly more mentions of concerns about profane language, more references to the overall objectionable content measure, concerns about group harm (e.g. racism/sexism), and mentions of drug use. Disgust was also marginally associated with concerns about violence. The results of these comparisons can be found in Table 2.

Table 2.

Experiment 1: Chi-square tests by condition for coding scheme categories

Coding		Condition		χ^2	p
Scheme	Frequency	Disgust	Anger	70	I
Category	(n=90)	(n=49)	(n=41)		
Genre	60.00%	67.35%	51.22%	2.42	.090
	(54)	(33)	(21)		
Artist	36.67%	32.65%	41.46%	0.75	.260
	(33)	(16)	(17)		
Song	23.33%	22.44%	24.39%	0.05	.512
C	(21)	(11)	(10)		
Hip hop	43.33%	55.10%	29.27%	6.07	.012
	(39)	(27)	(12)		
Rock	22.22%	10.20%	36.59%	8.99	.003
	(20)	(5)	(15)		
Pop	21.11%	26.53%	14.63%	1.90	.131
	(19)	(13)	(6)		
Country	6.67%	2.04%	12.20%	3.70	.066
	(6)	(1)	(5)		
RnB/soul	3.33%	2.04%	4.88%	0.56	.433
	(3)	(1)	(2)		
Electronic	1.11%	2.04%	0.00%	0.85	.544
	(1)	(1)	(0)		
Folk	1.11%	0.00%	2.44%	1.21	.456
	(1)	(0)	(1)		
Jazz	1.11%	2.04%	0.00%	0.85	.544
	(1)	(1)	(0)		
		70.10 11			
Aesthetics	61.11%	59.18%	63.41%	0.17	.424
011 11	(55)	(29)	(26)	0.46	000
Objectionable	44.44%	59.18%	26.83%	9.46	.002
content	(40)	(29)	(11)	2.04	020
Group harm	30.00%	38.78%	19.51%	3.94	.039
	(27)	(19)	(8)	0.51	210
Genre	25.56%	28.57%	21.95%	0.51	.319
concerns	(23)	(14)	(9)	0.01	245
Intrusiveness	20.00%	16.33%	24.39%	0.91	.245
No soties	(18)	(8)	(10)	0.00	256
Negative	15.56%	12.24%	19.51%	0.90	.256
experiences	(14)	(6)	(8)	0.70	240
Disliked	10.00%	12.24%	7.32%	0.60	.340
outgroup	(9)	(6)	(3)	0.50	120
Emotion	5.56%	2.04%	9.76%	2.53	.130
regulation	(5)	(1)	(4)		

Artist	4.40%	4.08%	4.88%	0.03	.621
behaviour	(4)	(2)	(2)		
Other	6.67%	6.12%	7.31%	0.05	.573
	(6)	(3)	(3)		
Sexuality	25.56%	30.61%	19.51%	1.45	.169
	(23)	(15)	(8)		
Violence	16.67%	22.45%	9.76%	2.59	.091
	(15)	(11)	(4)		
Language	15.56%	24.49%	4.88%	6.54	.010
	(14)	(12)	(2)		
Drug use	12.22%	18.37%	4.88%	3.79	.049
	(11)	(9)	(2)		
Discrimination	8.90%	8.16%	9.76%	0.07	.539
	(8)	(4)	(4)		
Gambling/	4.40%	6.12%	2.44%	0.71	.379
materialism	(4)	(3)	(1)		
Horror/	4.40%	6.12%	2.44%	0.71	.379
frightening	(4)	(3)	(1)		
10 10				-	-

Note. df = 1 for all tests. Numbers in parentheses indicate number of responses coded as including the content type. Categories are listed by section of the coding scheme, with categories in descending order of frequency.

positively associated with use of music for emotional regulation.

square tests of independence were carried out to explore relationships between the genres of music that were mentioned by participants and the categories of the coding scheme that their responses fell into. Rock music was significantly and positively associated with the likelihood of mentioning a specific artist, and negatively associated with concerns about group harm, profane language, and sexual content, as well as with the overall objectionable content category, and was marginally negatively associated with concerns about references to drug use and with likelihood of mentioning the overall genre. It was significantly and

Interactions between music genre and categories of the coding scheme. Chi-

Hip hop music was significantly, positively associated with the likelihood of mentioning the overall genre, as well as with concerns about group harm, violence, profane language, sexual content, references to drug use, gambling/materialism, and the overall

objectionable content category. It was also negatively associated with likelihood of mentioning a specific artist or specific song, and with aesthetic concerns. Finally, it was marginally negatively associated with negative experiences and emotional regulation.

Pop music was significantly and positively associated with aesthetic concerns, and significantly negatively associated with negative experiences and violent content. It was also marginally positively associated with the likelihood of mentioning a specific artist, and marginally negatively associated with concerns about references to drug use.

Country music was found to be significantly and positively associated with memories of negative experiences and significantly, negatively associated with the overall category for objectionable content. It was also marginally negatively associated with likelihood of mentioning a specific artist. Jazz music was marginally positively associated with use for emotion regulation and concerns about discriminatory content. RnB/soul music was significantly, positively associated with concerns about sexual content and marginally positively associated with the overall objectionable content category. It was also marginally negatively associated with the likelihood of mentioning the overall genre. These results can be seen in Table 3.

Table 3. Experiment 1: Significant chi-square tests by genre for coding scheme categories

Category Frequency (n=90) (n=70) (n=20) 1 (n=20) Genre 60.00% (54) (429% (450%) (24) .099 (24) Objectionable content (44) (40) (37) (3) 15.00% (9.03) .002 Artist (36,67% (31,3%) (32) (27) (11) 36.67% (31,3%) 55.00% (37,2 0.04) Group harm (27) (26) (1) 25.56% (31,3%) 55.00% (7.65) (.004) Sexuality (23) (22) (1) 25.56% (31,3%) (5.00%) 5.71 (0.04) Language (14) (14) (14) (10) 15.56% (20,0%) (0.00%) 4.74 (0.01) Drug use (14) (14) (14) (0) 10.00 (0.00%) 4.74 (0.01) Emotion regulation (5,5) (11) (14) (14) (19) 10.03 (0.00%) 10.23 (0.00%) Frequency (n=90) (11) (10) (10) (10) (10) 10.03 (0.00%) 10.23 (0.00%) Aesthetics (55) (38) (17) (19) (19) (19) (19) (19) (19) (19) (19	Coding Scheme		Rock		χ^2	p
Genre (54) 60.00% (54) 64.29% (45) 45.00% (9) 2.41 (9) Objectionable content (44) 44.44% (52) 52.86% (53) 15.00% (37) .002 Artist (36.67% (31.43% (55.00% (33)) 37.1 (3) .004 Group harm (27) (26) (11) .004 Sexuality (23) (22) (11) .012 Examility (23) (22) (1) .012 Language (15.56% (23) 22.00% (22) (1) .012 Language (14) 15.76% (22) .00% (1) .00% (1) .021 Drug use (11) 15.71% (00) .00% (3.58) .052 .052 (11) (11) (0) .00% (3.58) .052 Emotion regulation (5.56% (1.43% (2.00% (3.2))) 10.23 (0.08) .008 (5) (1) (4) (4) (1) (0) .00% (1) .008 .008 .052 .008 .008 .008 .008 .008 .008 .008 .008 .008 .008 .008 .008 .008 .008 <td>Category</td> <td>Frequency</td> <td colspan="2"></td> <td>,,</td> <td>•</td>	Category	Frequency			,,	•
			(n=70)	(n=20)		
Objectionable content 44.44% (40) (37) (37) (3) 52.86% (37) (3) 15.00% (37) (3) .002 (40) Artist 36.67% (33) (22) (11) 37.2 .049 Group harm 30.00% (37), 4% (5.00% (7.65) .004 (27) (26) (1) (26) (1) Sexuality 25.56% (23) (22) (1) Language 15.56% (20) (20) (00) (00) (4.74 (02) Language 15.56% (20) (00) (00) (4.74 (02) Drug use 12.22% (11) (11) (0) Emotion regulation 5.56% (1.43% (20) (20) (10) (4) (5) (1) (4) (4) Frequency (n=90) (5) (1) (4) (11) (4) Aesthetics 61.11% (74.51% (33.59) (13.94) (20) Aesthetics 61.11% (74.51% (43.59% (32.9) (32.9) (20) Genre 60.00% (43.14% (32.9) (32.9) (32.9) (32.9) Objectionable content 44.44% (22.9 (32.9) (32.9) (32.9) (32.9) (32.9) (32.9) Objectionable content 44.44% (27.55% (66.67% (13.77 (2.00)) (32.9) (32.	Genre	60.00%	64.29%	45.00%	2.41	.099
Artist (40) (37) (3) Group harm 36.67% 31.43% 55.00% 3.72 .049 Group harm 30.00% 37.14% 5.00% 7.65 .004 (27) (26) (1) .012 Sexuality 25.56% 31.43% 5.00% 5.71 .012 Language 15.56% 20.00% 0.00% 4.74 .021 Language 12.22% 15.71% 0.00% 3.58 .052 Intiguage 12.22% 15.71% 0.00% 3.58 .052 Intiguage 12.22% 15.71% 0.00% 3.58 .052 Intiguage 12.22% 1.43% 20.00% 10.23 .008 Emotion regulation 5.56% 1.43% 20.00% 10.23 .008 Frequency (n=90) 0 1 (4 (4 (5) 1.43% 25.00% 8.89 .003 Acesthetics 61.11% 74.51% 43.59% 8.89		(54)	(45)	(9)		
Artist 36.67% (33) 31.43% (22) 55.00% (11) 3.72 (04) .049 (12) Group harm 30.00% (22) 37.14% (26) 1.00 .004 (12) .000% (11) .004 (12) .000% (12) .004 (12) .000% (12) .004 (12) .002 (12) .001 (12) .002 (22) .000% (12) .001 (12) .002 (12) .000% (12) .000% (12) .001 (12) .002 (12) .000% (12) .002 (12) .000% (12) .002 (12) .000% (12) .002 (12) .002 (12) .000% (12) .002 (12) .002 (12) .002 (12) .002 (12) .002 (12) .002 (12) .002 (12) .002 (12) .002 (12) .002 (12) .002 (12) .002 (12) .002 (12) .002 (12) .002 (12) .003 (12) .008 (12) .008 (12) .008 (12) .008 (12) .008 (12) .008 (12) .008 (12) .008 (12) .008 (12) .008 (12) .008 (12) .008 (12) .008 (12) .008 (12) .003 (12) .003 (12) .003 (12) .003 (12) .003 (12) .003 (12) .003 (12) .003 (12) .003 (12)	Objectionable content	44.44%	52.86%	15.00%	9.03	.002
$ \begin{array}{ c c c c c } \hline Group harm & 30.00\% & 37.14\% & 5.00\% & 7.65 & .004 \\ \hline Croup harm & 30.00\% & 37.14\% & 5.00\% & 7.65 & .004 \\ \hline Croup harm & 25.56\% & 31.43\% & 5.00\% & 5.71 & .012 \\ \hline Sexuality & 25.56\% & 20.00\% & 0.00\% & 4.74 & .021 \\ \hline Croup harm & 15.56\% & 20.00\% & 0.00\% & 4.74 & .021 \\ \hline Croup use & 15.56\% & 20.00\% & 0.00\% & 3.58 & .052 \\ \hline Croup use & 12.22\% & 15.71\% & 0.00\% & 3.58 & .052 \\ \hline Croup use & 12.22\% & 15.71\% & 0.00\% & 3.58 & .052 \\ \hline Croup use & 12.22\% & 15.71\% & 0.00\% & 3.58 & .052 \\ \hline Croup use & 12.22\% & 15.71\% & 0.00\% & 10.23 & .008 \\ \hline Croup harm & 5.56\% & 1.43\% & 20.00\% & 10.23 & .008 \\ \hline Croup harm & 60.00\% & 43.14\% & 82.05\% & 8.89 & .003 \\ \hline Genre & 60.00\% & 43.14\% & 82.05\% & 8.89 & .003 \\ \hline Croup harm & 60.00\% & 43.14\% & 82.05\% & 13.94 & <.001 \\ \hline Croup harm & 30.00\% & 15.69\% & 13.77 & <.001 \\ \hline Croup harm & 30.00\% & 15.69\% & 17.95\% & 10.38 & .001 \\ \hline Croup harm & 30.00\% & 15.69\% & 48.72\% & 11.48 & .001 \\ \hline Croup harm & 30.00\% & 15.69\% & 48.72\% & 11.48 & .001 \\ \hline Croup harm & 30.00\% & 15.69\% & 38.46\% & 6.03 & .014 \\ \hline Croup harm & 30.00\% & 15.69\% & 38.46\% & 6.03 & .014 \\ \hline Croup harm & 25.56\% & 15.69\% & 38.46\% & 6.03 & .014 \\ \hline Croup harm & 20.00\% & 15.69\% & 38.46\% & 6.03 & .014 \\ \hline Croup harm & 30.00\% & 15.69\% & 38.46\% & 6.03 & .014 \\ \hline Croup harm & 30.00\% & 15.69\% & 38.46\% & 6.03 & .014 \\ \hline Croup harm & 30.00\% & 15.69\% & 38.46\% & 6.03 & .014 \\ \hline Croup harm & 30.00\% & 15.69\% & 38.46\% & 6.03 & .014 \\ \hline Croup harm & 30.00\% & 15.69\% & 38.46\% & 6.03 & .014 \\ \hline Croup harm & 30.00\% & 15.69\% & 38.46\% & 6.03 & .014 \\ \hline Croup harm & 30.00\% & 15.69\% & 30.77\% & 10.00\% \\ \hline Croup harm & 30.00\% & 15.69\% & 30.77\% & 10.00\% \\ \hline Croup harm & 30.00\% & 15.69\% & 30.77\% & 10.00\% \\ \hline Croup harm & 30.00\% & 15.69\% & 30.77\% & 10.00\% \\ \hline Croup harm & 30.00\% & 15.69\% & 30.77\% & 10.00\% \\ \hline Croup harm & 30.00\% & 15.69\% & 30.77\% & 10.00\% \\ \hline Croup harm & 30.00\% & 15.69\% & 30.77\% & 10.00\% \\ \hline Croup harm & 30.00\% & 15.69\% & 30.77\% & 10.00\% \\ \hline Croup harm & 30.00\% & 30.00\% & 30.00\% & 40.00\% & 40.00\% \\ \hline Croup harm & $		(40)	(37)	(3)		
Group harm 30.00% (27) 37.14% (26) 5.00% (1) 7.65 7.65 .004 .004 Sexuality 25.56% (12) 31.43% (22) 5.00% (1) 5.71 (10) .012 Language 15.56% (14) 20.00% (11) 0.00% (11) 4.74 (10) .021 Drug use 12.22% (11) 15.71% (11) 0.00% (10) 3.58 (10) .052 Emotion regulation 5.56% (5) 1.43% (11) 20.00% (10) 10.23 (10) .008 Aesthetics 61.11 (n=90) 7.451% (n=91) 43.59% (n=39) 8.89 (17) .003 Genre 60.00% (54) 43.14% (22) 82.05% (32) 13.94 (30) <.001	Artist	36.67%	31.43%	55.00%	3.72	.049
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		(33)	(22)	(11)		
Sexuality 25.56% 31.43% 5.00% 5.71 .012 (23) (22) (1) .	Group harm	30.00%	37.14%	5.00%	7.65	.004
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$			_ ` /	(1)		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Sexuality	25.56%	31.43%	5.00%	5.71	.012
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $						
$ \begin{array}{ c c c c c } \hline Drug use & 12.22\% & 15.71\% & 0.00\% & 3.58 & .052 \\ \hline (11) & (11) & (0) & & & & & \\ \hline (11) & (11) & (0) & & & & \\ \hline Emotion regulation & 5.56\% & 1.43\% & 20.00\% & 10.23 & .008 \\ \hline (5) & (1) & (4) & & & & \\ \hline & & & & & & \\ \hline & & & & & \\ \hline & & & &$	Language	15.56%			4.74	.021
$ \begin{array}{ c c c c c } \hline Emotion regulation & (11) & (11) & (0) \\ \hline Emotion regulation & 5.56\% & 1.43\% & 20.00\% & 10.23 & .008 \\ \hline (5) & (1) & (4) & & & & \\ \hline & & & & & & \\ \hline & & & & & \\ \hline & & & &$		(14)	(14)	(0)		
$ \begin{array}{ c c c c c } \hline Emotion regulation & 5.56\% & 1.43\% & 20.00\% & 10.23 & .008 \\ \hline (5) & (1) & (4) & & & \\ \hline (5) & (1) & (4) & & & \\ \hline (5) & (1) & (4) & & & \\ \hline (1) & (4) & & & \\ \hline (1) & (4) & & & \\ \hline (1) & (1) & (4) & & \\ \hline (1) & (1) & (4) & & \\ \hline (1) & (1) & (4) & & \\ \hline (1) & (1) & (4) & & \\ \hline (1) & (1) & (1) & & \\ \hline (1) & (1) & (1) & & \\ \hline (1) & (1) & (1) & & \\ \hline (1) & (1) & (1) & & \\ \hline (1) & (1) & (1) & & \\ \hline (1) & (1) & (1) & & \\ \hline (1) & (1) & (1) & & \\ \hline (1) & (1) & (2) & (32) & & \\ \hline (1) & (1) & (20) & & \\ \hline (1) & (10) & (11) & & \\ \hline (1) & (10) & (10) & (10) & \\ \hline (1) & (10) & (11) & & \\ \hline (1) & (10) & (11) & & \\ \hline (1) & (10) & (11) & & \\ \hline (1) & (10) & (11) & & \\ \hline (1) & (10) & (11) & & \\ \hline (1) & (10) & (11) & & \\ \hline (1) & (10) & (10) & (10) & \\ \hline (1) & (10) & (10) & (10) & \\ \hline (1) & (10) & (10) & (10) & \\ \hline (1) & (10) & (10) & (10) & \\ \hline (1) & (10) & (10) & (10) & (10) & \\ \hline (1) & (10) & (10) & (10) & (10) & \\ \hline (1) & (10) & (10) & (10) & (10) & \\ \hline (1) & (10) & (10) & (10) & \\ \hline (1) & (10) & (10) & (10) & (10) & \\ \hline (1) & (10) & (10) & (10) & (10) & \\ \hline (1) & (10) & (10) & (10) & (10) & (10) & \\ \hline (1) & (10) & (10) & (10) & (10) & (10) & (10) & \\ \hline (1) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & \\ \hline (1) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & (10) \\ \hline (1) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & (10) & (10$	Drug use	12.22%	15.71%	0.00%	3.58	.052
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		(11)	(11)	(0)		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Emotion regulation	5.56%	1.43%	20.00%	10.23	.008
Frequency (n=90) 0 (n=51) (n=39) 1 (n=39) Aesthetics 61.11% (55) (38) (17) (32) (32) Genre 60.00% (54) (22) (32) (32) (32) (32) (32) Objectionable content (40) (14) (26) 44.44% (26) (7) 13.77 (301) (301) (33) (26) (7) (33) (26) (7) (33) (26) (7) (33) (26) (7) (33) (26) (7) (34) (27) (8) (19) (34) (19) (34) (19) (34) (19) (34) (15) (34) (15) (34) (15) (35) (15) (35) (16) (16) (15) (35) (16) (16) (15) (35) (16) (16) (15) (35) (16) (16) (15) (35) (16) (16) (15) (35) (16) (16) (15) (35) (16) (16) (15) (35) (16) (16) (16) (16) (16) (16) (35) (16) (16) (16) (16) (16) (35) (16) (16) (16) (16) (16) (35) (16) (16) (16) (16) (16) (16) (16) (16		(5)	(1)	(4)		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			Hip	Нор	χ^2	p
Aesthetics 61.11% (55) 74.51% (38) 43.59% (17) 8.89 .003 Genre 60.00% (54) 43.14% (22) 82.05% (32) 13.94 <.001		Frequency	0	1		
Genre 60.00% (54) 43.14% (22) 82.05% (32) 13.94 (-001) Objectionable content 44.44% (22) (32) 13.77 (-001) Artist 36.67% (33) 27.45% (66.67% (13.77) 10.38 (001) Artist 36.67% (33) 50.98% (17.95% (10.38) (10.001) 10.38 (001) Group harm 30.00% (27) (8) (19) 48.72% (11.48) (001) Sexuality 25.56% (15.69% (38.46% (6.03) (15)) 0.014 (23) (8) (15) (15) Song 23.33% (31.37% (12.82% (4.25) (0.033) (15)) Violence 16.67% (3.92% (33.33% (13.77) (12.13) (001) Language 15.56% (3.92% (30.77% (12.13) (10)) Language 15.56% (14) (2) (12) Negative experiences 15.56% (21.57% (7.69% (3.24) (0.063) (14) (11) (3) Drug use 12.22% (0.00% (28.21% (16.39) (16.39) (0.00) (11) (10) (11) Emotion regulation 5.56% (9.80% (0.00% (4.05) (0.05) (10) (10) (10)		(n=90)	(n=51)	(n=39)		
Genre 60.00% (54) 43.14% (22) 82.05% (32) 13.94 <.001 Objectionable content (40) 44.44% (22) (32) 13.77 <.001	Aesthetics	61.11%	74.51%	43.59%	8.89	.003
Objectionable content 44.44% (40) (14) (26) (17) 27.45% (66.67% (13.77) (4.001) 13.77 (4.001) Artist 36.67% (33) (26) (7) 10.38 (001) .001 Group harm 30.00% (27) (8) (19) 11.48 (001) Sexuality 25.56% (15.69% (15)) 38.46% (6.03) (014) Song 23.33% (21) (16) (5) 12.82% (4.25) (0.33) Violence 16.67% (3.92% (13)) 33.33% (13.77) (13.77) (13.77) -001 Language 15.56% (3.92% (13)) 30.77% (12.13) (001) -001 Negative experiences 15.56% (21.57% (7.69% (3.24) (16.39) (14)) -063 Drug use 12.22% (0.00% (28.21% (16.39) (16.39) (10)) -001 Emotion regulation 5.56% (9.80% (0.00% (4.05) (0.05)) -001		(55)	(38)	(17)		
Objectionable content 44.44% (40) 27.45% (50) 66.67% (26) 13.77 <.001 Artist 36.67% (33) 50.98% (26) 17.95% (7) 10.38 (00) .001 Group harm 30.00% (27) 15.69% (8) 48.72% (11.48 (00)) .001 Sexuality 25.56% (15.69% (8)) 38.46% (19) 6.03 (014) Song 23.33% (8) (15) (15) 12.82% (4.25 (0.33)) Violence 16.67% (3.92% (33.33% (13.77)) 13.77 (00) <00)	Genre	60.00%	43.14%	82.05%	13.94	<.001
Artist 36.67% 50.98% 17.95% 10.38 .001 Group harm 30.00% 15.69% 48.72% 11.48 .001 Sexuality 25.56% 15.69% 38.46% 6.03 .014 Song 23.33% 31.37% 12.82% 4.25 .033 Violence 16.67% 3.92% 33.33% 13.77 <.001		(54)	(22)	(32)		
Artist 36.67% 50.98% 17.95% 10.38 .001 Group harm 30.00% 15.69% 48.72% 11.48 .001 (27) (8) (19) Sexuality 25.56% 15.69% 38.46% 6.03 .014 (23) (8) (15) Song 23.33% 31.37% 12.82% 4.25 .033 (21) (16) (5) Violence 16.67% 3.92% 33.33% 13.77 <.001	Objectionable content	44.44%	27.45%	66.67%	13.77	<.001
Group harm 333 (26) (7) Sexuality 30.00% 15.69% 48.72% 11.48 .001 Sexuality 25.56% 15.69% 38.46% 6.03 .014 C33 (8) (15) (15) 12.82% 4.25 .033 Song 23.33% 31.37% 12.82% 4.25 .033 (21) (16) (5) (5) Violence 16.67% 3.92% 33.33% 13.77 <.001		(40)	(14)	(26)		
Group harm 30.00% 15.69% 48.72% 11.48 .001 Sexuality 25.56% 15.69% 38.46% 6.03 .014 (23) (8) (15) Song 23.33% 31.37% 12.82% 4.25 .033 (21) (16) (5) Violence 16.67% 3.92% 33.33% 13.77 <.001	Artist	36.67%	50.98%	17.95%	10.38	.001
Sexuality (27) (8) (19) Song 25.56% 15.69% 38.46% 6.03 .014 Song 23.33% 31.37% 12.82% 4.25 .033 (21) (16) (5) Violence 16.67% 3.92% 33.33% 13.77 <.001		(33)	(26)	(7)		
Sexuality 25.56% 15.69% 38.46% 6.03 .014 Song 23.33% 31.37% 12.82% 4.25 .033 (21) (16) (5) Violence 16.67% 3.92% 33.33% 13.77 <.001	Group harm	30.00%	15.69%	48.72%	11.48	.001
Song (23) (8) (15) Violence 16.67% 3.92% 33.33% 13.77 <.001		(27)	(8)	(19)		
Song 23.33% 31.37% 12.82% 4.25 .033 Violence 16.67% 3.92% 33.33% 13.77 <.001	Sexuality	25.56%	15.69%	38.46%	6.03	.014
Violence 16.67% (15) 3.92% (13) 33.33% (13.77) <.001 Language 15.56% (3.92% (13)) 30.77% (12.13) .001 Negative experiences 15.56% (2) (12) (12) Negative experiences 15.56% (21.57% (7.69% (3.24)) 3.24 (063) (14) (11) (3) (3) Drug use 12.22% (0.00% (28.21% (16.39)) 16.39 (0.001) (11) (0) (11) (11) Emotion regulation 5.56% (9.80% (0.00% (4.05)) 0.00% (4.05) (0.53)			(8)	(15)		
Violence 16.67% 3.92% 33.33% 13.77 <.001 Language 15.56% 3.92% 30.77% 12.13 .001 Language (14) (2) (12) Negative experiences 15.56% 21.57% 7.69% 3.24 .063 (14) (11) (3) Drug use 12.22% 0.00% 28.21% 16.39 <.001	Song	23.33%	31.37%	12.82%	4.25	.033
(15) (2) (13) Language 15.56% 3.92% 30.77% 12.13 .001 (14) (2) (12) Negative experiences 15.56% 21.57% 7.69% 3.24 .063 (14) (11) (3) Drug use 12.22% 0.00% 28.21% 16.39 <.001		(21)	(16)	(5)		
Language 15.56% 3.92% 30.77% 12.13 .001 (14) (2) (12) Negative experiences 15.56% 21.57% 7.69% 3.24 .063 (14) (11) (3) Drug use 12.22% 0.00% 28.21% 16.39 <.001	Violence	16.67%	3.92%	33.33%	13.77	<.001
(14) (2) (12) Negative experiences 15.56% 21.57% 7.69% 3.24 .063 (14) (11) (3) Drug use 12.22% 0.00% 28.21% 16.39 <.001		(15)	(2)	(13)		
Negative experiences 15.56% 21.57% 7.69% 3.24 .063 Drug use 12.22% 0.00% 28.21% 16.39 <.001	Language	15.56%	3.92%		12.13	.001
(14) (11) (3) Drug use 12.22% 0.00% 28.21% 16.39 <.001		(14)	(2)	(12)		
Drug use 12.22% 0.00% 28.21% 16.39 <.001 (11) (0) (11) Emotion regulation 5.56% 9.80% 0.00% 4.05 .053	Negative experiences				3.24	.063
(11) (0) (11) Emotion regulation 5.56% 9.80% 0.00% 4.05 .053			(11)			
Emotion regulation 5.56% 9.80% 0.00% 4.05 .053	Drug use				16.39	<.001
•			` '			
(5) (5) (0)	Emotion regulation				4.05	.053
(-) (-)		(5)	(5)	(0)		

Gambling/Materialism	4.44%	0.00%	10.26%	5.47	.032
	(4)	(0)	(4)		
		Pop		χ^2	p
	Frequency	0	1		
	(n=90)	(n=71)	(n=19)		
Aesthetics	61.11%	54.93%	84.21%	5.41	.017
	(55)	(39)	(16)		
Artist	36.67%	32.39%	52.63%	2.64	.089
	(33)	(23)	(10)		
Violence	16.67%	21.13%	0.00%	4.82	.020
	(15)	(15)	(0)		
Negative experiences	15.56%	19.72%	0.00%	4.44	.027
	(14)	(14)	(0)		
Drug use	12.22%	15.19%	0.00%	3.35	.062
C	(11)	(11)	(0)		
	` ,	Cor	untry	χ^2	p
	Frequency	0	1		
	(n=90)	(n=84)	(n=6)		
Objectionable content	44.44%	47.62%	0.00%	5.14	.026
J	(40)	(40)	(0)		
Artist	36.67%	39.29%	0.00%	3.72	.058
	(33)	(33)	(0)		
Negative experiences	15.56%	11.90%	66.67%	12.79	.005
	(14)	(10)	(4)		
		Ja	azz	χ^2	р
	Frequency	0 1		,,,	•
	(n=90)	(n=89)	(n=1)		
Discrimination	8.89%	7.87%	100.00%	10.37	.089
	(8)	(7)	(1)		
Emotion regulation	5.56%	4.49%	100.00%	17.19	.056
	(5)	(4)	(1)		
	(-)	RnB/Soul 0 1		χ ²	р
	Frequency			70	1
	(n=90)	(n=87)	(n=3)		
Genre	60.00%	62.07%	0.00%	4.66	.061
Come	(54)	(54)	(0)	1.00	.001
Objectionable content	44.44%	42.53%	100.00%	3.88	.084
Sojectionable content	(40)	(37)	(3)	2.00	.00-
Sexuality	25.56%	22.99%	100.00%	9.04	.015
Donumity	(23)	(20)	(3)	<i>7.</i> ∪ T	.015
Note $df - 1$ for all tests				numbor	,f

Note. df = 1 for all tests. Numbers in parentheses indicate number of responses coded as including the content type. Categories are listed by genre, with each significant coding category presented in descending order of frequency.

Discussion

This experiment was carried out to explore the potential reasons why people may experience anger and disgust in response to music. The relationships between the genre of music that the participants described and the specific content that was seen as concerning were also examined. The results suggest that anger and disgust may be elicited by music, but in different situations. Some content, such as concern over aesthetics, was mentioned frequently in response to both emotions but with no significant difference between the two. When asked to think of a time they were disgusted by music (as opposed to angered), participants were significantly more likely to mention music which contained potentially harmful material about a social group, for example racism or sexism. They were also more likely to be disgusted by music which used profane language or made reference to drug use. These results provide preliminary evidence for the "disgust-moral" hypothesis, which suggests that disgust is felt in response to music which contains immorality of any kind, regardless of domain. This hypothesis also suggests that anger at music has less to do with immorality and more to do with personal concerns. However, while not significant in the analyses, examination of the descriptive statistics in Table 1 does demonstrate that results trend in a way that supports the disgust-moral hypothesis, by having higher mean scores for personal concerns in the anger (versus disgust) condition.

In regards to difference by genre, disgust was associated more with hip hop music, whereas anger was associated more with rock music, and nearly associated more with country music. Of all the genres that were mentioned, six had significant associations with the various types of disliked content. Rock was associated less with a number of content concerns than other genres. Hip Hop was associated more with various forms of moral concerns such as group harm e.g. racism/sexism, violence, profane language, sexual content and concerns about materialism. Pop music was associated less with the moral content categories but was

more likely to be associated with aesthetic concerns. Country music was associated more with previous negative experiences than other genres. Jazz music was used slightly more than statistically expected for emotion regulation, and RnB/soul music raised concerns about sexuality. Gender and age each had one marginal influence on the content categories, but these results were not strong enough to suggest a need to control for them during analyses. The specific pattern of concerns about each genre may explain why they also elicit the moral emotions. Group harm and profane language were both associated with disgust, and hip hop music associated with both of these content types. Rock and country music were less associated with immoral content: as such, reasons for strong reactions to these music genres may be more personal and therefore more likely to elicit anger. However, these connections are purely speculative at this point- more direct tests would have to be carried out to explore this concept further.

These findings provide initial evidence for the idea that there is a relationship between moral emotions, music type and specific concerns about music content. Specific concerns about individual genres also appear to be relevant in places. Overall, the pattern of results provides some support for the "disgust-moral" hypothesis, but not enough to draw firm conclusions. Specifically, the results of this study provide support for the role of disgust as a response to immoral content of varying categories. When asked to consider music they thought of as disgusting, participants generated concerns about numerous types of morally-relevant content. They also generated significantly more moral concerns in response to the disgust prompt than in response to the anger prompt. However, the disgust-moral hypothesis predicted a corresponding role of anger in response to music which has personal reasons for being disliked, such as music which contains reminders of previous negative experiences. This predicted relationship did not appear in the data. Additionally, little mention of deliberate emotion induction was given by participants in either condition.

Given these results provided only partial support for a hypothesis, it was decided that the next experiment would need to replicate and extend these findings in order to provide a clearer examination of what processes are taking place in response to disliked music. This would be achieved by first replicating the methodology of this experiment, such that free-responses from a second sample could be taken and the pattern of results compared to those generated by this study. Secondly, some changes were made to the research design in order to address the small number of limitations present in this experiment. It was hoped that the resulting data would provide clarity in regards to whether or not the disgust-moral hypothesis should be adopted in regards to anger and disgust at music, or whether a different explanation would be a better fit.

In designing the next experiment, it was therefore important to consider the potential flaws in the structure of this experiment. Particularly noticeable in these analyses was the relative absence of anger and disgust being described as a way to moralize intergroup boundaries defined by music (for example criticising music that was seen as threatening or depurifying to a given genre). Looking at the literature regarding distinctiveness threat and moralization of self-relevant content, the reason for this is initially unclear. Further examination of the dataset suggested that the relative lack of identification processes in this study may have been due to the participant sample. As the mean age was 29.44, the participants were outside of the age range where music would be most significant as a source of identity. This would affect to what extent they perceived threats to a music-based ingroup, as well as their processing of more recent music styles such as rap. Given this, it was decided to carry out the next experiment in a younger age sample, to determine if additional reasons for anger and disgust at music would be found in a participant group to whom music was still a more frequent and relevant aspect of their identity.

Further examination of the experiment raises two further limitations to be addressed by the remainder of this thesis. Firstly, the lack of quantitative measures given to the participants means that comparisons to other population types may be difficult. Additionally, the coding scheme for the qualitative data was in part designed based on early examination of the responses. As such, responses to moralized music may exist that have not been captured by either the literature review or the present data. By changing the target population to capture a new age group as previously mentioned, it is therefore also possible to examine whether this novel population would provide unique insights into moralized music that had not been present thus far. Additional quantitative measures were also designed to allow not only for direct comparisons of participants in separate conditions, but also to allow for comparisons to other populations in future research papers.

Finally, it is important to address the issue that in this experiment, anger and disgust have been presented separately. Traditionally, the two emotions have been studied together due to their high level of covariance (Marzillier & Davey, 2004). However, in this experiment participants were presented only with one, and not the other. This was done to allow for between-participant comparisons, and also to prevent participant confusion due to being asked about two potentially similar-seeming terms. However, the possibility that participants were describing content suitable for the condition to which they were not assigned remains a possibility. As such, once the following experiment was carried out to address the previous limitations, the research design was changed to allow for anger and disgust to be measured together. The studies addressing this limitation can be seen in Chapters 6 and 7.

