Facebook Idio-Culture: How Personalisation Puts the Me in Social Media

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How Personalisation Puts the *Me* in Social Media

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Abstract

The aim of this study is to examine the extent to which cultural preferences in music in the UK have changed as a result of personalised social media. It is an exploration of the extent to which the boundaries of musical subcultures, and other such cultural groupings have been smudged by a customised Internet, and by the quotidian routine of using social media sites led by influential algorithms, designed to offer us an experience tailored to our own tastes. It also investigates the ways in which a person's need to use their taste as an outward display of identity or *subcultural capital* (Thornton 2006) has altered, now that every aspect of life can be advertised on Facebook, Twitter and other such websites.

With the rise of technologies such as 'online recommenders' this research evaluates whether the new technology, rather than helping, has hindered our ability to predict the tastes of an individual, and instead, whether it shepherds us through the abundance of data now readily available to us at the touch of a button. It examines, also how the filtering of accessible information, deemed relevant for us by such technologies affects our tastes and behaviour. In terms of primary research, an Investigation is conducted, focussing on a target group of individuals linked by a Facebook fan Page, following a mixed methods approach, consisting of an in-depth, self-completion questionnaire designed to collate quantitative data on the demographic, an observation by means of analytical tracking software, written specifically for this thesis examining the online behaviour of the participants as they create and recommend a musical playlist, and also a series of more open, qualitative interviews. The thesis concludes by acknowledging that musical taste is affected both implicitly by our habitus (Bourdieu 1984) and explicitly by means of algorithmic personalisation in a pincer movement, narrowing our tastes and channelling our musical choices.

Acknowledgements

Author's declaration

I declare that all the material contained in this thesis is my own work.

Chapter 1 - Introduction

1.1 Rationale

The current research examines the influential nature of social media on the consumption of and engagement with music, and focuses in particular on algorithmic filtering and the customised online experience with which we are presented.

"The anonymous programmers who write the algorithms that control the series of songs in these streaming services may end up having a huge effect on the way that people think of musical narrative – what follows what, and who sounds best with whom." (Frere-Jones 2010)

Specifically, it seeks to bridge a currently existing gap in the field, firstly by linking theories on taste, cultural intermediaries and post-subcultural studies, with analyses on the algorithms present in social media for a general understanding of the impact of personalisation.

Secondly, it examines the potential impact that algorithm-led social media has had on individuals from a particular, targeted group, by means of primary research in the form of a mixed methods ethnographic investigation, consisting of an in-depth, self-completion questionnaire designed to collate quantitative data on the demographic, an observation by means of analytical tracking software, written specifically for this thesis; examining the online behaviour of the participants as they create and recommend a musical playlist, and also a series of more open, qualitative interviews.

Much of the discussion centres on distinction and individualisation, which justifies the analysis of the impact of algorithmic gatekeeping on particular individuals culturally linked by Facebook.

Following on from the work of Daniel Miller, (2011) whose choice of participant demography has been influential to the present methodology, the findings of the current primary research is not necessarily intended to represent all users of social media in a general sense, but more to provide insight into the potential, individual effects that the embedded algorithms can have on the musical habits of the specific participants.

This is not to say that insights gained from the research will be irrelevant in a wider context. According to Ed Montano, "Ethnographic study, rather than

privileging the local [....] can be applied to a wider context and can thus enhance our understanding of a global industry and culture." (Montano 2013 p119)

Furthermore, Montano states, on his research into electronic dance music culture, "working through issues related to DJ practice in a specific setting helps to construct a more informed understanding of contemporary EDM culture, in both local and global contexts" (Montano 2013 p 127)

It is possible that, as the effects of algorithmic personalisation are realised on a global scale, methodological approaches that focus on the local, but engage with the global, could provide valuable insight.

Many of the algorithmic recommenders present in social media function by offering or filtering content based not only on the previous behaviour of the individual, but also collaboratively, on the previous behaviours of other 'similar' users. The current methodology enables the examination of the participants' responses to such recommendations and assesses the level to which individualisation, or depersonalisation is encouraged.

In a world affected so significantly and so abruptly by social media and the underlying algorithms that direct them, all understanding of their potential impact is advantageous and the current research will contribute to several areas in the field.

More specifically, my motivation to carry out this particular study stems from an invested interest in the chosen demography. The current primary research involves an observational study of participants chosen from members of the Facebook fan page for the melodic rock band 'One Day Elliott,' of which I am the lead singer and songwriter. I have been interested to assess the impact of social media on this relatively small community of fans, or idioculture, in an attempt to better understand not only the potential social implications of personalised social media, but also the band's fan base as a collective demographic.

At this stage, it is important to specify what is meant by the term 'Idioculture'. Originally termed by Gary Fine and defined as "a system of knowledge, beliefs, behaviours and customs shared by members of an interacting group to which members can refer and employ as the basis of further interaction" (Fine 1979 p 734), Idioculture in this context, focuses specifically on small groups, linked by shared ideologies or interests, and the social interactions and behaviours that occur therein.

Though the term has been developed and added to by the likes of Farrell (2001) who discussed models of collaborative creativity circles in French Impressionism, and Eliasoph and Lichterman (2003) who proposed a model of culture linking group styles and behaviours to broader cultural categories, an emphasis on the connection between groups and shared aspects of culture are common throughout the sociological literature in this field.

The introduction of social media, will undoubtedly have an impact on the interaction between members of such cultures and so the current research seeks to establish the extent to which the members of the One Day Elliott Facebook fan page, via an examination of shared ideologies and musical tastes, can be categorised as an idioculture.

In any observational study, the observer's bearing on the observed must be recognised. This is particularly true for the present methodology.

Throughout the process it has been important to acknowledge my situational identity and personal position within the current research, and the potential impactful nature of being both the researcher, and also a member of the band in which an interest is the linking factor for all of the participants. In this sense, there exists an insider/outsider fluidity of which it was vital to remain aware.

Whilst making initial contact with the participants, throughout the observation and also in the analysis of the results, this positioning was something that needed to be taken into account, regarding the data collected from the participants, but also in terms of my own biases.

One benefit of my positioning within the demographic was convenience. Being a member of the band granted me access and contact to everyone on the fan page, and it is possible that this position also amplified trust, acceptance and encouraged participation.

Nonetheless, measures were taken to minimise the influence I would have, to ensure that the validity of the results was not jeopardised.

For a more detailed discussion on my position within the research see section 8.3 of the methodology chapter.

Through an exploration of the leading existing literature and a mixed method, ethnographic study, consisting of the collection of both qualitative and quantitative data, this research seeks to determine answers to the following questions:

I. To what extent has the personalisation of social media narrowed our musical social diet?

II. To what extent has our consumption of music been influenced by social media?

III. Has the rise of data collecting algorithms and online recommenders affected our musical taste and behaviour?

IV. Does the filtering of information lead to the fragmentation of musical subcultures and the formation of micro-niches or pigeonholes?

V. Does a customised online experience lead to more acute distinctions and greater individualisation?

The mixed methods ethnographic primary research is divided into three stages. The initial stage took the form of an online, self-completion questionnaire, based in part on the sociological research methodology into taste and distinction carried out by Pierre Bourdieu (1984), (whose theories have been considered by many as the central organising framework for empirical work in the field (Lizardo and Skiles 2012)), though, updated to allow for the significant technological advancements and social differences that have occurred since the 1980s, making it relevant to a present climate. The idea of this stage was to gather data on the chosen demographic about their engagement with music and their relationship with social media. The questions also focussed on a broad range of themes to establish a detailed picture of the individuals that make up the sample, and information was gathered on their preferred tastes, pastimes and personal, educational, and financial situations. The survey was "reached" by 342 people, (meaning that the message that contained the link was seen and read by that many followers of the band) and of that number, 87 individuals (25%) took the time to complete it. The data was then analysed to spot patterns or trends and to determine a collective insight to the members of the One Day Elliott Facebook fan page.

The second part of my primary research, and an area in which this research makes a particularly significant contribution was the observational study. 25 participants, chosen from the same demographic, agreed to be observed whilst using social media for a week. Due to it not being possible to access the data collected by the algorithms already embedded in social media such as Facebook or YouTube, my own version of big-data collection software was developed.

Using observational software, commissioned and written especially for this thesis, in the form of a data – collecting extension that attaches to the Google Chrome browser, meant it could be developed to remotely observe, measuring the appropriate data and allowing the participant to act in a much more normalised environment. This method greatly reduces the impact of researcher to participant influence. It is far less intrusive and also allows for the collection of large amounts of data, not possible from some traditional forms of observation.

This methodology seeks to bridge gaps that currently exist in the world of observational research. There are examples of other available observational software, (such as *Interact*, (Mangold-International.com) *Observer XT*, (Noldus.com) and *Observerware* (observerware.com)) but most are expensive and involve participants having to use a specific device with the software installed. This requires a higher level of interaction with the researcher that could potentially marginalise results. Using a specifically designed Chrome extension affords the researcher high levels of data collection with minimal interaction with the participants, and at a minimum cost. Multiple copies of the software do not need to be purchased, and an easily downloadable link can be emailed to as many participants as required. The data for all the participants is instantaneously sent to a single database so behaviour can be observed in real time. The main objectives in its development were to step away from lab-style observation, or an over-the-shoulder approach that is often utilised, to reduce, as effectively as possible, the influence of a researcher presence.

This method also allows an insight into the collection methods and type of data collected by the algorithms embedded in social media, access to which is heavily restricted, due to its apparent value and the power it grants those who control it (see section 3.2.)

The decisions made regarding the specifics of the software and the aspects of behaviour I intended to observe, were heavily influenced by my findings from analysis of the answers given by the demographic in the surveys. Each participant downloaded and installed the extension and allowed it to record their online behaviour for a week.

During this stage, the participants were instructed to complete a task that involved creating a musical playlist for an anonymous recipient, about whom the only prior knowledge given was that they too, were a fan of One Day Elliott. The playlists were then examined and compared for genre and style specificity, and cross-referenced with data from the tracking software to observe the engagement with and influence of algorithmic recommendations. These results were also compared to the data collected from the survey.

This activity was devised to engage the participants with searching for music and allowed me to see how they responded to the various advertisements and algorithms. It also positioned them as both recipients of recommendations and as recommenders themselves.

Importantly, due to its similarities with how algorithmic data is collected, this method affords not only analysis of online behaviour, but also an insight into how the information on which the algorithms base their recommendations and personalised filters is obtained.

To avoid any ethical issues, it was explained to each candidate that their data be kept safe and secure, would not be passed on to any third parties and that their identities remain anonymous. The extension was also designed not to record passwords, or any personal data. Approval was sought from and approved by the ethics committee and all the necessary procedures and protocols have been followed (see Appendix D).