CHAPTER 5

Further exploration of reasons for feeling anger and disgust in response to music

The next step of this research was to carry out an experiment to determine if the results from Experiment 1 replicated in a younger sample. A series of decisions for this experiment were therefore made as follows. Firstly, the mean age of the previous sample was outside of the age range where music is most likely to be a source of identity: to ensure that this new sample was suitably identified through music and explore how this affected anger and disgust responses, quantitative self-identity measures were included in this experiment. Secondly, quantitative measures were added to explore the underlying factors of emotional response to disliked music. It was hoped that this would allow for a more detailed examination of the relationship between anger, disgust and potentially controversial aspects of music, and allow construction of empirically-based quantitative measures to begin, setting up future research methods. Finally, to explore potential third-party moralization, it was decided to add measures of anger and disgust at other people who enjoyed listening to the described music. It was hoped that this would provide quantitative grounding for future research into not only why music is moralized, but how this interacts with interpersonal social cognition.

Participants. As with the previous experiment, an a priori target of 90 participants was set to allow for approximately the same sensitivity to detect a medium effect size. Due to the speed with which participants signed up before the applications could be closed, 94 participants were recruited. Applications were received via the Research Participation Scheme at the University of Kent, and participants were awarded course credit for their time. All participants were psychology undergraduates, and the sample was 86% female with a mean age of 19.97. Analyses were carried out to explore to what extent these demographic

variables may have affected participant responses. Participants were required to be over the age of 18 and able to listen to music. Anyone who did not meet these criteria was prevented from taking part.

Procedure. A brief summary of the experiment was uploaded to the Research Participation Scheme, describing the experiment as exploring "how people feel about the music they listen to". The study took place in a laboratory setting, with participants being given individual cubicles to avoid noise interference during the tasks.

As with Experiment 1, the participants were first presented with an information sheet and consent form which had to be completed before the task could begin. Participants were split into two conditions: anger and disgust. In both conditions, the experiment began with a similar writing task to Experiment 1, where participants were asked to think of a time they were angry/disgusted in response to music and write a short paragraph about this experience. Once three minutes had passed for the writing task, they were allowed to move on to the rest of the experiment, where they completed the measures described below in order. Participants were presented with a debrief form once the experiment was finished and given a chance to ask any questions before they left the laboratory.

Measures. The writing task was a modified version of the one used in the previous experiment: participants were still asked to describe a time they were angered or disgusted by music, but this took the form of one question instead of separating the information about the music they were describing from the rest of the task. The responses were then coded using an adapted version of the coding scheme (Appendix B). The prompt for the writing task read:

"Please think of a time when music made you feel [angry/disgusted], and write a short paragraph explaining why you felt [anger/disgust] towards this music. You will be

allowed to move on from this page after three minutes have passed, but if you need more time to write then you may take as long as is required."

Participants next rated their anger or disgust at six different people listening to and enjoying the music they had written about. These people were described as "A stranger", "An acquaintance", "Your classmate or co-worker", "Your friend", "Your sibling" and "Your romantic partner", and the anger or disgust score for each was measured on a 5-point Likert-type scale where "1" = "Not at all angry/disgusted" and "5" = "Extremely angry/disgusted".

Next, the participants completed measures of moralization of the music they had written about. As with the coding scheme for both studies, the first few questions of this measure were taken from Rozin et al. (1997), with all references to meat-eating changed to references to the disliked music. Additional items were then added based on content from the literature review and the open-ended responses from the first study: the full content of this measure can be found in Appendix C. Items from this subscale included "We demean ourselves by listening to this music" and "Many good, moral people listen to this music" (reverse-coded). There were 22 items in total, with responses being measured using a 7-point Likert-type scale from "I" = "Strongly Disagree" to "7" = "Strongly Agree", with "4" = "Neutral" as a mid-point.

Finally, the participants completed measures of self-identification through music. An open-ended question asked participants to "Please describe how you identify yourself as a music listener in two words". They then rated on a single 7-point Likert-type scale, where "1" = "Not at all" and "7" = "Completely", their response to the following prompt: "Please rate the extent to which you feel your music preferences influence the way you define yourself as a person".

Participants then completed the reasons for listening to music scale (Lonsdale & North, 2011). This measure has 30 items rated on a 5-point Likert-type scale from "I" = "Not at all" to "5" = "Very Much", with the question stem reading "I listen to music..." The items measure six subscales: positive mood management (e.g. "...to set the right mood"), diversion (e.g. "...to pass the time"), negative mood management (e.g. "...to help get through difficult times"), interpersonal relationships (e.g. "...to have something to talk about with others"), personal identity (e.g. "...to display my membership of social groups/subcultures") and surveillance (e.g. "...to obtain useful information for daily life").

They then completed the collective self-esteem scale (Luhtanen & Crocker, 1992), where the words "social group" were changed to "musical preference group" to fit in with the aim of the study. The text preceding the question read:

"We are all members of different social groups. One of these social groups is defined by the things that interest us, specifically our music listening preferences. We would like you to consider your membership in this particular group, and respond to the following statements on the basis of how you feel about this group and your membership in it. Please read each statement carefully and respond by using the following scale:"

The scale consisted of 16 items on a 7-point Likert-type scale, from "I" = "Strongly Disagree" to "7" = "Strongly Agree", with "4" = "Neutral" as a midpoint. The items loaded onto four subscales: membership esteem (e.g. "I am a worthy member of the musical preference group I belong to"), private collective self-esteem (e.g. "In general, I'm glad to be a member of the musical preference group I belong to"), public collective self-esteem (e.g. "In general, others respect the musical preference group that I am a member of") and identity (e.g. "In general, belonging to a musical preference group is an important part of my self-image").

A number of other potential methods by which to measure identification through music were considered for this experiment. However, it was eventually decided that the experiment would be best served by including only those described above, as inclusion of too many measures on a similar topic was seen as potentially eliciting fatigue or boredom in participants.

Results

Descriptive statistics for categories of the coding scheme. Once again, the agreement between the coders was good, with Cohen's k = .69 (95% CI, .685 to .700). As with the previous experiment, participants were most likely to mention an overall genre as compared to specific artist or song. Across all responses, participants mentioned only six of the 16 potential genres: electronic, hip hop, jazz, pop, RnB/soul and rock. When both conditions were analysed together, participants were most likely to mention one of the objectionable content categories, aesthetics or concerns about group harm e.g., racism/sexism. Of the specific categories for the PEGI classification scheme, participants were most likely to mention sexuality, language and violence as cause for concern. Two categories (disliked outgroup and concerns about gambling/materialism) were not mentioned by any participants and are therefore absent from subsequent analyses and tables. The descriptive statistics for all other categories can be seen in Table 4.

Table 4.

Experiment 2: Descriptive statistics

	Dis	gust	Aı	nger	Total			
	(n = 47)		(n =	= 47)	(n = 94)			
	M	SD	M	SD	M	SD		
Genre	0.26	0.44	0.34	0.48	0.30	0.46		
Artist	0.30	0.46	0.06	0.25	0.18	0.39		
Song	0.19	0.40	0.04	0.20	0.12	0.32		
Electronic	0.02	0.15	0.06	0.25	0.04	0.20		
Нір Нор	0.21	0.41	0.11	0.31	0.16	0.37		
Jazz	0.02	0.15	0.00	0.00	0.01	0.10		
Pop	0.02	0.15	0.04	0.20	0.03	0.18		
RnB/Soul	0.13	0.34	0.02	0.15	0.07	0.26		
Rock	0.13	0.34	0.17	0.38	0.15	0.36		
Emotion Regulation	0.02	0.15	0.36	0.49	0.19	0.40		
Genre Concerns	0.02	0.15	0.02	0.15	0.02	0.15		
Group Harm	0.55	0.50	0.15	0.36	0.35	0.48		
Negative Experiences	0.17	0.38	0.47	0.50	0.32	0.47		
Aesthetics	0.43	0.50	0.47	0.50	0.45	0.50		
Artist Behaviour	0.02	0.15	0.02	0.15	0.02	0.15		
Intrusiveness	0.04	0.20	0.06	0.25	0.05	0.23		
Objectionable Content	0.72	0.45	0.23	0.43	0.48	0.50		
Violence	0.21	0.41	0.04	0.20	0.13	0.34		
Language	0.28	0.45	0.06	0.25	0.17	0.38		
Horror/Frightening	0.09	0.28	0.04	0.20	0.06	0.25		
Sexuality	0.43	0.50	0.11	0.31	0.27	0.44		
Drug Use	0.04	0.20	0.00	0.00	0.02	0.15		
Discrimination	0.04	0.20	0.11	0.31	0.07	0.26		
Other	0.28	0.45	0.09	0.28	0.18	0.39		

Note. All categories are reported, excluding those which received zero mentions by participants.

Influence of demographic variables on categories of the coding scheme. A series of binary logistic regressions were run to explore whether participant age was associated with any categories of the coding scheme. No significant associations were found, all p-values > .1. Gender was found to have a marginal association with mentions of previous negative experiences, $\chi^2(1) = 3.34$, p = .069, with men being less likely to mention negative experiences than women.

Differing levels of the moral emotions. Chi-square tests of independence were carried out to examine the relationships between moral anger and disgust and all categories of the coding scheme. For the first half of the coding scheme (regarding the music type and music genre of responses) participants in the disgust condition were significantly more likely to mention a specific artist or song, and marginally more likely to mention RnB/Soul Music than those in the anger condition.

For the second half of the coding scheme, condition was associated with eight concerns about the music content. Participants in the anger condition were more likely to mention emotional regulation through the music and to mention previous negative experiences with music, whereas participants in the disgust condition were more likely to mention concerns about group harm e.g. racism/sexism, the overall objectionable content category, violence, language, sexuality, and concerns labelled "other". These results can be seen in Table 5.

Table 5.

Experiment 2: Chi-square tests by condition for coding scheme categories

•		· ·			C
Coding Scheme		Cone	dition	χ^2	р
Category	Frequency	Disgust	Anger		
	(n=94)	(n=47)	(n=47)		
Genre	29.79%	25.53%	34.04%	0.81	.250
	(28)	(12)	(16)		
Artist	18.09%	29.79%	6.38%	8.69	.003
	(17)	(14)	(3)		
Song	11.70%	19.15%	4.26%	5.05	.025
	(11)	(9)	(2)		
Hip hop	15.96%	21.28%	10.64%	1.98	.130
	(15)	(10)	(5)		
Rock	14.89%	12.77%	17.02%	0.34	.387
	(14)	(6)	(8)		
RnB/soul	7.45%	12.77%	2.13%	3.86	.055
	(7)	(6)	(1)		
Electronic	4.26%	2.13%	6.38%	1.04	.308
	(4)	(1)	(3)		
Pop	3.19%	2.13%	4.26%	0.34	.500
	(3)	(1)	(2)		
Jazz	1.06%	2.13%	0.00%	1.01	.500
	(1)	(1)	(0)		
Objectionable	47.87%	72.34%	23.40%	22.55	<.001
content	(45)	(34)	(11)		
Aesthetics	44.68%	42.55%	46.81%	0.17	.418
	(42)	(20)	(22)		
Group harm	35.11%	55.32%	14.89%	16.86	<.001
	(33)	(26)	(7)		
Negative	31.91%	17.02%	46.81%	9.60	.002
experiences	(30)	(8)	(22)		
Emotion	19.15%	2.13%	36.17%	17.59	<.001
regulation	(18)	(1)	(17)		
Other	18.09%	27.66%	8.51%	5.82	.015
	(17)	(13)	(4)		
Intrusiveness	5.32%	4.26%	6.38%	0.21	.500
	(5)	(2)	(3)	_	
Artist behaviour	2.13%	2.13%	2.13%	<.001	.753
Campa	(2)	(1)	(1)	, 001	750
Genre concerns	2.13%	2.13%	2.13%	<.001	.753
	(2)	(1)	(1)		
Sexuality	26.60%	42.56%	10.64%	12.26	<.001
	(25)	(20)	(5)		

Language	17.02%	27.66%	6.38%	7.53	.006
	(16)	(13)	(3)		
Violence	12.77%	21.28%	4.26%	6.11	.014
	(12)	(10)	(2)		
Discrimination	7.45%	4.26%	10.64%	1.39	.217
	(7)	(2)	(5)		
Horror/Frightening	6.38%	8.51%	4.26%	0.71	.339
	(6)	(4)	(2)		
Drug use	2.13%	4.26%	0.00%	2.04	.247
	(2)	(2)	(0)		

Note. df = 1 for all tests. Numbers in parentheses indicate number of responses coded as including the content type. Categories are listed by section of the coding scheme, with categories in descending order of frequency.

Interactions between concerns about content and genres. Of the music genres mentioned by the participants, five had significant relationships with concerns about music content. Electronic music was found to be marginally positively associated with the likelihood of participants mentioning the overall genre. Hip hop music was found to be associated with a higher likelihood of describing the overall genre or specific artist, the overall category for objectionable content, concerns about violence and language, and marginally with horrific/frightening content. Pop music was associated with expressing more concerns about the intrusiveness of the music and marginally associated with concerns about the aesthetics of the music. RnB/soul music was marginally negatively associated with likelihood of mentioning the overall genre, and positively associated with the likelihood of naming a specific artist or song, with more mentions of the overall objectionable content category, and with more concerns about group harm e.g., racism/sexism, sexual content and concerns that fell into the "other" category. It was also marginally negatively associated with previous negative experiences of the music. Finally, rock music was positively associated with the likelihood of mentioning an overall genre and concerns about aesthetics of the music

and negatively associated with the overall objectionable content category and concerns about sexuality. These results can be seen in Table 6.

Table 6. Experiment 2: Significant chi-square tests by genre for coding scheme categories

Coding Scheme		Elec	tronic	χ^2	p
Category	Frequency	0	1		-
	(n=94)	(n=90)	(n=4)		
Genre	29.79%	27.78%	75.00%	4.08	.078
	(28)	(25)	(3)		
	, ,	Hip	Нор	χ^2	p
	Frequency	0	1		
	(n=94)	(n=79)	(n=15)		
Objectionable content	47.87%	41.77%	80.00%	7.38	.007
J	(45)	(33)	(12)		
Genre	29.79%	21.52%	73.33%	16.18	<.001
	(28)	(17)	(11)		
Artist	18.09%	13.92%	40.00%	5.79	.027
	(17)	(11)	(6)		
Language	17.02%	12.66%	40.00%	6.67	.019
	(16)	(10)	(6)		
Violence	12.77%	8.86%	33.33%	6.78	.021
	(12)	(7)	(5)		
Horror/Frightening	6.38%	3.80%	20.00%	5.54	.050
\mathcal{E}	(6)	(3)	(3)		
				1	
		P	op	χ ²	p
	Frequency	0 P	P op 1	χ^2	p
	Frequency (n=94)	0	1	χ²	p
Aesthetics	(n=94)	0 (n=91)	1 (n=3)	χ ² 3.84	.086
Aesthetics	(n=94) 44.68%	0 (n=91) 42.86%	1 (n=3) 100.00%		
	(n=94) 44.68% (42)	0 (n=91) 42.86% (39)	1 (n=3) 100.00% (3)		.086
Aesthetics Intrusiveness	(n=94) 44.68% (42) 5.32%	0 (n=91) 42.86% (39) 3.30%	1 (n=3) 100.00% (3) 66.67%	3.84	
	(n=94) 44.68% (42)	0 (n=91) 42.86% (39) 3.30% (3)	1 (n=3) 100.00% (3)	3.84	.086
	(n=94) 44.68% (42) 5.32% (5)	0 (n=91) 42.86% (39) 3.30% (3) RnB	1 (n=3) 100.00% (3) 66.67% (2) 8/Soul	3.84	.086
	(n=94) 44.68% (42) 5.32% (5)	0 (n=91) 42.86% (39) 3.30% (3) RnB	1 (n=3) 100.00% (3) 66.67% (2) 8/Soul 1	3.84	.086
Intrusiveness	(n=94) 44.68% (42) 5.32% (5) Frequency (n=94)	0 (n=91) 42.86% (39) 3.30% (3) RnB 0 (n=87)	1 (n=3) 100.00% (3) 66.67% (2) 8/Soul 1 (n=7)	3.84 23.16 χ^2	.086 .007
	(n=94) 44.68% (42) 5.32% (5) Frequency (n=94) 47.87%	0 (n=91) 42.86% (39) 3.30% (3) RnB 0 (n=87) 43.68%	1 (n=3) 100.00% (3) 66.67% (2) 8/Soul 1 (n=7) 100.00%	3.84	.086
Intrusiveness Objectionable content	(n=94) 44.68% (42) 5.32% (5) Frequency (n=94) 47.87% (45)	0 (n=91) 42.86% (39) 3.30% (3) RnB 0 (n=87) 43.68% (38)	1 (n=3) 100.00% (3) 66.67% (2) 3/Soul 1 (n=7) 100.00% (7)	3.84 23.16 χ^2 8.24	.086 .007 p
Intrusiveness	(n=94) 44.68% (42) 5.32% (5) Frequency (n=94) 47.87% (45) 35.11%	0 (n=91) 42.86% (39) 3.30% (3) RnB 0 (n=87) 43.68% (38) 29.89%	1 (n=3) 100.00% (3) 66.67% (2) 3/Soul 1 (n=7) 100.00% (7) 100.00%	3.84 23.16 χ^2	.086 .007
Intrusiveness Objectionable content Group harm	(n=94) 44.68% (42) 5.32% (5) Frequency (n=94) 47.87% (45) 35.11% (33)	0 (n=91) 42.86% (39) 3.30% (3) RnB 0 (n=87) 43.68% (38) 29.89% (26)	1 (n=3) 100.00% (3) 66.67% (2) 3/Soul 1 (n=7) 100.00% (7) 100.00% (7)	3.84 23.16 χ^2 8.24 13.98	.086 .007 <i>p</i> .004 <.001
Intrusiveness Objectionable content	(n=94) 44.68% (42) 5.32% (5) Frequency (n=94) 47.87% (45) 35.11% (33) 31.91%	0 (n=91) 42.86% (39) 3.30% (3) RnB 0 (n=87) 43.68% (38) 29.89% (26) 34.48%	1 (n=3) 100.00% (3) 66.67% (2) 3/Soul 1 (n=7) 100.00% (7) 100.00% (7) 0.00%	3.84 23.16 χ^2 8.24	.086 .007 p
Intrusiveness Objectionable content Group harm Negative experiences	(n=94) 44.68% (42) 5.32% (5) Frequency (n=94) 47.87% (45) 35.11% (33) 31.91% (30)	0 (n=91) 42.86% (39) 3.30% (3) RnB 0 (n=87) 43.68% (38) 29.89% (26) 34.48% (30)	1 (n=3) 100.00% (3) 66.67% (2) 3/Soul 1 (n=7) 100.00% (7) 100.00% (7) 0.00% (0)	3.84 23.16 χ^{2} 8.24 13.98 3.55	.086 .007 <i>p</i> .004 <.001
Intrusiveness Objectionable content Group harm	(n=94) 44.68% (42) 5.32% (5) Frequency (n=94) 47.87% (45) 35.11% (33) 31.91% (30) 29.79%	0 (n=91) 42.86% (39) 3.30% (3) RnB 0 (n=87) 43.68% (38) 29.89% (26) 34.48% (30) 32.18%	1 (n=3) 100.00% (3) 66.67% (2) 3/Soul 1 (n=7) 100.00% (7) 100.00% (7) 0.00% (0)	3.84 23.16 χ^2 8.24 13.98	.086 .007 <i>p</i> .004 <.001
Intrusiveness Objectionable content Group harm Negative experiences Genre	(n=94) 44.68% (42) 5.32% (5) Frequency (n=94) 47.87% (45) 35.11% (33) 31.91% (30) 29.79% (28)	0 (n=91) 42.86% (39) 3.30% (3) RnB 0 (n=87) 43.68% (38) 29.89% (26) 34.48% (30) 32.18% (28)	1 (n=3) 100.00% (3) 66.67% (2) 3/Soul 1 (n=7) 100.00% (7) 100.00% (7) 0.00% (0) 0.00% (0)	3.84 23.16 χ^{2} 8.24 13.98 3.55 3.21	.086 .007 p .004 <.001 .061 .076
Intrusiveness Objectionable content Group harm Negative experiences	(n=94) 44.68% (42) 5.32% (5) Frequency (n=94) 47.87% (45) 35.11% (33) 31.91% (30) 29.79%	0 (n=91) 42.86% (39) 3.30% (3) RnB 0 (n=87) 43.68% (38) 29.89% (26) 34.48% (30) 32.18%	1 (n=3) 100.00% (3) 66.67% (2) 3/Soul 1 (n=7) 100.00% (7) 100.00% (7) 0.00% (0)	3.84 23.16 χ^{2} 8.24 13.98 3.55	.086 .007 <i>p</i> .004 <.001

Artist	18.09%	12.64%	85.71%	23.35	<.001
	(17)	(11)	(6)		
Other	18.09%	13.79%	71.43%	14.53	.002
	(17)	(12)	(5)		
Song	11.70%	4.60%	100.00%	57.07	<.001
	(11)	(4)	(7)		
		R	ock	χ^2	p
	Frequency	0	1		
	(n=94)	(n=80)	(n=14)		
Objectionable content	47.87%	52.50%	21.43%	4.61	.030
	(45)	(42)	(3)		
Aesthetics	44.68%	38.75%	78.57%	7.64	.006
	(42)	(31)	(11)		
Genre	29.79%	20.00%	85.71%	24.60	<.001
	(28)	(16)	(12)		
Sexuality	26.60%	31.25%	0.00%	5.96	.009
	(25)	(25)	(0)		
37 . 10 10 11	37 1 1			•	

Note. df = 1 for all tests. Numbers in parentheses indicate number of responses coded as including the content type. Categories are listed by genre, with each significant coding category presented in descending order of frequency.

Analysis of moralization measures. In order to examine underlying causes of anger and disgust at music, a factor analysis was carried out on the measure of reasons for emotional response to the music created for this experiment. A maximum likelihood factor analysis with varimax rotation was run, to ensure the resulting factor matrix gave the most likely model to explain the data. Two items were removed from analysis at this point: Item 8, "Emotionally, I just can't listen to this music" and Item 13, "I dislike the idea of being associated with this music". Both were removed as they did not clearly load onto any one factor. After analysis of the scree plot it was determined that there were five major factors: the factor loadings can be seen in Table 7.

Table 7
Experiment 2: Factor loadings (Varimax rotation) of reasons for emotional responses to disliked music

music Item	Factor						
	1	2	3	4	5		
This music encourages inflicting pain and suffering on others	.816	057	.149	054	008		
This music encourages violating people's rights	.812	.081	.235	156	.115		
This music is associated with a group of people I find immoral	.734	.211	.091	.143	.154		
This music encourages killing others	.665	007	036	102	.055		
Listening to this music causes people to develop bad character traits	.643	.496	.111	062	.088		
Listening to this music is offensive	.603	.215	.366	152	.059		
This music is harmless*	.591	400	166	059	063		
This music is associated with a group of people I find unpleasant	.579	.254	.067	015	.195		
We demean ourselves by listening to this music	.539	.330	.271	150	.185		
I dislike the idea of living the lifestyle this music encourages	.476	.191	.401	344	.335		
Listening to this type of music is against my religious or spiritual beliefs	.468	.153	.168	.014	.153		
This music does not reflect on the character of the listener*	.019	.813	.032	.023	007		
Listening to this music is a sign that a person has bad character traits	.339	.679	.209	.007	.065		
Many good, moral people like this music*	273	.624	238	.094	054		
This music is not a good example of the artist's work	.106	.143	.910	115	.074		
This music is not a good example of the genre	.311	.123	.808	002	.054		
I dislike this music because it reminds me of things I have previously experienced	080	085	011	.921	192		
This music is associated with a previous unpleasant event in my life	043	.012	117	.882	150		
This genre is important to me	060	.002	.121	.160	843		
This artist is important to me	171	.012	217	.297	810		
I dislike the idea of being associated with this music	.402	.243	.313	223	.440		
Emotionally, I just can't listen to this music	.175	.164	.160	.098	.256		

Note. *= reverse-coded. Factor loadings above .4 are in boldface.

After examination of the rotated factor matrix, each factor was labelled according to its content. Factor 1 was labelled as "Immoral Content", as it contained items relating to general perceptions of immorality and encouragement of immoral actions. Factor 2 was labelled "Moral Character", as it contained items relating specifically to the music reflecting badly on the moral character of people who listen to and enjoy it. Factor 3 contained items relating to whether or not the music was a good example of its genre and the artist's work: as such, it was labelled "Example". Factor 4 contained items reflecting the listener's previous negative experiences of the music, and was named "Personal". Finally, Factor 5 contained items regarding the importance of that music genre or artist to the listener, and as such was named "Importance". Descriptive statistics for these factors can be seen in Table 8.

Table 8

Experiment 2: Descriptive statistics and tests of simple effects for factors underlying the reasons for emotional response to disliked music measure.

Factor name	Number of items		n	М	SD	F	p	$\eta_p^{\ 2}$
Immoral	11	Anger	47	3.17	1.40	16.54	<.001	.152
content	$(\alpha = .91)$	Disgust	47	4.28	1.22			
Moral	3	Anger	47	3.13	1.35	5.87	.017	.060
character	$(\alpha = .78)$	Disgust	47	3.83	1.46			
Bad	2	Anger	47	3.55	2.06	1.89	.173	.020
example	(r = .79, p < .001)	Disgust	47	4.10	1.76			
Personal	2	Anger	47	3.90	2.28	5.03	.027	.052
	(r = .84, p < .001)	Disgust	47	2.94	1.89			
Importance	2	Anger	47	3.35	2.02	4.97	.028	.051
	(r = .71, p < .001)	Disgust	47	2.53	1.50			

Analysis of factors in relation to the moral emotions. A 5 (Reasons, within) x 2 (Moral Emotion, between) ANOVA was carried out to assess the relationship of the five factors derived from the reasons for emotional response scale to the moral emotions of anger and disgust. There was a significant effect of reasons, F(4, 368) = 4.03, p = .003, $\eta_p^2 = .042$, but not of moral emotion, F(1, 92) = 0.38, p = .538, $\eta_p^2 = .004$. However, there was a significant interaction between reasons and moral emotion, F(4, 368) = 7.56, p < .001, $\eta_p^2 = .076$. Tests of simple effects were then carried out to explore which reasons elicited which emotion: responses containing the immoral content and moral character factors were elicited significantly more in the disgust condition than the anger condition, while the importance and personal factors were elicited significantly more in the anger condition than the disgust condition. The example factor was not significantly different between conditions. The results of these tests are summarised in Table 8.

Examining anger and disgust in response to relationship intimacy. A 6 (Levels of Relationship Intimacy, within) x 2 (Moral Emotion, between) ANOVA was carried out to explore to what extent anger and disgust were elicited by people of different levels of relationship intimacy with the participant listening to and enjoying the described music. There was a significant effect of both relationship intimacy, F(5, 450) = 63.08, p < .001, $\eta_p^2 = .412$ and moral emotion, F(1, 90) = 36.97, p < .001, $\eta_p^2 = .291$. However, there was no interaction between level of relationship intimacy and moral emotion, F(5, 450) = 0.19, p = .966, $\eta_p^2 = .002$.

As there was no significant interaction effect, a series of paired t-tests was then carried out to assess how levels of anger and disgust would vary in relation to the intimacy the listener had with the participant. As the level of intimacy (from stranger to romantic partner) increased, so did the level of experienced anger/disgust. Each level of intimacy was significantly different between the anger and disgust conditions, with participants being more

likely to feel disgust at the other person's enjoyment of the moralized music than anger.

These results can be seen presented in Figure 1.

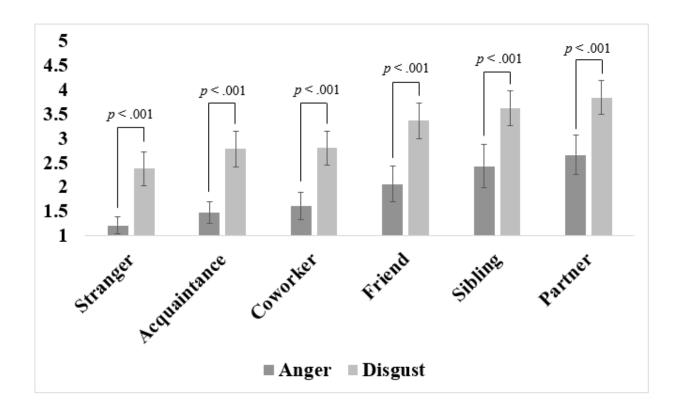


Figure 1. Experiment 2: Anger and disgust in response to disliked music being listened to and enjoyed by others of increasing levels of relationship intimacy to the participant. Error bars are 95% confidence intervals.

Measures of self-identification through music. Following an initial read-through of the data, a coding scheme was created to categorize the two words participants chose to describe their musical identity. This coding scheme was included as part of the larger coding scheme used for the experiment and can be found in Appendix B. It was then used by the same two coders to assign categories to each of the participants' self-descriptions, with the author of this thesis resolving disputes between them. Categories included references to being

a (non)varied listener, to style (frequency or enthusiasm) of listening, to functions of music including deliberate use of music to increase/decrease emotionality, search for meaning or bond with others, and self-identification through a preferred genre. Descriptive statistics for these categories can be found in Table 9.

Table 9

Experiment 2: Frequency of words used to describe identification-through-music style

Category	Frequency
Other	31
High Variety	29
Preferred Genre	23
Increasing Emotionality	16
Active/Enthusiastic	15
Listening	
Meaning Search	11
Frequency	6
Decrease Emotionality	5
Social Relatedness	4
Neutral words	3
Low Variety	2
M . 04 C .	4 1

Note. n= 94. Categories are presented by frequency of occurrence.

Given the high frequency of the "other" condition, an examination was carried out by the author of this thesis to explore what content was primarily populating this response type. A brief review of the data revealed that the high frequency of the "other" condition was largely due to participant tendencies to use supportive words to add intensity or grammatical correctness to their key point. Frequent occurrences in this category were the word "music" following a genre or valence description, and words such as "very" preceding a descriptive.

Some responses were also coded as "other" for being non-directional, for example "mood" which was neither category 3a (Increase Emotionality) or 3b (Decrease Emotionality).

Next, descriptive statistics were obtained for the single item importance of music scale, the reasons for listening to music scale (Lonsdale & North, 2011) and the collective self-esteem scale (Luhtanen & Crocker, 1992). These can be seen in Table 10. The means for the single item scale (M = 5.00, SD = 1.43), and the identity subscale on the collective self-esteem scale (M = 3.93, SD = 1.33) were both above the mid-point for the respective scales, with the identity subscale on the reasons for listening to music scale (M = 2.85, SD = 1.02) also nearly at the midpoint implying that the sample was moderately identified, but not extremely so.

Table 10

Experiment 2: Descriptive statistics for quantitative measures of identification through music

Scale	Subscale	N	М	SD
Reasons for listening to	Negative mood management	94	4.05	0.74
music scale	Personal identity	94	2.85	1.02
	Surveillance	94	2.47	0.84
	Positive mood management	94	4.55	0.62
	Interpersonal relationships	94	2.84	0.88
	Diversion	94	3.81	0.92
Collective self-	Membership	94	4.71	0.96
esteem scale	Private	94	5.63	0.97
	Public	94	5.08	0.97
	Identity	94	3.93	1.33
Single-item measure	Identity	92	5.00	1.43

Finally, a series of correlational analyses were run to explore if any of the self-identification measures were associated with any of the five factors of the reasons for emotional response to music scale described above. For the reasons for listening to music scale, the negative mood management scale was positively correlated with the previous experiences of the music factor, r(92) = .26, p = .010. There were also marginal correlations between the surveillance subscale and the example factor, r(92) = -.18, p = .092, and between the diversion subscale and the importance factor, r(92) = .18, p = .078. For the collective self-esteem scale, there was one significant correlation between the public subscale and the moralization factor, r(92) = -.21, p = .040. Finally, there was a marginal correlation between the single-item identification-through-music scale and the example factor, r(90) = -.17, p = .097. All correlations can be seen in Table 11.

Table 11. *Experiment 2: Correlational matrix*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Negative Mood	1															-
Management																
2. Personal Identity	.429**	1														
3. Surveillance	$.268^{*}$.453**	1													
4. Positive Mood Management	.470**	.054	.081	1												
5. Interpersonal Relationships	.226*	.251*	.379**	.145	1											
6. Diversion	.375**	.167	.144	.391**	.361**	1										
7. Membership	.135	.138	033	.015	005	.032	1									
8. Private Self-	.192†	.096	124	$.269^{*}$	070	.135	.473**	1								
Esteem																
9. Public Self-	022	180†	107	.187†	109	062	$.328^{*}$.376**	1							
Esteem																
10. Identity	$.232^{*}$.530**	.152	.042	037	008	.381**	$.297^{*}$.161	1						
11. Single-item	.539**	.490**	$.286^{*}$	$.284^{*}$.122	.115	$.228^{*}$.315*	.024	.521**	1					
identity measure																
12. Moralization	.123	.047	008	.025	.020	046	126	024	214*	152	007	1				
factor												ale ale				
13. Moral character	.126	.132	.026	106	116	127	032	.007	137	.119	.018	.501**	1			
factor												ale ale	ate.			
14. Example factor	030	130	175†	.093	.033	.028	052	019	129	131	174†	.474**	.303*	1		
15. Personal factor	.264*	.155	.169	.059	.064	.063	.062	.034	086	.100	.089	210 [*]	082	161	1	
16. Importance factor	.078	.033	071	.098	.032	.183†	.114	.068	034	.108	.006	278*	052	134	.390**	1

Note. ** p < 001. * p < .05, † p < .1

Discussion

This experiment was carried out to examine the relationships between anger, disgust and music content, in the interest of expanding on information gained from the first experiment. The findings from these data were very similar to those of the previous experiment: in both samples, disgust was associated with group harm concerns, objectionable content and language, with violence being either significantly or marginally associated with disgust. The two samples did also have unique concerns about disgusting music, with the MTURK workers describing more concerns over references to drug use and the UK student sample expressing more condemnation of overt sexuality. Following the nonsignificant trends of the previous experiment, in this dataset anger resulted in more mentions of music used to regulate emotion and which contained reminders of previous negative experiences.

Different genres were also found to be related to different concerns about music, with hip hop being associated with violence, language and horrific content, pop with intrusiveness and aesthetic concerns, RnB/soul with concerns about group harm and sexuality, and rock with aesthetics. While these results differ in some places from the previous study, there is also some overlap. In both samples, participants associated RnB/Soul music with concerns about sexual content, rock with less concerns about sexuality and objectionable content than the other genres, and hip hop music with more concerns over violence, language and objectionable content. This shared response pattern supports the idea that different music genres elicit different concerns in the listener: the difference between the two samples is also somewhat expected as the two samples are likely to have different life experiences that would bias what specific content they found most concerning. This in turn may explain some of the difference in levels of felt anger and disgust in response to these music types.

Initial examination of specific moral responses to music content suggests that there may be five factors underlying moralization. These are perceived immoral content, implications of poor moral character, whether or not the music is a good example of its genre/artist, personal reasons for the individual disliking the music, and importance of the music style to the individual. Of these, the immoral content and moral character factors are more associated with disgust and the personal and importance factors are associated more with anger. These findings, together with those of the qualitative measures, provide further support for the "disgust-moral" hypothesis from the previous chapters. Where before there was only support for the relationship between disgust and immoral content, now the relationship between anger and personal factors has achieved significance.

Further interesting findings regarding the differing role of anger and disgust at music can be found in the analysis of the relationship between intimacy with a hypothetical person who listens to the condemned music and the resulting moral emotion felt at that listener. As relationship intimacy increased, so too did the level of felt moral emotion. Across all levels, disgust was significantly higher than anger. It could therefore be suggested that proximity to the self can affect how severely a person moralizes music content. Additionally, the levels of disgust being higher than those of anger across all levels of intimacy may suggest that offensive music is overall more likely to be seen as disgusting than anger-inducing regardless of contextual factors. The association between disgust and immoral content established by both the qualitative and quantitative measures may make sense when viewed in the light of Cottrell and Neuberg (2005), who found that disgust is a response to objects which threaten group values. It may be possible that the disgust condition eliciting stronger overall reactions indicates that participants feel afraid that if someone they know listens to the music, this may in turn cause immorality or threat to enter the participant's life or social group, necessitating emotional responses and potentially action to avoid negative consequences.

In regards to the identification through music measures, very little was found to connect the identification measures with reasons for responding to music with the moral emotions. As always, it is important to acknowledge here the potential role of methodological error: while measures of current identity through music were taken, these may not have accurately captured the participants' experiences of using music for functions related to identity management, such as construction or maintenance of group identity. However, some interesting findings were present in the analysis of the participant-generated words to describe their music listening style, which suggests that the majority of people in the study identified themselves primarily by a specific genre of music or by their open-mindedness/willingness to try new music. This is in line with suggestions made by previous research. Specifically, music of a specific genre is a source for parasocial contact with peers during adolescence (Mulder et al., 2009). As such, participants who have only recently aged out of adolescence are likely to maintain their music-centred identity until such time as they reclassify themselves. The large percentage of participants who identify themselves by a specific genre are therefore in line with expectations.

Musical omnivorousness being the other largest category is also in line with the literature. As explained by Coulangeon (2015) and Veentra (2015), musical omnivorousness is often associated with individuals who are attempting to negotiate interactions between their own social status and those of the people around them in the way that best suits their needs. Students, by leaving home and beginning university, will be undergoing a similar process of attempting to reconcile the identity they have had before arriving at university with the culture into which they have recently moved. This may explain the tendency to embrace multiple music styles, as a way of bridging both former and new identities.

Taking all of the above into account, it can be suggested that there is some evidence for the elicitation of moral emotions by music content. Anger has been found on one occasion

to respond to personal concerns such as previous negative experiences associated with the music, and disgust has been found across both studies to be felt in response to a variety of types of perceived immorality, including harm to social groups, overt sexuality and references to violence. However, evidence for the relationship between self-identity and moralization is proving harder to find. While the student sample was fairly strongly identified, they may fall short of the need to moralize music through which they identify. It may be the case that this is only found in the highest of identifiers: those for whom their identity is not only based strongly on a type of music, but on a specific type requiring boundary protection.

Due to this, a decision was made to divide ongoing research. Studies to seek evidence for moralization of music which constitutes an identity threat amongst the highest identifiers were separated into a second line of research. A qualitative study demonstrating viability of this topic will be presented in chapter eight.

The next two chapters will present follow-up studies to the moralization findings of the experiments so far. These next two studies were designed to seek confirmatory evidence of the response patterns from the research so far, while also addressing some limitations of the experiments thus far. Firstly, as mentioned previously this experiment has shown signs of difficulty with measuring and capturing high levels of identification in participants. It is hoped that creating a new line of research to address these individuals specifically will address this concern.

Secondly, as discussed in the previous chapter, anger and disgust have a tendency towards covariance (Marzillier & Davey, 2004) and so far have only been tested separately. The following research will therefore address this by presenting participants with descriptions of moralized content, and exploring to what extent this elicits anger and disgust when the two

are measured together. A measure designed by Salerno and Peter-Hagene (2013) was selected for this task, due to previous success in measuring anger and disgust simultaneously while also capturing their independent effects on participants.

Finally, it is important to acknowledge that while there was some substantial overlap between responses in the first and second experiments, this overlap was not perfect. As such, there is potentially a role of cultural variation to be addressed in regards to what content is likely to elicit moralization of music. In the short term, this concern was addressed by using the same source of participants between this previous experiment and the next study, in the hopes that underlying differences in moralization tendencies would be minimal and thus less likely to confound the data. In the long term, it may be beneficial to address the likely role of cultural and intergroup differences in moralization of music by testing a larger range of populations from across different cultures, regions and demographics. However, this would require collaboration between many different researchers, and thus was deemed out of the immediate reach of this thesis.

Taking all of the above into consideration, it was decided that the next experiments would begin with descriptions of disliked content and measure the resulting anger and disgust that participants felt in response to these descriptions. It was determined that if the resulting data fell into the same pattern as the open-ended data, with anger at personal concerns and disgust at immorality, this would support the findings so far by demonstrating that they were not a result of the specific methodology used. Evidence to support the previous response pattern would also add strength to the overall theory by demonstrating that even when participants had the option of using both emotions to describe their experience of all disliked content, they instead continued to use anger to respond to personal reasons for disliking the music and disgust to condemn perceived immorality.

In addition to the above, participants were asked to consider what actions they may take in response to disliked music: this was included to allow for exploration of what behavioural consequences moral emotions in response to music may motivate. In response to the finding that participants feel more strongly about music which intrudes into their social space, measures were also used to determine to what extent each type of disliked content was seen as a potential reputation threat to the participant. In the next chapter, a review of previous literature into behavioural consequences of anger and disgust will be given, the next study presented, and the results of the study interpreted with reference to the previous literature.

CHAPTER 6

6.1 The consequences of anger and disgust at music

Across the last two experiments, evidence has been found of the elicitation of anger and disgust by music. The results of these studies suggest a pattern of disgust at immoral content and anger at personally-offensive content that may go some way to explaining the examples of moralized language used against music in the first chapter. With these results in mind, the focus of this thesis was turned to two areas of anger and disgust at music which have yet to be explored. Firstly, the following study was designed to start with moral violations of different types, and test the extent to which they elicited anger and disgust. This would allow both emotions to be tested at once, in response to the same object, and therefore be compared to one another. Additionally, the extent to which anger and disgust elicit behavioural tendencies was tested to explore what consequences may arise in response to condemned music.

Examination of this topic will provide two benefits: firstly, it will address to what extent anger and disgust at music motivate behaviour. This could explain actions such as campaigning against disliked music or supporting bans on certain music styles. Secondly, studying the consequences of anger and disgust at an object which is both technically harmless and lacking in physically-contaminating content offers the opportunity to shed new light on a topic of much interest to moral emotion researchers. Previous research has generally agreed that anger and disgust both elicit behavioural consequences, with anger seen as an approach-oriented emotion and disgust as an avoidance-oriented emotion. However, much research also finds the opposite, suggesting that anger and disgust may both elicit both approach and avoidance tendencies. As such, this research offers the opportunity to examine the behavioural consequences of anger and disgust in response to a technically harmless, non-

physically-contaminating object. In doing so, it may contribute to understanding of behavioural consequences of anger and disgust on a wider level. In order to situate the current research, the existing literature into behavioural consequences of anger and disgust will first be covered.

6.2 Evidence supporting a unique pairing of anger to approach, disgust to avoidance

As discussed by Fischer and Roseman (2007), anger is usually seen as an emotion associated with approach behaviours. When an individual feels anger, especially at someone who they are close with, they seek to coerce the individual into an agreement which ends the unpleasant situation and restores the relationship to its former state. Evidence for the relationship between anger and approach behaviours has been found in a number of contexts. Carver and Harmon-Jones (2009) reviewed a number of studies that studied the consequences of anger from a number of perspectives. Across studies including both physiological and behavioural measures of anger and approach, a consistent connection between the two was found. In a study of real-world behaviours (in this case, in the service industry) anger (as compared to dissatisfaction) lead to customers using approach behaviours to "get back at" companies which had displeased them, for example through going out of their way to spread negative information about the company (Bougie, Pieters, & Zeelenberg, 2003). This finding is particularly interesting given that it measures approach tendencies in a naturalistic setting. In work by Lerner and Keltner (2001), anger resulted in significantly more risky decisions being made in response to scenarios describing disease prevention. When compared to participants who had been induced to feel fear, participants were significantly more likely to gamble on uncertain methods of counteracting a hypothetical disease. This may be an indication that the participants were less likely to hesitate or take caution with their actions, in favour of approaching the situation directly.

Anger has also been found to interact with personal identity processes when considering what actions to take in certain situations. Yzerbyt, Dumont, Wigboldus, and Gordijn (2003) tested the relationship between self-categorization and action tendencies in an intergroup context and found that anger not only mediated the relationship between these variables but had a unique relationship with the impulse to carry out offensive actions. This supports work by earlier research: Mackie, Devos, and Smith (2000) explored the effects of anger on action tendencies against an outgroup. Their work found that anger was increased by perceptions that the ingroup was in a strong position against the outgroup, and by perceptions of collective support for action. The resulting anger then lead to increased support for actions which moved against the outgroup. As such, anger can lead to support for hostile approach actions on both individual and group levels, often acting as a mediating variable between context and likelihood of action. If acted on, these aggressive impulses can then be replaced with a sense of satisfaction (Maitner, Mackie, & Smith, 2006).

While the above evidence forms a coherent argument for the role of anger in eliciting approach behaviours, a concern with each paper is that no attention was paid to the potential effects of disgust. Disgust is frequently found to correlate with anger (Marzillier & Davey, 2004) and may have potentially played a role in the action tendencies described. However, there is also a significant amount of research which measures both anger and disgust which supports the unique pairings of anger to approach and disgust to avoidance.

Frijda, Kuipers, and Ter Schure (1989) measured a number of emotions and their associated action tendencies. Even when measured together, anger was significantly correlated with items measuring the impulse to "move against" a target, and disgust with the impulse to avoid the target. From their work, anger was found to correlate only with the desire to attack and conquer a situation, supporting the argument that the two emotions have separate action tendencies.

Similarly to the above work by Lerner and Keltner (2001), Harle and Sanfey (2010) carried out an exploration of risk-taking behaviours in the context of induced emotion, this time including an inducement of disgust. When playing an economic decision-making game, participants accepted less unfair offers following disgust (versus anger) induction.

Conversely, angry participants accepted more unfair offers. This would appear to support the role of anger in moving towards a situation and disgust away from a situation. However, participants exposed to the disgust and anger inductions reported similar levels of disgust in response to their stimuli, raising the concern that disgust may therefore have played a role in both conditions.

Polman and Kim (2013) also explored the effects of anger and disgust on economic decision-making. In their studies of resource management tasks, participants who described an anger-inducing memory gave less of their resources to the group, and took more from the shared resource pile (although the results for this were only of marginal significance). In opposition to this, participants who described a disgusting memory gave more to the group and took less from the shared pile. The researchers argue that this is a demonstration of approach versus avoidance behaviours, with angered participants approaching and keeping the potential resources close to themselves, and disgusted participants instead choosing to expel the resources from themselves. However, a potential concern regarding both this and the previous study by Harle and Sanfey (2010) is that keeping and rejecting resources may not perfectly map onto approach and avoidance tendencies- the decision as to what to keep and accept into one's own space may be motivated by different processes than the decision to enter and engage with someone else's space. However, the similar findings between the studies do suggest a consistent trend in resource management predicted by feelings of anger and disgust.

Unique relationships between anger and approach and disgust and avoidance have also been found in a socio-moral context. Gutierrez and Giner-Sorolla (2007) presented participants in three studies with various stories designed to elicit anger and disgust. When anger in response to the described scenarios was measured, it was found to predict approach behaviours in a way that disgust did not. Similarly, when disgust at the described scenario was measured, it predicted avoidance behaviours with no significant effect of anger. This pattern was consistent across three studies.

Some evidence for the pairing of anger with approach and disgust with avoidance has even been found in the context of media. Newhagen (1998) exposed participants to images taken from TV news broadcasts, which were pre-tested to ensure they elicited anger and disgust. Participants then used a joystick to either move the image towards themselves (approach behaviour) or away from themselves (avoidance behaviour). Anger was found to elicit the most approach of any emotional category (versus non-emotional, disgusting and fearful images). Disgust was found to elicit the most avoidance. Participants also demonstrated the best memory of anger-inducing images, suggesting that the images had been allowed to stay with the participant in a way that avoidance-inducing images had not. However, because of the research method used (a joystick which could only move in one direction) it is not clear what the results would demonstrate if both approach and avoidance tendencies could be measured in response to each emotion.

Taking all of the above evidence into consideration, it is clear that a large amount of research exists that connects anger uniquely to approach behaviours, and disgust to avoidance behaviours. However, many of these papers tested only one of the two emotions or were otherwise limited in their ability to draw explicit conclusions about the potential for a unique relationship. As such, research addressing the opposing argument will now be reviewed.

6.3 Evidence against a unique pairing of anger to approach, disgust to avoidance

In a number of studies, the relationships between anger, disgust, approach and avoidance were found to be more complex than a unique relationship. Nabi (2002) found that whether the emotions predicted unique action tendencies or not depended on the specific item. Some items, such as wanting to avoid something, wanting to hit something, or wanting to lash out at something, fit the expected relationship of disgust to avoidance and anger to approach. However, avoidance items such as moving away from the object and turning away from the object, as well as the approach item regarding overcoming an obstacle, were all roughly equal in response to anger and disgust. Peters and Kashima (2007) presented participants with descriptions of people whose actions elicited anger, disgust or other emotions. Anger was found to significantly elicit both actions intended to "approach against" the person and actions which would avoid and reject the person. Disgust was only marginally associated with avoidance, with the mean score of approach behaviours being close (if not significantly so) to those of avoidance.

Hutcherson and Gross (2011) also found a more complex relationship between the emotions and their resulting action tendencies. Their results suggested that anger at the time of a recalled event was significantly correlated with actions to stop the offender. However, both disgust and anger were correlated with the desire to punish the offender, with disgust having a stronger relationship with desire to punish than anger. Also of note was that only anger at the time of the study was associated with active avoidance of the offender. This, along with the two studies above, suggests that anger and disgust may have a more complex relationship with the action tendencies of approach and avoidance than thought, especially on an individual level.

Mackie and Smith (2015) explored the role of anger and disgust in regards to confrontation between groups. They found that anger was associated with support for verbal, physical, and actual confrontations with the outgroup. However, they also found a significant relationship of disgust with support for an attack on the outgroup. They also found disgust to be positively related to tendencies for dehumanisation of and moral attack on the outgroup, both of which have been connected to an increased likelihood of extreme forms of intergroup hostile approach behaviours such as ethnic cleansing and genocide. As such, this research suggests that both anger and disgust may play a role in intergroup hostile approach tendencies.

One potential explanation for the conflicting results found by research is that there may be extraneous variables affecting the relationships between felt emotion and action tendencies. Averill (1983) suggests that this may include the role of language use in research. This paper compared the understanding of anger and aggression by psychologists and lay people of the time, and found that the two were different in a number of ways. Psychology at the time (as summarised by a "straw person" style argument) was described as holding the belief that anger was always connected to aggressive action tendencies. However, when lay people described their experiences of anger nearly any action was found to come as a result. This varied from humour, to reconciliation, to aggression. This leads to the question of whether anger truly always leads to aggression, which could then be channelled by the individual into a different coping technique, or if it actually leads to a number of different impulses, some of which are not being caught by current research methods. Also of note in this paper was the difference in perceived benefits of anger. Psychology at the time described anger as a mostly negative, destructive emotion. However, in the stories given by lay people, while anger was rarely described as positive or enjoyable, it was nonetheless seen as a beneficial emotion (to both angered individual and the target of their anger) in a large

percentage of responses. This study raises the question of whether a difference in understanding between researchers and lay people, and the ability of researchers to bridge this gap, may be an explanation for mixed findings on behavioural tendencies in response to felt emotion.

An alternative perspective was provided by research carried out by Bossuyt, Moors, and De Houwer (2014). They argue that while anger does lead to aggression, not all forms of aggression involve actively approaching the target. Their study instead suggests that both approach behaviours such as fighting and avoidance behaviours such as stubbornly turning one's back on a person can be seen by participants as forms of aggression. As such, even if anger had a unique relationship with aggression, this may not universally translate to approach tendencies if avoidance actions can provide a better outlet for that aggression.

Russell and Giner-Sorolla (2013) argue that the possibility of certain actions may vary by context. They found that anger was usually associated with consequences such as aggression, punishment, and rebuking an offender. However, reparations and avoidance behaviours were also commonly found in response to anger. They argue that contextual details such as the potential influence of perceived social accountability may influence which behaviours are selected to deal with a situation. As such, anger would be a context-sensitive emotion, changing an aggressive impulse into an alternative action depending on the situation. Context was also found to affect the responses to disgust: while avoidance was usually preferred, situations where the disgusting object could not be avoided were instead met with purification actions. As such, the relationship between anger, disgust and resulting consequences could be affected by the context in which an event takes place.

Another potential variable that could affect the relationship between anger, disgust and behavioural tendencies could be the role of personal involvement. Phillips and Smith

(2004) found that the unique relationships of anger to approach and disgust to avoidance held only in some analyses. They explored both cases where the participant was actively involved in the situation they described, and other cases where the participant had only been an observer in the situation. When analyses were carried out on these cases as one large dataset, the unique relationships held. When the cases were examined separately, more complex patterns emerged. When the participant was directly involved in a situation, anger was associated with the tendency to directly sanction the offender. However, disgust was split evenly between the tendency to directly sanction the offender and avoid them, suggesting that disgust can motivate either approach or avoidance when the situation is personal. When the participant was instead observing the situation without being directly involved, disgust led to more direct sanctions than avoidance, potentially implying that disgust may motivate more approach tendencies when other people are at risk. Given these results, it is possible that the personal involvement of an individual, and/or the presence of others affected by the situation, may interact with the extent to which approach and avoidance are elicited by anger and disgust.

To summarise the above research, in a number of cases anger and disgust have been found to have a complex relationship with the impulse to approach or avoid a situation. This relationship may be explained by extraneous variables, such as differences in understanding between researchers and their participants, differing styles of aggressive impulse, contextual information, and the role of personal involvement and the involvement of other people. The next section will give a brief overview of other concepts that may influence the effects of anger and disgust on behaviour.

6.4 Other concepts influencing anger and disgust effects on behavioural tendencies

Something that must be taken into consideration when discussing behavioural tendencies is the role of individual differences. As explained by Coan and Allen (2003) individuals who are high in trait behavioural activation are more likely to report experiencing emotions in terms of action tendencies. As such, studies with a high percentage of participants who are high in this trait may find stronger patterns of approach and avoidance tendencies than other participant samples.

The valence of anger and disgust could also have a moderating effect on to what extent they motivate behaviour. Chen and Bargh (1999) demonstrate in their research that positive emotions tend to lead to higher levels of approach behaviours versus negative emotions, which are more commonly associated with avoidance. Negative emotions have also been found to narrow an individual's mental repertoire of potential actions in a given situation (Fredrikson & Branigan, 2005), which may influence what a participant feels is possible in response to anger and disgust.

Finally, it is important to remember that anger and disgust do not exist by themselves: other emotions often influence how people may interact with a situation. For example, Coleman, Williams, Morales, and White (2017) tested the role of different emotions on behaviour in a task that involved choosing between multiple options. They found that, compared to anger and disgust, fear was most likely to encourage participants to make a choice, and discourage them from deferring their opportunity to choose. While controlling for all emotions is not possible in the majority of research, keeping in mind the potential interactions with other emotions may help to ensure understanding of the implications of anger and disgust.

6.5 Methodological concerns in research exploring anger, disgust and resulting behavioural tendencies

At this point, it becomes important to consider the extent to which the relationship between anger, disgust and behavioural tendencies may be affected by the methodological decisions made during research. Firstly, the research listed previously does not all measure the same emotions. Some focus primarily on anger, some primarily on disgust, and some on one or both in comparison to a third emotion such as fear. These methodological decisions may further confuse the pattern of action tendencies in response to emotion. For example, if only anger is measured and disgust is not, then the likely covariance of anger and disgust (Marzillier & Davey, 2004) suggests that disgust too may have played a role in the resulting action tendencies. The inclusion of third (or more) emotions may also naturally account for some of the significant effects in the studies, further confusing the role of each emotion in guiding action tendencies, and making it more challenging to determine how these emotions may therefore guide responses to disliked music.

Secondly, the preceding research used a number of different methods to both elicit and measure anger and disgust, and this may have implications for their resulting action tendencies. The previous research can be loosely categorised into three types of emotional stimuli: participant's own memories, visual media, and written scenario. Each of these may have impacted upon the results of the experiments. In many cases, such as Polman and Kim (2013), Fischer and Roseman (2007) and Frijda et al. (1989), the participants were asked to recall their own memories in order to elicit in them the emotions of anger and disgust.

However, anger can be a very personal, self-relevant emotion (Hutcherson & Gross, 2011).

Looking at the findings of Phillips and Smith (2004), there is a chance that during particularly self-relevant incidents of anger participants could be biased towards approach motivations. In their research, they found a direct connection between anger and direct sanctions against a

transgressor: but only when their crime directly involved the participant. As such, by specifically using participants' own memories of anger to elicit the emotion, researchers may be biasing their results towards the approach motivation. It is worth noting that all three of the above-listed studies using memory to induce anger found evidence in support of the exclusive anger-approach/disgust-avoidance pairings. However, even this pattern is not completely clear-cut. In both the original paper by Hutcherson and Gross (2011) and in Nabi (2002) memory elicitation paradigms elicited results that did not support the exclusive pairings. This provides further reason to approach the next study with caution- even amongst studies using similar styles, there has been some inconsistency in resulting action tendencies.

In some cases, the preceding research relied on written media in order to elicit the desired emotional states. Maitner, Mackie, and Smith (2006) had their participants read stories about the participants' ingroup being attacked: in scenarios where the ingroup retaliated, the anger dissipated. Yzerbyt et al. (2003) also found a unique relationship between anger and offensive action tendencies when participants responded to hypothetical situations. However, Peters and Kashima (2007) found that when presented with stories about individuals who elicited anger or disgust, anger-inducing stories resulted in both approach and avoidance behaviours, with disgust only marginally associated with avoidance. This, too, demonstrates that even studies using similar methodology have found inconsistent relationships between the emotions and resulting action tendencies.

Finally, some of the previous research used direct elicitation of anger and disgust using visual media such as images and film clips. Newhagan (1998) explored approach and avoidance tendencies in response to pre-rated images designed to elicit anger or disgust and found evidence supporting the unique pairings. Harle and Sanfey (2010) also found this unique relationship following emotion induction through film clips. However, in both of these cases this relationship was based upon a forced-choice paradigm. In Newhagan (1998)

participants used a joystick to either push away or pull the image towards them, and in Harle and Sanfey (2010) participants made the choice to either accept or reject the offer they were given. If these studies had included a method by which both approach and avoidance towards the same object could be measured, then it is possible that these objects may have elicited both tendencies. This is especially true for Harle and Sanfey (2010) for whom while there was a significant relationship between disgust, anger, and their expected behavioural results, this was not a perfect relationship- participants still showed some signs of the opposite expected behaviour.

Taking all of the above into account, it is important to be particularly open-minded in regards to the research carried out for this thesis because not only does previous research not align in regards to the relationships between anger, disgust, approach and avoidance, but there is evidence that this may be impacted to some extent by the methodology used. This latter concern is especially relevant as action tendencies in response to music have rarely been empirically studied- and therefore no previous work is available to guide the hypotheses of the following work. As such, the decision was made to approach the next study in an open-minded way. It was predicted that there may be a relationship between anger, disgust, and resulting action tendencies, but this relationship was left open for exploration using the collected dataset.

6.6 The present study

Evidence for the effects of anger and disgust on approach and avoidance tendencies is unclear as to extent to which there is a unique pairing of anger to approach and disgust to avoidance. While some research has found this unique pairing, other studies suggest that this relationship is more complex, and may be confounded by a number of other variables.

As such, the following study was designed to test the consequences of anger and disgust at music in a way which was guided by the findings reviewed above. Firstly, rather than using separate conditions for anger and disgust, it was decided that this experiment would begin with descriptions of disliked content in music and measure both emotions in response to all categories of disliked content. It was hoped that this would allow for examination of the extent to which the previous findings of this thesis replicated when scaled measures, rather than open-ended responses were used to test anger and disgust at music. It was also hoped that this would allow for clearer analysis of the extent to which the two emotions co-occur. These findings would also be used to seek confirmatory evidence for the findings of the previous studies in regards to the pattern of anger in response to more personally relevant content and disgust to general immoral content.

Measures were designed to test the extent to which anger and disgust elicit hostile approach and avoidance behaviours in a music-specific context. This decision was made to enhance applicability of the research line, by not only explaining why music may be moralized but also what forms this may take outside of a research setting. A new measure was created for this study in recognition of the fact that unlike previous research into approach and avoidance behaviours, music is a preference rather than an intuitively controversial situation such as resource distribution or competition with an outgroup. As such, behaviours that would be seen as hostile approach in the context of previous research situations (e.g. intergroup conflict) could be seen as too extreme in the context of music, and previous measures therefore invalid for this specific task. Avoidance, too, was seen as potentially taking on more subtle roles in response to a preference, and therefore measures were also created for this action tendency.

Previous research has also connected disgust to reputational contamination fears: this can involve both moral contamination of the individual and contamination of intergroup

boundaries. In regards to moral contagion fears, Rozin, Haidt, McCauley, Dunlop, and Ashmore (1999) found during a study of disgust sensitivity that their participants were unwilling to touch or wear items associated with the Nazi party. This may suggest that to some extent, people fear that exposure to immoral content may act as a form of reputational contagion, whereby their own moral standing becomes damaged through association with the immoral object. To test whether a similar effect is found in response to immoral music, measures of moral contamination by the condemned music were added to this study. While moral contagion measures exist in previous literature, as with hostile approach and avoidance it was seen as best to create a new measure to ensure ecologically valid items, rather than items adapted from irrelevant situations.

In regards to group boundary contamination, findings by Cottrell and Neuberg (2005) and by Berger and Heath (2008) state that disgust is used to moralize and defend group boundaries, and that cultural objects are used as a method of ensuring one's group values remain unchanged. As such, it was next determined that a measure of how strongly the participant wants to avoid being publicly associated with the music (as opposed to being exposed to it in private) would shed some light on the extent to which the music was seen as a potential contamination threat to an individual's association with their ingroup. If the music was seen as threatening to group boundaries, participants would want to keep away from associations with it to avoid misidentification. If the music went against one's group values, becoming associated with it could also damage the participant's standing in their ingroup. Participants therefore would be unlikely to take this risk without a fairly substantial reward. However, if the music was not seen as contaminating, the risk of being associated with it was theoretically outweighed by the benefit of financial compensation, which should have been reflected in lower amounts of money being required before participants would associate themselves with music which is neither disgusting nor contaminating. To what extent

participants found it easy to recall examples of each type of disliked content in music was also tested, to determine how accessible examples of each moralization type are.

The non-directional aims for this study were therefore to examine the extent to which participants found it easy to generate an example of music disliked for specific content types, and to what extent elicited anger and disgust influenced tendencies towards hostile approach and avoidance behaviours. In regards to the latter, there were two competing theories: the first is that anger-inducing music would exclusively elicit hostile approach tendencies, and disgusting music would exclusively elicit avoidance tendencies. The second theory is that the relationship between these two would be more complicated due to the role of extraneous variables. This would be reflected by anger-inducing and disgusting music eliciting levels of hostile approach and avoidance tendencies that do not fall into a pattern supporting the above exclusive pairings. The specific predictions for this experiment were as follows:

- Personally-important music and music that reminds participants of previous negative experiences will elicit more anger than disgust.
- 2) Immoral music and music with implications for the listener's moral character will elicit more disgust than anger.
- Disgusting music will score higher than anger-inducing music on moral contagion measures.
- Disgusting music will score higher than anger-inducing music on measures of reputational concerns.

Method

Participants. One hundred and six undergraduate psychology students were recruited from the University of Kent via the Research Participation Scheme and were awarded course credit for their time. Participants were only recruited if they were 18 years of age or older and

were able to listen to music. The sample had a mean age of 20.24, and was 93.4% female. Due to the within-participants design, this sample provided over 99% power to detect a medium sized effect (f = .25) and approximately 80% power to detect a small effect (f = .15).

Procedure. Participation in this study took place in a laboratory setting, in individual, noise-reducing cubicles. Participants were briefed about the experiment in person, before being instructed to complete the study online on the computers to which they were assigned. Each questionnaire began with an information sheet detailing the participant's right to withdraw and right to confidentiality, as well as a consent form. Participants were also asked to create an identification code to ensure anonymity of the data. Participants were then presented with the five counter-balanced blocks of questions described below, before being debriefed.

Materials. Participants completed five blocks of questions, presented in a randomised order. Each block was nearly identical except for the key sentence, which was a description of a type of music, and any required adaptations to match the rest of the items to the key sentence. This description was presented at the top of each page, and formatted to draw attention to the fact the description was changing between pages. The five sentences were adaptations of the five factors derived from the previous study. Specifically, participants were asked to think of a type of music which they disliked because "It encourages activities you believe are morally wrong" (to elicit the "immoral content" factor), "Because it is a clear sign that the listener is of bad moral character" (to elicit the "moral character" factor), and "Because it is associated with a bad experience that you have had" (to elicit the "personal/previous negative experiences" factor). The "importance" and "bad example" blocks were merged into one ("Because it is a bad example of a type of music which is important to you") as phrasing sentences for these that were clearly different from the perspective of the participant proved challenging. The fifth block therefore used aesthetic

reasons for disliking the music as a prompt ("Because it is aesthetically unpleasant") in acknowledgment of the frequency with which aesthetic concerns were generated by participants in both conditions for both previous studies.

Participants were prompted with these five categories of music, then were asked what music they had thought of in response to the prompt sentence. Next, in order to separate anger from disgust, a 5-by-5 grid designed to measure anger and disgust on the same scale was adapted from Salerno and Peter-Hagene (2013). The use of this grid allows for some of the correlation between anger and disgust to be removed, by forcing participants to separate their ratings of the two emotions. Anger was presented on the Y-axis, and disgust on the X-axis. The text preceding the question read:

"Below you will see a grid. Please use this grid to indicate how angry and disgusted you feel by the music you just selected. The music can make you feel high in both, low in both, or high in one and not the other. Along the bottom of the grid is how disgusted you feel about the music type, with low disgust on the left through high disgust on the right. Along the left side of the grid represents how angry you feel about the music type, from low anger on the bottom to high anger at the top. Please click on the box that lines up with your level of disgust and your level of anger at the music type.

For example, if you felt a music type deserved a '3' for anger and a '1' for disgust, you would click on box '3-1'. Please make sure to only select one box."

Following this, a measure created specifically for this study was presented to the participants: this was a 12-item, 3-subscale questionnaire designed to measure hostile approach and avoidance tendencies, as well as moral contagion fears. For the purposes of this research, "hostile approach" items were designed to include behaviours which required making a deliberate effort to reduce the use of music by other people. "Avoidance" items

were designed to reflect the participant making an effort to remove the music from only their own social and physical space. The "moral contagion" items were designed to reflect fears that the person's moral standing in society would be damaged in some way by association with that music.

Each subscale consisted of four items: items for the hostile approach subscale included "I would support reasonable restrictions on who is able to listen to this music" and "I would post on social media to encourage people not to listen to this music". Items for the avoidance subscale included "I would avoid being seen in public with a person who was visibly a fan of this music" and "I would change the channel on the TV or radio if this music started playing". Items for the moral contagion fears subscale included "I would feel uncomfortable if a copy of this music was saved onto an electronic device that people knew was mine" and "I would be seen as a less moral person if people thought that I enjoyed this music". All items were rated on a 5-point Likert-type scale where "I" = "Strongly Disagree" and "5" = "Strongly Agree". The full text of this measure can be found in Appendix D.

In designing this measure, it was deemed necessary to balance validity with realism. While some situations may lend themselves to obvious hostile approach behaviours such as intergroup violence, it was determined that this research would benefit from a slightly more subtle approach. In day-to-day life, extreme actions such as violence towards someone who created or distributed disliked music was seen as unlikely: music is considered by society to be a preference, and therefore as less worthy of extreme acts than situations like war or resource distribution. "Hostile approach" actions were therefore defined for this study as those which involved a direct action, specifically to remove the music from the social space of other people, not just the self. Less direct, less violent means such as petitions, bans and protests were seen as truer to day-to-day interactions with music than extreme hypotheticals, for example a direct confrontation with the artist. Hostile approach and avoidance techniques

were therefore primarily differentiated as follows: actions which involved taking an active movement towards the music to remove it from the space of other people were seen as hostile approach. Actions which involved taking an active movement to remove the music from only one's own space were seen as avoidance. It was hoped that by defining the action tendencies as such, a more ecologically valid set of results could be obtained.

Following the behavioural tendencies measure, participants were then presented with the following question:

"How much money would you need to be paid before you would appear in a busy public place wearing clothing which marked you as a fan of the music you described? Use pounds, and decimals for pence. Type 0 if you would wear that clothing without being paid for it."

It was hoped that this question would provide a measure of reputational concerns, with higher required price being associated with more desire to protect one's reputation from the immoral music. Logically, if one is afraid of becoming contaminated by association with an object, a higher financial inducement would be required before that fear could be overcome.

Finally, participants were asked how easy it was for them to think of an example of music that fit the description they were given on a 5-point Likert-type scale, from "1" = "...very difficult" to "5" = "...extremely easy"

Results

Reliability scores for hostile approach, avoidance and moral contagion subscales. Cronbach's Alpha was calculated for each of the subscales created for this study. The hostile approach ($\alpha = .83$ -.90) and avoidance ($\alpha = .74$ -.84) subscales were of acceptable reliability, whereas the moral contagion subscale reliability scores were much lower ($\alpha = .65$ -.72).

Scores for the scale with each item removed were examined, at which point it was discovered that the item reading "If this music released an updated version with the problems fixed, I would be willing to listen to it" was reducing subscale reliability. With this item removed from the analysis, the moral contagion subscale demonstrated suitable reliability scores ($\alpha = .77-.86$).