The third part of the primary research consists of follow up semi-structured interviews with the candidates who took part in the observational study. Influenced by studies conducted by the likes of DeNora (2000) and Crafts and Cavicchi, (1993) this was to obtain qualitative data examining their own opinions and explanations for their online musical behaviour. DeNora's *Music in Everyday Life* has been particularly influential here, as it examines the "aesthetic components of agency and social organisation through the use of music." (Siciliano 2013 p306), focussing on individuals' engagement with music by means of ethnographic interviews. Likewise, Crafts and Cavicchi's *My Music*, uses interviews to document the diverse, individualistic relationships people have with music.

A discussion on the research objectives could then take place, drawing on the information gathered from each stage of the methodology, as well as the knowledge acquired from the existing literature.

1.2 Perspective and Contribution to knowledge

The observational method used for this research, addresses the issues as mentioned above and provides a basis from which future observational, ethnographic study could evolve and develop, and suggestions are made in the concluding chapter as to possible directions for potential study.

By positioning the participants in a dual role, of subcultural prosumption; both as recipients of recommendations, and as recommenders themselves, this research method enables an insight into the influence and transformation of

cultural intermediaries and its effects on the musical engagement and consumption of the members of the sample group. This allows a direct focus on the notion of prosumption. (Toffler 1980) which has seen a surge thanks to new technologies.

More generally, this research supports the notion that, initially, personalised social media steer us toward musical subcultures and reinforce stereotypes. However, as the algorithms improve and the data collected on us becomes more intricate and detailed, these subcultures begin to fragment and disappear. In this sense, the concept of the individual consumer is strengthened.

Therefore, following on from Bennett (1999), Maffesoli (1996) and others, the research hypothesises that *subcultures*, *tribes* or *neo-tribes* are becoming less and less prominent and that the idea of the individual listener or consumer is becoming more commonplace.

However, this research also expands on this notion and discusses the idea that, before customisation can become absolute, it needs to be acknowledged that, as well as being *influenced by* our tastes; the filtered access to information also *influences* them creating a delicate balance. It has been suggested that developers of recommending software and customising algorithms need to be aware of such a balance and ensure that they do not allow a shift to go too far in either direction. (Pariser 2011) Localised, micro-niches are beneficial to businesses and the appropriate amount of influence will allow them to target audiences and tailor-make effective marketing campaigns accordingly. Many would argue, though, that a limited access stunts growth and does not contribute to the development of new avenues for their targeted demographic, which, I theorise may have long-term consequences. Our tastes are individual to us and, as the software becomes more accurate, this should reflect in the recommendations we receive. Increasingly, the algorithms will scrutinise and discover nuances and particular details that distinguish us from groups and stereotypes. This should eventually bring about the necessity for individualised marketing, but the manipulated information that we receive as a result, counteracts this effect. Despite the fact that the information we receive is based on the complex combination of data collected about us, it is filtered and customised to suit that combination accordingly and, over time, the filtering restricts information deemed to be irrelevant, but that could otherwise contribute to our individuality. By catering to our personality and allowing us access only to information deemed presently appropriate, the current research argues that there is a possibility that the future development of our individuality is hindered and the algorithms instead, push us back towards the groupings that they were initially intended to distinguish us from.

The current research draws links and highlights the similarities between this notion and Bourdieu's theory of Habitus, which in itself is almost like a filter through which your decisions are made. Where you come from, the class you were born into, the stances, aptitudes and outlooks on life that have been instilled by your background and upbringing, all contribute to your habitus. It is not fixed but evolves as new life experiences unfold. Habitus theory is prominent in many fields of sociological study and I will also compare more recent, updated accounts of Bourdieu's theories with my own. (Glaesser and Cooper 2014), (Coulangeon and Duval 2015), (lisahunter, Smith and Emerald 2014)

Following on from Christopher Small's idea of *Musicking* (Small 1998), a concept, in which Small suggests that we should not just view music as an object, but instead, as an activity or process, and by participating in which, we all form and enhance our social identities, this research, in a similar way, seeks to introduce a new term.

According to Small, *to music* is to partake, in any capacity, in any activity involving or related to music performance. These actions also establish relationships, "between person and person, between individual and society, between humanity and the natural world and even perhaps the supernatural world." (Small 1998 p13)

The term introduced by the current research is *Tasteing;* a gerund that acts as a synecdoche for the way we now consume culture and outwardly display it – referring to the ever-shifting parameters of how we present ourselves as we navigate through the uneasy balance between limitless access to all information and a customised, filtered stream of information which limits that to what we are exposed. Individuals *Taste* culture in different combinations from day to day. In broad terms, *Tasteing* is the action of using cultural capital, acknowledging the notion that our online consumption of culture is both a result of, and an actor upon our habitus (Bourdieu 1984) and cultural standpoint, affecting us in an influential loop.

This research sheds light on the transformative effect of the personalisation of social media on society and specifically, the world of music. Following on from Wilson (2014) and Pariser (2011) it reinforces the importance of the acknowledgment of this influence, firstly by developers of algorithms in order to avoid future issues, and secondly by music consumers in order to identify the potentially problematic levels of corporate power afforded to businesses and marketing agencies in terms of the ability to augment and manipulate our access to information. With this said, it takes into account the importance of technological and economic advancement which are concepts that

provide a contrasting argument, supporting the development of such customisation.

1.3 Thesis Structure and Overview

Section 3 provides an explanation and analysis of the existing literature in the field, highlighting key texts and concepts as well as identifying gaps in the knowledge. By establishing the current position of academia on the personalisation of social media and its effect on the world of music, a platform is created from which to introduce the current research, making clear the contribution to the knowledge in this field.

This literature review chapter focuses on the impact of social media and web 2.0 on musical society, drawing attention to the transformative effect of digital technology. The new access to an unprecedented amount of information along with what Wellman refers to as 'hyperconnectivity' (Wellman 2001), and the almost infinite archiving made possible by sites such as YouTube, has renovated our relationship with time and space.

The importance of understanding social media via critical analysis is discussed, involving several definitions from various academics. Participatory culture is examined and notions of power and political control are debated.

Existing literature on subcultures and identity is also observed, starting off with traditional theories by Hebdige, and Hall & Jefferson through to Maffesoli, Bennet and Muggleton & Weinzierl, discussing the changing opinions in this area, mentioning the resistant nature of cultural groupings such as punk through to the idea of neotribes and later the disintegration of subcultures and a re-evaluation of the concept. The notion of the cultural omnivore is also observed.

Several key texts that have been of particular importance or influence are also reviewed which include literature from Pierre Bourdieu, Daniel Miller, Eli Pariser, danah boyd and Christian Fuchs.

Bourdieu (1984) theorises that it is our taste that distinguishes us from each other. Bourdieu's work predates online recommendation lists and algorithms but the development of such platforms has made his notions on the culture that we consume an even more pressing issue. Taste, both controls and is controlled by the algorithms embedded in the websites that we frequent. It is necessary therefore that, to fully understand the impact that recommending software and the personalisation of social media has on our musical lives, the

way we now develop our tastes, surrounded by the new technology, should be examined.

For this reason, the research continues by summarising traditional arguments concerning the ever-waging war between nature and nurture, and how aspects of biology and social influence combine to guide our tastes. This is examined via the Bourdieusian prism of habitus. Understanding the contributing processes to the formation of tastes both presently and previously will help to understand how they may be formed alongside the introduction of new, influential technologies.

Bourdieu's theories of field and cultural capital are also discussed and provide a basis from which to examine the tastes and behaviours of the demographic.

The chapter concludes that our tastes are individual to us; a contributing factor to the breakdown of musical subcultural groupings, and poses the question of how this may be affected by the increasingly prominent presence of recommending algorithms and customised experiences online.

The Personalisation of Social Media – Part One: Collecting the data.

I have divided the discussion of social media into three main chapters, the first of which concentrates primarily on the vast collection of data (big data) that fuels the algorithms embedded in social media.

This chapter begins by examining notions of ownership and privacy on social media. Shifts in technology have brought about the necessity for shifts in behaviour patterns and the notion of netiquette is acknowledged. The collection and analysis of big data is discussed and the disputes that surround the levels of access that social media, Facebook in particular, have to our personal information is analysed.

Issues of 'dataveillance', and data laundering are also examined and examples of ethical concerns from companies such as Apple and WhatsApp are given as examples of the moral considerations brought about by the collection of big data by businesses and corporations.

The Personalisation of Social Media – Part Two: Using the data.

The second chapter on social media's personalisation concentrates on how the accumulated big data is used. A controversial experiment conducted on

Facebook involving the manipulation of user's emotions is studied and the possible consequences or possibilities are discussed.

The chapter also provides an introduction to, and further examination of different forms of online personalisation, including recommendation software and algorithms designed to filter information based on data collected on previous consumption.

The idea of online playlists as a form of recommender is proposed and discussed, due to its particular relevance to the current methodology.

Focusing on the power afforded to those who control the use of big data, the concept of social media and algorithmic filtering as the new cultural intermediaries is examined as well as big data's impact on the concepts of structure and agency.

The Personalisation of Social Media – Part Three: An Evaluation.

The third and final section on personalisation seeks to evaluate the effects of the collection and use of the data, and the impact that online customisation potentially has on society.

The software is scrutinised and possible problems or limitations are uncovered, such as an inability to accurately predict, limited levels of accuracy and understanding, and issues of gatekeeping, barrier reinforcement and trust. This chapter focuses on many of the negative aspects of the personalisation of Social Media, including theories by Pariser (2011) and Wilson (2014) who both highlight the problematic nature of this shift.

The chapter concludes by highlighting the apparent complex and polarising nature of algorithmic filtering, identifying its contribution to both individualisation, and censorship.

A Deeper Look at YouTube and Facebook Algorithms

In this chapter, the recommendation algorithms embedded in YouTube and Facebook are closely inspected.

Recommendations account for over 60% of all video clicks from YouTube's video page (Davidson et al 2010) and so a closer examination of the functionality of these systems is appropriate. The chapter looks at how the lists

of recommended videos are generated, and identifies the formulaic processes that link similar or associated videos.

The auto-play feature was introduced as a YouTube function in 2014, and as the name suggests, automatically plays a video immediately after the currently watched video is finished. Suggestions are made as to how this video is chosen, including ranking algorithms that allocate utility values to the videos.

Similar discussion is conducted on the equivalent Facebook personalising systems, but the exact mechanics of how they operate are closely guarded trade secrets (Hodson 2014). Nonetheless, work by (Eslami et al 2015a) attempts to reverse engineer the processes to gain insight into their functionality.

To examine the processes further, the rest of this chapter documents my own investigative search on YouTube, and notes the recommended videos. This search also incorporates an Application Programming Interface (API), which is a software that creates a full, uncensored list of related videos, so that the effects of YouTube's filtering can be identified. Mimicking a typical search potentially conducted by the participants, I initially typed 'One Day Elliott' into the query box, to examine the resultant recommended videos in comparison to the uncensored API list.

The chapter concludes by acknowledging the inconsistencies between formats (mobile devices, laptops), the extremely complicated processes that contribute to the formulation of the recommended lists, and highlights unusual occurrences regarding certain videos that appear in the lists. Possible explanations are proposed, such as the weight of collaborative filtering, the overriding of algorithmic influence by corporate agenda and also the possibility that YouTube themselves take measures to occasionally randomise recommended material in order to introduce an element of variety in their systems.

Methodology

Section 8 details the primary research methodology as mentioned above. As social media have become increasingly embedded in nearly all aspects of everyday life, a diverse, multidisciplinary approach is beneficial. For this reason, a mixed-methods, ethnographic approach has been adopted, collecting both quantitative and qualitative data carried out in three stages.

The methodology chapter provides more thorough explanations for the choice of demographic, drawing on the past work of Miller (2011) and boyd, (2014)

It gives supporting evidence and justification for using a mixed methods approach. It also recognises my positional influence as both a researcher and member of the band and considers issues of distance and the potential impact this may have, including researcher bias, and insider/outsider fluidity as well as possible positive impacts such as a heightened sense of trust and acceptance.

The question choices in the survey, including the devices implemented to ask them, are discussed and justified, referring to Bourdieu's work and examples of their use in other academic works.

The full details of the task are laid out and the observational method is explained in detail, indicating the functionality of the tracking extension and the data it collects.

The chapter concludes with more supporting theories behind the use of interviews in ethnographic study.

Results

The results chapter is split into three sections to match the three stages of primary research. The first of these concentrates on an analysis of the data collected from the online web survey. Using graphs and other statistical graphics I highlight any patterns of behaviour or taste that appear in the answers given by the participants. This is to help gain an overall understanding of the tastes and behaviours of members of my chosen demographic.

The second of my results chapters focuses on the data collected as part of the observational study. Data gathered from the observational software is analysed and the findings are discussed, highlighting trends and engagement with particular social media sites such as YouTube and Facebook.

The third results chapter takes a look at the playlists created by the observed participants and examines the qualitative data collected from the post-observation interviews, comparing these findings with those of the survey and the analysis of the observational data.

Discussion/ conclusion

Finally, after thorough analysis of all the results from my primary research, including a cross examination of the data collected from all three sections, the research questions and objectives are discussed. The chapter first provides an evaluation of the research methodology and identifies

considerations for future repetitions of the investigation. The complicated impact of the personalised algorithms is identified and addressed, proposing that, in a complex network of influence, filtered access to information contributes to both a heightened sense of individualisation, but also to a narrowing of taste, acting as gatekeeping, cultural intermediaries.

The potential impact of this is discussed, in terms of the fragmentation of musical subcultures and the changes to the development of musical and cultural taste. The contribution that this research makes to knowledge in the field and also the potential, wider implications of its findings are also acknowledged.

Appendices

I have included a necessarily substantial appendix, to include important and relevant information to which reference can be made, but is not intended to be included in the main body of the text. This includes transcriptions of the participant's playlists and interviews, a full list of the survey questions, and any additional graphs, charts or figures from the primary research data, as well as documentation to show confirmation of approval from the Ethics committee.

Chapter 2 - Tasteing

Following on from Christopher Small's idea of *Musicking;* (Small 1998) a concept, in which Small suggests we should consider the term 'music' as a verb rather than a noun and view music not as an object, but instead, as an activity, and by participating in which, we all form and enhance our social identities, I seek to introduce a new term. *Tasteing;* a gerund that acts as a synecdoche for the way we now consume culture and outwardly display it, refers to the ever-shifting parameters of how we present ourselves as we navigate through the uneasy balance between limitless access to all information and a customised, filtered stream of information which limits that to what we are exposed. Individuals *Taste* culture in different combinations from day to day.

The deliberate misspelling of *tasteing* takes its inspiration from a similar tradition of word play found in French post-structuralism (see Derrida's *Différance* (1978)).

Taste, both musical and otherwise, plays in establishing our identities, not only in terms of how others actually see us, but also in how we see ourselves and how we *wish* to be seen. Social media has granted us new platforms from which to advertise our tastes. It has blurred the lines between private and public and it has transformed our relationship with space and distance. We can advertise our likes, interests and daily activities on the walls of our Facebook profiles and immortalise our experiences with tweets and images on Twitter or Instagram.

However, as well as the heightened access to information made available, it is important to also acknowledge the influential nature of algorithmic filtering and the contribution we all make to the processes that decide to what music or culture we have access. The more we engage with social media, the more data is collected, collated and analysed, which builds an increasingly detailed picture of 'who we are' and recommendations are made accordingly. Tasteing is not just the process of consuming media alone, but also the contribution that that

consumption makes towards the filtering of the information we see and thus the influence that it has on the evolution of our taste.

The act of Tasteing highlights the notion that our engagement with music and other examples of culture, guides, and is guided by our taste; it acknowledges the idea that our online consumption of culture is both a result of, and an actor upon our habitus (Bourdieu 1984) and cultural standpoint, affecting us in an influential loop.

The recommendations are almost like a distorted reflection of our selves, only showing us the best bits and the things we'd like to see. But, surely there would be consequences to this?

A study into *emodiversity* conducted by Quoidbach et al (2014) supports the notion, that the 'variety and relative abundance of the emotions that humans experience' has a profoundly positive effect on overall physical and mental health and wellbeing (Quoidbach et al 2014 p2057); a concept recently illustrated by the Disney/Pixar animation *Inside Out.*

 Quoidbach et al's work built upon many studies that all highlight the beneficial effects of a self-awareness of, and having an affluent, authentic and complex emotional life. (Schutte et al 2007,) (Wood et al 2008,) (Barrett 2009, 2013,) (Barrett and Bliss-Moreau 2009.)

Despite the obvious benefits of positive feelings and emotions, it has been suggested that an overabundance of happiness could have a negative effect (Gruber 2012). According to certain studies, too much happiness can stifle creativity (Davis 2008), can cause us to be inflexible in the face of new challenges (Fredrickson 2010), can prevent protective instincts, (Carver 2000) and hinder our ability to empathize with others (Eisenberg et al 1994) (Gruhn et al 2008) (Shanafelt et al (2005), (Devlin et al 2014).

And so, does a personalised social media warrant a 'too much of a good thing' cliché?

It should be considered that, the information that is filtered out by the algorithms, deemed as irrelevant is often relevant. Despite not always being obvious, we are influenced by many more variables than we might think. Finer details, and information that may seem outside the parameters of our interests are the nuances that help to establish context and are important contributors to the complicated combination of factors that illustrate our identity. Our taste is built, not just on the consumption of the things we like and enjoy, but also on our reactions to the things we don't like, the indifference we feel about certain things, and the excitement that may spring from new discoveries. To have a rich and meaningful experience of culture, we need to be exposed to a variety of stimuli, not necessarily with the goal to become more culturally omnivorous, but to develop a better understanding of what we truly like and dislike, of who we actually are.

Chapter 3 - Literature Review

3.1 The impact of Web 2.0 and Social Media

Digital technology is everywhere; we have brought it into our lives in the same way as the washing machine, the television, or the car. We use it wherever we can, and we are affected by it and by the forces that caused it to be created and shaped by the forms it takes – and the forms of our societies. – (Harkaway, 2012 p xiv)

Breakthroughs and advancements in technology have always had a significant impact on the world around us. As new inventions are developed, we adapt and change our lives to incorporate them, until they are commonplace and accepted as a way of life. The world of music is no exception to this and there have been several noteworthy technological developments that have drastically changed our musical lives.

The invention of the record player causing outrage to musicians who were concerned people would no longer attend live performances now that they could listen in their own homes, and the emergence of the electronic synthesizer guiding much of the sound throughout the eighties are two such examples, however, there is one progression that has had a greater impact on everyday life than any other; The Internet. The last decade has borne witness to a universal shift and, in some way nearly every aspect of human life has been affected by the World Wide Web.

Concerning the music industry, arguments around illegal downloading and streaming have raged and panics over how musicians will make a living continue (Thall, 2005) and (Mooney, Samanta, and Zadeh, 2010) but I intend to focus more on the social and cultural impact of these changes on the world of music.

The Internet has led to an unprecedented level of *hyper-connectivity* (Wellman 2001), drastically altering our relationship with space and time and allowing us to be in contact with anyone around the world who shares the same technology.

The phrase *'six degrees of separation'* was first used in 1929 in the play *Lancszemek,* written by the Hungarian Author Frigyes Karinthy. (Karinthy 1929) and was later itself, the title of a play by John Guare (1990). It refers to the notion that we are all connected to everyone else in the world by six or less links. Online

social networks now allow us to close the gap and share with each other, our first, second, third degree, in fact, all of our acquaintances, as well as the opportunity to remain connected with people that would have previously drifted out of our lives and been forgotten about. Consequently, the amount of relationships we need to maintain has increased. Does this mean that we spread ourselves more thinly over a larger number of people? Do we have time to sustain 'friendships' in this quantity?

According to anthropologist Robin Dunbar, the answer is no. His suggestion is that there is a cognitive limit on how many social relationships the human brain can handle. According to his theory, the maximum number of true interpersonal relationships we can cope with is 150, (Dunbar, 1992) and attempts to maintain more than that, result in shallower, less meaningful relationships.

There have been several criticisms to this number, suggesting that it is too low (Wellman, 2012). Bernard et al (2001) stated that even before the advent of social media the number for the average American stood at around 290 and, due to Facebook's popularity and aforementioned aptitude to retain relationships, studies by (Hua and Wellman, 2010) and (Boase, 2008) suggest that social media has led to an increase in the carrying capacity of relationships.

Friendship is already considered to be a vague term (Kendall 2002, Parks 2006) and this ambiguity is only enhanced by the use of the term for all enacted interpersonal connections on social networking sites. (boyd 2006, Fono & Reynes-Goldie 2006, Gross & Acquisti 2005), and according to Ellison et al (2007) and also Baron (2008) as many as two thirds of Facebook users' friends list are not considered to be 'actual' friends.