Interaction between content of moralized music and elicited moral emotion. A 5 (Reasons, within) x 2 (Moral Emotion, within) repeated-measures ANOVA was run to determine whether the content of disliked music had an effect on the levels of moral emotions that were elicited by the music. Main effects were found for content, F(4, 332) = 8.61, p <.001, $\eta_p^2 = .094$, and emotion, F(1, 83) = 12.81, p = .001, $\eta_p^2 = .134$. An interaction effect between the two was also found, F(4, 332) = 4.02, p = .003, $\eta_p^2 = .046$. A series of tests of simple effects were then carried out to determine the direction of any significant differences. Music containing immoral content, F(1, 83) = 16.37, p < .001, $\eta_p^2 = .165$, implications of immoral character, F(1, 83) = 20.33, p < .001, $\eta_p^2 = .197$, and unpleasant aesthetics, F(1, 83)= 8.23, p = .005, $\eta_p^2 = .090$, all demonstrated higher levels of disgust than anger. The music being a bad example of its type, F(1, 83) = 1.13, p = .290, $\eta_p^2 = .013$, resulted in slightly more disgust than anger, and negative experiences of the music led to slightly higher levels of anger, F(1, 83) = 0.22, p = .640, $\eta_p^2 = .003$, but neither of these latter two findings were significant. The significant findings above suggest a similar pattern of disgust at immoral content to that seen in the previous two studies. However, the co-occurring pattern of anger at personal concerns was not seen in this dataset. A summary of these results is presented in Figure 2.

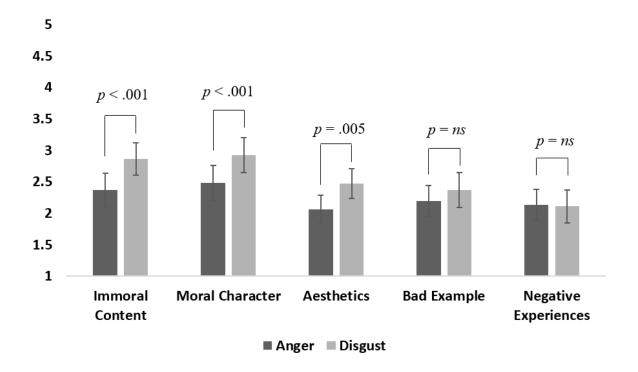


Figure 2. Study 3: Felt anger and disgust in response to different types of disliked content in music. Error bars are 95% confidence intervals.

Interaction between content of moralized music and behavioural consequences.

A 5 (Reasons, within) x 3 (Behavioural Consequences, within) repeated-measures ANOVA was run to determine whether the reasons for disliking the music elicited different behavioural tendencies. Main effects were found for reasons, F(4, 408) = 22.08, p < .001, $\eta_p^2 = .178$, and behavioural consequences, F(2, 204) = 45.76, p < .001, $\eta_p^2 = .310$. An interaction effect was also found, F(8, 816) = 8.64, p < .001, $\eta_p^2 = .078$. Tests of simple effects were then carried out to explore the effect of reasons for disliking the music in eliciting different levels of behavioural consequences. Significant simple effects were found for hostile approach, F(4, 99) = 16.44, p < .001, $\eta_p^2 = .399$, avoidance, F(4, 99) = 6.97, p < .001, $\eta_p^2 = .220$, and moral contagion fears, F(4, 99) = 12.04, p < .001, $\eta_p^2 = .327$.

While avoidance behaviours were elicited more than hostile approach behaviours by all types of content, hostile approach behaviours were more likely in the immoral content and implications of immoral character blocks. These two blocks also elicited the highest levels of moral contagion fears. Figure 3 demonstrates the results of the simple effect tests comparing behavioural tendencies in response to each type of content.

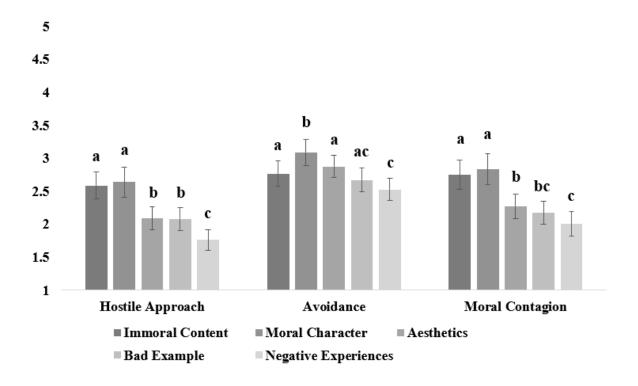


Figure 3. Study 3: Behavioural tendencies in response to different types of content in disliked music. Error bars are 95% confidence intervals, where means within each category which lack a common subscript are significantly different. Results are Bonferroni corrected within each consequence type (alpha = .005).

Directly connecting anger and disgust to behavioural consequences. In order to test for a direct effect of anger and disgust on each of the behavioural consequences of hostile approach, avoidance and moral contagion concerns, a series of mixed model analyses was carried out. This analysis was selected on the grounds that it would allow for a direct test of the influence of anger and disgust on hostile approach, avoidance and moral contagion, as opposed to the indirect effects through content type from the above analyses. Most importantly, it would allow for this test to be performed while generalising the analysis across multiple contexts which had previously been listed as separate variables. These analyses were carried out using the mixed model feature of SPSS version 25: the existing datafile for the study was first restructured, such that each content type within each subject became a separate case. An index code was added to refer to each type of content. Anger, disgust, hostile approach, avoidance and moral contagion were each also restructured into one single variable for each combination of content and subject. The participant-generated ID code was used as the random subject variable, and the analysis was set up to include the random effect of the intercept.

The model included one nominal variable (content type) and two covariates (anger and disgust) as predictors. The rationale for choosing these specific predictors was as follows: anger and disgust were included to test the direct effects of these emotions on each of the behavioural consequences. As content type has previously been demonstrated to elicit different levels of the behavioural consequences, this variable was included in the model to prevent this effect from being confounded as an effect of anger and disgust. The coefficients for the separate content types lacked a meaningful reference category to allow for dummy coding to be carried out and so could not be interpreted. The variable was therefore included only as an overall covariate. This model was then run three times, testing each of the three behavioural consequences as the dependent variable in turn.

When the above model was run testing hostile approach tendencies as the dependent variable, all variables were significant (residual estimate .32, SE = .024). Upon examination of the coefficients, disgust, t(415.02) = 9.55, p < .001, and anger, t(437.73) = 7.87, p < .001, both had a significant influence on hostile approach. When the dependent variable was avoidance, both anger, t(446.49) = 4.31, p < .001, and disgust t(430.07) = 9.57, p < .001, were significant predictors (residual estimate .40, SE = .30). Finally, when moral contagion was the dependent variable, both anger, t(447.43) = 6.83, p < .001, and disgust, t(430.47) = 9.48, p < .001, were significant predictors (residual estimate .44, SE = .03). These results can be seen summarised in Table 12.

Table 12.

Study 3: Estimate of fixed effects on hostile approach, avoidance and moral contagion fears

Esti	mates of Fixed Effec	ets: Hostile	Approach		
Parameter	Estimate	SE	df	F	p
Intercept	0.61	0.11	1, 299.72	92.62	<.001
Content			4, 356.10	16.20	<.001
Anger	0.26	0.03	1, 437.73	61.97	<.001
Disgust	0.28	0.03	1, 415.02	91.20	<.001
1	Estimates of Fixed E	ffects: Avo	idance		
Parameter	Estimate	SE	df	F	p
Intercept	1.59	0.11	1, 307.21	275.16	<.001
Content			4, 357.88	2.34	.055
Anger	0.15	0.04	1, 446.49	18.59	<.001
Disgust	0.31	0.03	1, 430.07	91.58	<.001
Est	imate of Fixed Effec	ts: Moral C	Contagion		
Parameter	Estimate	SE	df	F	p
Intercept	0.77	0.12	1, 306.79	92.35	<.001
Content			4, 358.35	10.29	<.001
Anger	0.25	0.04	1, 447.43	46.68	<.001
Disgust	0.32	0.03	1, 430.47	89.87	<.001

Taken together, these findings suggest that both anger and disgust have direct effects on the behavioural consequences of disliked music. Additionally, across all three behavioural tendencies disgust had a stronger effect than anger.

Measuring the strength of reputational concerns in response to disliked music.

Participants were asked to indicate how much they would need to be paid in order to wear clothing which advertised the disliked music they had described. This was presented as an open question with no set guidelines. Participant responses were found to vary so significantly as to make parametric analyses unusable, as across all categories, participants had listed numbers in excess of millions of pounds. As such, a non-parametric Friedman test was carried out to determine to what extent disliked content in music would result in different levels of reputational concerns. The categories were significantly different, $\chi^2(4, N = 98) =$ 32.06, p < .001. Immoral content (Median = £50.0_a), implications of immoral character (Median = £50.0_a) and unpleasant aesthetics (Median = £30.0_a) all resulted in higher levels of reputational concern, as represented by higher amounts of money being required before the participant would allow themselves to be seen as associated with the music. Lower amounts were required for music seen as being a bad example of its type (Median = £20.0_b) and for music associated with previous negative experiences (Median = £15.0_b), which were seen as less threatening to one's reputation by participants. In the previous summary, different subscripts indicate that the means are different by Wilcoxon's signed rank test. The Kendall's coefficient was .082, suggesting that the effect size was relatively small.

Ease of recall by content type. A one-way repeated measures ANOVA was run to determine whether any of the content types participants were prompted to recall were significantly different in ease of generation. There was no significant difference between conditions, F(4, 408) = 0.65, p = .631, $\eta_p^2 = .006$. All content types were roughly equal in ease of recall.

Discussion

This study aimed to explore how content within moralized music types affects levels of experienced moral emotions and behavioural tendencies. Prediction one suggested that music which is offensive for personal reasons would elicit more anger than disgust. This prediction was not supported: the difference between levels of anger and disgust in response to personal concerns was not significant in this dataset. Prediction two stated that music associated with immorality would elicit more disgust than anger. This was supported by the analyses, with both morally-relevant categories (as well as aesthetics) eliciting significantly higher levels of disgust than anger. Prediction three suggested that measures of moral contagion fears would be higher in response to music seen as disgusting. This was supported by the analyses: music which elicited perceptions of the listener as being of poor moral character were seen as morally contaminating, suggesting the listener feared that they too would be perceived as of poor moral character. Finally, prediction four suggested that measures of reputational concerns would demonstrate a similar pattern, with disgusting music being seen as more threatening to one's reputation versus anger-inducing music. While no music was significantly anger-inducing in this study, the music types which elicited the most disgust (immoral content, implications of immoral character, and aesthetic concerns) also elicited the highest amounts of required payment before participants would associate themselves with the music, suggesting that disgusting music did lead to stronger reputational fears.

In regards to the exploratory elements of the study, all categories of content were seen as relatively similar in terms of easiness to generate, ensuring that rarity of exposure to these music types did not confound the other findings. As participants found it equally easy to recall examples of all five content types, this provides some support for their continued

usage. If one or more types were harder to generate it would call into question the extent to which these content types were valid across multiple samples.

Anger and disgust-inducing music were then examined in relation to their elicitation of hostile approach and avoidance tendencies. While no music elicited significantly more anger than disgust, some evidence for an interaction was found. All five categories of disliked content elicited more avoidance than approach, in line with the findings by Chen and Bargh (1999) that negative emotions towards an object prompts avoidance. However, of particular note is that both categories containing immoral content, which were rated as significantly more disgusting than anger-inducing by participants, produced the highest tendencies towards hostile approach behaviours of all categories. While negative experiences of the music did not significantly elicit anger (as opposed to disgust) in this sample, it has been associated with anger in the previous experiments but here led to the lowest level of approach tendencies of all the five categories. This finding may support the argument presented previously that relationships between anger, disgust and behavioural tendencies are more complex than unique pairings between anger to approach and disgust to avoidance, especially when considering that both emotions were significant, positive predictors of all three behavioural consequences in the mixed model. Disgust being more connected to a situation than anger is particularly note-worthy for being different from the majority of reviewed literature.

Interesting to note at this point is the role of the aesthetic qualities of the music. In the previous two studies, examples of bad aesthetics were elicited roughly equally in response to both anger and disgust conditions. However, in this study participants rated bad aesthetics as resulting in significantly more disgust than anger. The aesthetics category also elicited more hostile approach tendencies than the negative experiences category. As such, regardless of lacking in immoral content this music too is seen as a disgusting object, which also elicits some interest in acting against the music.

One specific finding which is important to address is the overall low levels of anger found in response to disliked music in this study. This may raise the possibility that anger is relatively infrequent in response to music. However, when asked to do so in the previous two studies participants were able to describe incidents where they felt that music had made them feel angry. This suggests three potential explanations for the relatively low levels of anger found in this study. Firstly, it is possible that anger is less frequently felt in response to music compared to disgust- participants in the previous study were therefore accurately describing a memory of an event which is relatively infrequent. The second possibility is that "anger" as described by the previous participants was a different emotion- such as frustration or irritation- being presented as anger in an attempt to provide an answer to the question with which they were presented. Finally, the possibility must be considered that when participants were presented with both disgust and anger simultaneously, they chose to rely more heavily on the term they felt was more accurate- such that anger, while being felt by participants, was under-described in favour of the more powerful emotion. This potential lack of relationship between anger and music will be discussed in more depth in the later parts of this thesis.

Another limitation which is important to address at this point is that participants did have the option of reusing the same piece of music between conditions- for example, by naming the same music for two or more blocks. However, this was deemed as being not only ecologically valid- many people do dislike music for more than one reason- but also potentially as a benefit to the analyses. Given that significant differences were found between conditions regardless of content reuse, this suggests that the underlying effects are fairly strong, allowing them to be robust enough to be demonstrated even when masked by the use of overlapping content. As such, the option to reuse music was kept in the following study: although participants were encouraged to think of separate pieces of music, the potential inaccuracies caused by participants trying to come up with unique ideas instead of their most

accurate choices was seen as more detrimental to the results than potential overlapping of categories.

Moving onto the overall pattern of these results, it is possible that in general, disgusting things are avoided regardless of whether that disgust is moral or not: there is, however, an exception to this rule. As mentioned by Russell and Giner-Sorolla (2013), when it is impossible to avoid an object of disgust, avoidance tendencies become an impulse to purify the object. For example, physically disgusting objects that cannot be easily avoided, such as those that are on an individual's body or in their living space, may be approached with the aim to clean the object. This both removes the disgusting object from the individual's sight, and prevents the likelihood of further contamination of the surrounding area. It is possible that music containing immoral content, which is seen as potentially morally contaminating, may act in a similar way.

If immoral content within music is allowed to remain part of popular culture, the ideas within may become normalised and part of mainstream thought. As such, the person may be motivated to "cleanse" this disgusting content from society, to prevent further spread of these contaminating ideas. Given the approach measures included items involving actions such as supporting a ban on the music in question, or taking part in a campaign against the music, this would suggest a tendency towards action designed to prevent the music from reaching more people.

This idea of "cleansing" immoral content being behind the tendency to approach disgusting music may also explain why approach tendencies are so low towards music with more personal reasons for being disliked. Unlike disgusting music, there is no need to prevent others from being affected by the music in question, as the previous negative experiences and memories only affect those who hold them. With no need to protect others from potential

contamination, music that is disliked for personal reasons is best avoided, for example by leaving the room or changing a channel on which it is playing.

While this idea may be supported by the current dataset, these ideas fall in line with only one hypothesis in a field where there are multiple competing theories. In order to test whether this pattern consistently appears in the context of anger and disgust at music, another study was run to replicate these findings and extend them. Additional measures were then developed to determine to what extent these behavioural tendencies were a result of a desire to cleanse society and prevent further contamination.

CHAPTER 7

7.1 Existing evidence for the cleansing hypothesis

In the last chapter, participants demonstrated a tendency to approach music they disliked on moral grounds in a hostile manner in order to remove it from society. By way of analogy to physically-contaminating products, it was suggested that this may result from an urge to "cleanse" immoral content from society. This would both prevent the content from harming the listener themselves and protect society from further contamination.

Some preliminary support for this "cleansing hypothesis" can be taken from previous literature, as a small body of research exists linking cleanliness with moral judgements. For example, the ability to cleanse oneself affects the severity of judgements that a person may make (Chapman & Anderson, 2013). Evidence from Zhong, Strejcek, and Sivanathän (2010) suggests that this may be due to a link between the "clean self" and the "virtuous self". By cleansing the body, a person may begin to feel morally purer. This in turn leads to the feeling of being comparatively morally superior to others, resulting in a tendency towards harsher moral judgement. The same concept has been found to work in reverse, with threats to moral purity leading to stronger desires for cleaning items and behaviours, as well as increased access to cleaning-related concepts (Zhong & Liljenquist, 2006). This may imply that when one's moral purity is threatened, the symbolic link between one's cleanliness and one's reputation is activated in the mind of the person, leading them to use physical cleansing in an attempt to cleanse their reputation.

This symbolic link between cleanliness and purity has also been found to relate to concerns regarding intergroup boundary setting. As explained by Cottrell and Neuberg (2005), disgust can be elicited by threats to ingroup values. Disgust can lead to fear over intergroup contamination: this in turn may potentially elicit cleansing behaviours. This may

best be illustrated by de Zavala, Waldzus, and Cypryanska (2014), who found that imagining contact with gay men (a group traditionally the target of moral judgement based on fears of perceived contamination) led to increased desire for physical cleansing, specifically targeting the body parts relevant to the contact. As such, as well as a desire to cleanse from immoral content, disgust may also lead to a desire to cleanse associations with undesirable outgroups from the individual's surroundings. This allows the person to feel that their morals and ingroup values remain unchanged.

Taking this research into account, it can be suggested that moral emotions elicited by music may also demonstrate this pattern of cleansing immoral content or content which poses a threat to group values from where it can harm the individual. Specifically, by performing actions designed to "cleanse" society of immoral content, the person can ensure their own continued reputational purity by dissociating themselves from the music. Cleansing in this way would also prevent these threatening values from being adopted by other people, especially younger generations who are often seen not only as more impressionable, but also as more in need of protection from harm and corruption.

However, in recent years the validity of the connection between physical cleansing and morality- the so-called "Macbeth Effect"- has been called into question. In a meta-analysis of 15 studies testing this effect (Siev, Zuckerman, & Siev, 2018) little evidence was found for the effect overall, and only mild evidence was found for the effect under certain conditions. A replication of the original study by Zhong and Liljenquist (2006) was carried out by the Many Labs 2 project (Klein et al., 2018) and failed to find significant results. Repeated failure to replicate was also reported by Earp, Everett, Madva, and Hamlin (2014).

Given these results, it is important to proceed with caution when attempting to explore a connection between cleanliness and morality. If the Macbeth effect does not replicate, then

starting examination of the cleansing hypothesis using measures of physical cleanliness would be ill-advised. However, given the promising results of the previous study, it is still worth attempting to investigate the hypothesis. As such, this next study aimed to explore cleansing of musically-induced corruption in more symbolic ways. These included removal of offensive content through lyrical re-writes, removal of cultural symbolism through stylistic edits, and removal of association with a disliked artist through having the music re-recorded by a new person. It was hoped that by using non-physical cleansing measures in response to non-physical contamination, a more direct, and more replicable result may be found.

This next study was therefore designed to test the cleansing hypothesis of anger and disgust in response to disliked music types. Specifically, it attempted to determine whether music can lead to desires to cleanse perceived immoral content from society, and if so, how a person would choose to make this happen. How this differs between music which elicits anger and music which elicits disgust was also examined. Given that the role of anger has varied across the previous three studies, the effects of anger were examined in a non-directional manner.

In order to best test the new aspects of this theory, the following decisions were made in regards to the methodology of this study. Firstly, in acknowledgement of research suggesting a link between moralization and disliked outgroups, a new block of questions was added to test the effects of associations with disliked people on anger and disgust in response to music, in the interest of determining whether the desire to cleanse content due to perceived intergroup threat applies to the elicitation of moral emotions by music. This block was tested alongside those describing moralized content from the previous studies, allowing for comparisons of anger and disgust at disliked outgroups against these emotions in response to other forms of moralization. Given the previously-described work by Cottrell and Neuberg

(2005) and de Zavala et al. (2014) it was expected that music liked by disliked outgroups would elicit more disgust than anger.

Measures testing hostile approach and avoidance behaviours in the same manner as the previous study were then used. This would firstly allow for an examination of whether previous results replicated, but also would explore whether the same patterns of action tendencies were found in response to music moralized due to association with disliked outgroups.

Next, to explore the extent to which "cleansing" actions were likely to have their intended effect, a set of changes were designed that were seen as potentially decontaminating the music. Specifically, these measures each changed one aspect of the moralized music. Stronger willingness to engage with the music once these changes were made was used to explore the potential impact of cleansing behaviours and shed light on how these may occur in settings outside of research. Findings for this measure were also seen as potentially relevant to the examples of moral panic at music which were described in the first chapter.

It is important to note at this point that the chosen measure of cleansing impulses is deliberately indirect. Direct cleansing- for example, by including items such as "The artist should re-record this music and change the lyrics"- was seen as unlikely to be recommended by participants. As explained by Rozin et al. (1999) the values of autonomy are highly valued in liberal, western societies. Saying that a person or group should, or must, do something to their music was therefore seen as a potential violation of the right of autonomy, and therefore less likely to be reported by participants. However, by asking if the participant would willingly engage with the music once it had already been willingly "cleansed" by the relevant people, this could indicate the extent to which cleansing impulses perform their required task. If condemned music becomes acceptable once the disliked content is removed, this indicates

that the cleansing impulse has done its job, removing the content which can cause corruption and rendering the music clean and safe for society to engage with. However, as music has already demonstrated unusual patterns of results in the previous studies, tests using this measure were assessed in a non-directional manner.

Two key predictions were generated for this study:

- 1. As in the previous study, disgusting music will result in higher levels of hostile approach behaviours when compared to other music types.
- 2. Due to their responding to different types of perceived threat, anger- and disgust-inducing music types will require different changes be made to their content before they are deemed acceptable to listen to.

Method

Participants. Eighty-five participants were recruited via the Research Participation Scheme at the University of Kent. All participants were first- or second-year psychology undergraduates, and were awarded course credit for their time. In order to take part, participants were required to be over the age of 18, able to listen to music, and could not be recruited if they had taken part in the previous study. The sample was 83.5% female, with a mean age of 19.46.

Procedure. Once recruited, all participants attended individual sessions in the university laboratories. The study took place on computers situated inside sound-dampening cubicles to help prevent the participants from being distracted during the tasks. All measures and forms were presented onscreen, beginning with an information sheet and consent form. Once these were filled out, participants completed four blocks of measures. All participants completed all blocks, which were counter-balanced to prevent order effects.

Each block of questions began with a sentence describing a type of music which may be disliked. Participants then completed the rest of the materials below in order. Once all blocks had been completed, participants were debriefed and awarded their course credit.

Materials. The question stem and descriptive sentences for the four types of disliked content read as follows:

"Please take a moment to think of an example of music which you dislike: [Because it encourages activities you believe are morally wrong/Because it is musically unpleasant: the sounds it contains are not enjoyable to listen to/Because it reminds you of a previous, negative experience that you have personally had/Because people you don't like listen to it.] This can be a genre, artist or specific song. While you are welcome to re-use your answers at any point in the survey, it is encouraged that you try to think of different examples if possible."

These blocks differ slightly from the ones used in the previous study: to allow for a more streamlined analysis, it was decided to combine the "immoral content" and "moral character" blocks into a single "immoral behaviour" block. It was hoped that this would provide clearer patterns between moral and non-moral categories, to prevent overlap between the two from confusing the analyses. The "bad example" block was removed as it was deemed less relevant to the hypotheses being tested. Finally, a new block measuring the effects of "disliked people" was added to test the effects of intergroup value threat in music.

The anger and disgust measure was the same grid used previously, taken from research by Salerno and Peter-Hagene (2013). The hostile approach and avoidance subscales were the same as the ones from the previous study, with the four items regarding moral contagion removed (also to streamline analysis).

A question was then included in each block to explore what the specific disliked content was that participants were responding to. The decision was made to not include this question in the "negative experiences" block to prevent participants from becoming upset at previous memories or changing their answer to avoid discussing memories that they would rather keep private. The specific content questions for the "immoral behaviour", "aesthetics" and "disliked people" blocks therefore read: "What immoral behaviour does this music encourage?", "What was it about the sound of this music you disliked?" and "Who are the people you dislike who listen to this music?"

Finally, the question stem measuring willingness to listen to the music read: "Would you listen to this song willingly?" If "no" was selected, the following question appeared: "If no, how easily could someone get you to listen to it by..." followed by a 5-point Likert-type scale ("I"= "Never"; "5"= "Very Easily"), with three items, those being "Having the artist change the lyrics", "Having the same artist change the style of the music" and "Having a different artist record it with similar lyrics and style".

Results

Reliability analyses for hostile approach and avoidance subscales. In order to ensure that the hostile approach and avoidance subscales were suitably reliable, especially when testing the new blocks of disliked content, reliability analyses were run for all subscales. Both hostile approach ($\alpha = .78-.86$) and avoidance ($\alpha = .73-84$) were found to be of a suitable level of reliability for analysis to continue.

Interaction between content of disliked music and moral emotions elicited by music. In order to determine how specific types of disliked content may affect elicited levels of anger and disgust, a 4(Content, within) x 2(Moral Emotion, within) repeated-measures ANOVA was run. Main effects were found for both content, F(3, 207) = 3.50, p = .016, $\eta_p^2 =$

.048, and emotion, F(1, 69) = 5.72, p = .019, $\eta_p^2 = .077$, as was a Content x Emotion interaction effect, F(3, 207) = 5.49, p = .001, $\eta_p^2 = .074$. A series of tests for simple effects was run to determine which types of disliked content resulted in significantly different levels of anger and disgust. Music disliked as a result of perceived immoral content, F(1, 69) = 13.09, p = .001, $\eta_p^2 = .160$, or due to being aesthetically unpleasant, F(1, 69) = 7.87, p = .007, $\eta_p^2 = .102$, was significantly associated with more disgust than anger. Music disliked for being associated with disliked people elicited more disgust than anger, F(1, 69) = 1.16, p = .285, $\eta_p^2 = .017$, and music disliked for being associated with previous negative experiences elicited more anger than disgust, F(1, 69) = 0.81, p = .370, $\eta_p^2 = .012$. However, these latter two differences did not reach significance. These results can be seen summarised in Figure 4.

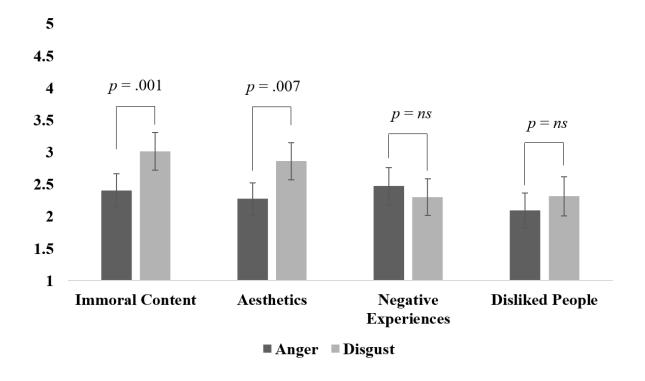


Figure 4. Study 4: Levels of felt anger and disgust in response to different disliked content in music. Error bars are 95% confidence intervals.

Interaction between content of disliked music and behavioural tendencies. To test the effect of specific types of disliked content on resulting behavioural tendencies, a 4 (Content, within) x 2 (Behavioural Tendency, within) repeated-measures ANOVA was carried out. Main effects were found for content, F(3, 249) = 12.15, p < .001, $\eta_p^2 = .128$, and behaviour, F(1, 83) = 100.61, p < .001, $\eta_p^2 = .548$, and an interaction effect was found for Content x Behaviour, F(3, 249) = 13.73, p < .001, $\eta_p^2 = .142$. A series of tests for simple effects was then carried out to examine the effect of each content type on elicited action tendency: significant simple effects were found for both hostile approach, F(3, 81) = 21.45, p $<.001, \eta_p^2 = .443$, and avoidance, $F(3, 81) = 7.55, p < .001, \eta_p^2 = .218$. Levels of avoidance behaviours were higher than levels of hostile approach behaviours for all types of disliked content. However, hostile approach behaviours were significantly higher for music encouraging immoral behaviours than all other types. Aesthetically unpleasant music and music associated with disliked people were also significantly higher in hostile approach tendencies than music which was associated with previous negative experiences, although they were not significantly different from one another. In regards to avoidance behaviours, music disliked for being aesthetically unpleasant elicited significantly more avoidance than all three other content types. The other three categories did not significantly differ from one another. These results can be seen summarised in Figure 5.

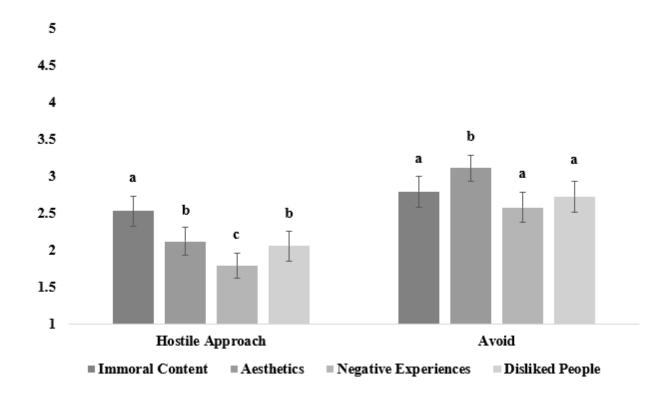


Figure 5. Study 4: Behavioural tendencies in response to different types of content in disliked music. Error bars are 95% confidence intervals. Means within a cluster which lack common subscript differ significantly, Bonferroni corrected within each consequence type (alpha = .005).

Directly connecting anger and disgust to behavioural consequences. In order to test for a direct effect of anger and disgust on hostile approach and avoidance tendencies, a pair of mixed model analyses were carried out. These were prepared and set up in the same manner as in Chapter 6, with the single exception that there was no variable for moral contagion fears in this study. As such, this model included one nominal variable (content type) and two covariates (anger and disgust) as predictors, with hostile approach and avoidance tendencies acting as the two dependent variables. As before, no meaningful

reference category existed for content type to allow for dummy coding to take place, and therefore content was run as a single covariate.

When hostile approach was included as the dependent variable, both anger and disgust were significant predictors (residual estimate .30, SE = .03). Both anger and disgust were also significant predictors when the dependent variable was avoidance (residual estimate .40, SE = .04). These results can be seen summarised in Table 13.

Table 13
Study 4: Estimates of fixed effects on hostile approach and avoidance

Estimates of Fixed Effects: Hostile Approach								
Parameter	 Estimate	SE	df	\overline{F}	p			
Intercept	1.13	0.12	1, 251.85	88.82	<.001			
Content	•		3, 222.69	13.69	<.001			
Anger	0.16	0.03	1, 275.13	22.33	<.001			
Disgust	0.25	0.03	1, 270.44	65.22	<.001			
	Estimates of Fixed Effe	ects: Avoi	dance					
Parameter	Estimate	SE	df	F	p			
Intercept	1.70	0.13	1, 259.66	179.38	<.001			
Content		•	3, 222.80	6.19	<.001			
Anger	0.22	0.04	1, 282.64	30.72	<.001			
Disgust	0.22	0.04	1, 277.82	38.68	<.001			

These results once against suggest that both anger and disgust may influence hostile approach and avoidance tendencies. Anger and disgust were significantly correlated with one another in the immoral content r(75) = .40, p < .001, negative experiences, r(76) = .28, p = .001

.014, and disliked people, r(75) = .38, p = .001, blocks, but not in the aesthetics block, r(75) = .09, p = .440.

Interaction between content of disliked music and required changes. A Chi-Square test of independence was run to determine if the specific type of disliked content affected whether or not the participant would listen to the music that was described with no changes made. There was a significant difference, $\chi^2(3) = 17.05$, p = .001, where 22 (26.19% of responses) participants would willingly listen to the music encouraging immoral behaviour, five (5.88% of responses) participants to the music which was aesthetically unpleasant, 25 (29.41% of responses) to the music associated with previous negative experiences and 21 (24.71% of responses) to the music which was associated with disliked people.

In order to test how specific types of disliked music may affect the type of changes that would make the music acceptable to listen to, a 4 (Content, within) x 3 (Required Changes, within) repeated-measures ANOVA was run. No main effect was found for the specific content that was disliked, F(3, 120) = 0.77, p = .512, $\eta_p^2 = .019$. However, a main effect was found for the type of changes required, F(2, 80) = 21.23, p < .001, $\eta_p^2 = .347$, and an interaction effect between specific disliked content and the type of required changes was also found, F(6, 240) = 7.51, p < .001, $\eta_p^2 = .158$. A series of tests for simple effects was then carried out to determine the effect of content type on desired changes, with significant results for immoral content, F(2, 39) = 11.03, p < .001, $\eta_p^2 = .361$, aesthetics, F(2, 39) = 24.03, p < .001, $\eta_p^2 = .552$, previous experiences, F(2, 39) = 11.48, p < .001, $\eta_p^2 = .370$, and disliked people, F(2, 39) = 8.88, p = .001, $\eta_p^2 = .313$. Music disliked as a result of encouraging immoral behaviours led to participants requiring that the lyrics or style be changed. All other types of disliked content led only to the style, as opposed to either lyrics or artist, being required to change. These results can be seen summarised in Figure 6.

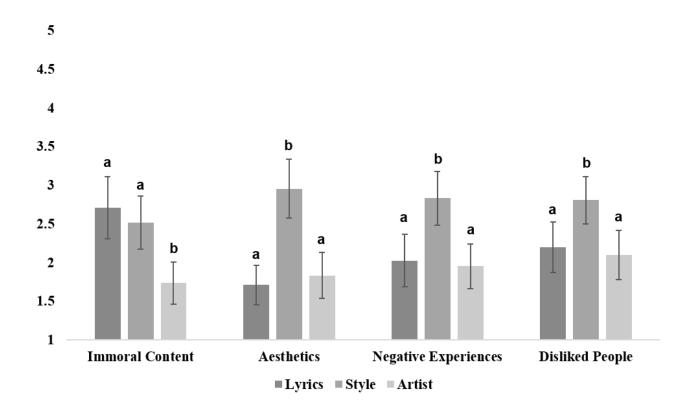


Figure 6. Study 4: Required changes to disliked music by content type. Error bars are 95% confidence intervals. Means within a cluster which lack common subscript differ significantly, Bonferroni corrected within each content type (alpha = .005).

Discussion

These results provide support for some aspects of both the findings of the previous study, and the predictions generated for this study. Prediction one was that disgusting music would lead to higher levels of hostile approach behaviours when compared to other music types. This prediction was supported by the data: music disliked for encouraging immoral behaviours generated a significantly higher level of hostile approach tendencies than all other types of disliked content. Music which elicited aesthetic dislike or was associated with

disliked people were also both more likely to result in hostile approach behaviours than music associated with previous negative experiences. Additionally, the mixed model analysis demonstrated a direct effect of disgust on hostile approach behaviours.