Studies into friendships have suggested that most people prefer to befriend others that they perceive to have similar social or demographic characteristics. (McPherson et al 2001, McCroskey et al 2005) and that online friendships are often built on platforms of similarity, due to shared online interests and meeting spaces. (McKenna & Bargh 2000, McKenna et al 2002, Parks and Floyd 1996)

Baym and Ledbetter (2009) conducted a study into the strength of friendships formed via the music-recommendation and social networking site, Last.fm. in their paper 'Tunes That Bind', they discuss how the findings of their research suggest that traditional demographical barriers to friendships were less of an issue in terms of making connections online, and that shared interests may trigger new connections and interactions, but specialised relationships and relational development remained weak unless interactions were extended

beyond the site itself (Baym and Ledbetter 2009 p 424), supporting Haythornthwaite's 'Media mulitplexity'; the notion that strong relationship ties rely on multiple means of communication. (Haythornthwaite 2005)

For Baym and Ledbetter, Last.fm, was a means by which users made, albeit weak, connections, but for relationships to properly develop, communication through other means was also necessary. This idea positions social media such as Last.fm as a place for connections to be made, but the levels of those connections are not necessarily any more than loose ties, or a subtle bind, based on a shared interest.

Heightened volumes of connectivity, do not necessarily lead to more meaningful or real connections, and similar questions can be asked about all forms of digital communication. Do we have the time to sift through the ever-increasing amount of correspondence that is sent to us on a regular basis? Part of the problem is filtering out what is important and what is not.

Aside from having to adjust to the sheer amount of information and correspondence, the arrival of Wi-Fi and broadband Internet, alongside the growth of compatible, mobile technology has allowed us to remain online in a constant capacity.

Indeed, smart phones have launched us into a state of permanent connectivity. Emails, Tweets, posts and access to search engines and social media, allow us to be contactable at all times.

When we consider the notion that, at the time of writing, there are over 750 million people with Facebook on their phones and over 6 billion hours of footage is uploaded onto YouTube each month, (Don't Blame Facebook 2014) it is easy to see how the Internet and in particular, social networking has combined with mobile technology to become a large part of our lives, in many ways revolutionising the way we communicate and interact.

There are some who argue that this constant connection can have detrimental effects. One such effect being that we no longer need to remember information because we can look it up at will; we are 'living in a world where knowing how to get information is more important than memorizing it" (boyd, 2012 p75)"

We no longer need to remember things like phone numbers or important dates because they are stored on a device in our pocket. We no longer need to know where anything is or use a map because we can plug in our SATNAV or phone and it will lead us straight there.

"The memory in our smartphones or our personal computers is increasingly an extension of our own selves since we have outsourced so much of our cognitive function to these technologies." (Hammersly, 2013 p 420)

Due to Moore's Law (Moore 1965), previously unimaginable amounts of data will be available to us in the foreseeable future. Coupled with Kryder's law (Kryder 2009) the technical advances thought impossible only a few years ago are quickly becoming a reality.

"A box the size of a hardback book containing the entirety of Hollywood's twentieth-century output is technologically foreseeable without any effort. So too is a book-sized box containing every book ever written." (Hammersly 2013 p14)

This capacity is enough to have a major effect on many industries, but even now, with the emergence of the *cloud*, and the ability to store everything elsewhere we can tap into it when necessary; There is no longer any need to own any data; Just a device to access it when required. (Ferkoun 2013)

As well as the boost in communication a huge development in the world of music is the emergence and abundance of music-based and listening orientated software made available by the increasing popularity of mobile devices. The ease and convenience of having constant access to as many songs as you like on your phone or iPod, makes persistent listening possible. There's no need to make compilation tapes or carry around CDs as being hooked up to the cloud theoretically gives you limitless access. (Seale 2013) It is feasible that the rise of this technology has drastically changed not only the way we listen and share our music, but has had a huge impact on how much it features in our lives allowing us to use music in many ways to enhance everyday activities and make it part of our usual routine. (Heye, and Lamont, (2010). A survey conducted over ten years ago stated that adolescents listen to music on average two to three hours every day. (North, Hargreaves, and O'Neill, 2000 255-272.) The development of portable musical technology over the last decade would surely see an increase in these figures (Krause, North, and Hewitt 2013)

Having the world's record collection in full availability to us at a touch of a screen highlights this new abundance of data at our disposal (Miell, MacDonald and Hargreaves 2005). In effect, every single door has been opened to us all, which has had a revolutionary impact on everyone. Many see this as problematic; in every sense, we are spoilt for choice.

"Tentacular, protuberant, excrescent, hypertelic: this is the inertial destiny of a saturated world. The denial of its own end in hyperfinality; is this not also the mechanism of cancer? The revenge of growth in excrescence. The revenge and summons of speed in inertia" (Baudrillard 1983 p189)

The amount of demand for your attention has increased massively over the past twenty years, but the available supply hasn't changed at all. (Hammersley, 2013 p87)

Increased access to information has the effect of giving technology users an excess of choice, leaving them with difficult decisions to make.

In the pre-internet era, there was already way more information and culture than any individual could digest. But most of this culture data and culture matter was stashed out of our everyday reach, in libraries, museums and galleries. Nowadays search engines have obliterated the delays involved in searching through a library's murky, maze-like stacks. What this means is that the presence of the past in our lives has increased immeasurably and insidiously. Old stuff either directly permeates the present, or lurks just beneath the surface of the current, in the form of on screen windows to other times. (Reynolds 2011 p56-57)

In his book, 'Retromania: Pop Culture's addiction to its own past', Simon Reynolds continues to point out that search engines have now removed the effort involved in our media consumption. He also reinforces the notion that "there is no evidence that we have significantly increased our ability to process or make good use of all that memory." (Reynolds 2011 p56)

One site, which has had a particular impact in more than one way, is YouTube, which has provided us with an almost infinite archive of footage.

"Total recall seems to be the goal. Is this an archivist's fantasy gone mad?' (Huyssen 2000) "YouTube's ever-proliferating labyrinth of collective recollection is a prime example of the crisis of over-documentation triggered by digital technology" (Reynolds 2011 p56)

This boundless space, coupled with an abundance of compatible technologies such as scanners and digital cameras has made it an effortless task to upload and share everything. Our mobile phones are now advanced enough for us to carry all of this technology in our pockets, meaning our experiences can be uploaded instantly.

What adds to this problem of having 'too much' information is the issue that the unlimited amount of space means that we no longer have to throw anything away; we don't have to choose what to keep because there is room to keep everything. This has a massive effect on our musical consumption. When your options are endless, where do you start?

Record companies deleted records from their catalogues in those days; …. listening to old music was limited to what you could find in shops, what you could afford on a limited budget. You could also tape music from the collections of your friends, or from public libraries, but this was limited by what was available and the cost of blank cassettes, today, any young person has access to virtually anything that's ever been recorded, free of charge, and anyone can easily bone up on all the history and context of the music through Wikipedia and a thousand music blogs and fan sites. (Reynolds 2011 p57)

Never throwing anything away not only leads to less room to move, but will also have an immense shift in how we view the past.

In a sense, the past has always been in competition with the present, culturally speaking. But the terrain has gradually shifted to the past's drastic advantage, thanks to late-nineties and early-2000s developments such as satellite and Internet radio (some of whose huge array of channels are formatted to vintage genres or generational cohorts) and the internet-connected 'infinite jukebox' that allows bar patrons to select from as many as two million tunes. (Reynolds 2011 p68)

This has a noteworthy impact on our relationship with nostalgia. Things that were once forgotten are now just a click away, meaning we can experience the past and see a more real version than the one perhaps manipulated by our memory. The Internet has removed the rose tinting from our spectacles.

"Our relationship to time and space in this YouTubeWikipediaRapidsareiTunesSpotify era has been utterly transformed. Distance and delay have been eroded to nearly nothing…. YouTube isn't just a website, though, or even a technology, but more a whole field of cultural practice." (Reynolds 2011 p58)

Reynolds makes the point that the new technology has swayed us into a quantity over quality approach, mentioning the shift of listening to music in the form of mp3s on mobile devices and arguing that in many ways our desire to have limitless access to all music has lessened our want for decent recordings; the notion that 'perhaps the process of circulating and accessing music has become more exciting than the practice of listening to it' (Sandhu 2011)

Reynolds' view is critical of this attitude and he feels that society's fascination with the past will have a negative effect on the development of our future.

Regardless of whether or not we view these changes as positive or negative, they are changes nonetheless and the impact they have on our consumption of music, and in turn our taste, is significant.

It could be considered that this technological take-over may be responsible for other changes in society in that many of our relationships are no longer necessarily with each other in the conventional sense, but instead we devote much of our attention to mobile machinery (Lenhart et al. 2010) (Moeller et al. 2012)

The human need to engage with others, establish identity and learn about the world has traditionally been acted out in front of various backgrounds such as clubs, shopping centres or local music venues. Social Media has become the new venue and individuals can sate their social appetites in a virtual space, and one where they can look, say and be what they want in relative safety.

This exchange of face-to-face encounters to virtual online experiences must have an effect on how we then develop socially (Fowlkes 2012), (Jones 2013).

"The basic connection in Facebook is referred to as 'friendship' since there is no way for software to elegantly map the true dynamic nuances of social life. While 'friendship' feels more comfortable, its overuse is costing us richness of our social life." (Hyde et al 2012 p59)

With this in mind, it's fair to say that our lives have 'sped up' and society has become less patient as a result of new technologies. (Barker 2014) Most of the advances have helped eliminate waiting, making our world more 'convenient', which does not always mean better. MP3s are a good example of this. Due to compression technology, which involves a reduction in the bit rate and therefore, the file size of downloadable music (Corbett 2012), the quality of a downloaded MP3 is far worse than that of a cd or vinyl, but we accept it, because it is quick to download, and we can fit thousands of tracks on our iPod, or mobile phone. It is also the case that it is far more common for us to listen to music in places where there is plenty of background noise such as public transport, and the difference in quality would make little difference. The footage on YouTube is of an equally poor quality, and although elsewhere in media, advancements such as High-Definition and Surround Sound are being made to improve the

experience of media consumption, the idea that consumers are willing to settle for inferior sound or picture, shows our increasing preference for speed and convenience over quality. (Moore 2011)

Another example of this was the recent emergence of new software attached to Soundcloud that instantly indicates where 'the drop' is on dance tunes, so that the public need not waste time listening to the opening of the track, but skip straight to the 'best bit'.

We no longer need to adhere to conventional time constraints. We are entering into an era of 24 hour, everything-on-demand. Television is already going this way, with catch up websites and DVD box sets, I suspect that, with the exception of televised sport (for obvious reasons), any program scheduling will become a thing of the past and we will choose our viewing from a YouTube style menu. (Jenkins 2013)

Furthermore, this technological shift has transformed completely the way we purchase music, and by this, I mean the experience of shopping for records or CDs. The activity of browsing around an independent record store, flicking through the albums and paying cash over the counter is becoming increasingly rare. As a result of this, most music stores have disappeared and those that remain struggle for survival. (McCormick 2013)

In place of this, online musical consumption is becoming standard practice, which has major effects on the consumption itself.

There is a much more 'virtual' feeling to purchasing the songs online. The items are just pictures, and the money is now just a number on the screen. Even the songs themselves are hidden from us. With a couple of clicks, the whole thing is done and the music is downloaded straight to the iPod or phone. It takes up no physical space, and can therefore feel like nothing has happened.

The limitations are also very different. Availability is no longer an issue. Everything that has ever been recorded can be found easily, and in most cases, completely free of charge.

In many cases, unrestricted access to music must be a good thing, but it can be argued that this overabundance of choice, affects the level at which we engage with music.

3.2 Understanding Social Media.

So far, we have discussed the transformative impact of the introduction of various new technologies. In this section, I delve a little deeper into the most significant of these technologies: Social media, which has undoubtedly had an immense effect on society and most notably has brought about the shift of life onto a virtual format.

"With perhaps a tenth of the planet using Facebook every day, less than a decade after it's invention, social networking, and the idea of the social graph, is perhaps the most influential and culturally significant thing to have happened to the Internet." (Hammersley, B, 2013 p31)

Christian Fuchs, highlights the importance of addressing social and critical theory in order to understand *what* social media actually is.

"...Defining social media requires an understanding of sociality: what does it mean to be and act in a social way? (Fuchs 2014 p37)

The applications of what we call "social media" have, according to some, been around for much longer than we would assume (Allen 2012) (Scholz 2008) and there are many different definitions of social media by leading researchers in the field each focussing on various aspects of online sociality.

For example, (Shirky 2008,) (Baym and boyd 2012,) (boyd 2009) (Van Dijk 2013) (Lovink 2011) (Terranova and Donovan 2013) (Gauntlett 2011) and (Meikle and Young 2012) all provide definitions to suggest that social media contain tools that include the capacity to communicate, collaborate, gather in communities, act collectively, connect, play or network with others, create and share content.

The enabling of individuals to participate, as well as spectate, is an area of much discussion. The once passive positioning becomes participatory; the consumer can now produce with great ease. Yochai Benkler champions this idea; "The network allows all citizens to change their relationship to the public sphere. They no longer need to be consumers and passive spectators. They can become creators and primary subjects. It is in this sense that the Internet democratizes (Benkler 2006, p272.)

Supporting theorists suggest that the advent of Web 2.0 has allowed a shift away from mass media broadcasting and corporate led influence, (Tapscott and Williams (2007), Bruns (2008)) blurring the line between producer and consumer and making culture and society more democratic.

In this sense, social media can be described as participatory culture, explained by Henry Jenkins as culture "in which fans and other consumers are invited to actively participate in the creation and circulation of new content." (Jenkins 2008 p331) For Jenkins, the 'spreadable' and interactive nature of social media allows consumers to be 'empowered' (Jenkins, Li, Krauskopf and Green 2009), and the claim that the rise of social media has opened the door for a more democratic society or culture is popular amongst many researchers in this field. For them, social media has allowed us to 'treat free time as a shared global resource and lets us design new kinds of participation and sharing that take advantage of that resource' (Shirky 2011 p 27), it leads to a "produsage-based, participatory culture (Bruns 2008 p 256) and marks the advent of "a new economic democracy [...] in which we all have a lead role' (Tapscott and Williams 2007 p15)

This increase in participation coupled with the aforementioned breakdown in traditional barriers to mass communication, has had a great impact on musical fandom.

"The Internet provides immediacy, even a sense urgency, for viewers who go online, erasing the frontiers of time and space, creating something that is familiar: fandom" (Bourdaa and Hong-Mercier 2012 p244)

Fan behaviour often goes beyond regular consumption and many partake in activities such as creating cultural reviews, fan videos, arts, fictions and websites to share with others with similar interests. (Bielby, Harrington and Bielby 1999), (Jenkins 1992, 2006)

As our lives shift in this digital direction, so too, can it be necessary for changes in our routines and behaviours to take place. New protocols are built and evolve from the emerging shifts in the 'network society' to which we belong (Castells 2009) and from which we receive a varying amount of benefit.

The rules and parameters of how we should behave and communicate also shift and 'Netiquette' is something we all have to learn and get used to.

"We have seen over and over again that the etiquette that governs our use of the new capabilities evolves far more slowly than the technology itself" (Hammersly 2013 p240)

Whether consciously or not, our use of social media enables a vast amount of communication that reaches over cultural and religious boundaries. When we post a video, or write a blog, the potential audience is ever increasing along with our network of connections. (Burgess and Green 2009) This is also

applicable in regards to an audience with a wider range of political persuasions, and there are many examples were new media has been utilised for political purposes, whether it be video uploads (Guadango et al 2013) the spread of memes (Baker and Gammon 2008) or online discussion groups. (Papacharissi 2009)

These studies highlight, in particular, changes in the communicative areas of the public sphere (Habermas 1992) brought about by social media. Jürgen Habermas established guidelines by which the public sphere can be evaluated. As well as the notions mentioned above, Christian Fuchs points out that a key element in his approach focuses on the fact that 'the public sphere is a question of its members' command of resources (property, intellectual skills)' (Fuchs 2014). This is supported by Garnham, "a virtue of Habermas's approach is to focus on the necessary material resource base for any public sphere." (Garnham 1992 361) – An idea that doesn't sit a million miles away from Bourdieu.

For others, however, (John (2013), Scholz (2008), Cammaerts (2008), Rushkoff (2010) Morozov (2011)), the impact of social media enhances the exploitative and dominative nature of capitalism, and the collection of data and amassing of 'home-made' content only empowers big businesses and companies.

While it is not untrue that social media has led to a significant rise in 'spreadable media' (Jenkins, Li, Krauskopf and green 2009) and the likes of YouTube has provided a platform for 'the production and distribution of grassroots media' (Jenkins 2008 p274) Fuchs argues that theories along these lines grossly underestimate the importance of power and capitalist dominance of the internet.

Fuchs (2014) points out several problematic areas in the theories of Jenkins' and other supporting scholars of participatory culture. Fuchs suggests that the missing critical theory in this approach is flawed and that the political notions of participation should be acknowledged including how and by whom it is controlled and regulated.

"Contemporary social media are not participatory: large companies that centralize attention and visibility and marginalise politics, especially alternative politics, dominate them." (Fuchs 2014 p121) "Media and Communication Studies should forget about the vulgar and reductionist notion of participation (simply meaning that users create, curate, circulate or critique content) and focus on discovering the political notion of participation by engaging with participatory democracy theory" (ibid p65).

Fuchs goes on to suggest that Jenkins 'neglects ownership as an aspect of participation .... mistakes politics with popular culture', neglects structural constraints of human behaviour and the dialectic of structure and agency' and that he 'misses the central economic relevance of money in the economy.' (Fuchs 2014 p65)

The democratizing nature of social media is also questioned by Franny Armstrong: "Yes the Internet is democratizing in that sense that the cheap equipment is democratizing. But just because a football is cheap and anyone can kick one around, it doesn't mean that everybody is Ronaldo" (Armstrong, cited in Sorensen 2012 p740)

Evgeny Morozov wrote about Google, "Theirs's is a very peculiar definition of democracy. For one, the idea of equality on which Google search is based is quite shallow: yes, everyone can vote with 'links' – but those who have the resources to generate more links, perhaps by paying influential sites to link to them, or to game the system through search engine optimization have much more power than those who don't. It's anything but 'one person – one vote.' At best, this is more of an oligarchy than a democracy. Besides, Google's ranking algorithm considers at least two hundred other factors – for example, the loading speed of the website – in addition to how many other sites link to a particular page." (Morozov 2013 p147)

The notion of user-generated content as *free labour* (Terranova 2003) is an area of contention within the democracy versus capitalist-control debate. As with other aspects of this dispute, while some see the production of online media and material as participatory, (Bowman and Willis 2003) others would label prosumer activity as exploitative and contributing to capitalist domination. (Fuchs 2014a)

It could be suggested that perhaps the creativity itself is not commercial, but the platform on which it is displayed, archived, or produced, is. Whether online culture is truly participatory or not, there is no question that capitalist regimes play some part and have some influence on the way society develops through its relationship with social media.

For Fuchs, though the level of exploitation is apparent on several levels, going beyond the realms of the internet itself and he points out the steeply inclined hierarchy and division of labour within digital media, from the highly paid Internet company executives at the top of the pyramid, dropping to the poorly paid precarious knowledge workers, internet users who produce material and data for free, the highly exploited workers in developing countries who

manufacture our hardware and the slave workers who extract the minerals to provide the raw materials. (Fuchs 2014 p122)

This is exemplified by a report made by SACOM (Students and Scholars Against Corporate Misbehaviour) detailing the mistreatment of Chinese workers by Foxconn; the company behind the manufacturing of iPhones, iPads, iPods and other Apple products, (SACOM 2011) and by several scholars who have commented on the inhumane conditions faced by workers who produce hardware for new technologies. (Zhao 2008), (Qui 2009), (Hong 2011) (Sandoval 2014)

In defence of his theories on participatory culture, Jenkins deflects many of his critics by pointing out that participatory culture and web 2.0 are not the same thing, and that participatory culture existed before the advent of the Internet.