Prediction two was that anger and disgust would lead to different changes being required before the music that elicited them was deemed suitable to listen to. This was indirectly supported: music disliked for encouraging immoral behaviours (which was seen by participants as more disgusting than other music types) led to more desire to change the lyrics than any other type of music. While all content types elicited desire to change the style of the music, immoral content was the only one which demonstrated this interest in changing the lyrics.

These findings may provide support for the cleansing hypothesis. Participants were more likely to approach and fix music which was immoral (and therefore likely to contaminate society) and to do the same with music which was associated with disliked people. This latter finding may suggest that participants were more willing to try and change music they deemed a threat to ingroup values as a result of being associated with a disliked outgroup. This would also explain the required changes to the music: by changing the lyrics, any references to immoral behaviour, criminality etc. can be removed and replaced with something that would not contaminate the minds and values of the next generation. By changing the style of music associated with disliked outgroups, the cultural associations elicited by that music type would also be removed, thus preventing contamination of the ingroup's values.

In regards to anger, music associated with previous negative experiences (which was seen as anger-inducing in the second experiment) led to the lowest levels of both hostile approach and avoidance behaviours of all types of disliked content. However, the mixed

model analysis did find a significant effect of anger, with higher levels of anger leading to more hostile approach and avoidance tendencies. It may be possible that certain types of personal content such as negative previous experiences may lead to a person not wanting to interact with the music type at all, whether to get rid of it or remove it from their space. However, when content type is controlled for there may be a chance that anger has a direct effect on behavioural tendencies. More specific analyses would be needed in order to better make this connection. In the previous chapter, the possibility was raised that anger was felt relatively infrequently in response to music. In this study, moderate levels of anger were found, with each of the four categories eliciting mean levels of anger at or around the midpoint of the scale. Taking this alongside the relative ease with which participants generated examples of anger at music in the first two studies, it could be possible that anger is overall felt less frequently and intensely towards music when compared with disgust. However, it may still play some small but unique role in contributing to action tendencies.

One more point which should be addressed is the continuing pattern of results in regards to music which is aesthetically bad. In the previous study, a unique role of aesthetics was found where bad aesthetics elicited both disgust and hostile approach tendencies, but to a lesser extent than immoral content. A similar pattern of results has emerged in this sample: participants rated music with bad aesthetics as being nearly as disgusting as music with immoral content, but as with the previous study the hostile approach tendencies elicited by this was lower than that of immoral music (although still significantly higher than in response to music which elicited memories of previous negative experiences).

This pattern of results may suggest an alteration to the disgust-moral hypothesis.

Specifically, while the pattern of disgust at immoral music has been consistently replicated, there may exist a second, non-moral version of disgust at music which targets bad aesthetics.

While this prediction was made before as part of the anger-moral hypothesis, none of the associated anger at immoral content was found in any of the four studies.

As such, these findings can provide further insight into the role of anger and disgust in condemning disliked music. As with the initial studies, disgust has been demonstrated as a response to immoral music, with the relationship of anger to specific content types inconsistent. These studies have extended these findings, by providing evidence that these elicited emotions may result in specific patterns of behaviour. As with the previous studies, these behavioural tendencies in response to disliked music appear to go in a different direction to previous research. Rather than anger-inducing music prompting hostile approach behaviours, it prompted the least hostile approach behaviours of all and demonstrated some influence on avoidance tendencies. Disgusting music, as opposed to eliciting more avoidance behaviours, instead led to the highest levels of hostile approach behaviours of all music types. Disgust has also been found to respond to bad aesthetics in music by eliciting hostile approach tendencies, but to a lesser extent than immoral content.

These findings together may therefore suggest support for an altered version of the "cleansing hypothesis" of moral emotions in response to music. Moral value is applied to music which is seen to have immoral content which may affect society in general, in line with the research by Hutcherson and Gross (2011). This moral reaction triggers a cleansing response, where the music is required to either be removed from society, or changed in such a way that the immoral content no longer exists and therefore cannot lead to further contamination of society. This may also take place as a method of defending ingroup values from perceived intergroup threat: previously moralized outgroups who produce music may lead to that music being deemed acceptable only once the stylistic cues which represent that outgroup have been removed, preventing threat to the values of the ingroup.

While previous research has often touched on the tendency to challenge objects seen as threatening, the cleansing hypothesis provides a unique insight into a specific form of action in response to threat. Where groups and individuals are often motivated to attack threatening objects in order to prevent harm, those experiencing cleansing motivations may differ in that they are not only attempting to prevent harm- they are also attempting to prevent contamination. Purely harmful objects rarely carry the potential consequence of corrupting ingroup members. By physical analogy, an attack by an outgroup is relatively unlikely to encourage the ingroup to further attack each other. In contrast, when approaching corrupting objects the individual not only needs to defend from harm against outside, but from potential future harm from within their own ingroups, such as members of their own family.

In addition to the above findings, disgust at music may also be elicited by bad aesthetics. However, while this disgust does in turn result in the desire to approach and change the music, it does so to a lesser extent than in response to immoral music. This may be accounted for by examining the potential benefits of removing music with bad aesthetics from society. While the music may be unpleasant to listen to, it is unlikely to have long term corrupting influences in the same manner as immoral content. It would therefore motivate hostile approach in order to prevent the unpleasant listening experience, but to a lesser extent as there is no potential corruption to prevent.

Anger in response to music may potentially be a more personal response. As it does not have long-term implications for the wellbeing of society, it too may therefore lead to less behavioural tendencies as there is nothing to prevent and nothing to cleanse. However, if presented with the opportunity to reclaim the music from negative memories, this would be done by changing the style. It is however important to note that the results for this have been less consistent than those of disgust, suggesting that anger as a response to music may be more complex than first thought.

At this point, it is important to address any potential limitations of the previous study. Firstly, the role of anger has continued to vary across the course of this thesis. Given that anger is a likely response to personally-relevant situations (Hutcherson & Gross, 2011), which by their nature are unique between individuals, overarching patterns in anger may be slow to arise. It is hoped that by continuing research into anger elicited by music, a more consistent pattern may be found over time or across cultures.

Secondly, this study measured cleansing intentions through exploring to what extent cleansing would have its desired effect, rather than direct intention to cleanse. As outlined above, this was to prevent participants from inhibiting their impulses in order to not be seen as threatening to the autonomy of others. Future research could explore more direct cleansing techniques by presenting fictionalised cases of moralized music, where the autonomy of real people will not be affected. In regards to the current research, it is believed that the overall pattern thus far is enough to justify continuing to explore the cleansing hypothesis in later research.

Finally, as a new inclusion, it is likely that the disliked people block of questions may have had methodological flaws. Specifically, in order to encourage free responses no guidance was given as to why that group was disliked by the participant. Responses therefore varied quite drastically. Exploring moralization of music as a method of condemning social groups (such as the condemnation of rap as a method of prejudice against African-Americans, Reyna et al., 2009) would therefore potentially require collaboration with researchers who already have methods of measuring prejudice without eliciting socially desirable responses. This is potentially a key area for future collaborative research opportunities.

Overall, these studies present a pattern of anger and disgust at music which may explain the examples of media responses to music presented in the first chapter. The

implications of these findings, both in regards to real-world examples of moral panic at music, and as a contribution to current psychological literature on the overall knowledge about anger and disgust, will be discussed in depth in chapter nine. First, chapter eight will present the first study in a new line of research into strongly-identified music listeners. Following on from the findings of the first two studies, music listeners who were strongly-identified were sought after and tested to examine what leads to moralization of identity-relevant content. The findings from this study were examined in light of the results from the first two experiments of this thesis. The potential viability of new, ongoing lines of research about moralization of music and what this topic can contribute to the overall field of psychology were then evaluated.

CHAPTER 8

8.1 Moralization of identity-threatening music

Across the last four studies, a pattern of results has been found which suggest that anger and disgust may play a role in responding to disliked music types. These emotions have been found to act as a method of determining whether or not to act against disliked music, and if so what actions to take. This can help to protect both the well-being of the listener and their culture against the content found within certain music types. However, while this explains some responses to disliked music, such as bans, petitions, and protests, there are a number of areas left unexplored.

Where the previous studies have discussed moralization intended to protect one's own life or culture from potential contamination by a piece of music, little attention has yet been paid to behaviours which are designed to do the opposite: to protect the music from outside influences. As before, a large body of evidence from both inside and outside of a research setting supports the existence of these behaviours. Online behaviours consistently demonstrate the tendency of music fans to meet any changes in their preferred genre or artist with hostility, for example by accusing artists of "selling out" should they produce an album more in line with mainstream music styles.

As such, this chapter will examine factors that existing literature suggests may motivate moralization of identity-threatening music. It will then present a qualitative study intended to explore the role of moral emotions in the protection of identity-relevant music, what purposes this tendency towards moralization may serve and what forms it may take. It is hoped that this in turn will demonstrate the viability of research into moral emotions in the context of music preferences as a continuing field of study.

8.2 What motivates the moralization of identity-threatening music?

As discussed in chapter three of this thesis, music can perform a large number of functions for the listener, including those of emotional and mood regulation, social relatedness, and self-awareness (Schafer et al., 2013). Music is known to be particularly relevant in regards to identity functions, given that it is one of the most common topics used to get to know a stranger (Rentfrow & Gosling, 2006). This may be a reasonably accurate method of learning about a new person, as Rubin et al. (2001) suggest that fans of specific genres of music do have attitudes appropriate to the stereotypes of that genre, such as finding heavy metal fans to be more aggressive and hold more negative attitudes towards women when compared to fans of other genres. While not all research agrees that stereotypical attitudes are a perfect fit, Rentfrow et al. (2009) offer the possibility that where there is mismatch, some listeners may choose to change their own values to better fit into the ingroup stereotypes. This research indicates that music may serve a very important role in communicating and forming one's own identity, which in turn provides motivation for moralizing anything that threatens the core values of that music. If the values of that music group change, either the listener must change their values to fit, they must find a new source of identity, or they must risk misidentification, which can be costly to their chances of finding compatible friends and mates (Berger & Heath, 2008).

Another reason why identity-relevant music is important to defend may be found in research into intergroup relations in a music-based context. Lonsdale and North (2009) demonstrated that people who share music tastes can come to see one another as an ingroup, and people in an outgroup who share musical tastes with the ingroup are seen more positively than those who do not. This is supported by research by Bakagiannis and Tarrant (2006) who found that perception of shared music tastes led to less intergroup differentiation. Evidence has also been found from real-world examples of music use in intergroup conflict, where

music was used to both increase and decrease space between two groups during a conflict in the Gaza strip (Bensimon, 2009). As such, music which is important to a person may also be worth defending due to its ability to bring them closer with others, including those who may otherwise be perceived only as a member of an outgroup.

The above research provides a brief insight into what may motivate the protection of identity-relevant music: music which acts as a source of identity allows for sharing and communicating of that identity on both an individual and group level. Other lifestyle preferences such as meat-eating have already been demonstrated to be subject to moralization, resulting in their becoming more of a moral value to the individual (Rozin et al., 1997). Over-eating behaviours have also demonstrated moralization in women (Shiek et al., 2013). As such, it is clear that neutral content such as a lifestyle choice can become moralized under the right circumstances. Some insight as to why moralizing techniques are used for this protection can be suggested by other research.

Peterson (2013) suggests that one reason for using moralization to defend a personally-important object is a lack of close allies. By attaching moral value to an identity-threatening object, an individual can motivate third parties to get involved in the rejection of the threatening object and the protection of the identity source. As such, moralization of music preferences may be a method of ensuring that music which challenges the values of one's own preferred genre remains unpopular and rejected by the ingroup, ensuring that the values of the ingroup remain intact. This would appear particularly relevant to music given its use as a source of parasocial contact. As explained by Mulder et al. (2009), music is often used by those (such as adolescents) who lack the ability to connect with their ingroup in person. By enjoying music they know is popular with people who are similar to them, a person can take part in ingroup activities even when lacking the ability to meet the ingroup in person. This lack of in-person contact would also lead to the lack of specific allies described

by Peterson (2013), supporting the idea that moralization is an attempt to secure third party support in defending music important to one's identity.

Some work has found more direct evidence for moralization of identity-relevant music amongst fans. van Poecke (2017) carried out interviews with a range of individuals associated with the Indie-Folk music scene. They found a consistent theme of fans who were "poly-purists". These fans managed their music selections by staying within the "Indie" music style: this allowed them to consume a range of different genres, from different socioeconomic backgrounds. At the same time, by rejecting the mainstream in favour of "authentic" music, they created for themselves an identity centred around a specific music type, rather than "just anything". A similar pattern has been found within the community centred around hip hop music. Dedman (2011) found that fans of hip hop could be categorised as casual, passive consumers labelled as "peripherals" and a more agentic, engaged subset of fans known as "purists", who rejected mainstream music in favour of their own preferred variant of hip hop. This pattern has also been demonstrated in fans of heavy metal, with Straw (1984) finding that the heavy metal community could be described as both lacking the traditional features and behaviour patterns of a musical subculture, yet demonstrating a consistent pattern of tastes across those who identified as part of the group.

This pattern maps fairly clearly onto existing work by Brewer (1991) and by Abrams (2009). Brewer (1991) writes about the need in individuals for an "optimally distinctive" identity: an identity which is simultaneously unique enough for that person to feel like they are not one and the same with everyone, yet also is shared with enough people that the individual does not feel completely alone. Abrams (2009) suggests that musical subgenres may provide this balance, by allowing for both uniqueness (by identifying with a specific subgenre, separate from the mainstream) and togetherness (with other fans of that subgenre). The research described above demonstrates a similar pattern, with fans of specific musical

subgenres rejecting the identity which is too popular (mainstream values) in favour of defending the purity of a subgenre, which they may share with other like-minded individuals.

This previous literature also clearly has some overlap with work on distinctiveness threat (Jetten et al., 2001). As explained by the researchers, groups seek to be distinctive from one another on domains which they consider as being particularly relevant to their identity. If this distinctiveness is challenged in some way, the individuals in this group will feel distinctiveness threat and take action to address it. According to Spears et al., (2002) these actions may take several different forms. If the identity of the group is poorly understood or undefined, actions may be taken to create and define the group identity in relation to other groups, thus ensuring the group becomes distinctive in some way. Alternatively, if the group already has a defined identity, and this becomes threatened by similarities with outgroups, individuals may react in such a way as to increase the perceived difference between the inand outgroups. These processes can also allow for instrumental functions, and therefore contribute to both the intragroup cohesion and intergroup distinctiveness that are important for resource allocation. In the context of musically-defined identities, it may be the case that for new or poorly defined genres, individual moralization of music may therefore focus on creating an identity around that genre from the ground up (such as in the case of the Indie-Folk "poly-purists", van Poecke, 2017). In pre-existing, well-defined musical genres, fans may instead focus on behaviours designed to increase perceived differences between their preferred music and similar but non-favoured genres, for example by categorising people and aesthetic qualities into either belonging to the preferred genre or belonging to the nonpreferred genre. As such, this previous work is worth considering in developing the upcoming study into moralization of personally-important music.

Given the content of both previous literature on moralization, and the four studies described previously, it is not clear what specific emotions this moralization of identity-

threatening music may elicit. One hypothesis is that given identity-relevant music is a very personal object, it may lead to anger. This would be in line with both literature suggesting anger to be a response to personal threats (Hutcherson & Gross, 2011) and with the findings of Experiment 2 of this thesis (where in both open-ended responses and scaled measures, personal concerns such as previous negative experiences of the music were found more in response to anger-inducing music than music considered disgusting). Alternatively, a threat to one's identity-relevant music preferences may be seen as a threat to one's ingroup values, which has been associated with feelings of disgust (Cottrell & Neuberg, 2005). It is also possible that the two may co-occur.

Before insight can be gained into the emotionally-relevant processes of moralization of identity-relevant content, a number of issues must be clarified. Previous literature has found these examples of moralization of identity-relevant media only amongst the most highly-identifying individuals. Moralization behaviours designed to protect identity-relevant content most likely only occur when an object is significantly important to a person's identity. As such, research amongst any sample where the participants are not strongly identified through their chosen media will not find these behaviours. Additionally, explicit measures of moralization in response to identity threat could potentially lead to participants adapting socially-desirable stances during research. This may be due to a desire to prevent their true self from being judged by an "outsider" or to ensure they do not damage the reputation of the ingroup, which could have consequences amongst their peers. As such, any truly strong beliefs (especially those which would be controversial to those outside of the ingroup) held by the participants may be hidden altogether from researchers, or presented in a weaker manner more in line with wider social norms.

Taking the above into account, this study aimed to lay the groundwork for future research into the emotional processes of moralization of identity-relevant content by

addressing a number of concerns. Following the example of works such as van Poecke (2017), it was run in a more natural setting, away from typical research conditions. In-person gatherings of fan groups (e.g. concerts), while a potential source of large population sizes, ran the risk of skewing data in favour of those fans who have both time and resources to attend such gatherings. As such, for this study online music forums were used, given their nature as a gathering place with fewer time and logistical restrictions for fans of music genres.

This research also used entirely qualitative methods, in acknowledgement of potential difficulties in creating quantitative scales for this topic. Not only would use of specific scales run the risk of participants expressing socially-desirable falsehoods as opposed to their own thoughts, but as discussed by Averill (1983) language use can differ significantly between researchers and lay people. By using open-ended qualitative responses this study attempted to ensure that all participants used language which they were comfortable with and therefore were guaranteed to understand. While qualitative open-ended responses may also elicit some concerns over socially-desirable response tendencies, it was hoped that they would attract less social desirability concerns than researcher-created scaled responses.

8.3 The present study

The present study aimed to explore individual moralization of music in a natural setting. Three popular online forums were selected as samples for this research, with the genres represented being hip hop, heavy metal and pop music. A question asking the forum members what they considered a "disgrace" to their music genre and why was posted to each forum in turn. The choice was made to phrase the question in this way for two reasons: firstly, the word "disgrace" is a strongly negative word, which would indicate to the forum users that their most intense negative opinions would be welcome in the discussion and prevent them from suppressing their true thoughts. Secondly, it was also a word which was

likely to appear in regular conversation: a significant effort was made during the design of this research to ensure that the language used throughout was not overly academic, and "disgrace" was seen as keeping the spirit of the anger and disgust research methods without the associated language use. The responses were then coded for content: detailed analyses are presented below.

Method

Participants. Given the nature of the study, no participant demographics could be collected. Across the three forums, 63 users posted at least one response, with some posting multiple times.

Ethics. Given the potential concern of socially-desirable responses described above, the decision was made to carry this survey out without indicating that it was part of a research project. As such, it was not possible to obtain informed consent from participants or to appropriately debrief them. In acknowledgement of this, a number of precautions were taken in order to ensure the ethical treatment of those who took part. Firstly, during the planning stage of this study tests were carried out to ensure that no private spaces were accessed by the researcher. Forums which required the user to log into the site before they could read any posts were discarded, as the required log-in was taken as a safeguarding of the space. Of those forums where users could read posts without being logged into the site, only those which had a public area where the question would be thematically and culturally acceptable were selected for use. By choosing the forums in this way, it ensured that all participants would be responding in a place where they knew their words could be read by anyone, for any purpose, at any time, and therefore would only be writing responses that they were comfortable with being read by others. In addition, the rules and FAQ sections for each

forum were carefully examined: any which specifically forbade the use of their forums for research purposes were not selected for analysis.

Next, steps were taken to ensure anonymity of participant responses. All responses were categorised by forum username, which was adopted as a form of self-selected User ID for this study. However, no forum usernames are presented in this chapter, and all responses are described rather than quoted. This decision was made to minimise the likelihood of any one participant being recognised if their username is used on a number of websites. As with all studies presented in this thesis, a full account of the intended research was presented to the ethics committee at the University of Kent, and approval received before research commenced.

Procedure. Three music forums were selected for this study. It was decided that these forums would represent the two most commonly moralized music genres from the previous studies, which were also two of the genres found to demonstrate individual moralization by previous research: heavy metal and hip hop. It was decided that a pop music forum would act as an interesting source of comparison given that is moralized relatively less frequently than the other two genres. Following a review of existing music forums, a forum for each genre was selected based on the frequency with which new posts were made in the forums.

An email account with a gender-neutral name was set up and used to register on the three selected forums. The same name was used both for the email account and for the forum account registration. Once the account became capable of posting, the question "What do you consider to be a 'disgrace' to (genre) music? Why?" was posted to all three forums, leaving a time gap of at least a week in between posts to ensure any shared members of the forums did not notice the repeated posting. A short paragraph was posted in the lead message of each thread, full text below. For the forum selected to represent pop music, the thread was posted

in the general discussion section of the forum, and received four posts in response. The hip hop forum received 26 posts in response to the question. Finally, the heavy metal forum received 528 replies. Once the board had stopped receiving replies for long enough that the post was considered abandoned, all responses were copied into a document to ensure the data was not lost.

Materials. The name and introductory paragraph for each of the music forums were slightly different, to prevent users of more than one forum from noticing the repeated posts and to account for variations in writing and phrasing style between forums. For the pop forum, the thread created was titled "What do you see as a 'disgrace' to pop music? why?" The accompanying paragraph read

"So I've been lurking on a lot of music forums lately, and noticed some pretty strong opinions being thrown around. Was wondering if there's similar debate on here- is there something that people think is a problem for pop music as a whole genre? And what made you start thinking that way?"

For the heavy metal forum, the thread was named "What do you see as a 'disgrace' to metal music? Why?" The lead paragraph read

"So I've been lurking on a whole bunch of music forums and noticed stuff getting pretty heated. Was wondering if it's the same here- is there something that people think is a problem for metal in general? Why's it such a big deal?"

Finally, for the hip hop forum, the thread was titled "what do you consider a 'disgrace' to hip hop? why?" with the accompanying paragraph reading

"been on a lot of music forums lately- seems like everyone has an opinion on what's a 'disgrace' to one genre or another. are things the same here?"

Development of a coding strategy. With the basic format of the study designed, the next step was to decide on how to approach the qualitative analysis that would be required to explore themes that were present in the forum responses. This process began with a brief review of the most widely used styles of content analysis, including grounded theory, Interpretive Phenomenological Analysis (IPA) and thematic analysis. Grounded theory (Charmaz, 1996) is an established approach that brings together a consistent set of procedures for data collection and analysis. However, this style of approach was deemed unsuitable for this specific dataset, as the present research violated some of the key aspects of the theory. Specifically, analyses using grounded theory require simultaneous collection and analysis of the data, to allow the analysis to influence the ongoing data collection. As the decision was made to only post the core research question, and not then engage in further prompting of the participants, this style would not work for this study. Also of note is that in research using grounded theory, the literature review should be carried out once the data analysis is complete, to prevent bias while coding responses. As this research was an offshoot of previous work, this was not possible as the researcher was already familiar with the relevant literature. As such, grounded theory was deemed unsuitable for the present study. IPA (Smith & Osborn, 2008) was similarly disqualified, as it is best suited to small numbers of rich, indepth qualitative responses such as interviews.

Given the above, the decision was made to make use of thematic analysis (Braun & Clarke, 2006) for this study. In their paper, the researchers outline thematic analysis as an approach designed to identify, carry out analyses on, and present patterns from within qualitative data. Thematic analysis benefits the present work in a number of ways, for example by requiring less technological knowledge than grounded theory and IPA (Braun & Clarke, 2006), which ensures that the following analyses will not be hampered by being carried out by a relative newcomer to qualitative methodology.

Before thematic analysis can begin, the researcher should ask themselves six key questions about their intended approach to the dataset (Braun & Clarke, 2006). Firstly, the researcher must determine what they will count as a theme. In the case of this research, it was determined that a "theme" was any novel concept that was seen as potentially contributing in some manner to the conversation over what could make music be seen as "disgraceful". It was decided that a concept could be a theme regardless of the number of appearances it made or the significance of its contribution to the overall dataset.

The second question that must be asked is whether the researcher wishes to explore the overarching trends in the dataset, or look in-depth at one key aspect of it. As this is a new area of research, broad trends and overarching concepts were selected as higher priority for this research.

The third question to be asked during thematic analysis is to what extent the process of extracting themes will be inductive versus theoretical. Although theoretical frameworks are available through which this dataset could be explored, it was determined that this work would take a largely inductive approach. This was for two reasons. Firstly, although there are many relevant areas of literature in this field, there is no specific theory which stands out as being the most likely contributor to this phenomenon. As such, basing this new line of work on the previous research led to the possibility of not only biasing the analysis, but focusing it on the wrong concepts, while potentially allowing novel content to go unnoticed. Secondly, as explored by Averill (1982) the use of language between researchers and lay people is markedly different in some situations. This is likely to be especially true in this context, as research about and lived experience of musical subgenres are likely to differ greatly due to the different context, lifestyles and personal knowledge held by the different individuals involved. As the author of this thesis is not actively involved in any significant musically-defined group, it was deemed likely that attempting to force theoretical frameworks onto

unfamiliar subjects was likely to damage the resulting analysis, as compared to allowing the themes to be freely presented by the participant responses. Although it is not possible to completely remove one's bias, this dataset was coded in the most objective manner possible, and therefore an inductive approach was used to ensure that the lived experience of the participants was favoured over the preconceptions of the author.

The fourth question asked during thematic analysis is to what extent the researcher wishes to focus on semantic versus latent content of the dataset. Semantic content contains the "face value" content of the data, where latent content is the underlying aspects which may go unspoken but influence the word choice and communication styles of the participants. As with the previous question, taking the responses as they were given was seen as a more objective, less reductive option for this dataset as this would prevent the analysis from being founded on preconceptions rather than participant communications.

The next question to be asked is to what extent the researcher wishes to focus on essentialist versus constructivist analysis. Essentialist analysis assumes a one-way relationship between lived experience and language: how the participant responds is how they genuinely perceive the world (Braun & Clarke, 2006). Conversely, constructivist analysis focuses more on the sociocultural contexts that lead to certain forms of expression, rather than assuming that expressions are accurate to the genuine experience of the respondent. As with the previous two questions, for this exploratory work in a new field it was decided to take participant responses as they gave them, rather than trying to interpret an unfamiliar underlying context.

Finally, when working in qualitative analysis it is important to understand what questions are being asked at each stage: the levels of research question are therefore defined for this study as follows. The overall research question asks what causes the moralization of

music genres that are relevant to the self-concept. The actual question presented to the participants was what they considered to be a disgrace to their preferred genre and why. Finally, the overarching question driving the thematic analysis was what specific reasons are given for condemnation of disliked music and how do these reasons interact with one another and the different individuals involved. With these questions answered, the overall design for the analysis was constructed.

According to Braun and Clarke (2006), thematic analyses consists of six major steps. In the first step, the researcher should become deeply familiar with the content of the dataset. In the present research, this was carried out by not only deep-reading the responses, but also through the process of transferring the data. In order to prevent data loss, the responses from the forum were transferred into an Excel file to allow for multiple back-up copies of the data to exist. As no function existed on any of the three forums to allow for this to be done automatically, the researcher transferred this data personally, copying, reformatting and entering the content into an Excel spreadsheet. This ensured an additional chance to become familiar with the content of the responses.

Once the researcher is familiar with the content of the responses, the second step of thematic analysis is to generate initial codes from the dataset (Braun & Clarke, 2006). The method of doing so is a personal choice by the researcher. In order to determine which method of extracting initial codes would best suit the current study, the techniques described by Ryan and Bernard (2003) were reviewed. The constant comparison method (Glaser & Strauss, 1967) was deemed as most appropriate for this data. In this method, the data is examined line by line, with the researcher asking at each point what the content of the line is, how it is similar to what has come before it, and how it is different. This allows for the researcher to focus on the content of the data, and not on their theoretical interpretations of it (Ryan & Bernard, 2003). As such, the next step of this research was to work through each

line of the forum responses to determine the content of each one, which previously-generated codes it was similar to, and how it differed from everything mentioned so far. Each line was allowed to be allocated to as many codes as necessary to ensure that as little as possible was lost from the analysis.

The third step in the process suggested by Braun and Clarke (2006) is to search for themes within the extracted codes. This involves creating a number of overarching themes in the data, looking for commonalities underlying the codes and how they may connect to one another. It also involves attempting to categorise the extracted codes into these initial themes to explore to what extent they adequately represent the dataset, including all of the content while leaving as little as possible unaccounted for. This process was applied to the codes extracted in step two. Initial themes were first developed from the codes extracted from the dataset. Following this, some of the top-down themes suggested by previous literature were entered into the analysis, to explore to what extent they added clarity to the overall pattern of data.

The top-down themes added into the analysis at this point included those of moralization of music for personal reasons, moralization of music as a reaction to immorality, identity protection mechanisms and reactions to distinctiveness threat. Derived from the previous line of research, the role of personal responses to music was added in recognition of the fact that some music may be rejected by individual fans in response to previous negative memories attached to that music. For example, in this context this could take the form of memories of disappointment in response to certain songs, underperforming albums or concerts. The previous research also suggested that moralization can occur when music is perceived as containing immoral content. This may also be found in this context, as someone who identifies through a subgenre could potentially want to avoid negative content becoming part of the object which they reference for their attitudes and behaviours, and which in turn

represents them to the general public. Identity protection mechanisms, such as the recruitment of third parties to assist in moralization (Peterson, 2013) could take the form of insisting that "disgraceful" music should be rejected by other fans or by the public, in order to ensure the continued purity of the genre. It could also take the form of accepting or rejecting certain aspects of the genre if it became associated with disliked outgroups such as competing genres. Finally, a potential theme was included at this point of the analysis to represent attitudes reflecting a reaction to concerns over the music's ability to provide an optimally distinctive identity (Brewer, 1991) and reactions to distinctiveness threat. This was seen as potentially including responses such as deliberate attempts to define the genre, attempts to define what qualities and values were part of the genre, and what qualities and values were instead seen as belonging to an outgroup. These themes were included, compared and contrasted with the themes derived from the dataset, and worked into the overall theoretical framework.

Next, Braun and Clarke (2006) suggest that the themes thus far should be reviewed. Extracts from the dataset should be used to match the initial codes to the themes so far, and used to define and re-define these themes. Connections between these themes and their subthemes should also be drawn, and the overall framework applied to determine to what extent the themes adequately explain the data. As such, the themes from the data and from previous research were drawn into a conceptual map, compared against the original data extracts, and refined as appropriate.

Step five in the process is to define and name the themes derived from the dataset (Braun & Clarke, 2006). This includes determining what each set of codes within the themes mean, what they contribute to the discussion, what is of interest about the themes and why. These steps were therefore applied to the themes derived from the dataset.

Finally, the final themes should be reported in as much depth as is appropriate. The final report on these analyses, including the extracted codes, early and refined themes, and the definitions and discussion of the final themes is therefore presented below.

Results

Initial code extraction. The spreadsheets containing the responses from all three forums were first collectively analysed to extract codes and common themes, before being reseparated for individual analysis. For the initial extraction of codes, the author of this thesis read through each comment and compared it to the comments that had been posted previously to it using the constant comparison approach (Ryan & Bernard, 2003). Any new content was highlighted and noted as a potential theme. Each individual page of the data was read through multiple times to ensure that no information was missed.

Initial code extraction resulted in 119 content types. These codes were examined for potential redundancies, with duplicate items being removed. The remaining items were then loosely organised into categories to allow for clearer presentation and analysis. The final total of codes at this stage was 80 codes across 19 categories, where each category contained between two and 13 items. The full text for these codes can be found in Table 14.

Table 14.

Study 5: Codes derived from forum responses, organised by category

Category	Code
(Sub)genre concerns: Aesthetics	Bad aesthetics e.g. unpleasant sounds
	Music production, e.g. cheap-sounding or overproduced
	Concerns about digitalization
(Sub)genre concerns: Quality	The genre lacks standards by which quality can be measured
	Specific songs being described as too long/too short
	The (sub)genre lacks overall talent
	The (sub)genre lacks overall inspiration
	The (sub)genre lacks development of artists/sound
	The music has bad lyrics
	The music is overrated
	The music feels mass-produced
	Too much "filler" content on an album
(Sub)genre concerns: Remaining "fresh"	The (sub)genre lacks variety
	The music is outdated
	The music reuses old content
	User states that the (sub)genre used to be better
(Sub)genre concerns: Lyrical content	The music is too negative
	The music ignores real world issues
	The music contains unacceptable subject matter
(Sub)genre concerns: Excessive Boundary defence	The genre lacks openness to new ideas
	The genre lacks opportunities for new artists
(Sub)genre concerns: Purity	Outgroup entry has reduced (sub)genre purity
	Ingroup corruption from above, e.g. labels, sources of income, awards

Ingroup corruption from the mainstream/general public

Ingroup corruption, specifically of values

The (sub)genre lacks clearly defined boundaries

Too many artists are attempting to access the (sub)genre

The music sounds too similar to something else

Fan behaviour: Closed-mindedness Discrimination, e.g. ageism

Fans who label music as good or bad by release date, not by actual quality

Fans who prioritise one aspect of the music over everything else

Cultism/Hero worship

Fans excessively defending (sub)genre purity

Fan behaviour: Lack of respect for in-group

The fans do not show (financial) support for the music

Fans who complain too much (especially if lacking in their own musical

experience)

Fans who try to control the (sub)genre

Fans who lack respect

Fan behaviour: Bad behaviour Fans who are pretentious/"posers"

Fans who expect the reality of the artist/genre to match on-stage images

Fans who insult other genres

Fans whose behaviour lets down the ingroup

Artist behaviour: Bad representation of the (sub)genre
The artist's choice of persona

The artists associate the (sub)genre with negative lifestyles or behaviours

The artists misrepresent the (sub)genre Artist aesthetics, e.g. appearance

Artist behaviour: Being overly proud Artists who are "fake" or excessively image-focused

Artists who are pretentious
The artist mistreats their fans

Awards from above, wrongly accepted

Artist behaviour: Lack of commitment to the (sub)genre The artists are responsible for not ensuring the genre remains of high quality

Artists who do not put their trust in their own style

The artists do not put in enough effort

The artist entered the genre in the wrong way

Artist behaviour: Lack of quality

The artists prioritise fame over quality

The artists are poor during live performances

Artist behaviour: Theft Artists who steal content

Artists who copy the content of others

Social impact of (sub)genre

The music is having a negative influence on human rights for social groups

Political associations or implications of the music The music has a negative influence on children

Watering down of minority (e.g. racial or social class) group values

Attempts to define the shared identity

User describes the tastes of other in-group members as the problem

Arguing about what defines the (sub)genre

Discussion of own tastes as illustration of what counts as part of the genre

Defence against outsiders' stereotypes of the genre

Debate over shallow vs. deeper interpretations of the genre

Discussion of the positive aspects of the ingroup

Accusations against another participant of attempting to force their tastes on others

Ranking of music to determine what is good or bad

Outgroup derogation

Expressed opinion that those disagreeing with a statement should leave the ingroup

Personal attacks against perceived deviants Attempting to label a subgroup as deviant

Declarations that there is only one way to be a fan

User names a specific song, artist or subgenre, with no explanation given.

Meta-commentary Comments on likely/existing forum behaviour

Arguing about to what extent a previous example of "disgrace" truly exists

Debate: Off-topic Irrelevant arguing e.g. politics

Irrelevant arguing e.g. politics Personal feuds between forum members

Non-responses User states that there is no disgrace to the genre

Extracted categories. The first cluster of categories extracted from the data pertained to the perceived quality and well-being of the overall genre or subgenre. These concerns included mentions of aesthetics, quality, the music remaining up-to-date, lyrical content, excessive boundary defence by the genre, and concerns over genre purity.