"The struggle to expand the communicative capacity accessible to the public has a much deeper history… the desire to participate cannot be reduced to the affordances and promises of recent technological platforms." (Jenkins, Ito and boyd 2016 p125)

He suggests that, although capitalist ideologies are certainly present in web 2.0, libertarian and neoliberal beliefs also exist, implying that Marxist critiques of social media often fail to acknowledge the nuances involved in the development and dissemination of new social technologies (ibid p126)

"Acknowledging that people are making money off participatory culture is not the same as saying it's all driven by capitalist incentives and values" (ibid p135)

"There is little doubt that many corporations have grabbed hold of different aspects of participatory culture in an effort to control, channel, and commodify such activities. Likewise, social media companies – driven by a model of advertising that relies on large quantities of data – are profiting from participatory culture practices taking root inside their ecosystem. But this does not mean that participatory culture is simply beholden to capitalist agendas. Some parts of participatory culture are quite resistant to capitalism. Other aspects are less critical and, perhaps, some may be more heavily shaped by corporate logics. We cannot untether participatory culture from corporate interests because participatory culture is not happening in a void. While we believe that the corporate dimensions should be critiqued, we also believe that participatory culture should not be thrown out simply because its practices and values do not protect us from the ills of neo-liberal capitalism" (ibid p185)

These arguments highlight the significant impact that Social media has had on the understanding of our ability to produce, consume, participate or be manipulated (see the discussion on structure and agency in section 5.5)

Social media companies face conflicting concerns and struggles when it comes to this. In order to maintain the loyalty of their users and reduce the potentially problematic issues of privacy, copyright and censorship (see section 8.1) and the public's opinion of how these are handled, some aspects of power have to be yielded to the users, which, in turn could lead to an increase in networked audiences who engage with collective interests. However, the necessity to function as a profitable organisation, incentivises works alongside advertisers, data-miners and venture capitalists. While we can certainly participate in new ways, on new levels, we *must* acknowledge the capitalist influence that exists within social media.

"Analysis of the ten most viewed videos on YouTube shows that transnational media corporations, the organised exploiters of surplus value-generating labour, control YouTube's political attention economy," (Fuchs 2014 p99) 'An internet that is dominated by corporations that accumulate capital by exploiting and commodifying users can never, in the theory of participatory democracy, be participatory and the cultural expressions of it cannot be expressions of participation." (Fuchs 2014 p65)

The labels by which we refer to social media are also a cause for consideration. For example, the notion of social media such as YouTube as a *platform*, should be examined. In 'Politics of *Platforms'* (2010) Tarleton Gillespie highlights the problematic use of this term, suggesting that, on one hand being 'platform' makes the site sound like a democratizing force, but on the other using it as a method of shirking responsibility. Referring to themselves as platforms, social media are making "efforts not only to sell, convince, persuade, protect, triumph, or condemn, but to make claims about what these technologies are and are not, and what should and should not be expected of them… these terms matter as much for what they hide as for what they reveal." (Gillespie 2010 p.364)

For Fuchs, the personalisation of the Internet is driven by corporations and advertising campaigns. The recommending software embedded in nearly all aspects of social media continually steers our online lives into an area controlled by the state and those corporations.

So how does the emergence of social media and the apparent corporate motives that drive them affect cultural society?

3.3 Subcultures and Identity

Humans are a knowledge-using, cooperative species, and culture emerges naturally from that lifestyle. (Pinker 2002 p60)

The word, culture, has always been shrouded in ambiguity and an exact definition has been eluding scholars for many years. Early pioneers of the term used it differently and disputes were common right from the start. Matthew Arnold referred to culture as 'the cultivation of the brain and an engagement with *sweetness and light';* a form of an educational enlightenment includes, exclusively "the best which has been thought and said" (Arnold, 1867) In contrast, just a few years later, Edward Burnett Tylor revealed a more anthropological, Darwinist view of culture as "...that complex whole which includes knowledge, belief, art, morals, law, custom and any other capabilities and habits acquired by man as a member of society." (Tylor 1871)

Tylor's description likened culture with civilisation. In his view, culture was everything and anything that we had accumulated through society and was what separated us from animals. Arnold's view was more along the lines of culture being the elitist literature and philosophy that separated different classes of human beings.

"Culture is a notoriously ambiguous concept.... Refracted through centuries of usage, the word has acquired a number of quite different, often contradictory, meanings." (Hebdige 1979 p5)

Culture develops as new ideas are shared. In the past, people would travel to different lands, taking with them the art, stories, music, skills, religion, laws and customs native to them as a people. Cultures evolve, for good or bad, as elements of these are taken on by new hosts and adopted by a new group of people.

Culture, then, is a pool of technological and social innovations that people accumulate to help them live their lives, not a collection of arbitrary roles and symbols that happen to befall them. This idea helps explain what makes cultures different and similar. When a splinter group leaves the tribe, and is cut off by an ocean, a mountain range, or a demilitarised zone, an innovation on one side of the barrier has no way of diffusion to the other side. As each group modifies its own collection of discoveries and conventions, the collections will diverge and the groups will have different cultures. (Pinker 2002 p65)

For many, it is this spread of ideas and information that stands as a leading point of significance in making us human.

In many cases, new cultures are welcomed and taken on, often subconsciously but there can also be a great deal of opposition.

An explanation of this lies in the notion that the culture we take on, or have been brought up with is a huge part of establishing one's identity. The way we behave, and the customs we adhere to, allow us to identify ourselves with and to others around us. Despite the fact that our identities are due to an already diverse mix of cultures and ideologies, we feel threatened by any change that comes about, just as new elements are taken on, others are disregarded and eventually forgotten. (Condry 2007) We spend so much time attempting to ascertain whom we are, we become proud of it, and feel uneasy or defensive if something new impends or takes over.

Our position in life, or where we stand in society therefore, is directly linked to our tastes and the culture in which we partake and with which we surround ourselves.

Post WW2, a new demographic appeared and the term teenager was used for the first time. This, along with the rise of artists such as Cliff Richard, Elvis Presley and later, the Beatles, gave rise to an unfamiliar behaviour. Since this time, the concept of Fandom has been widely researched and there are many studies that examine fan behaviour.

"Fans usually belong to a community in which the same passion, language, media practices and the will to participation are expressed. This sense of belonging is strong among fans. (Bouraa and Hong Mercier 2012 p244)

This type of devotion has been described as extreme and obsessive (Gray, J. 2003), sometimes pathological (Jenson, J. 1992) and has often been compared to acts of religious worship. (Lobert 2012) suggesting either, that famous musicians are being worshipped as icons, (Till 2010) or the music itself can be comparable to a religion or cult, (Eurich 2003) in the sense that interaction rituals (Collins 2004) can often take place.

Fandom, exemplifies the consumption of culture, and as different aspects of culture become prominent, cultural groups form, the members of which are united by their common interest.

Since the 1970s, studies into the concept of *subculture* have been prominent in any cultural or sociological area of research, and in particular those

areas concerning music, fashion, style and youth. Studies brought forward at this time such as Hall and Jefferson's *Resistance through Rituals*, (1976), Dick Hebdige's *Subculture: the meaning of style (1979)*, along with Mungham and Pearson's *Working Class Youth Culture* (1976) and *Profane Culture* by Willis (1978) (who were all affiliated with The Birmingham Centre for Contemporary Cultural Studies or CCCS) rapidly became key texts in youth-related academia. They also followed on from theories and studies conducted by Gramsci (1971) and Althusser (1971) and made claims that subcultures were the social backlash to society at the time, and drew more attention to the idea that it was no longer acceptable just to like the right things, but also to make sure to distance yourself from anything that could earn you some negative capital.

However, as with the broader concept of culture, *subculture* was somewhat cloaked by the fact that the definition was vague and many people had a different understanding of what a subculture actually was and despite its dominance in the field, cracks began to appear and critiques of subculture quickly became commonplace. (McRobbie 1980), (Clarke 1981), (Brake 1985), (Cohen 1987), (Redhead 1990), (Harris 1992)

For many, developing new taxonomies and new pigeonholes in which to place the youth, was an attempt to simplify a complex series of relationships and provide an explanation for the difficult processes that we go through on our way to establish our place in society.

"(Subculture) has arguably become little more than a convenient 'catch-all' term for any aspect of social life in which young people, style and music intersect' (Bennett 1999 p599)

It was noted that, as society was changing, the concept of subculture was not always easy to determine. Youth culture was fragmenting and different mutations of previous groups were appearing.

Youth styles were becoming more prolific from the 1980s onwards (Polhemus 1997) and this, combined with an increase in the opportunity for 'style mixing' (McRobbie 1994) was leading to a disintegration of youth culture.

"The 1980s and 1990s (are) decades of subcultural fragmentation and proliferation, with a glut of revivals, hybrids and transformations, and the co-existence of myriad styles at any one point in time" (Muggleton 2000 p.47)

Chaney proposes that we must "consider whether or not there is still theoretical and empirical justification for the application of subculture in a world increasingly characterised by cultural fragmentation" (Chaney 2002 p 2)

In recognition of the significant changes in society, much of the current literature on this subject observes that society has changed in such a way, as the term should be re-evaluated. By the early 2000s such theoretical understanding and ethnographic practice came to be known as 'post-subcultural studies.'

"In a global society with a rapid proliferation of images, fashions and lifestyles, it is, unsurprisingly, becoming increasingly difficult to pinpoint what 'subculture' actually means. Enthusiastically adopted by the media and academia, 'subculture' may be a convenient way to describe more unconventional aspects of youth culture, but it does little to help us comprehend the diverse range of youth groups in today's so-called 'post-modern' world" (Muggleton 2003)

One of the key concepts of the CCCS that seems to be missing in more recent youth groupings is that of resistance against society. As mentioned above, in this era of mainstream entertainment and media being saturated in the shocking and offensive, any unruly or antisocial behaviour, a characteristic well associated with the CCCS definition of subcultures, would not seem all that resistive. In other words, if antisocial behaviour were a distinctive attribute in breaking away from the mainstream for post-war youth, today's climate would instead render these actions obsolete, or force the youth into taking things even further.

"While we argue that certain contemporary 'subcultural' movements can still express a political orientation, the potential for style itself to resist appears largely lost, with any 'intrinsically' subversive quality to subcultures exposed as an illusion. Thus, while the analyses of the CCCS can still be regarded as pioneering scientific work, they no longer appear to reflect the political, cultural and economic realities of the twenty-first century." (Muggleton and Weinzierl 2003 p5)
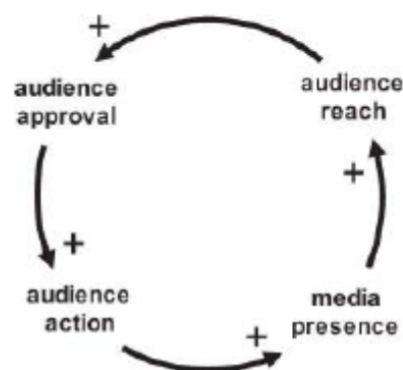
Fig. I – Wikstrom's Audience –Media Engine Model

The 'audience – media engine' model, developed by Patrick Wikstrom, (2006, 2009) (see fig I) highlights the important relationship between the music industry and the media. The ability to control the audience – media engine has always been integral to music-business strategy but has been significantly complicated by the rise of social media. According to Wikstrom, the widespread capability to upload information to the cloud, has increased the number of media outlets, and thus accelerated audience fragmentation. (Wikstrom 2013 p 131) This, coupled with *'increased product variety'* (Brynjolfsson et al. 2003) contributes to "a shift from mass culture to massively parallel culture". (Anderson 2006 p 184) suggesting that as cultures break down, many smaller cultural groupings or microcultures are formed.

With the view that subcultures are already in a state of fragmentation, the prolific shift of our lives into a digital world presents more variables, which could either reinforce traditional subcultural groupings, or lead to further division. I assess throughout my thesis which of these cases is more prominent, and for what reason.

Attention, then, should be directed to examining the impact of social media on smaller, subcultural groups or localised communities. A particular study into individualised use and localised influence of social media was carried out by Daniel Miller.

Miller's anthropological study 'Tales From Facebook' focuses on Facebook users in Trinidad. Through intense observation, Miller assesses how Social Media has affected the lives of those who use it, via his experience of the local people, cultural relativism and the localised netiquette, which he claims is evident as usage adapts to the needs and habits of its users.

Miller's study has influenced my own in several ways, especially in terms of my methodology. Like Miller, I observe a focus group using social media, and assess their online behaviour, (concentrating particularly on any actions or decisions connected with the consumption of music.)

More specifically, Miller's choice of participant demography influences the present methodology. Miller concentrates his attention on a number of Facebook users from Trinidad, which would, at first seem to be of little relevance when discussing any global or general effects of social media. However, he makes the argument that the opposite is true.

Firstly, he points out that it can be problematic to only observe Facebook as it was originally set up and utilised and it is in fact more fluid and adaptable to its users.

"As Facebook has spread, it has become increasingly diverse. So, from an anthropological perspective, it could be said that there is no longer any such thing as Facebook. There are only the particular genres of use that have developed for different peoples and regions." (Miller 2011 page x)

And then goes on to suggest that, as a result, Facebook is used and experienced in a different way in accordance to outside cultural influences.

"This volume is set in Trinidad, a place chosen specifically to dislodge the assumption that however people in the UK or the US use Facebook, that *is* Facebook. Trinidad is sufficiently distinctive to force us to engage with the comparative dimensions of Facebook's emergent heterogeneity. The intention is that for most readers this displacement from their usual setting will actually make this book more, rather than less, effective at helping them consider the impact also on their own lives." (Miller 2011 page x)

In a similar way, I believe that focussing on a smaller group of individuals chosen from a particular cultural demographic, has allowed me to make more in-depth observations on the actual impact social media has had on their online 'musicking' (Small 1998) provided I pay attention to any cultural relativism or localised netiquette.

"Without this injection of cultural relativism, we could easily be drawn into making vast generalisations about what Facebook is and its social consequences, based on assumptions about the functions of technology or some general model of human psychology" (Miller 2011 p164)

Like Miller, danah boyd's 'It's complicated: The social lives of networked teens,' (2014) focuses on individual's experiences and behaviours on social media, concentrating on youth engagement with social media in America and particularly on the concerns that America has regarding its impact on youth culture and the practices contained within.

A key factor of importance with social media is the fact that it is made up of individuals forming and maintaining connections and relationships. As well as with each other, and as part of cultural groups, these relationships are often made with activities such as music, and I believe, in order to understand the greater influence of such a fluid, constantly evolving platform, we need to focus

on the smaller parts and observe the different ways in which particular individuals may be affected.

3.4 Pierre Bourdieu

Research absolutely key to this concept, was carried out by Pierre Bourdieu.

Bourdieu's *Distinction: A social Critique of the Judgement of Taste,* is a book that was first published in France in 1979, and has grown to become a key text in the world of sociological research; Even to the extent that it was voted by the International Sociological Association in 1998, as one of the ten most important sociological books of the 20th century. (ISA books of the century 1998) Based on an in-depth series of interviews and concise ethnographic data, much of the book focuses on and dissects the idea of social class. In it, Bourdieu also examines the concept of taste and how it is formed.

The title itself Distinction comes from the idea that each of our aesthetic choices, are all distinctions, or choices made in opposition to those made by other classes. Our choices are a way of distinguishing ourselves from others in order to gain merit and identity, suggesting that what we like, and just as importantly, what we dislike helps to shape our social image or personality. *Taste classifies, and it classifies the classifier. Social subjects, classified by their classifications, distinguish themselves by the distinctions they make, between the beautiful and the ugly, the distinguished and the vulgar, in which their position in the objective classifications is expressed or betrayed.* (Bourdieu, 1979 p6) The subtitle too, *A Social Critique of the Judgement of Taste*, is also a deliberate reference to the revolutionary nature of the book, referring to Kant's *A Critique of Judgement (1790).*

Distinction is a comprehensive study based on over ten years of empirical research. Ethnographic data in the form of thousands of surveys were conducted collecting information about multiple forms of culture, blanketing all aspects of life. This data was cross-referenced with the individual's occupation, income, education and family background, and then, most importantly followed up with interviews in which the participants would explain their views and opinions.

This approach has strongly influenced my own, in terms of primary research. The questionnaire–led methodology carried out by Bourdieu's team is similar to the data collection aspect I have conducted as the initial stage of my primary research. The quantitative data can be analysed and cross referenced against the information later collected during the observational stage and also the more qualitative data gathered during the final interviews.

The data collected by Bourdieu and his team, flagged up few surprises at first and correlations between class and culture were easy to see. However, during the interviews, Bourdieu discovered that, although many of the participants 'liked' and 'disliked' what he had expected them to, they gave extremely interesting reasons and at times, defensive arguments, as to why. He discovered that, particularly amongst the middle and higher classes, taste was being used as an identity tool; a means by aligning one's self with the 'right' things to gain what he called *Cultural Capital*.

Cultural Capital is the idea that the culture we consume acts as currency that can earn us a place higher on our desired social ladder. Just as economic capital allows us to flourish in society, Bourdieu argues that having the right knowledge and being seen to be consuming the right amount of the right culture grants us a certain place in the social order. Of course, what is considered to be the right culture differs, depending on the background of the individual and Bourdieu suggests that different types of this cultural capital can help you escalate different social hierarchies. The first paragraph in Distinction is a quote, in homage to this notion; a scene from a medieval play suggesting that pupils should view knowledge as 'an intellectual stock in trade' owned by them as if it were 'a house or money.' Bourdieu, points out that being seen to like or dislike the right things is essential, not only to align one's self with a desired social group, but also to disassociate one's self with others that are considered to be undesirable. He discovers that there are many things that shape these desires.

Another concept devised by Bourdieu, is that of habitus – which is almost like a filter through which your decisions are made. Where you come from, the class you were born into, the stances, aptitudes and outlooks on life that have been instilled by your background and upbringing, all contribute to your habitus. It is not fixed but evolves as new life experiences unfold.

"The habitus is not only a structuring structure, which organises practices and the perception of practices, but also a structured structure." (Bourdieu 1986 p170)

And thirdly, his concept of field; for Bourdieu, fields are the systems through which we chase our ambitions and objectives. Each field carries with it its own rules and system of hierarchy.

These concepts combine to explain our standpoint of taste. Where we stand in society (or at least where we think we do) is in accordance to these parameters. The field being the institution of which we wish to be a part, or the ladder we wish to climb, our habitus being the inbuilt attitudes and beliefs we

have acquired form our background, and the cultural capital, the currency that allows us to situate ourselves somewhere on the ladder.

My favourite analogy for this in the literature I've read so far can be found in Carl Wilson's '*Let's talk about love*':

"The clearest way to understand distinction may be in high-school terms: Say you're a white, nerdy fifteen-year-old boy who listens to High School Musical but you come to see you have a chance at becoming friends with the tough kids who smoke behind the school. So, you start listening to death metal and wearing hacked-up jean jackets. This isn't a ruse: you just start to see what's plausible and exciting for you about those tastes. Here, death metal is cultural capital, high school cliques are the field and your habitus is what's likely to determine whether you can carry off the slang and the haircut. Your instinct is to distinguish yourself from the nerds by becoming one of the tough kids, who, incidentally hate high school musical with a vengeance, because that's what nerds listen to." (Wilson 2010 p 92)

3.5 Being Cool.

The exchange of cultural capital is complicated and can work differently from individual to individual, but in simple terms it comes down to being what many of us would refer to as 'cool'. Being *cool* earns respect, and status. *Cool* is something most of us want to be and our relationship with culture is usually vying for a position on the cool ladder.

One way of being *cool* is having confidence, and ironically, being 'deliberately uncool' can actually earn cultural capital. Someone with the confidence to go against the grain could be considered a trendsetter. Other, more careful members of society wouldn't dare attempt such risky behaviour, due to the almost certain ridicule that could befall them for doing so and getting it wrong.

"Some collective practices have enormous inertia because they impose a high cost on the first individual who would try to change them... laying down your weapons when hostile neighbours are armed to the teeth, abandoning the QWERTY keyboard layout, and pointing out that the emperor is not wearing any clothes." (Pinker 2002 p66)

A cautious attempt to test the water in this way is admitting to having a 'guilty pleasure'; making it common knowledge that you know that something is uncool, but enjoy it anyway.

Culture advances, when people go against the grain and develop new ideas, but culture grows when people latch on to an idea and follow it, making it popular. The majority of us are followers, absorbing the culture, and accepting it into our lives, adhering to the rules that accompany it and waiting for others to produce the next thing to follow. We do not always do this consciously and many of us would like to think we don't do it at all.

There is something evolutionary about the way we do this. Almost like an instinctual behaviour, to ensure our survival. Animals do similar things when they congregate in herds and huddle together when a predator is near. We have learnt that to stray away from the group is dangerous, and could end badly. In a cultural sense, this links us back to cultural capital. Although being individual is important in today's society, you have to be individual in the right way.

Taste in music is an indicator of identity and is strongly linked with the exchange of cultural capital. (MacDonald, Hargreaves and Miell 2002) and (Rentfrow 2012). The world of music has become one of the biggest market places for this exchange and we are constantly haggling with each other for the optimum place in society. Bourdieu suggests that our cultural intake is a symbolic statement; liking a particular style of music is like a badge to display much more than our musical taste alone. A band's t-shirt is an announcement saying, not only am I a fan, I also affiliate with the band's policies and the culture that surround them.

Stokes suggests, "Music is socially meaningful…largely because it provides means by which people recognise identities and places, and the boundaries which separate them." (Stokes 1994 p124) Our musical tastes, in this way, almost act like a synecdoche of our personality. There is much evidence suggesting our tastes are directly linked to our need to socially align ourselves with others. When trying to fit into a social group, liking the right things (or being seen to) is essential. Frith states "the relationship between the musicians and their fans is tribal; and any criticism of the music is received by the fan as an assault upon themselves and their identity." (Frith 1987 p133-151) It is often this link between identity and taste that can cause confusion. Someone's taste in music is seldom based on the music specifically, but about accompanying factors; lifestyle, fashion etc.