When participants discussed aesthetic concerns about the music, they most frequently did so in a manner that described disgraceful music as that which suffered from badly thought-out audio. This included uncomfortable or musically unpleasant sounds, but also included comments regarding production quality and use of digital instruments. Depending on the specific music being discussed, production quality was seen as either too low (rendering the music difficult or impossible to listen to) or too high (with music which is traditionally rough-sounding being made to sound too polished and therefore losing its identity). Digitalization was also seen as problematic due to its threat to traditional sounds and music production methods.

Participants who mentioned concerns over subgenre quality described an overall lack of talent and inspiration within the genre, including aspects such as badly written lyrics, the uncertainty of how best to measure quality within the genre, and other fans ascribing too much positivity to music they considered overrated. Themes such as mass-production and filler content also frequently came up as signs that the broader market being made available to musicians was leading to a tendency to publish songs of lower quality to meet demand.

Concerns over the subgenre remaining up-to-date were often described in reference to older, classic styles of the genre. Specifically, participants expressed concern over modern tendencies to reuse old content, to remain attached to outdated content, and expressed opinions that the genre had declined over time. A lack of variety in the music was also mentioned.

Lyrical content was also seen as problematic by a number of participants, who expressed condemnation of music which was overly negative or contained unpleasant/unacceptable subject matter. Conversely, music which refused to acknowledge real-world issues was also judged negatively.

Excessive boundary defence by the overall genre was mentioned by some participants. This took the form of comments describing how the genre lacked opportunities for new artists to take part in music production, as well as an overall lack of welcome for new ideas and concepts. This was seen as being overly limiting, potentially supressing positive developments within the genre.

The opposite of the above was also found, with many commenters describing concerns that the boundaries of their genre were not defended well enough. Comments were made about the entry of outgroups to the genre resulting in different and unwelcome versions of the music, lack of a clearly defined way to describe something as part of the genre or not, and concerns that specific music sounded too similar to other, less welcome music. Most commonly expressed were fears of ingroup values being corrupted from outside sources. This included references to both corruption from "above", i.e. the labels and media sources that provide income to those who create the music, but also to corruption from outsiders, such as the mainstream viewpoint and general public. These were seen as leading to a less pure version of the ingroup value set.

The next cluster of categories derived from the data included references to how other fans of the music behaved. This included a category of codes devoted to fans who were overly closed-minded when dealing with new content or people. For example, fans who discriminated by age of other fans/artists, or who judged music as being good or bad exclusively by when it was published (either favouring old, classic tracks or newer modern

output). Fans who prioritized one aspect of the music, e.g. guitar riffs, over everything else to determine quality were also condemned. Overly-obsessive devotion to one's preferences, such as "hero worship" and refusal to acknowledge any negative aspects of their preferred music was also described by participants.

Fans who lacked respect for the ingroup were also widely condemned by participants. This included references to fans who stole the music through illegal downloads or who refused to pay for tours/merchandise, as this was seen as a lack of support for the artist and their music. Fans who were overly critical, as well as those who wanted to control the genre for their own gain, were also mentioned in a number of comments.

Fan behaviour was also commented on when fans were seen as being a bad example of the ingroup to outsiders. This included fans who were overly pretentious, who were insulting of other genres, and other forms of bad behaviour by fans of the genre.

The last major cluster of categories found in the forums was centred around perceived bad behaviour by artists. Artists who made the genre look bad in front of outsiders were disliked, for example those who were seen as misrepresenting the genre or associating it with negative lifestyle choices. Artists who were overly proud were condemned by a number of posts, specifically targeting artists who were "fake", image-focused, pretentious or seen as mistreating their fans. Lack of commitment to the art of the genre was also disliked by commentators, who criticised artists seen as neglecting the future of the genre, who compromised their personal style, or who were seen as entering the genre in the "wrong" manner. Finally, artists who were seen as stealing or copying the material of others were occasionally mentioned by participants.

Categories which did not neatly fall into a major cluster of codes included the social impact of the genre, attempts to define the shared identity, meta-debates and non-responses.

Participants mentioned on occasion the potential social impact of the genre, discussing it in regards to minority social group values, politics and potential harm to children. The forums frequently fell into debates regarding what objects within the genre counted as good or bad, how different objects ranked against one another, and whether some fans and their tastes or behaviours counted as deviant subgroups. Some posts were also made as meta-commentary on likely or actual behaviour by the forum members. Finally, some posts were categorised as non-responses for suggesting that there was nothing that counted as a disgrace to the genre, or because they debated something completely irrelevant to the topic such as politics.

Initial search for themes. With the codes described above extracted, a flashcard was written for each individual code. These were then used to search for initial themes that could be seen as frequently recurring within the data. Codes were physically laid out such that proximity to one another indicated semantic similarity, and distance relative semantic difference. The resulting layout of the codes was then examined, and flashcards representing overarching themes inserted where appropriate. At this point, the top-down themes described earlier were added to the analysis. In two cases, they were found to overlap with existing themes that had been extracted from the participant responses: there was a backlash against unacceptable content in music which conceptually overlapped with anger and disgust responses to immoral music, and there was discussion of the genre as being too similar or different to other genres which conceptually overlapped with research into optimal distinctiveness (Brewer, 1991) and distinctiveness threat (Jetten et al., 2001). The other potential top-down themes were discarded at this point for not being clearly represented by the extracted codes. Following this, a thematic map (Figure 7) was drawn out to establish how these themes could relate to one another. The themes described as resulting from both top-down and bottom-up analyses were renamed in a way to reflect both component themes to streamline analysis. At this point, the map consisted of eight major themes, and seven

subthemes, five of which acted as areas of overlap between the major themes. Non-responses were given their own category, such that they could be coded without being part of the thematic map.

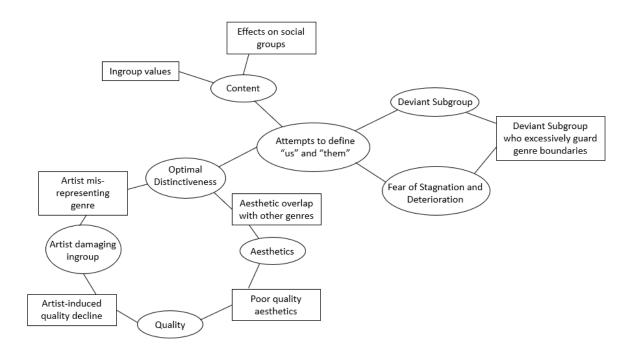


Figure 7. Study 5: Initial map of themes showing eight major themes and seven subthemes.

At this point, a process of thematic development was carried out, where the existing thematic map was applied to the data extracts and the overarching dataset. In areas where there was disconnect between the thematic map and the data, the thematic map was refined, and analysis carried out using the refined map. In the early stages of this process, the thematic map was restructured to comprise one major theme, five sub-themes, and component parts of two of the sub-themes (Figure 8).

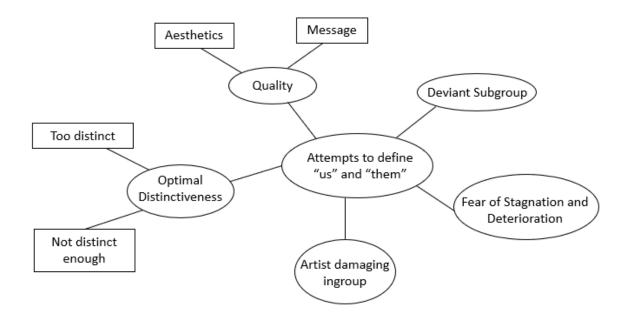


Figure 8. Study 5: Mid-point thematic map showing one major theme (centre), five subthemes and four components of subthemes

However, this map still failed to adequately fit the data and so analysis was continued. Finally, through this thematic analysis process a map was developed comprising three major themes, each with their own sub-themes and component parts (Figure 9). These themes are described in more depth in the next section of this chapter.

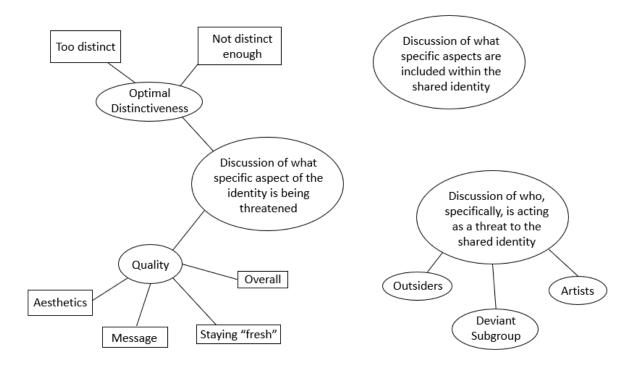


Figure 9. Study 5: Final thematic map showing three major themes, five subthemes and six components of subthemes

Description of extracted themes. The first of the major themes to be extracted from this dataset was labelled as "Discussion of what specific aspects are included within the shared identity". When asked to describe what they considered to be a disgrace to their preferred genre, some participants responded by attempting to define the boundaries of that genre. Across the forums this took a number of different forms. A large amount of responses were dedicated to discussion of the participants' preferences, such as the songs or music styles they liked or didn't like, without reference to anything they considered disgraceful. In some cases, this led to a collaborative effort amongst participants to attempt to define and rank what counted as good, and therefore what should be included in the shared identity. Discussion of what form different aspects of the music should take was also included here. How the different music styles "should" sound, what the group did or did not stand for as a

collective, and other negotiations of identity were carried out in responses labelled as this theme. This theme accounted for approximately nine of the originally extracted codes, including "discussion of own tastes as illustration of what counts as part of the genre" and "ranking of music to determine what is good/bad".

The second major theme extracted from this dataset was defined as "discussion of what specific aspect of the identity is being threatened". Where the first major theme attempted to standardise what should be accepted into the shared identity, responses in this theme instead focused on what aspects of the identity were actively under threat. The first subtheme in this area was fear that the quality of the genre was somehow under threat. This was further sub-divided into four sections. Some participants demonstrated concerns that the overall quality of the genre was under threat, without further elaborating on which aspects were specifically failing to meet their standards (this accounted for six of the initial codes, including "the genre lacks standards by which quality can be measured"). Some responses indicated that there was a threat to the aesthetic qualities of the music, for example identifying types of sound that, if included in music, reduced the quality of the overall aesthetics of the genre (three of the initial codes were merged into this subtheme, including "bad aesthetics e.g. unpleasant sounds"). Other responses suggested that the quality of lyrics in the genre- or the identity and moral values contained within those lyrics- were under threat from the inclusion of certain content (this accounted for 10 of the initial codes, including "watering down of minority (e.g. racial or social class) group values"). Finally, a specific subset of quality concerns related to the genre's ability to remain high-quality over time. This subset included both backwards comparisons- such as saying that the music used to be betterand responses that looked forwards in time, such as expressing fears that there was no innovation or creativity currently ensuring the production of fresh content. This subset

accounted for four of the initial codes, including "user states that the (sub)genre used to be better".

The second subtheme was coded both from bottom-up and top-down theme extraction as relating to distinctiveness threat- specifically, fears that the specific aspect of the identity that was being threatened was its ability to function as a source of an optimally distinctive (Brewer, 1991) identity. This took two different forms. Firstly, there were responses that discussed concerns that the genre was too distinctive, too restrictive, and lacked variety (accounting for six of the initial codes, including "the (sub)genre lacks variety"). This was seen not as a threat to quality- as in the previous subtheme- but as a threat to the ability of the fans to have enough of a variety of content to engage with. This was often expressed as music within a (sub)genre all sounding similar, thus rendering it as too niche, and leaving not enough content for the participants to explore and identify with. The second form that this subtheme took was the opposite fear: that the (sub)genre was not distinct enough (accounting for four of the initial codes, including "the (sub)genre lacks clearly defined boundaries"). Here, the music was seen as too generic, too mainstream, and not unique enough to adequately function as a distinguishing mark of identity in comparison to music not deemed part of the genre.

The third and final overarching theme in this dataset was defined as "discussion of who, specifically, is acting as a threat to the shared identity". This had three subthemes. First, there was a fear of influence from people who were completely removed from the shared identity (accounting for five of the initial codes, including "outgroup entry has reduced (sub)genre purity"). Most commonly, this took the form of fears regarding interference in the creative process by executive producers, music labels, musical award shows and other sources of revenue that could dictate what did or did not get made.

The second subtheme contained attempts to identify, label and condemn a deviant subgroup within the overarching ingroup (this accounted for 17 of the initial codes, including "fans who prioritise one aspect of the music over everything else"). This contained a variety of different reasons for condemning specific types of fan, including condemning people who liked a specific artist or style, condemning fans who took the music too seriously or not seriously enough, and condemning fans whose poor behaviour either damaged the music industry (for example by not paying into the group through purchasing merchandise) or the reputation of the genre to outgroups.

Finally, the third subtheme contained discussion of identity threats caused by the actions of artists within the subgenre (this accounted for 12 initial codes, including "the artists associate the (sub)genre with negative lifestyles or behaviours". Codes not allocated to any of the themes were discarded due to their being non-responses such as political arguing). This included a range of behaviours for example poor lifestyle or aesthetic choices, mistreatment of fans, and neglecting or actively sabotaging the genre through poor performance. In this subtheme, artists were acknowledged as having the power and resources to change the (sub)genre, ensure its continued quality, or push to increase the quality of the genre. Those that failed to do so were therefore judged as having failed to perform their expected duties as ingroup members.

Differences in theme expression by forum. In regards to the first theme extracted from this dataset- discussion of what objects were part of the shared identity- this theme was found to be relatively infrequent in the pop music forum, occurring only once (although this was the smallest dataset). This theme was relatively common in the hip hop forum: in this dataset, discussion of the shared identity often took the form of debate as to who was allowed to speak on behalf of the group, as well as which artists adequately represented the group's collective identity (or more commonly, those who failed to do so). In the heavy metal forum,

this theme was by far the most common. Pages-long debates took place attempting to define what sounds adequately represented the genre. A collaborative effort towards the end of the debate took place to attempt to establish a Top 50 collection for a participant-selected year as an exercise to establish the relative quality of recently released music. During these debates, the overall focus tended to be on the aesthetic qualities of the music that best defined heavy metal. Some participants chose to debate to what extent guitar riffs were the defining aesthetic aspect of heavy metal, where others focused primarily on production style and how this should interact with subgenre identity. While there was some debate over artists who did or did not accurately represent the genre, this was relatively less frequent than aesthetic debate.

In regards to the other two themes, these were expressed in relatively similar manners across the three forums, with the exception of obvious differences in specific objects (such as specific songs or subgenres) made reference to. However, to what extent each theme was present in each forum varied significantly. In the pop music forum, while the response rate was very low, there was nonetheless a clear trend to express concerns about lack of distinctiveness (27.27% of data extracts from this forum). Pop was seen as having too many different styles and genres within it, and fans expressed concerns about there being no clear definition of what pop music actually was.

In the hip hop forum, the most common subtheme present was concerns about the source of identity threat as being the artists responsible for music production. Artists were identified as being overly negative, as being a bad influence on their fans, or as having failed to safeguard the quality of the genre and the source and flow of income through the production process. This subtheme appeared in roughly 22.00% of data extracts from this forum. The next most common topics of discussion were attempting to define what objects were part of the shared identity (18.00% of data extracts from this forum, see above) and

attempting to identify a deviant subgroup (18.00% of data extracts from this forum). This often took the form of fans who did not contribute financially to the genre, or who were overly restricted in their style of music selection. Concerns about the quality of the message and identity of the genre (10.00% of data extracts from this forum), and fears over outside influence on the genre (10.00% of data extracts from this forum) were also relatively common.

Finally, in the heavy metal forum, there was a significant amount of responses that had to be discarded for irrelevant content. 34.69% of coded data extracts from this forum involved no relevant discussion, comprising name-calling, personal feuds between participants, and an extended debate about politics. With these removed, the next largest category was debate over what exact objects should be counted as acceptable in the shared identity- this accounted for 64.83% of the remaining extracts from this forum. Given the disproportionate size of this category, this too was removed for the final analysis of the heavy metal forum to allow for easier comparison of the remaining categories.

With both non-responses and identity negotiation extracts removed, the most common subthemes were identification of artists as being a direct threat to the ingroup (25.17% of data extracts from this forum), identification of the overall aesthetic quality of the music as being at risk (22.45% of data extracts from this forum), and attempts to identify deviant subgroups within fans (22.45% of data extracts from this forum).

Discussion

The research described above contributes to existing research into fan behaviour in the context of musical subcultures. Uniquely, it does so by exploring these behaviours in the light of moralization processes, specifically of identity-relevant content. By using more natural research settings, in a similar manner to the previous literature, and applying

empirical analysis, it is now possible to explore the underlying concepts which contribute to individual moralization of music.

By examining the responses from this initial foray into high-identifying music listeners, it becomes clear that patterns can be seen in responses to music seen as "disgraceful" to a personally-relevant genre. A significant pattern amongst participants was identified where consideration of disgraceful content elicited an attempt to define what exactly the shared identity was, for example through trying to agree on what music counted as good or bad, or trying to compare music types to one another to agree on a hierarchy of tastes. This is not completely dissimilar to research by Maher et al. (2013) into meaning threat. Their participants, when music went against established expectations, experienced meaning threat and responded by reinforcing other aspects of their identity, specifically through outgroup derogation. Although outgroup derogation did sometimes appear in this dataset, it appeared as though when being asked to consider a music type deemed as threatening to the identity (a disgrace to one's preferred genre) many participants reacted by reaffirming what was good about the music type- ingroup love, rather than outgroup hate (Parker & Janoff-Bulman, 2013).

When actively considering disgrace within a preferred genre, participants generally identified this as either being a threatening object or a threatening person. In some cases, inclusion of specific aesthetics or messages, or including too much or too little identifying content, was seen as a threat to the overall shared identity. In others, disgrace was seen as the perceived active attempts by people to damage the shared identity, through outsiders corrupting the genre, insiders becoming deviant, or ingroup producers of content misrepresenting the fans or producing inferior products.

There were marked differences by genre in this dataset. While pop music did not elicit many responses, those that were gathered demonstrated concerns over being distinctive enough- understandable, for a genre defined as being whatever is currently popular in society. While both the hip hop and heavy metal forums identified fears of damage through poorly performing artists or deviant subgroups of fans, where the two differed was in what aspect of the identity was most commonly seen as under threat. For heavy metal fans, the aesthetic quality of the music elicited the most concerns. For hip hop fans, there were fears over dilution of message and identity, as well as fears over outside influence on the genre. This, too, makes sense in the context of previous works- hip hop is a genre seen as both associated with and providing a voice for the African-American community (Reyna et al., 2009), a group which has historically been marginalised. These fears over their voice being corrupted by the outside, and fears of identity loss, fall in line with the potential after-effects of this historical marginalization.

Interesting to note at this point is that as described above, the hip hop forum consistently prioritised the message of the music. Conversely, the heavy metal forum spoke very little about the message of their music, but a lot about the aesthetic qualities that they considered disgraceful. If this was demonstrated to be a consistent pattern, it may suggest that what aspects of the music are moralized may be determined by which aspects are the source of identity for those listeners. Music genres which prioritise the message within the lyrics would therefore elicit condemnation if the message within a song was incompatible with ingroup values. Music genres defined by the sound would elicit criticism if the aesthetics of a specific song were incompatible with the norms of the group.

The fears over artist quality in both hip hop and heavy metal forums may potentially be due to the potential for an artist to cause damage to the ingroup in multiple ways. By being lazy, corrupted or of poor overall quality, an artist can damage several of the aspects of the

shared identity that fans aim to keep of high quality. Additionally, given that individual artists are on the whole more visible to outsiders than individual fans, any misbehaviour or expression of values which contradict that of the group identity could therefore come to be part of the group's reputation to outsiders. This could change the associations of the music in the mind of the general public, damaging its viability as a suitable source of identity due to perceived risk of misidentification costs (Berger & Heath, 2008).

In addition to the above, participants also repeatedly demonstrated concerns surrounding the use of their chosen genre as a source of an optimally distinctive identity (Brewer, 1991). In some cases, participants were concerned about a lack of variety in their chosen (sub)genre. This may tie into the need for assimilation- if the music is too distinct, and lacks any variety, there is little to go on for a source of identity and therefore the participant runs the risk of trapping themselves within a style of identity too niche to be shared with many others- they will have no-one to assimilate with, and no new content to build into their future identity. Conversely, many participants discussed their concerns regarding a lack of boundaries separating their preferred style from others. This threatens the ability of the music style to provide a suitable level of distinction from others, triggering distinctiveness threat reactions. As explained by Jetten et al. (2001) and Spears et al. (2002) distinctiveness threat can lead both to attempts to create the group identity (possibly explaining the responses attempting to define what exactly was part of the group identity) but also to separate it from similar groups (explaining the responses which labelled certain aesthetic or content aspects as being not part of the group identity). Attempts to distinguish the ingroup from similar outgroups are also more common in high-identifying group members (Jetten et al., 2004) which may explain the relatively common nature of these responses in the hip hop and heavy metal forums. As such, some of the findings of this study fall in line with previous research into identity management and distinctiveness threat processes.

The attempts by participants to define and condemn a specific deviant subgroup of fans also makes sense in light of previous literature. Research into group schisms explores the processes through which a subgroup may decide to break from a larger group identity. Sani and Reicher (2000) suggest that a subgroup's decision to undergo a schism may be predicted by to what extent they feel the group identity has been subverted, and how much of a voice they perceive themselves as having within the larger group to fight these potential subversions. If a new group norm is seen as having subverted the overarching identity in a critical way, this can impact on perceived intragroup cohesion, which alongside perceived inability to speak out against a subversion can predict a subgroup's intention of breaking from the larger group (Sani & Todman, 2002). This process was eventually refined into a model by Sani (2005), who suggested that a belief that the group identity had been subverted would lead to negative emotions, reduced identification through the overall group, and reduced perception of intragroup cohesion. This would in turn lead to the subgroup developing the intention to leave.

This process may share some similarities with the responses by participants who attempted to define a specific subgroup of fans as being deviant. This, too, begins with the perception that some group members are subverting the group norms leading to negative emotions. However, at this stage the individual who sees these fans as deviant may still feel as though they are part of the larger group identity. As such, by taking action against the new subversion, they may be able to position the existing group norms as the majority- and the deviant fans as being the subgroup who must adapt or leave. In this way, reactions against deviant subgroups of fans within a genre may be a method of negotiating potential schisms within a group, a method of seeking control over the overarching identity, and a way by which to ensure that the deviant fans are therefore unable to corrupt the overall whole-group identity. In some ways, this is not entirely dissimilar to the cleansing hypothesis seen in the

previous work of this thesis. The individual who reacts against the moralized object is attempting to protect a large group (society or music genre) against a perceived threat (immorality or subversion of identity) which is seen as potentially having the ability to spread and contaminate the larger group. However, as this research line is extremely early in development, it is important to hold off on making too many assumptions. Later research may be able to connect these lines of research together in a more meaningful way.

Finally, it is interesting to note that upon examination of the codes and themes extracted from the forum data, there are some areas of overlap with the music most commonly moralized in the previous studies. Forum users described music with bad aesthetics, negative or immoral content in lyrics, and with potential to harm social groups such as children or minorities as all being disgraceful. This overlap in concerns between both ingroup members of musical subcultures and those who are outsiders to that group may potentially suggest that the emotional response to disliked content is affected by to what extent the object is close to one's identity. If music contains bad aesthetics or immoral content, and is not part of one's identity, it may elicit disgust and desire to cleanse that content from society. However, if the subgenre that music is part of does form a central part of a person's identity, the emotional and behavioural responses may be more focused on removing that content from the subgenre, rather from society, in order to maintain subgenre purity and quality.

As with the previous set of studies, at this point it must be considered that there were some limitations of this style of research. Firstly, as some participants contributed more frequently than others, this may have led to an overrepresentation of certain viewpoints, and an underrepresentation of others. The lack of responses on the pop forum will also contribute to this reduced level of generalizability, on the grounds that only voices from certain subgroups of fans are being heard. However, as a first exploratory study this work has created

a baseline from which these methodological concerns may be addressed, and future work designed to account for these issues. This initial study may therefore act as a critical first step in laying groundwork for future research.

It is also important to consider that while having a researcher who is objective about the music being discussed can allow for less biased coding and analyses, it is likely that this may mean some key, unspoken points of information and context are being missed. This however may suggest a new field of potential collaborative studies. By uniting the objective researcher with those who have context for the issues being debated- such as fans or industry professionals- greater understanding and research into these issues may be sought. Future research may also offer the opportunity to develop more generalizable, quantitative measures of individual moralization of music. Most importantly, by continuing down this line of research, the implications of potential behavioural tendencies and conflict between attitudes in this context may be explored, allowing this research to contribute not only to knowledge, but to real-world scenarios.

Overall, the results of this study suggest that when participants are asked to consider what they feel is a threat to their preferred music genre, they may react in one of three waysby reaffirming the group identity, by identifying an aspect of the identity that they feel is threatened, or by identifying the source of a potential threat. Different sub-processes during these discussions can then take on forms similar to other forms of identity management strategies, such as seeking optimal distinctiveness and preventing distinctiveness threat. This study has therefore provided a first step in the process of empirically testing responses to threatening music by high-identifying fans, and laying groundwork for future research in this field.

While it is not appropriate to draw any firm conclusions until this research can be more thoroughly tested, this study demonstrates the viability of ongoing research into music, emotion and moralization. The final chapter will discuss the overall conclusions of this thesis, the limitations of the studies presented, and the potential future of this research field.

CHAPTER 9

9.1 Summary of findings

This research set out to provide an empirical examination of a phenomenon regularly demonstrated by the media: the expression of anger and disgust at music. The studies presented in this thesis therefore aimed to provide insight into both the elicitors of these emotions and how they differ from one another, and what behavioural consequences these emotions would motivate. In the first two studies, participants were provided with the opportunity to freely describe a music type that was anger-inducing or disgusting to them. In both studies, mentions of bad aesthetics were found equally in response to anger and disgust prompts. Responses to both studies also consistently suggested that disgust was elicited by music which contained content perceived as immoral, such as bias against social groups such as race or gender, violence or profane language. In the second study, anger-inducing music was found to have personal reasons for being disliked, such as elicitation of negative memories. These findings were supported by the scaled measures of the second study: of the five factors underlying emotional responses to disliked music, those associated with immoral content were elicited more by disgust than anger, and those that were more personally-relevant were elicited more by anger than disgust.

These findings support the "disgust-moral" hypothesis from the introduction of this thesis. As suggested by research such as Hutcherson and Gross (2011), disgust was found to respond to general immorality and anger to self-relevant situations. Both of these emotions were also found to be experienced more intensely by the thought of the controversial music being enjoyed by someone the participant was close to, as opposed to someone they were less familiar with.

Studies three and four were designed to explore the potential consequences of anger and disgust at music. When asked to consider music types such as those described by the participants of the first two studies, results supported the elicitation of more disgust than anger by immoral content within the music. Disgust was also elicited more than anger by aesthetic concerns in both studies. Less consistent results were found for the elicitation of anger by personal concerns. In regards to behavioural consequences, all types of disliked music elicited more tendencies to avoid the music (versus hostile approach tendencies and moral contagion fears). However, hostile approach tendencies were strongest in response to music which contained immorality, with aesthetically bad music showing some tendency towards eliciting hostile approach in the fourth study: music types seen as disgusting were more likely to be actively addressed through methods such as signing petitions or supporting bans on the music.

Evidence for the role of contamination fears was found consistently in the third study. Disgusting music types such as those that contained implications of immoral character traits resulted in higher moral contagion fears than all other music types. This was supported by the reputational fears measure, which suggested that significantly higher financial inducements would be required before participants would consider becoming associated with the music in question. These suggest that disgusting music types may be seen as potentially contaminating.

The fourth study supported the pattern of all music types eliciting avoidance, with the highest levels of hostile approach being found in response to disgusting music types such as those containing immorality and to a lesser extent those considered aesthetically unpleasant. Uniquely to this study, participants indicated that their willingness to listen to the music in question could be affected by how the music could be changed. Music containing immoral

content required the lyrics to be changed, with all other types requiring the style to be changed.

These studies suggest that anger and disgust perform different roles in response to controversial, disliked music. Anger is sometimes, but not always, elicited by music of a personally offensive nature. This can prompt avoidance of the music, but does not encourage the listener to take action against it. Disgust, on the other hand, is consistently elicited by immoral content of all types. When a piece of music elicits disgust through containing immoral content, it prompts in the listener a desire to approach and change the music content. This may be explained by the role of the moral and reputational contagion concerns of the third study: immorality in music could potentially be seen as a form of cultural contamination, for example by spreading messages of violence or hatred to others who could then adopt these principles themselves. By changing the lyrics which carry these damaging messages, or otherwise preventing them from being spread, the potential contamination of others is limited. Disgust is also frequently elicited by music which is aesthetically unpleasant, resulting in some tendencies towards hostile approach, but to a lesser extent than the immoral music.

These results suggest a role for social "cleansing" desires in response to music. To use a physical analogy, objects which are considered disgusting are usually avoided. However, when the object is unavoidable, such as being part of an individual's person or property, this avoidance desire is overridden by a desire to approach the object and clean it before the contamination can spread any further. Disgust at music appears to follow a similar path: while avoiding the content is preferable, the threat of the immoral content contaminating the self, society or people to whom the listener is close appears to result in hostile approach tendencies, to "cleanse" the content from society and thus ensure it does not spread. On the other hand, if the disgust has been elicited by aesthetic qualities, there are some weaker

extent as for immoral content. This is likely due to the lack of benefits associated with the removal of aesthetically unpleasant music: there is no need to approach these as strongly due to the lack of potential harm and contamination from these music types.

Not all of the expected elicitors of anger and disgust at music were found in the main body of this research. The role of social identity functions of moral emotions, such as the moralization of ingroup boundaries, was rarely mentioned by participants. As such, a fifth study was carried out to test whether research into this area would be viable. Results from high-identifying forum users suggest that moralization of personally-relevant material may overlap with the results of the previous studies by including condemnation of immoral or aesthetically-bad content, but also suggest that individual moralization commonly takes the form of attempting to define the shared identity, criticising aspects of music which reduce the overall quality of the genre, or identifying people who could act as a source of damage to the shared identity. These findings both suggest that individual moralization exists and may potentially be the result of seeking to maintain an optimally-distinctive (Brewer, 1991) identity, and demonstrate the potential viability of the topic for future research.

The findings of this thesis provide initial evidence for the role of anger and disgust in controlling the impact of controversial music. By feeling disgust at immoral content within music, a person can be compelled to remove that music and its content from society, ensuring that no others can be contaminated by the immorality. By feeling anger at music, a person may be encouraged to avoid or ignore that music with no inclination to approach or change it, as it harms no-one but themselves. These findings support the idea of a social cleansing function of disgust in response to music.

9.2 Importance of findings in regards to moral panic at music

In the first chapter of this thesis, a number of examples of media responses to controversial music were given. These often included strongly moralized language. With the results of this thesis in mind, it may now be possible to determine why anger and disgust may respond to a technically harmless object such as music.

Music may come to be seen as harmful due to the content it contains. By activating pre-existing moral values such as those which condemn racist or sexist viewpoints, or by containing content moralized for other reasons such as explicit sexuality, a piece of music can be seen as causing damage either to the listener themselves or to society in general. The disgust elicited by this, and potentially any co-occurring anger, may together form a sense of moral outrage at the controversial music (such as in the research carried out by Salerno and Peter-Hagene, 2013). Once the moral emotions become attached to a specific subject, they can lead to opinions on this subject becoming increasingly extreme and unlikely to change (Skitka, 2010). As such, once music has become relevant to the emotions of anger and disgust it is more likely to elicit extreme condemnation and less likely to experience a change of opinion in the moralizer.

These findings fall in line with the previously given examples of media condemnation of music. Music referred to as "disgusting" by the writers was often extremely sexualised, such as the music by Elvis Presley (Kirkwood, as cited in Mackie, 2010). "Blurred Lines", the most recent example of music described as disgusting, was also both heavily sexualised and contained an incitement to harm others through lyrics perceived as encouraging rape. The only non-sexual music type condemned for being disgusting was Jazz music: a music type which instead was likely to be associated with groups the media considered threatening. This may have led them to moralize the music as a form of prejudice against those groups, as

suggested by the fourth study of this thesis and in line with previous findings by Reyna et al. (2009).

Given the above, it is likely that previous examples of anger and disgust at music may fall in line with the findings of this thesis: that music containing immoral content or reminders of disliked outgroups elicits disgust. This, co-occurring with anger, leads to a form of moral outrage in response to that music, which both leads to action against that music and harsher opinions of that music which are more resistant to change. While not present in the examples listed in the first chapter of this thesis, it is also possible that some media expressions of disgust at music may be in response to aesthetically-unpleasant music: however, these are likely to remain personal expressions of disgust, as the widespread condemnation elicited by moral panics is unnecessary in response to music with no contamination threat.

Initial evidence from the qualitative study into high-identifying music listeners also suggests a role for individual moralization of content which threatens a preferred genre.

Specifically, people who express condemnation of music may be reacting to that music reducing the overall quality of the genre they identify with, or to aspects of the music damaging the overall image of their ingroup and therefore its suitability as an identity source.

Of particular importance from this research are the findings of the third and fourth studies. As demonstrated by the theoretical section of chapter six, the previous research looking at behavioural consequences of anger and disgust has been inconsistent, with some arguing a unique pairing of anger to approach and disgust to avoidance, and others finding that the pattern is significantly more complex. This research demonstrates support for the latter: while anger and disgust both elicited tendencies to avoid the object in question, only disgust was found to elicit hostile approach tendencies in the context of controversial music.

This was suggested to be a side effect of the perceived necessity of taking action: anger-inducing music harms no-one but the listener, so can be handled with avoidance or simply by ignoring it. Disgusting music could contaminate and cause harm to others, requiring intervention. This contributes to the field by suggesting that the complex relationship of moral emotions and action tendencies could in part be explained by the perception of taking action being either necessary or not.

The findings of the latter two studies also lay groundwork for a potentially interesting theory for how moral emotions may elicit behavioural tendencies. Both immoral content and bad aesthetics were found to elicit disgust in participants. However, the two differed significantly in terms of behavioural response. When compared to music associated with previous negative experiences (the most personal of all concerns, and therefore least threatening to society) both content types elicited more tendencies towards hostile approach actions. However, even when music seen as immoral and as aesthetically bad elicited nearly equal levels of disgust, as in the fourth study, aesthetically-unpleasant music led to significantly less tendencies towards approaching the music to change it than immoral content. As such, it may be possible that the relationship between disgust and resulting action tendencies may be mediated to some extent by whether or not the stimulus is considered a threat. Immoral, threatening music may therefore be acted on whereas aesthetically unpleasant but harmless music may not, even when the two are described as equally disgusting.

If this is the case, these findings may not only support the cleansing hypothesis further, by suggesting that disgust only leads to approach when there is something worthy of being cleaned, but may also suggest new paths for research where potential for future harm is tested as a mediating variable between felt disgust and resulting action tendencies.

Alternatively, it is possible that disgust in response to aesthetically-bad music is a completely

different response to music that presents in the same way. This "aesthetic disgust" may appear the same as moral disgust on the surface and in self-reports, but is different both in terms of elicitor and resulting action tendency. However, as this aesthetic disgust was only found in post-hoc analyses, more research is needed to properly test for its existence in response to music, as compared to moral responses.

Following on from all of the above, the fifth study of this thesis not only lays the groundwork for new research into the moralization of identity-relevant content in a musical subcultural context, but also demonstrates the viability of the connection of moral emotions and music preference as an ongoing field of study.

9.3 Situating the present thesis within the wider field of psychology

These findings contribute to both ongoing research into psychological reactions to various forms of media, and to the wider area of research surrounding the moral emotions. In regards to media psychology, and specifically psychology of music, these findings constitute an initial examination of why specific moral emotions are felt in response to music, a topic which despite widespread media examples has yet to be tested empirically. This has allowed for a new, more quantitative approach to exploring a concept which until recently has only been seen either in media representations of music, or in retrospectives discussing moralization in a more historical, sociological context such as Knowles (2009). These studies also support the importance of media preferences as a tool by which overarching theories of psychology may be tested in a more specific context- as such, it is important to make clear where, exactly, these findings sit in regards to the large and varied patterns of research that have been carried out previously.

This research is perhaps most obviously connected to the wider field of moral psychology. In particular, research into the process of moralization (Rozin, 1999; Rozin et al.,

1997) provides some groundwork into providing evidence that preferences can become morally relevant. However, these papers focus primarily on lifestyle choices known to have physically detrimental effects, such as meat-eating and smoking behaviours. The present thesis extends this concept of moralization, by providing support for the process applying to preferences which have no physically-relevant components.

This research next contributes to current knowledge surrounding anger and disgust as moral emotions. As reviewed in Chapter 2, a large body of research has been carried out exploring how and why anger and disgust may respond to different content types. Papers such as Rozin et al. (1999) and Shweder et al. (1997), suggest unique pairings between moral emotion and specific type of violation. In these papers, it is suggested that anger results from perceptions of autonomy violations and disgust from divinity (or purity) violations. This style of specific pairing between emotion and violation type has also been found more recently in papers such as Giner-Sorolla et al. (2012) and Horberg (2009). The results of this thesis run counter to this unique pairing of emotion to violation type, instead falling in more line with previous research by Hutcherson and Gross (2011). Instead of anger being elicited by autonomy violations and disgust by purity violations, Hutcherson and Gross (2011) found that anger responded to more personally-relevant situations and disgust to general immorality. Although this thesis found that anger was somewhat inconstant in its elicitation by music, it found results that consistently supported the connection between disgust and overall immorality.

In research into the moral emotions, there are three main theories about how disgust may interact with immoral content- these are the elicitation, amplification and moralization hypotheses. As reviewed by Avramova and Inbar (2013), these each suggest a different role that disgust may play in producing moral judgements- such that it is only elicited by immorality, that incidental disgust may amplify responses to immorality, and that disgust

may lead to neutral content being seen as immoral. This present thesis is relevant to this debate in two manners, firstly in that it provides further support for the relationship between disgust and immorality in some fashion, and secondly in that it provides a new manner in which these competing hypotheses may be tested in the future. By exploring causality in the context of disgust at music, further light may be shed on these competing theories.

This thesis set out to explore the reason why people may feel moralized responses to an object in the media which is not explicitly harmful. This conceptually overlaps with two areas of research discussed previously: aesthetic moral judgements of visual art, and moral typecasting. In the former, moralized reactions to visual art were found to respond to contextual information such as deliberate offensiveness, aesthetic unpleasantness, and mixing the sacred with the profane (Silvia & Brown, 2007; Silvia, 2009; Dunkel & Hillard, 2014). In the latter, explicitly harmless content was seen as harmful by participants due to dyadic completion- if harm is caused, someone must be harmed by it. Thus, objects seen as harmful are deemed as harming a non-specific object such as society or nature (Gray & Wegner, 2009; Gray et al., 2014). In regards to these research lines, this thesis provides expansion on the former by suggesting that moralized responses to media are resultant not only from contextual details (although these are important) but also to perceived calls to immorality within the object itself. In regards to the latter, moral typecasting may shed light on why music is consistently moralized for containing immoral content, even if no-one is harmed by it-society, or nature, is instead seen as the victim. This is particularly visible in some of the older media examples, for example condemnation of the Waltz (Knowles, 2009) and Jazz (Rawlins, as cited in Spencer, 1996, pp. 77) as being potential social ills.

Next, there exist some fields of research that are similar in content to this thesis, but examine the topic outside of the field of music. Firstly, much as this thesis aims to explore the potential approach and avoidance behaviours in response to disliked music, so too has

much research been carried out into the extent to which the emotions of anger and disgust can elicit approach and avoidance behaviours more generally. Papers such as Harle and Sanfey (2010) and Gutierrez and Giner-Sorolla (2007) argue for a unique pairing of anger to approach tendencies and disgust to avoidance tendencies. Papers such as Nabi (2002) and Peters and Kashima (2007) suggest that the relationship may be significantly more complicated. This thesis falls in line with the latter approach, as in the third and fourth studies of this thesis anger was found to have significantly less of a relationship with any of the behavioural tendencies than disgust- instead, music seen as disgusting elicited the highest approach behaviours of all, on the condition that it contained immoral content.

This pairing of disgust and approach tendencies in the context of immoral content was then connected to research which suggests that there may be an association between cleanliness and moral judgement. While some of these papers (e.g. Zhong & Liljenquist, 2006) have recently been shown as failing to replicate (Earp et al., 2014) others (such as de Zavala et al., 2014) may still suggest a connection between cleanliness fears and moralization as an attempt at intergroup boundary-setting. As such, this thesis was used as a foray into the possibility that moral responses to music may act as a cleansing technique, ensuring products which contaminate society or reduce intergroup boundaries are removed before they can cause harm or misidentification. Some early evidence for this was found, but further research will be needed before a consistent pattern can be found.

Finally, it is important to acknowledge the work that has been done in similar areas to this thesis. Work such as Alderman et al. (2010) has explored the role of the moral emotions in public debate over controversial issues. Work into moral outrage has also explored the combined role of anger and disgust at controversial objects (Salerno & Peter-Hagene, 2013). Some work has been done into how and why people may experience offensive at certain objects in the media such as advertising (such as Chan et al., 2007, and Dahl et al., 2003), and

work by Garland (2008) explored moral panics at music from a theoretical perspective. Some work, such as Cohen (1972) and McRobbie and Thornton (1995) has also explored moral panics: however, this current field of research has yet to explicitly explore the role of anger and disgust in this context. Therefore, this thesis inhabits a space in the field unique in that so far, no empirical explorations of anger and disgust as moralized responses to music have been carried out. This thesis provides a baseline against which future research may therefore continue to develop these lines of exploration.

By situating this thesis within the previous literature, it is clear that through continued exploration of moralized music it is possible to examine pre-existing moral theories through a new lens, one which allows for direct responses to immoral content undiminished by physical responses. With this in mind, it is important to consider where this thesis sits in regards to the general realm of psychology which is not explicitly connected to the study of morality. Most obviously, this thesis provides a new line of exploration for the field of music psychology. Research into the psychology of music has thus far explored many uses of music (for example self-awareness, social relatedness and emotional regulation, Shafer et al., 2013), but has yet to look at anger and disgust in this context in any meaningful way.

Additionally, in Chapter 2 of this thesis, a brief review was given of theories of emotion that run counter to the theory that emotions are conscious reactions to cognitive violations outlined above. Theories such as the intuitionist model of emotion (Haidt, 2001), the moral foundations theory (Graham et al., 2013), and the appraisal theory (Scherer, 2009) of emotion suggest that emotions may actually be intuitive responses to actions or appraisals of the environment. This thesis, while acknowledging the possibility that emotion may be an intuitive process, falls more in line with the conscious elicitation of moral emotions in response to morally-relevant content.

This thesis also contributes to ongoing research about the manner in which groups may choose to define and maintain their boundaries. Research such as Berger and Heath (2008) suggests that groups may adopt and abandon objects from their collective identity in order to maintain an optimally distinctive (Abrams, 2009; Brewer, 1991) identity. Music specifically has been found to be a method by which people may increase (Bensimon, 2009) and decrease (Bakagiannis & Tarrant, 2006) intergroup differentiation. The results of the fifth study of this thesis are of particular interest in regards to this work, on the grounds that the forum respondents showed a clear pattern of attempting to define group boundaries throughout their responses. Future work on this subject may therefore increase the depth of knowledge currently available about the extent to which music acts as a source of intergroup differentiation, both in regards to musical and non-musical identities. This fifth study and future work that develops from it is also relevant to literature regarding music as a source of individual identity construction (e.g. Lonsdale & North, 2011).

Similarly to the above, it is important to acknowledge the overlap that this thesis may have with work on distinctiveness threat. Research such as Jetten et al. (2001) and Spears et al. (2002) suggests that group members desire for their group to be as distinctive as possible on the domains they consider most self-relevant. This can be demonstrated quite clearly in the fifth study, where not only did participants make quite clear their desire to be seen as unique and different from other, less liked genres and subgenres of music, but also did so in different manners depending on what they cared most about. On the rap forum, where the message of the music was most important, participants disparaged music seen as being less meaningful or lacking in significant lyrical prowess. By comparison, the heavy metal forum paid relatively little attention to lyrical content, instead devoting a large amount of time and emotional energy to the sound of their music, attempting to define their genre by what sounds best represented their shared identity. This thesis therefore occupies a similar area of research

to distinctiveness threat, but takes it in a new direction not only by demonstrating it in the context of music in an empirical manner, but also by making the connection to moralization research (such as the use of moralization to encourage third-parties to help keep the object unchanged, Peterson, 2013). This connection may prove useful in future research by bringing to light new reasons why fans may be strongly motivated to protect their interests in their chosen genre of music.

Taking all of the above into consideration, it can be said that this thesis offers a number of unique contributions to the field of psychology overall. Firstly, it provides a new framework in which to test existing theories of morality. Second, it attaches new empirical data to previously-existing theoretical work and reports from the media. Third, this thesis acts as support for the concept that preferences can be subject to moralization even in areas which lack in any significant physical component such as eating or smoking behaviours. Finally, it contributes to the ongoing debate about the relationships between anger, disgust and action tendencies, by providing data suggesting that disgust may under certain conditions lead to approach tendencies. This not only provides further support against the traditional pairings of anger to approach and disgust to avoidance, but also may shed some light on why the relationships between these emotions and behaviours have been traditionally difficult to find in a consistent way.

9.4 Limitations of the current research

Across the course of the first four studies of this thesis, a number of potential limitations of the work have been identified. In some cases, the use of multiple research designs has been able to address these. Although anger and disgust were measured separately in the first experiments, the potential covariance between these emotions was addressed and explored using a methodology change in the second pair of studies. Similarly, by making use

of both qualitative and quantitative research methods, this thesis has been able to provide both the more personal, in-depth data associated with qualitative work and the more objective, statistics-driven research associated with quantitative work.

However, there are still a number of concerns that are worth addressing about the overall body of work. Specifically, there has been an inconsistent pattern shown by the measures of felt anger and resulting consequences. It may be the case that the significance of anger is being overwhelmed by that of disgust, or that anger is less common in response to music and therefore appears to different extents depending on the sample. It may also be possible that due to its more personal nature (Hutcherson & Gross, 2011) that anger at music is a unique experience to each person and therefore particularly difficult to capture in more standardised research formats.

Next, there could potentially be concern regarding the conclusions that can be drawn from this thesis due to the use of limited sampling methods. For the main body of the research, two sources of participants were used: an online sample of MTURK workers, and three samples of undergraduate students from a university in southern England. While this provided some heterogeneity in responses, both samples are relatively well-educated compared to the general populace, which may affect the content and insight within their responses. Furthermore, both samples have previous experience of taking part in experimental studies, leading to potential concerns over attempts at hypothesis guessing or practice effects from previous studies. However, given that these studies primarily relied on measures created for this research it is likely that the measures would have been new and therefore of interest to both participant samples, leading to better task engagement and less chance of correctly guessing the nature of the research. Regardless, the variety between responses taken from these two groups of participants suggest that there may be cultural, age-

related or other sources of variance in moralization of music, such that some forms may exist that have not been captured in this thesis.

Another issue is the use of self-reported, retrospective measures. Use of these techniques results in participants having had time and space to consider their responses and phrase them in a more elaborated and justifiable manner. It is therefore possible that the content of some responses by participants may differ from responses they would give if immediately exposed to music they found objectionable. However, it is unlikely that participants would have experienced the need to conceal these specific moralizing emotions, especially given that for the most part they fell in line with societal expectations. This may be even more the case for the forum sample, given that the increased anonymity from online forum pages ensures that any controversial opinions given cannot be traced to the original source. As such, while there may be some difference between immediate and delayed moralization of music, it is likely that the results presented in this thesis provide a decent insight into at least part of the reasoning by which people may come to feel anger and disgust in response to music. It is also important to consider here that research into more direct relationships between moralization of music and cleansing impulses is yet to be carried out.

Finally, some concerns were present within the fifth and final study for this thesis. For this work, a sample of online participants was taken from three music forums. This sample comes with its own set of concerns, both in regards to the nature of their responses and the ability of the researcher to adequately interpret their use of non-academic language. However, as previously discussed, the benefits of the anonymous and therefore freely-spoken debate of public forums was deemed preferential to potential bias that could arise from the presence of a visible researcher. It is also important to acknowledge the relative imbalance of responses (both between fans of different music types and between louder and less outspoken fans), as well as the potential difficulties for the researcher to fill in the unspoken context of the

discussions. However, these concerns do not detract from the benefit of having performed an exploratory study to lay groundwork for this field. Rather, they offer new and exciting opportunities for future research- to be outlined in more detail in the following section.

9.5 Future research directions

As previously mentioned in places throughout this thesis, there is a great amount of future research that can be carried out in the relatively new field of moral emotions in response to music. Firstly, studies designed to address the limitations described above in regards to the specific role of anger would allow for greater understanding of this very personal emotion.

Secondly, by creating studies which more directly test the intentions of those experiencing cleansing impulses, a clearer link between the emotional responses and action tendencies examined by this thesis may be more directly tied to real-world examples of moralization of music.

By considering the limitations of this work described above, it is also clear that multiple exciting opportunities for collaborative works exist in this field. Previous work such as Reyna et al. (2009) and the results of the fourth study of this thesis make clear that a link exists between moralization of music and intergroup discrimination (e.g. by ethnicity). By combining this research style with existing work into race relations and how to examine them, it may be possible to explore this topic in more depth while making use of measures which can circumvent the social desirability bias exhibited in standard participant samples.

Some evidence for cross-cultural variation was also found between the American MTURK workers and the UK student samples: if two reasonably similar cultures demonstrate different responses to music, it is likely that cultures with less in common would have significantly more different approaches to disliked content within music. As such, this offers

a possibility of co-operative research on an international level. By sharing resources, it may be possible to explore the role of cross-cultural differences in music preference, identity and the discussion of immoral content, personal harm and policing of intergroup boundaries. All of these would not only enrich current knowledge on music and identity, but also provide interesting insight into the differences and similarities in identity politics between different cultures, groups and demographics. In addition to cross-cultural research, it would also be of great interest to collaborate with individuals within the music industry itself, to allow for the objective nature of research to meet the greater personal understanding of the surrounding context of moralized music, promoting greater shared knowledge.

In addition to all of the above, there are now new lines of research being carried out by the author of this thesis. Firstly, the fifth study of this thesis demonstrated that moralization of identity-relevant content is very present in discussions of music preferences, and that these acts of boundary setting can take place both between and within musically defined groups. As such, follow-up research to correct the limitations outlined above, seek better access to and understanding of high-identifying music listeners, and further knowledge of personal boundary-setting through moralization of music is now in development.

The author of this thesis is also now undertaking research to examine music with immoral content which elicits the opposite reaction to that of the previous studies. As demonstrated by the large fanbases for controversial music types such as hip hop and heavy metal music, music types containing perceived immorality are still enjoyed by a wide variety of people, many of whom many of whom would consider themselves (and be considered by others) to be of normal moral standing. As such, studies are being carried out to explore what motivates people to enjoy music which others may deem immoral, and what processes they use to justify their enjoyment and protect their own morality from being challenged.

Finally, it is possible that anger and disgust may also have different consequences outside of behavioural responses. For example, research by Giner-Sorolla and Espinosa (2011) suggests that anger and disgust may elicit different self-conscious emotions, with anger cuing guilt and disgust cuing shame. This is suggested to be a result of what specifically is being judged. When the behaviour of a person is judged, as opposed to the self, the condemning emotion is anger, and the corresponding self-conscious emotion guilt. When the person themselves is being judged, the condemning emotion is disgust, which results in shame. This may suggest that expressions of anger or disgust at music could result in different emotional consequences for a fan of that music, with fans exposed to angry responses feeling guilty and fans exposed to disgusted responses feeling shame.

9.6 Concluding remarks

Across the course of five studies, anger and disgust have been found to be elicited by controversial music types. A pattern of disgust at immoral music, with anger sometimes appearing in response to personally-offensive music was found, with both anger and disgust resulting in avoidance tendencies. Disgust at immoral content led to a social cleansing desire aimed at preventing the contamination of others through this immorality. The fifth study demonstrated that moralization of intergroup boundaries could be found amongst high-identifying music fans, and that future research into the connection of moral emotion to music preferences was viable. These results are believed to both demonstrate the future potential of the field and contribute to ongoing discussion around the behavioural consequences of the moral emotions.

References

- Abrams, D. (2009). Social Identity on a National Scale: Optimal Distinctiveness and Young People's Self-Expression Through Musical Preference. *Group Processes & Intergroup Relations*, 12(3), 303-317. doi: 10.1177/1368430209102841
- Alderman, J., Dollar, K. M., & Kozlowski, L. T. (2010). Commentary: Understanding the origins of anger, contempt, and disgust in public health policy disputes: Applying moral psychology to harm reduction debates. *Journal of Public Health Policy*, 31(1), 1-16. doi: 10.1057/jphp.2009.52
- Altheide, D. L. (2009). Moral panic: From sociological concept to public discourse. *Crime, Media, Culture*, 5(1), 79-99. doi: 10.1177/1741659008102063
- Averill, J. R. (1983). Studies on anger and aggression: implications for theories of emotion. *American psychologist*, *38*(11), 1145. doi: 10.1037/0003-066X.38.11.1145
- Avramova, Y. R., & Inbar, Y. (2013). Emotion and moral judgment. *Wiley Interdisciplinary Reviews: Cognitive Science*, 4(2), 169-178. doi: 10.1002/wcs.1216
- Bakagiannis, S., & Tarrant, M. (2006). Can music bring people together? Effects of shared musical preference on intergroup bias in adolescence. *Scandinavian Journal of Psychology*, 47(2), 129-136. doi: 10.1111/j.1467-9450.2006.00500.x
- Baumgartner, H. (1992). Remembrance of things past: Music, autobiographical memory, and emotion. In J. F. Sherry Jr. & B. Stemthal (Eds.), *Advances in Consumer Research*, *Vol. 19* (pp. 613-620). Provo, UT: Association for Consumer Research.
- Behne, K.E. (1997). The development of "Musikerleben" in adolescence: How and why young people listen to music. In I. Deliège & J. Sloboda (Eds.), *Perception and*

- cognition of music (pp. 143-159). Hove, England: Psychology Press/Erlbaum (UK) Taylor & Francis.
- Bennet, T., Frith, S., Grossberg, L., Shepherd, J., & Turner, G. (2005). *Rock and Popular Music: Politics, Politics, Institutions*. London, UK: Routledge.
- Bensimon, M. (2009). The Dynamic of Songs in Intergroup Conflict and Proximity: The Case of the Israeli Disengagement from the Gaza Strip. *Group Processes & Intergroup Relations*, 12(3), 397-412. doi: 10.1177/1368430209102851
- Berger, J., & Heath, C. (2008). Who Drives Divergence? Identity Signaling, Outgroup Dissimilarity, and the Abandonment of Cultural Tastes. *Journal of Personality and Social Psychology*, 95(3), 593-607. doi: 10.1037/0022-3514.95.3.593
- Bjorklund, F. (2000). Defense mechanisms and morality: A link between isolation and moralization. *Scandinavian Journal of Psychology*, 41(1), 55-62. doi: 10.1111/1467-9450.00171
- Blumer, H. (1971). Social problems as collective behavior. *Social problems*, *18*(3), 298-306. doi: 10.2307/799797
- Boer, D., Fischer, R., Tekman, H. G., Abubakar, A., Njenga, J., & Zenger, M. (2012). Young people's topography of musical functions: Personal, social and cultural experiences with music across genders and six societies. *International Journal of Psychology*, 47(5), 355-369. doi: 10.1080/00207594.2012.656128
- Boer, D., Fischer, R., Atilano, M. L. G., Hernandez, J. D., Garcia, L. I. M., Mendoza,
 S., Gouveia, V. V., Lam, J., & Lo, E. (2013). Music, identity, and musical
 ethnocentrism of young people in six Asian, Latin American, and Western cultures.
 Journal of Applied Social Psychology, 43(12), 2360-2376. doi: 10.1111/jasp.12185

- Bonneville-Roussy, A., Rentfrow, P. J., Xu, M. K., & Potter, J. (2013). Music Through the Ages: Trends in Musical Engagement and Preferences From Adolescence Through Middle Adulthood. *Journal of Personality and Social Psychology*, 105(4), 703-717. doi: 10.1037/a0033770
- Bossuyt, E., Moors, A., & De Houwer, J. (2014). On angry approach and fearful avoidance:

 The goal-dependent nature of emotional approach and avoidance tendencies. *Journal of Experimental Social Psychology*, 50, 118-124. doi: 10.1016/j.jesp.2013.09.009
- Bougie, R., Pieters, R., & Zeelenberg, M. (2003). Angry customers don't come back, they get back: The experience and behavioral implications of anger and dissatisfaction in services. *Journal of the Academy of Marketing Science*, *31*(4), 377-393. doi: 10.1177/0092070303254412
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research* in psychology, 3(2), 77-101. doi: 10.1191/1478088706qp063oa
- Brewer, M. B. (1991). The Social Self: On Being the Same and Different at the Same Time.

 Personality and Social Psychology Bulletin, 17(5), 475-482. doi:

 10.1177/0146167291175001
- Brewer, M. B. (1999). The psychology of prejudice: Ingroup love and outgroup hate?. *Journal of social issues*, 55(3), 429-444. doi: 10.1111/0022-4537.00126
- Burns, R., & Crawford, C. (1999). School shootings, the media, and public fear: Ingredients for a moral panic. *Crime, Law and Social Change*, 32(2), 147-168. doi: 10.1023/A:1008338323953
- Carver, C. S., & Harmon-Jones, E. (2009). Anger is an approach-related affect: evidence and implications. *Psychological bulletin*, *135*(2), 183. doi: 10.1037/a0013965

- Chakroff, A., & Young, L. (2015). Harmful situations, impure people: An attribution asymmetry across moral domains. *Cognition*, *136*, 30-37. doi: 10.1016/j.cognition.2014.11.034
- Chan, K., Li, L., Diehl, S., & Terlutter, R. (2007). Consumers' response to offensive advertising: A cross cultural study. *International Marketing Review*, 24(5), 606-628. doi: 10.1108/02651330710828013
- Chapman, H. A., & Anderson, A. K. (2013). Things rank and gross in nature: a review and synthesis of moral disgust. *Psychological bulletin*, *139*(2), 300. doi: 10.1037/a0030964
- Chapman, H. A., & Anderson, A. K. (2014). Trait Physical Disgust Is Related to Moral Judgments Outside of the Purity Domain. *Emotion*, *14*(2), 341-348. doi: 10.1037/a0035120
- Charmaz, K. (1996). The search for Meanings- Grounded Theory. In J. A. Smith, R. Harré, & L. Van Langenhove (Eds.), *Rethinking Methods in Psychology* (pp. 27-49). London, UK: Sage Publications.
- Chastagner, C. (1999). The parents' music resource center: From information to censorship. *Popular Music*, *18*(2), 179-192. doi: 10.1017/S026114300000903X
- Chen, M., & Bargh, J. A. (1999). Consequences of automatic evaluation: Immediate behavioral predispositions to approach or avoid the stimulus. *Personality and social psychology bulletin*, 25(2), 215-224. doi: 10.1177/0146167299025002007
- Coan, J. A., & Allen, J. J. (2003). Varieties of emotional experience during voluntary emotional facial expressions. *Annals of the New York Academy of Sciences*, 1000(1), 375-379. doi: 10.1196/annals.1280.034

- Cohen, S. (1972). Folk Devils and Moral Panics. London, UK: Routledge.
- Cohen, A. J. (2001). Music as a source of emotion in film. *Music and emotion: Theory and research*, 249-272.
- Coleman, N. V., & Williams, P. (2013). Feeling Like My Self: Emotion Profiles and Social Identity. *Journal of Consumer Research*, 40(2), 203-222. doi: 10.1086/669483
- Coleman, N. V., Williams, P., Morales, A. C., & White, A. E. (2017). Attention, attitudes, and action: When and why incidental fear increases consumer choice. *Journal of Consumer Research*, 44(2), 283-312. doi: 10.1093/jcr/ucx036
- Cooper, J. M., & Silvia, P. J. (2009). Opposing art: Rejection as an action tendency of hostile aesthetic emotions. *Empirical Studies of the Arts*, 27, 109–126. doi: 10.2190/EM.27.1.f
- Cottrell, C. A., & Neuberg, S. L. (2005). Different emotional reactions to different groups: a sociofunctional threat-based approach to "prejudice". *Journal of Personality and Social Psychology*, 88(5), 770-789. doi: 10.1037/0022-3514.88.5.770.
- Coulangeon, P. (2015). Social mobility and musical tastes: A reappraisal of the social meaning of taste eclecticism. *Poetics*, *51*, 54-68. doi: 10.1016/j.poetic.2015.05.002
- Critcher, C. (2008). Moral panic analysis: Past, present and future. *Sociology Compass*, 2(4), 1127-1144. doi: 10.1111/j.1751-9020.2008.00122.x
- Crosby, J. R., Monin, B., & Richardson, D. (2008). Where do we look during potentially offensive behavior? *Psychological Science*, 19(3), 226-228. doi: 10.1111/j.1467-9280.2008.02072.x

- Cross, I., & Tolbert, E. (2009). Music and meaning. In S. Hallam, I. Cross, & M. Thaut (Eds.)

 The Oxford handbook of music psychology (pp. 24-34). Oxford, UK: Oxford

 University Press.
- Dahl, D.W., Frankenberger, K.D., & Manchandra, R.V. (2003). Does it pay to shock?

 Reactions to shocking and non-shocking advertising content among university students. *Journal of Advertising Research*, 43(3), 268-280. doi: 10.1017/S0021849903030332
- de Hoog, N. (2013). Processing of social identity threats: A defense motivation perspective. Social Psychology, 44(6), 361-372. doi: 10.1027/1864-9335/a000133
- de Zavala, A. G., Waldzus, S., & Cypryanska, M. (2014). Prejudice towards gay men and a need for physical cleansing. *Journal of Experimental Social Psychology*, *54*, 1-10. doi: 10.1016/j.jesp.2014.04.001
- Dedman, T. (2011). Agency in UK hip-hop and grime youth subcultures—peripherals and purists. *Journal of Youth Studies*, *14*(5), 507-522. doi: 10.1080/13676261.2010.549820
- Dixon, T. L., Zhang, Y., & Conrad, K. (2009). Self-Esteem, Misogyny and Afrocentricity: An Examination of the Relationship between Rap Music Consumption and African American Perceptions. *Group Processes & Intergroup Relations*, 12(3), 345-360. doi: 10.1177/1368430209102847
- Dunkel, C. S., & Hillard, E. E. (2014). Blasphemy or art: What art should be censored and who wants to censor it. *The Journal of Psychology, 148*(1), 1-21 doi: 10.1080/00223980.2012.730563

- Earp, B. D., Everett, J. A., Madva, E. N., & Hamlin, J. K. (2014). Out, damned spot: Can the "Macbeth Effect" be replicated? *Basic and Applied Social Psychology*, *36*(1), 91-98. doi: 10.1080/01973533.2013.856792
- Eibach, R. P., Libby, L. K., & Ehrlinger, J. (2009). Priming family values: How being a parent affects moral evaluations of harmless but offensive acts. *Journal of Experimental Social Psychology*, 45(5), 1160-1163. doi: 10.1016/j.jesp.2009.06.017
- Fischer, A., & Giner-Sorolla, R. (2016). Contempt: Derogating Others While Keeping Calm. *Emotion Review*, 8(4), 346-357. doi:10.1177/1754073915610439
- Fischer, A. H., & Roseman, I. J. (2007). Beat them or ban them: The characteristics and social functions of anger and contempt. *Journal of personality and social psychology*, *93*(1), 103. doi: 10.1037/0022-3514.93.1.103
- Fitzgerald, M., Joseph, A. P., Hayes, M., & O'Regan, M. (1995). Leisure activities of adolescent schoolchildren. *Journal of Adolescence*, 18(3), 349-358. doi: 10.1006/jado.1995.1024
- Fredrickson, B. L., & Branigan, C. (2005). Positive emotions broaden the scope of attention and thought-action repertoires, *Cognition and Emotion*, *19*(3), 313-332. doi: 10.1080/02699930441000238
- Frijda, N. H., Kuipers, P., & Ter Schure, E. (1989). Relations among emotion, appraisal, and emotional action readiness. *Journal of personality and social psychology*, *57*(2), 212. doi: 10.1037//0022-3514.57.2.212
- Garland, D. (2008). On the concept of moral panic. Crime, Media, Culture, 4(1), 9-30

- Garrido, S., & Schubert, E. (2011). Individual differences in the enjoyment of negative emotion in music: A literature review and experiment. *Music Perception*, 28(3), 279-295. doi: 10.1525/MP.2011.28.3.279
- Garrido, S., & Schubert, E. (2013). Adaptive and maladaptive attraction to negative emotions in music. *Musicae Scientiae*, *17*(2), 147-166. doi: 10.1177/1029864913478305
- Giner-Sorolla, R., Bosson, J. K., Caswell, T. A., & Hettinger, V. E. (2012). Emotions in sexual morality: Testing the separate elicitors of anger and disgust. *Cognition and Emotion*, 26(7), 1208-1222. doi: 10.1080/02699931.2011.645278
- Giner-Sorolla, R., & Espinosa, P. (2011). Social Cuing of Guilt by Anger and of Shame by Disgust. *Psychological Science*, 22(1), 49-53. doi: 10.1177/0956797610392925
- Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago, IL: Aldire.
- Gold, B. P., Frank, M. J., Bogert, B., & Brattico, E. (2013). Pleasurable music affects reinforcement learning according to the listener. *Frontiers in psychology, 4*, 541. doi: doi.org/10.3389/fpsyg.2013.00541
- Goode, E., & Ben-Yehuda, N. (1994). *Moral Panics: The Social Construction of Deviance*. Hoboken, NJ: Wiley-Blackwell.
- Graham, J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S. P., & Ditto, P. H. (2013).
 Moral Foundations Theory: The Pragmatic Validity of Moral Pluralism. *Advances in Experimental Social Psychology*, 47, 55-130. doi: 10.1016/B978-0-12-407236-7.00002-4
- Gray, K., Schein, C., & Ward, A. F. (2014). The Myth of Harmless Wrongs in Moral Cognition: Automatic Dyadic Completion From Sin to Suffering. *Journal of*

- Experimental Social Psychology: General, 143(4), 1600-1615. doi: 10.1037/a0036149
- Gray, K., & Wegner, D. M. (2009). Moral Typecasting: Divergent Perceptions of Moral Agents and Moral Patients. *Journal of Personality and Social Psychology*, *96*(3), 505-520. doi: 10.1037/a0013748
- Gutierrez, R., & Giner-Sorolla, R. (2007). Anger, Disgust and presumption of harm as reactions to taboo-breaking behaviors. *Emotion*, 7(4), 853-868. doi: 10.1037/1528-3542.7.4.853
- Gutierrez, R., & Giner-Sorolla, R. (2011). Disgusting but harmless moral violations are perceived as harmful due to the negative emotions they elicit. *Revista De Psicologia Social*, 26, 141-148. doi:10.1174/021347411794078381
- Haidt, J. (2001). The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgement, *Psychological Review*, *108*(4), 814-834. doi: 10.1037//0033-295X. 108.4.814
- Haidt, J. (2003). The Moral Emotions. In R. J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), *Handbook of affective sciences* (pp. 852-870). Oxford: Oxford University Press.
- Hall, S., Critcher, C., Jefferson, T., Clarke, J., & Roberts, B. (1978). *Policing the crisis: Mugging, the State and Law and Order*. London, UK: Palgrave.
- Harlé, K. M., & Sanfey, A. G. (2010). Effects of approach and withdrawal motivation on interactive economic decisions. *Cognition and Emotion*, 24(8), 1456-1465. doi: 10.1080/02699930903510220

- Hewett, I. (2013, May 16). The Rite of Spring 1913: Why did it provoke a riot? Retrieved

 August 24, 2018, from

 https://www.telegraph.co.uk/culture/music/classicalmusic/10061574/The-Rite-of-Spring-1913-Why-did-it-provoke-a-riot.html
- Hier, S. P. (2002). Conceptualizing moral panic through a moral economy of harm. *Critical Sociology*, 28(3), 311-334. doi: 10.1177/08969205020280030301
- Horberg, E. J., Oveis, C., Keltner, D., & Cohen, A. B. (2009). Disgust and the moralization of purity. *Journal of Personality and Social Psychology*, 97(6), 963-976. doi: 10.1037/a0017423
- Hunt, A. (1997). 'Moral panic' and moral language in the media. *British Journal of Sociology*, 48(4), 629-648. doi: 10.2307/591600
- Huron, D. (2011). Why is sad music pleasurable? A possible role for prolactin. *Musicae Scientiae*, 15(2), 146-158. doi: 10.1177/1029864911401171
- Hutcherson, C. A., & Gross, J. J. (2011). The Moral Emotions: A Social-Functionalist
 Account of Anger, Disgust and Contempt. *Journal of Personality and Social Psychology*, 100(4), 719-737. doi: 10.1037/a0022408
- Huynh, L. (2015, April 02). In the news: Robin Thicke's rape song, Tennessee legislation, and my continued obsession with Sheryl Sandberg. Retrieved August 03, 2017, from http://feministinla.blogspot.co.uk/2013/04/in-news-robin-thickes-rape-song.html
- Inbar, Y., Pizarro, D. A., & Bloom, P. (2012). Disgusting Smells Cause Decreased Liking of Gay Men. *Emotion*, 12(1), 23-27. doi: 10.1037/a0023984

- Janata, P. J., Tomic, S. T., & Rakowski, S. K. (2007). Characterization of music-evoked autobiographical memories. *Memory*, 15(8), 845–860. doi: 10.1080/09658210701734593
- Jetten, J., & Spears, R. (2003). The divisive potential of differences and similarities: The role of intergroup distinctiveness in intergroup differentiation. *European review of social psychology*, *14*(1), 203-241. doi: 10.1080/10463280340000063
- Jetten, J., Spears, R., & Manstead, A. S. (2001). Similarity as a source of differentiation: The role of group identification. *European Journal of Social Psychology*, *31*(6), 621-640. doi: 10.1002/ejsp.72
- Jetten, J., Spears, R., & Postmes, T. (2004). Intergroup distinctiveness and differentiation: a meta-analytic integration. *Journal of personality and social psychology*, 86(6), 862. doi: 10.1037/0022-3514.86.6.862
- Jones, A., & Fitness, J. (2008). Moral Hypervigilance: The Influence of Disgust Sensitivity on the Moral Domain. *Emotion*, 8(5), 613-627. doi: 10.1037/a0013435
- Klein, R. A., Vianello, M., Hasselman, F., Adams, B. G., Adams Jr, R. B., Alper, S., ... & Batra, R. (2018). Many Labs 2: Investigating variation in replicability across samples and settings. *Advances in Methods and Practices in Psychological Science*, *1*(4), 443-490. doi: 10.1177/2515245918810225
- Knegtmans, H., van Dijk, W. W., Mooijman, M., van Lier, N., Rintjema, S., & Wassink, A. (2018). The impact of social power on the evaluation of offensive jokes. *Humor*, *31*(1), 85-104. doi: 10.1515/humor-2017-0106

- Knowles, M. (2009). The Wicked Waltz and Other Scandalous Dances: Outrage at Couple

 Dancing in the 19th and Early 20th Centuries. Jefferson, NC: McFarland & Company

 Inc.
- Kolnai, A. (2004). *On Disgust* (E. Kolnai, Trans.). Chicago, IL: Open Court. (Original work published 1929).
- Korsmeyer, C. (2012). Disgust and aesthetics. *Philosophy Compass*, 7, 753–761. doi: 10.1111/j.1747-9991.2012.00522.x
- Korsmeyer, C. (2013). Gut appreciation: possibilities for aesthetic disgust. *Lebenswelt*, *3*, 186-199. doi: 10.13130/2240-9599/3483
- Kupfer, T., & Giner-Sorolla, R. (2016). Communicating moral motives: The social signaling function of disgust. *Social Psychological And Personality Science*, 8, 632-640. doi:10.1177/1948550616679236
- Kuppens, P., Van Mechelen, I., Smits, D. J., & De Boeck, P. (2003). The appraisal basis of anger: specificity, necessity and sufficiency of components. *Emotion*, 3(3), 254-269. doi: 10.1037/1528-3542.3.3.254
- Kuppens, T., & Yzerbyt, V. Y. (2012). Group-Based Emotions: The Impact of Social Identity on Appraisals, Emotions, and Behaviors. *Basic and Applied Social Psychology*, 34(1), 20-33, doi: 10.1080/01973533.2011.637474
- Landy, J. F., & Goodwin, G. P. (2015). Does Incidental Disgust Amplify Moral Judgment? A
 Meta-Analytic Review of Experimental Evidence. *Perspectives on Psychological Science*, 10(4), 518-536. doi: 10.1177/1745691615583128
- Leigh, S. (2017). Elvis Presley: Caught in a trap. Carmarthen, Wales: McNidder & Grace.

- Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of personality and social* psychology, 81(1), 146.
- Linton, D. (1979). Why is pornography offensive? *The Journal of Value Inquiry*, *13*(1), 57-62. doi: 10.1007/BF00144557
- List of popular music genres. (2017, June 30). Retrieved June 30, 2017, from https://en.wikipedia.org/wiki/List_of_popular_music_genres
- Lonsdale, A. J., & North, A. C. (2009). Musical Taste and Ingroup Favouritism. *Group Processes & Intergroup Relations*, 12(3), 319-327. doi: 10.1177/1368430209102842
- Lonsdale, A. J., & North, A. C. (2011). Why do we listen to music? A uses and gratifications analysis. *British Journal of Psychology*, 102(1), 108-134. doi: 10.1348/000712610X506831
- Lovett, B. J., Jordan, A. H., & Wiltermuth, S. S. (2012). Individual Differences in the Moralization of Everyday Life. *Ethics & Behavior*, 22(4), 248-257. doi: 10.1080/10508422.2012.659132
- Luhtanen, R., & Crocker, J. (1992). A collective Self-Esteem Scale- Self-Evaluation of one's social identity. *Personality and Social Psychology Bulletin*, 18(3), 302-318. doi: 10.1177/0146167292183006
- Lynskey, D. (2013, November 13). Blurred Lines: the most controversial song of the decade.

 Retrieved June 23, 2017, from

 https://www.theguardian.com/music/2013/nov/13/blurred-lines-most-controversial-song-decade
- Mackie, J. (2010, August 17). Elvis, the Beatles and the Hayrick Rubes made PNE history.

 Vancouver Sun. Retrieved from

- http://www.vancouversun.com/Elvis+Beatles+Hayrick+Rubes+made+history/341027 9/story.html
- Mackie, D. M., Devos, T., & Smith, E. R. (2000). Intergroup emotions: explaining offensive action tendencies in an intergroup context. *Journal of personality and social psychology*, 79(4), 602. doi: 10.1037//0022-3514.79.4.602
- Mackie, D. M., & Smith, E. R. (2015). Intergroup emotions. In M. Mikulincer, P. R. Shaver,
 J. F. Dovidio, & J. A. Simpson (Eds.), APA handbooks in psychology. APA handbook
 of personality and social psychology, Vol. 2. Group processes (pp. 263-293).
 Washington, DC, US: American Psychological Association.
- Maher, P. J., Van Tilburg, W. A. P., & Van den Tol, A. J. M. (2013). Meaning in music:

 Deviations from expectations in music prompt outgroup derogation. *European Journal of Social Psychology*, 43(6), 449-454. doi: 10.1002/ejsp.1969
- Maitner, A. T., Mackie, D. M., & Smith, E. R. (2006). Evidence for the regulatory function of intergroup emotion: Emotional consequences of implemented or impeded intergroup action tendencies. *Journal of Experimental Social Psychology*, 42(6), 720-728. doi: 10.1016/j.jesp.2005.08.001
- Marzillier, S. L., & Davey, G. C. (2004). The emotional profiling of disgust-eliciting stimuli: Evidence for primary and complex disgust. *Cognition & Emotion*, 18(3), 313–336. doi:10.1080/02699930341000130
- McRobbie, A., & Thornton, S. L. (1995). Rethinking 'moral panic' for multi-mediated social worlds. *British journal of sociology*, *46*(4), 559-574. doi: 10.2307/591571

- Mehu, M., & Scherer, K. R. (2015). Emotion categories and dimensions in the facial communication of affect: An integrated approach. *Emotion*, 15(6), 798-811. doi: 10.1037/a0039416
- Menninghaus, W. (2003). *Disgust: Theory and history of a strong sensation*. Albany, NY: SUNY Press.
- Moors, A., Ellsworth, P. C., Scherer, K. R., & Frijda, N. H. (2013). Appraisal theories of emotion: State of the art and future development. *Emotion Review*, *5*(2), 119-124. doi: 10.1177/1754073912468165
- Mulder, J., ter Bogt, T., Raaijmakers, Q., & Vollebergh, W. (2007). Music Taste Groups and Problem Behavior. *Journal of Youth and Adolescence*, *36*(3), 313-324. doi: 10.1007/s10964-006-9090-1
- Mulder, J., ter Bogt, T. F. M., Raaijmakers, Q. A. W., Gabhainn, S. N., & Sikkema, P. (2009). From death metal to R&B? Consistency of music preferences among Dutch adolescents and young adults. *Psychology of Music*, *38*(1), 67-83. doi: 10.1177/0305735609104349
- Nabi, R. L. (2002). The theoretical versus the lay meaning of disgust: Implications for emotion research. *Cognition and Emotion*, 16(5), 695-703. doi: 10.1080/02699930143000437
- Newhagen, J. E. (1998). TV news images that induce anger, fear, and disgust: Effects on approach-avoidance and memory. *Journal of Broadcasting and Electronic Media*, 42(2), 265-276. doi: 10.1080/08838159809364448
- Pan European Game Information. (2018, November 8). Retrieved November 8, 2018, from https://pegi.info/

- Parker, M. T., & Janoff-Bulman, R. (2013). Lessons from Morality-Based Social Identity:

 The Power of Outgroup "Hate," Not Just Ingroup "Love". *Social Justice Research*,

 26(1), 81-96. doi: 10.1007/s11211-012-0175-6
- Pearson, G. (1984). Hooligan: A history of respectable fears. London, UK: Palgrave.
- Peters, K., & Kashima, Y. (2007). From social talk to social action: Shaping the social triad with emotion sharing. *Journal of personality and social psychology*, 93(5), 780. doi: 10.1037/0022-3514.93.5.780
- Petersen, M. B. (2013). Moralization as protection against exploitation: do individuals without allies moralize more? *Evolution and Human Behavior*, *34*(2), 78-85. doi: 10.1016/j.evolhumbehav.2012.09.006
- Phillips, T., & Smith, P. (2004). Emotional and behavioural responses to everyday incivility: Challenging the fear/avoidance paradigm. *Journal of Sociology*, 40(4), 378-399. doi: 10.1177/1440783304048382
- Pizarro, D., Inbar, Y., & Helion, C. (2011). On Disgust and Moral Judgment. *Emotion Review*, *3*(3), 267-268. doi: 10.1177/1754073911402394
- Pocho, L. (2015, November 16). "Everything except country and rap:" What you really mean.

 Retrieved August 03, 2017, from

 http://www.runoutnumbers.com/blog/2015/11/16/everything-except-country-and-rap
- Polman, E., & Kim, S. H. (2013). Effects of anger, disgust, and sadness on sharing with others. *Personality and Social Psychology Bulletin*, *39*(12), 1683-1692. doi: 10.1177/0146167213500998

- Rabb, N., Nissel, J., Alecci, A., Magid, L., Ambrosoli, J., & Winner, E. (2016). Truths about beauty and goodness: Disgust affects moral but not aesthetic judgments. *Psychology of Aesthetics, Creativity, and the Arts, 10*(4), 492-500. doi: 10.1037/aca0000051
- Reeves, A., Gilbert, E., & Holman, D. (2015). Class dis-identification, cultural stereotypes, and music preferences: Experimental evidence from the UK. *Poetics*, *50*, 44-61. doi: 10.1016/j.poetic.2015.01.002
- Rentfrow, P. J., & Gosling, S. D. (2006). Message in a ballad: the role of music preferences in interpersonal perception. *Psychological Science*, *17*(3), 236-242. doi: 10.1111/j.1467-9280.2006.01691.x
- Rentfrow, P. J., McDonald, J. A., & Oldmeadow, J. A. (2009). You Are What You Listen To:

 Young People's Stereotypes about Music Fans. *Group Processes & Intergroup*Relations, 12(3), 329-344. doi: 10.1177/1368430209102845
- Reyna, C., Brandt, M., & Viki, G. T. (2009). Blame It on Hip-Hop: Anti-Rap Attitudes as a Proxy for Prejudice. *Group Processes & Intergroup Relations*, 12(3), 361-380. doi: 10.1177/1368430209102848
- Robinson, K. H. (2008). In the name of 'childhood innocence': A discursive exploration of the moral panic associated with childhood and sexuality [Online]. *Cultural Studies Review*, *14*(2), 113-129. Retrieved 10th March 2019 from https://epress.lib.uts.edu.au/journals/index.php/csrj/article/view/2075/2257
- Roccas, S., Klar, Y., & Liviatan, I. (2006). The Paradox of Group-Based Guilt: Modes of National Identification, Conflict Vehemence, and Reactions to the In-Group's Moral Violations. *Journal of Personality and Social Psychology*, 91(4), 698-711. doi: 10.1037/0022-3514.91.4.698

- Rohloff, A., & Wright, S. (2010). Moral panic and social theory: Beyond the heuristic.

 *Current Sociology, 58(3), 403-419. doi: 10.1177/0011392110364039
- Rothe, D., & Muzzatti, S. L. (2004). Enemies everywhere: Terrorism, moral panic, and US civil society. *Critical Criminology*, *12*(3), 327-350. doi: 10.1007/s10612-004-3879-6
- Rozin, P. (1999). The Process of Moralization. *Psychological Science*, *10*(3), 218-221. doi: 10.1111/1467-9280.00139
- Rozin, P., Haidt, J., McCauley, C., Dunlop, L., & Ashmore, M. (1999). Individual differences in disgust sensitivity: Comparisons and evaluations of paper-and-pencil versus behavioral measures. *Journal of Research in Personality*, *33*(3), 330-351. doi:10.1006/jrpe.1999.2251
- Rozin, P., Lowery, L., Imada, S., & Haidt, J. (1999). The CAD triad hypothesis: A mapping between three moral emotions (contempt, anger, disgust) and three moral codes (community, autonomy, divinity). *Journal of Personality and Social Psychology*, 76(4), 574-586. doi: 10.1037/0022-3514.66.5.870
- Rozin, P., Markwith, M., & Stoess, C. (1997). Moralization and Becoming a Vegetarian: The transformation of Preferences into Values and the Recruitment of Disgust.

 Psychological Science, 8(2), 67-73. doi: 10.1111/j.1467-9280.1997.tb00685.x*
- Rubin, A. M., West, D. V., & Mitchell, W. S. (2001). Differences in Aggression, Attitudes

 Toward Women, and Distrust as Reflected in Popular Music Preferences. *Media Psychology*, 3(1), 25-42. doi: 10.1207/S1532785XMEP0301_02
- Russell, P. S., & Giner-Sorolla, R. (2011a). Moral anger, but not moral disgust, responds to intentionality. *Emotion*, 11(2), 233-240. doi: 10.1037/a0022598

- Russell, P. S., & Giner-Sorolla, R. (2011b). Moral Anger Is More Flexible Than Moral Disgust. *Social Psychological And Personality Science*, 2(4), 360-364. doi: 10.1177/1948550610391678
- Russell, P. S., & Giner-Sorolla, R. (2011c). Social Justifications for Moral Emotions: When Reasons for Disgust Are Less Elaborated Than for Anger. *Emotion*, 11(3), 637-646. doi: 10.1037/a0022600
- Russell, P., & Giner-Sorolla, R. (2013). Bodily moral disgust: What it is, how it is different from anger, and why it is an unreasoned emotion. *Psychological Bulletin*, *139*, 328-351. doi: 10.1037/a0029319
- Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field methods*, *15*(1), 85-109. doi: 10.1177/1525822X02239569
- Sabo, J., & Giner-Sorolla, R. (2017). Imagining wrong: Fictitious contexts mitigate condemnation of harm more than impurity. *Journal Of Experimental Psychology:*General, 146(1), 134-153. doi:10.1037/xge0000251
- Salerno, J. M., & Peter-Hagene, L. C. (2013). The Interactive Effect of Anger and Disgust on Moral Outrage and Judgments, *Psychological Science*, 24(10), 2069-2078. doi: 10.1177/0956797613486988
- Sander, D., Grandjean, D., & Scherer, K. R. (2018). An appraisal-driven componential approach to the emotional brain. *Emotion Review*, 10(3), 219-231. doi: 10.1177/1754073918765653
 - Sani, F. (2005). When subgroups secede: Extending and refining the social psychological model of schism in groups. *Personality and Social Psychology Bulletin*, *31*(8), 1074-1086. doi: 10.1177/0146167204274092

- Sani, F., & Reicher, S. (2000). Contested identities and schisms in groups: Opposing the ordination of women as priests in the Church of England. *British Journal of Social Psychology*, *39*(1), 95-112. doi: 10.1348/014466600164354
- Sani, F., & Todman, J. (2002). Should we stay or should we go? A social psychological model of schisms in groups. *Personality and Social Psychology Bulletin*, 28(12), 1647-1655. doi: 10.1177/014616702237646
- Schäfer, T., Sedlmeier, P., Städtler, C., & Huron, D. (2013). The psychological functions of music listening. *Frontiers in Psychology*, *4*(511), 1-33. doi: 10.3389/fpsyg.2013.00511
- Scherer, K. R. (2009). Emotions are emergent processes: they require a dynamic computational architecture. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *364*(1535), 3459-3474. doi: 10.1098/rstb.2009.0141
- Scherer, K. R. (2013). The nature and dynamics of relevance and valence appraisals:

 Theoretical advances and recent evidence. *Emotion Review*, 5(2), 150-162. doi: 10.1177/1754073912468166
- Scherer, K. R., Mortillaro, M., Rotondi, I., Sergi, I., & Trznadel, S. (2018). Appraisal-driven facial actions as building blocks for emotion inference. *Journal of personality and social psychology*, 114(3), 358-379. doi: 10.1037/pspa0000107
- Schnall, S., Haidt, J., Clore, G. L., & Jordan, A. H. (2008). Disgust as Embodied Moral Judgment. *Personality and Social Psychology Bulletin*, *34*(8), 1096-1109. doi: 10.1177/0146167208317771

- Schumann, K., & Ross, M. (2010). Why women apologize more than men: Gender differences in thresholds for perceiving offensive behavior. *Psychological Science*, *21*(11), 1649-1655. doi: 10.1177/0956797610384150
- Seidel, A., & Prinz, J. (2013a). Sound morality: Irritating and icky noises amplify judgments in divergent moral domains. *Cognition*, 127(1), 1-5. doi: 10.1016/j.cognition.2012.11.004
- Seidel, A., & Prinz, J. (2013b). Mad and glad: Musically induced emotions have divergent impact on morals. *Motivation and Emotion*, 37(3), 629-637. doi: 10.1007/s11031-012-9320-7
- Sharman, L., & Dingle, G. A. (2015). Extreme metal music and anger processing. *Frontiers* in *Human Neuroscience*, 9(272). doi: 10.3389/fnhum.2015.00272
- Sheikh, S., Botindari, L., & White, E. (2013). Embodied metaphors and emotions in the moralization of restrained eating practices. *Journal of Experimental Social Psychology*, 49(3), 509-513. doi: 10.1016/j.jesp.2012.12.016
- Shepherd, D., & Sigg, N. (2015). Music Preference, Social Identity, and Self-Esteem. *Music Perception: An Interdisciplinary Journal*, 32(5), 507-514. doi: 10.1525/mp.2015.32.5.507
- Shweder, R. A., Much, N. C., Mahapatra, M., & Park, L. (1997). The "big three" of morality (autonomy, community, divinity) and the "big three" explanations of suffering. In A. M. Brandt & P. Rozin (Eds.), *Morality and health* (pp. 119-169). Florence, KY, US: Taylor & Frances/Routledge.
- Siev, J., Zuckerman, S. E., & Siev, J. J. (2018). The Relationship Between Immorality and Cleansing. *Social Psychology*, 49(5), 303-309. doi: 10.1027/1864-9335/a000349

- Silvia, P. J., & Brown, E. M. (2007). Anger, disgust, and the negative aesthetic emotions: Expanding an appraisal model of aesthetic experience. *Psychology of Aesthetics*, *Creativity, and the Arts, 1*(2), 100-106. doi: 10.1037/1931-3896.1.2.100
- Silvia, P. J. (2009). Looking past pleasure: Anger, confusion, disgust, pride, surprise, and other unusual aesthetic emotions. *Psychology of Aesthetics, Creativity, and the Arts*, 3(1), 48-51. doi: 10.1037/a0014632
- Skitka, L. J. (2010). The Psychology of Moral Conviction. *Social and Personality*Psychology Compass, 4(4), 267-281. doi: 10.1111/j.1751-9004.2010.00254.x
- Smith, J. A. & Osborn, M. (2008). Interpretative Phenomenological Analysis. In G. M. Breakwell (Ed.), *Doing Social Psychology Research*, (pp. 53-80). Oxford, UK: Blackwell Published Ltd.
- Spears, R., Jetten, J., & Scheepers, D. (2002). Distinctiveness and the definition of collective self: A tripartite model. In A. Tesser, D. A. Stapel, & J. V. Wood (Eds.), *Self and motivation: Emerging psychological perspectives*, (pp. 147-171). Washington, DC: American Psychological Association.
- Spencer, J. M. (1996). *Re-searching black music*. Knoxville, TN: The University of Tennessee Press.
- Straw, W. (1984). Characterizing rock music cultures: The case of heavy metal. *Canadian University Music Review/Revue de musique des universités canadiennes*, (5), 104-122. doi: 10.7202/1013933ar
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. *The social psychology of intergroup relations*, 33(47), 74.

- Tamir, M., Mitchell, C., & Gross, J. J. (2008). Hedonic and instrumental motives in anger regulation. *Psychological Science*, *19*(4), 324-328. doi: 10.1111/j.1467-9280.2008.02088.x
- Waddington, P. A. (1986). Mugging as a moral panic: A question of proportion. *British Journal of Sociology*, 37(2), 245-259. doi: 10.2307/590356
- Waterman, A. S. (1982). Identity development from adolescence to adulthood: An extension of theory and a review of research. *Developmental Psychology*, 18(3), 341-358. doi: 10.1037/0012-1649.18.3.341
- Wheatley, T., & Haidt, J. (2005). Hypnotic Disgust Makes Moral Judgements More Severe.

 *Psychological Science, 16(10), 780-784. doi: 10.1111/j.1467-9280.2005.01614.x
- Van den Tol, A. J. M., & Edwards, J. (2015). Listening to sad music in adverse situations:

 Music selection strategies, self-regulatory goals, listening effect, and moodenhancement. *Psychology of Music*, *43*(4), 473-494. doi:

 10.1177/0305735613517410
- van Poecke, N. (2017). Pure taste in popular music: The social construction of indie-folk as a performance of "poly-purism". *American Journal of Cultural Sociology*, 1-33. doi: 10.1057/s41290-017-0033-y.
- Veenstra, G. (2015). Class Position and Musical Tastes: A Sing-Off between the Cultural Omnivorism and Bourdieusian Homology Frameworks. *Canadian Review of Sociology*, 52(2), 134-159. doi: 10.1111/cars.12068
- Vuoskoski, J. K., Thompson, W. F., McIlwain, D., & Eerola, T. (2012). Who Enjoys Listening to Sad Music and Why? *Music Perception*, 29(3), 311-317. doi: 10.1525/MP.2012.29.3.311

- Yzerbyt, V., Dumont, M., Wigboldus, D., & Gordijn, E. (2003). I feel for us: The impact of categorization and identification on emotions and action tendencies. *British Journal of Social Psychology*, 42(4), 533-549. doi: 10.1348/014466603322595266
- Zatz, M. S. (1987). Chicano youth gangs and crime: The creation of a moral panic. *Contemporary Crises*, 11(2), 129-158. doi: 10.1007/BF00728588
- Zhong, C. B., & Liljenquist, K. (2006). Washing away your sins: Threatened morality and physical cleansing. *Science*, *313*(5792), 1451-1452. doi: 10.1126/science.1130726
- Zhong, C. B., Strejcek, B., & Sivanathan, N. (2010). A clean self can render harsh moral judgment. *Journal of Experimental Social Psychology*, 46(5), 859-862. doi: 10.1016/j.jesp.2010.04.003
- Zillmann, D., & Gan, S. (1997). Musical taste in adolescence. In D. J. Hargreaves & A. C.North (Eds.), *The social psychology of music* (pp. 161-187). New York, NY, US:Oxford University Press.

Appendix A

Coding Scheme, Experiment 1

This is the coding scheme for question one: "What is the music you will be writing about?"

Part One

Please categorise the response into:

- 1: Genre
- 2: Artist
- 3: Song

In the cases where a response may fall into more than one category, please indicate all categories that may apply. For example, "I will be writing about Black Sabbath, who perform heavy metal music" would be both 1: Genre and 2: Artist.

Part Two

Please code all responses into the following music genres:

- 1: African
- 2: Asian
- 3: Avant-garde
- 4: Blues
- 5: Caribbean and Caribbean-influenced
- 6: Comedy
- 7: Country
- 8: Easy listening
- 9: Electronic
- 10: Folk
- 11: Hip hop
- 12: Jazz
- 13: Latin
- 14: Pop
- 15: R&B and soul
- 16: Rock

For each response, please use Wikipedia to determine its genre. To categorise genre responses, please use this page which lists which subgenres fall into which category: https://en.wikipedia.org/wiki/List_of_popular_music_genres.

To categorise song and artist responses, please go their Wikipedia page and use **only the first entry** on the genre section of their page summary. For example, if an artist is listed as "Rock; Electronica; Metal" they would be categorised as 16: Rock.

If it is unclear what song/artist a person is referring to (for example they have given a description which is too vague) please leave this section blank.

In some cases, participants have begun to answer the second question in this section: if they have done this please treat anything which is not a genre, artist or song as belonging to section 2.

This is the coding scheme for question two: 'This is why I felt (Emotion) about this music'

Part One

For each response, please indicate whether each of the following categories is present in the text. The heading of each bullet point is the category title, sub-points are examples of things which may be classified into that category

- 1: Emotional responses and regulation
 - o Positive emotional response ('It makes me happy')
 - o Negative emotional response ('It upsets me')
 - Deliberate use of music to change emotional/motivational state ('I use this music to get worked up')
 - Inclusion of the appropriate or inappropriate emotion for the condition
 - Please only code emotional responses where they are explicitly stated.
- 2: Concerns about how the music affects the music-based group they identify with
 - o Concerns about being 'Real' vs 'Fake'
 - o Music 'Selling out' or Becoming Mainstream
 - o 'Dumbing Down' the genre
 - Associating the group with things which are out of character or unpleasant ('It makes people who like this music look stupid')
- 3: The music reminds them of a music-based group they dislike
 - o 'This music is listened to by bad people'
 - o 'I don't like people who listen to this music'
- 4: Concerns about how the music affects a non-music based group
 - o Gender ('This music hurts women')
 - o Race ('This song is racist')
 - o Culture ('This music is what is wrong with society')
 - Age-related groups ('This music is harmful to Children')
 - This category should contain all references to the music affecting people not explicitly associated with a music group.
- 5: The music reminds them of a previous personal experience or situation
 - Relationships
 - Specific Memories
- 6: Aesthetic Concerns
 - Annoying
 - o Reaction to the sounds in the music, e.g. infuriating, gross
 - o Repetitive

- o Mentions of any video accompanying the song
- o 'This music is stupid'
- Aesthetic concerns can include any reference to the five senses: the video they have seen attached to the music, unpleasant sounds, reference to physicality e.g. 'It makes my skin crawl'.
- The only other content that should be categorized as Aesthetic concerns is reference to the music being pointless/stupid, worthless or similar complaints.
- 7: Inappropriate behaviour by artist
 - Wasted potential
 - o Abuse of power/influence
 - o Laziness
 - Responses coded into this section should refer to some specific trait of the person who created the music (such as personality, wasted potential) or to an explicitly mentioned event or series of events (such as being a convicted rapist, having a drunk-driving accident in their past). Simply being an artist who has created the music participants are writing about does not get coded as 'inappropriate behaviour'
- 8: Perceived Intrusiveness
 - o Forced to listen to it
 - Inappropriate location

Part Two

Please classify any objectionable content that is mentioned by the participant:

- 1: Violence
- 2: Language
- 3: Horrific or frightening content
- 4: Sexuality
- 5: Drug use
- 6: Gambling and/or materialism
- 7: Discrimination, prejudice or disrespect
- 8: Other

How to use the spreadsheet

- At the top of each column, please list the participant's unique code, which will be three letters and two numbers.
- For the rest of the spreadsheet, please use a '0' to indicate a category is not present and a '1' if the category is present.

Appendix B

Coding Scheme, Experiment 2

How to use the spreadsheet

- At the top of each column, please list the participant's unique code, which will be a string of letters and numbers.
- For Question One, please use a '0' to indicate a category is not present and a '1' if the category is present.
- For Question Two, see below.

This is the coding scheme for question one: 'This is the music I felt (Emotion) about, and why'

Part One

Please categorise the response into:

- 1: Genre
- 2: Artist
- 3: Song

In the cases where a response may fall into more than one category, please indicate all categories that may apply. For example, 'I will be writing about Black Sabbath, who perform heavy metal music' would be both 1: Genre and 2: Artist.

Part Two

Please code all responses into the following music genres:

- 1: African
- 2: Asian
- 3: Avant-garde
- 4: Blues
- 5: Caribbean and Caribbean-influenced
- 6: Comedy
- 7: Country
- 8: Easy listening
- 9: Electronic
- 10: Folk
- 11: Hip hop
- 12: Jazz
- 13: Latin
- 14: Pop
- 15: R&B and soul

• 16: Rock

For each response, please use Wikipedia to determine its genre. To categorise genre responses, please use this page which lists which subgenres fall into which category: https://en.wikipedia.org/wiki/List_of_popular_music_genres.

To categorise song and artist responses, please go their Wikipedia page and use **only the first entry** on the genre section of their page summary. For example, if an artist is listed as 'Rock; Electronica; Metal' they would be categorised as 16: Rock.

If it is unclear what song/artist a person is referring to (for example they have given a description which is too vague) please leave this section blank.

Part Three

For each response, please indicate whether each of the following categories is present in the text. The heading of each bullet point is the category title, sub-points are examples of things which may be classified into that category

- 1: Emotional responses and regulation
 - o Positive emotional response ('It makes me happy')
 - o Negative emotional response ('It upsets me')
 - Deliberate use of music to change emotional/motivational state ('I use this music to get worked up')
 - o Please only code emotional responses where they are explicitly stated.
- 2: Concerns about how the music affects the music-based group they identify with
 - o Concerns about being 'Real' vs 'Fake'
 - Music 'Selling out' or Becoming Mainstream
 - o 'Dumbing Down' the genre
 - Associating the group with things which are out of character or unpleasant ('It makes people who like this music look stupid')
- 3: The music reminds them of a music-based group they dislike
 - o 'This music is listened to by bad people'
 - o 'I don't like people who listen to this music'
- 4: Concerns about how the music affects a non-music based group
 - o Gender ('This music hurts women')
 - o Race ('This song is racist')
 - Culture ('This music is what is wrong with society')
 - Age-related groups ('This music is harmful to Children')
 - This category should contain all references to the music affecting people not explicitly associated with a music group.
- 5: The music reminds them of a previous personal experience or situation
 - Relationships
 - Specific Memories
- 6: Aesthetic Concerns
 - Annoying
 - o Reaction to the sounds in the music, e.g. infuriating, gross

- o Repetitive
- o Mentions of any video accompanying the song
- o 'This music is stupid'
- Aesthetic concerns can include any reference to the five senses: the video they have seen attached to the music, unpleasant sounds, reference to physicality e.g. 'It makes my skin crawl'.
- The only other content that should be categorized as Aesthetic concerns is reference to the music being pointless/stupid, worthless or similar complaints.
- 7: Inappropriate behaviour by artist
 - Wasted potential
 - Abuse of power/influence
 - Laziness
 - Responses coded into this section should refer to some specific trait of the person who created the music (such as personality, wasted potential) or to an explicitly mentioned event or series of events (such as being a convicted rapist, having a drunk-driving accident in their past). Simply being an artist who has created the music participants are writing about does not get coded as 'inappropriate behaviour'
- 8: Perceived Intrusiveness
 - o Forced to listen to it
 - Inappropriate location

Part Four

Please classify any objectionable content that is mentioned by the participant:

- 1: Violence
- 2: Language
- 3: Horrific or frightening content
- 4: Sexuality
- 5: Drug use
- 6: Gambling and/or materialism
- 7: Discrimination, prejudice or disrespect
- 8: Other

This is the coding scheme for question two: 'This is how I identify myself as a music listener in two words'

Guidance:

- For each participant, you will find two words. Each word should be allocated a number according to the categories below.
- Please code two numbers for each participant, separated by a semicolon.
- Words such as 'very' or 'extremely', made in reference to the second word, should not be coded.
- For example: 'Social, Everything' would be coded '6;2a'. 'Very Keen' would be coded '4'.
- 1. Genre of music listened to. E.g. 'Hip Hop', 'Rock', 'Indie'.
- 2. Open-mindedness/Variety.
 - a. High variety e.g. 'Open', 'Varied', 'Everything' (Code 2a)
 - b. Low variety e.g. 'Picky' 'Cautious' 'Specific' (Code 2b)
- 3. Controlling their own emotions.
 - a. Increasing their emotions e.g. 'Emotional' 'Heartfelt' 'Passionate' (Code 3a)
 - b. Decreasing their emotions e.g. 'Calm' 'Relaxing' 'Soothing' (Code 3b)
- 4. Active/Enthusiastic. E.g. 'Active', 'Engaged', 'Keen'.
- 5. Frequent. E.g. 'Constant', 'Daily', 'Always'
- 6. Social Relatedness. E.g. 'Connection', 'Communication', 'Social'
- 7. Search for Meaning. E.g. 'Deep', 'Meaningful', 'Spiritual'.
- 8. Neutral words. E.g. 'Neutral', 'Average', 'Passive'
- 9. Other

Appendix C

Measure of reasons for emotional responses to disliked music, Experiment 2

Please take a moment to think about the music you have just written about, and rate the extent to which you agree with the following questions (1= "Strongly Disagree"; 7 = "Strongly Agree")

- This music encourages inflicting pain and suffering on others
- This music encourages killing others
- This music encourages violating people's rights
- Listening to this type of music is against my religious or spiritual beliefs
- We demean ourselves by listening to this music
- This music is harmless
- Listening to this music is offensive
- Emotionally, I just can't listen to this music
- Listening to this music causes people to develop bad character traits
- Listening to this music is a sign that a person has bad character traits
- This music does not reflect on the character of the listener
- Many good, moral people like this music
- I dislike the idea of being associated with this music
- I dislike the idea of living the lifestyle this music encourages
- This music is associated with a group of people I find unpleasant
- This music is associated with a group of people I find immoral
- This music is associated with a previous unpleasant event in my life
- I dislike this music because it reminds me of things I have previously experienced
- This music is not a good example of the genre
- This music is not a good example of the artist's work
- This genre is important to me
- This artist is important to me

Appendix D

Behavioural consequences of disliked music measure, Study 3

Please read the statements below, and rate the extent to which you agree with them. (1= "Strongly Disagree"; 5= "Strongly Agree")

- I would support reasonable restrictions on who is able to listen to this music
- I would support a campaign to raise awareness of the problems caused by this music
- I would encourage people I know not to listen to this music
- I would post on social media to encourage people not to listen to this music
- If this music released an updated version with the problems fixed, I would be willing to listen to it.
- I would be less likely to be riend a person I knew listened to this music
- I would avoid being seen in public with a person who was visibly a fan of this music
- I would change the channel on the TV or radio if this music started playing
- I would feel uncomfortable if a copy of this music was saved onto an electronic device that people knew was mine
- I would leave a room where this music was playing
- I would be seen as a less moral person if people thought that I enjoyed this music
- I would feel like a less moral person if I started to enjoy this music