At the time that Bourdieu conducted his research, the notion of social class was of upmost importance. Cultural status has traditionally had a considerable impact on taste and many cultural-sociological arguments have been centered on ideas of high and low culture.

"Cultural capital is the linchpin of a system of distinction in which cultural hierarchies correspond to social ones and people's tastes are predominately a marker of class." (Thornton 2006 p99)

There are many for whom cultural snobbery is integral, suggesting that the most important aspect of any art form is aesthetic value and that art is cheapened by popular culture. (Scruton 1997). Adorno (1984) is also famously credited with much work in this field, to the extent that Middleton suggests that "Anyone wanting to argue the importance of studying popular music has to absorb Adorno in order to go beyond him." (Middleton 1990 p35)

"…every popular music genre was linked, in Adorno's view, to forms of regression and infantile dependency" (Adorno 1990 cited in DeNora 2000 p165)

Gans too suggests that high culture can be tainted by popular culture should any crossover take place. "When an item of high culture is borrowed, the high culture public may thereafter consider it tainted because its use by the popular culture has lowered its cultural prestige. Popular culture audiences on the other hand may be pleased if their fare is borrowed from or by a culture of higher status." (Gans 1974 p14)

This view proposes that, instead of an aesthetic enrichment, cultural crossovers are an example of 'high culture' being polluted by the 'less valuable' popular culture. Access to culture that was previously exclusive to the higher classes result in new associations with the lower classes and a cheapening of that culture.

This is supported Van Den Haag, "Corruption of past high culture by popular culture takes numerous forms…. Bach candied by Stokowski, Bizet coarsened by Rodgers and Hammerstein…works are cut, condensed, simplified and rewritten until all possibilities of unfamiliar or aesthetic experience are strained out" (Van Den Haag cited in Gans 1974 p15)

These views, expressed over 40 years ago, could well be dismissed as dated and old fashioned however, similar opinions have been recorded since.

Strinati in 1995, "Because the masses lack taste and discrimination, culture is thereby debased and trivialized." (Strinati 1995 p7)

And by Stichele and Laermans in 2005 "The rapid development of the leisure industry and the booming of the mass media, together with the democratisation of the educational system and an increased social mobility,

resulted in a serious decrease in impact and legitimacy of the fine arts among the post war generations." (Stichele and Laermans 2005 p45)

These views are based on assumptions that aesthetic value is the only reason for liking something, but there are many other reasons why we might enjoy a particular song or piece of art. In the same way that we might enjoy a rollercoaster or emotional movie, we might like something because it's not beautiful; sometimes the actual evocation of a feeling is enough.

In an increasingly multicultural world, the boundaries between what was once considered high and low culture are disappearing. Diverse appreciation increases alongside exposure to different cultures. The rise in popular cultural phenomena such as reality television, designer casual-fashion, and the huge financial successes of footballers, rappers and the like have intermingled society to an extent that the boundaries are now blurred.

Shifts of attitude towards popular culture has given rise to some critical responses to Bourdieu (Laughey 2006 p39) and also to the idea of the *cultural omnivore;* a term devised by Peterson to describe "people of a higher social status, contrary to elite/mass models of cultural taste, who were not averse to participation in activities associated with popular culture." (Peterson and Simkus 1992 p152-86)

"The *omnivore* thesis contends that there is a sector of the population of western countries who do and like a greater variety of forms of culture than previously, and that this broad engagement reflects emerging values of tolerance and undermines snobbery." (Warde et al. 2007 p1143-164)

The Omnivore thesis has been considered by many to be a strong competitor to Bourdieu's theories. (Lizardo and Skiles 2012)

Many studies point towards a majority of cultural omnivores being from the western world; in particular, the USA and several Scandinavian countries, maybe because these are places where society is more multicultural and diversity is encouraged. It is also less likely for individuals from a place where diverse cultural-exposure is minimal to form an eclectic taste, owing simply to lack of access. Research also suggests that omnivorousness is more likely to be found in middle-aged rather than younger participants. This could be because older people have lifestyles that allow access to a more varied repertoire of styles.

"Omnivores in the USA had wider tastes... they were also more liberal on racial and political matters, hence a connection between omnivorousness and multicultural tolerance." (Bryson 1996 p890)

Are the reasons behind omnivorousness purely social and due to multicultural societies or are there genetic explanations, something innate that makes some people more likely to display omnivorous tendencies than others? For Purhonen, the answer is social.

"No matter how omnivorousness is operationalised, socio-demographic factors offer better explanations for literary preferences than for musical ones." (Purhonen et al 2010 p267)

The more this subject is highlighted, the more grey-areas are revealed and it seems that several problematic notions reveal themselves at each turn. Firstly, the term omnivore invites criticism from researchers in this field. Theodore Gracyk suggests that we don't have time to be true cultural omnivores – merely *cultural grazers*.

"Leila Josefowicz has recorded Bartok's sonata for violin, yet she has a passion for the music of U2. I don't know if Josefowicz is equally passionate about Tejano music and Balinese gamelan, but there comes a point in every life where one is merely dabbling." (Gracyk 2007 p124)

"A limited free time and a broad taste or lifestyle transforms omnivores into cultural hoppers." (Van den Broek and de Haan 2000)

Secondly, it seems that studies treat taste as if it is fixed and constant and not fluid and ever changing. They also neglect the notion that people may feel indifference. Is it not possible that instead of just liking something or not, you may have mixed feelings towards a song or genre, or no feelings at all?

"Research on musical tastes has not explicitly considered "mixed feelings" for genres that are neither liked nor disliked categorically." (Sonnett 2004 p260)

Like language, taste grows and advances, changing as people change in response to many outside stimuli.

The idea of a cultural omnivore would apparently contradict areas of Bourdieu's theories, and invites questions surrounding the existence of such individuals. Carl Wilson comments on attitudes towards this cultural shift, "his original survey did not reflect the relatively recent shakeup in taste categories,

the seeming collapse of high and low culture into a No-Brow society in which an in-depth knowledge of Buffy the Vampire Slayer, Japanese Ganguro fashions and the latest graffiti artists may carry more cachet than a conversance with Moliere, Schoenberg and Donald Judd" (Wilson 2010 p95)

However, Wilson continues to say that even if direct comparisons are difficult, the fundamentals remain the same. The contexts may have changed but the processes work in the same way. It is for this reason I still examine today's musical, social climate through the Bourdieusian principles of Habitus, Field and most importantly the exchange of Cultural Capital. Whether culturally omnivorous or not, the apparent link between taste and identity is undeniable.

3.6 Taste - It's all personal

A major aspect of using social media involves the establishing of the user's identity. Navigating the complex connections made online, along with communicating and participating in the various aspects of culture, involves various decisions, which, thanks to the personalising software dictates our online position and the possible information filtered to us in the future.

Our taste both controls and is controlled by the algorithms embedded in the websites we frequent. Bourdieu theorises that it is our taste that distinguishes us from one another. I propose that to fully understand the impact that recommending software and the personalisation of social media has on our musical lives, the way we develop our tastes should be examined.

An understanding of how we form our tastes both presently and previously will help us to understand how we may form them alongside the introduction of new, influential technologies.

Nature and Nurture – going beyond the old chestnut

"Professors are inclined to attribute the intelligence of their children to nature, and the intelligence of their students to nurture" (Masters 2001 p345)

For many years, contrasting ideas have been presented as to whether our tastes are guided by nature or nurture; through experience and environment, or as a result of biology and genetics (Peretz 2006) (Appleyard 2011). But there is suitable evidence on both sides of the nature/nurture fence to suggest that both are viable options and, instead of thinking about one being the true answer to our questions, we should think about the idea that they work together and that our identity is a result of the complicated relationship between the two.

"One of the most pernicious misconceptions in cognitive science is the belief in a dichotomy between nature and nurture. Many psychologists, linguists and social scientists, along with the popular press, continue to treat nature and nurture as combating ideologies rather than complementary perspectives. For such people, the idea that something is both "innate" and "learned", or both "biological" and "cultural" is an absurdity. Yet most biologists today recognise that understanding behaviour requires that we understand the interaction between inborn cognitive processes (e.g. learning and memory) and individual experience. This is particularly true in human behaviour, since the capacities for language and culture are some of the key adaptations of our species and involve irreducible elements of both biology and environment, of both nature and nurture." (Tecumseh-Fitch 2012 p155)

It seems clear that the debate should be over, and that nature and nurture work together to shape our personalities and tastes. Certainly, the evidence seems to be irrefutable. "Everybody with an ounce of common sense knows that human beings are a product of a transaction between the two .... Instinct is not the opposite of learning...no longer is it nature versus nurture, but nature via nurture" (Ridley 2011 p3)

We do learn things throughout our lives, but we have been born with an instinct to learn, which varies from person to person. For many, human culture seems the very antithesis of "instinct." And yet it must be true that language plays a key role in every human culture. Language is the primary medium for the passing on of historically accumulated knowledge, tastes, biases, and styles that makes each of our human tribes and nations its own unique and precious entity. And if human language is best conceived of as an instinct to learn, why not culture itself? ... human language, and human culture, are not instincts – but they *are* instincts to learn. (Tecumseh-Fitch 2012 p156)

This instinct allows us to absorb and learn from the environment but through the filters of our genetic make-up, which also adjusts accordingly.

"Genes are not puppet masters, nor blueprints. Nor are they just the carriers of heredity. They are active during life; they switch each other on and off; they respond to the environment. They may direct the construction of the body and brain in the womb, but then they set about dismantling and rebuilding what they have made almost at once – in response to experience." (Ridley 2011. p 6)

We do not start with a blank slate, as many scientists used to believe, but with a potential guide for life, a set of innate capabilities and talents, which have been passed down as a genetic cocktail from our parents.

A parrot and a child both learn *something* when exposed to speech, but only the child has a mental algorithm that extracts words and rules from the sound wave and uses them to utter and understand an unlimited number of new sentences. The innate endowment for language is in fact an innate mechanism for *learning* language. (Pinker 2002 p60)

For children to learn about the world, it is not enough that they merely observe and copy what they see. They need to possess innate mechanisms that allow them to decipher the values and reasons behind certain actions. They need the genetic foundations to extract the meaning in the culture so they can understand, as well as do. They need an instinct to learn.

'...the correct explanation will invoke a complex interaction between heredity and environment: culture is crucial, but culture could not exist without mental faculties that allow humans to create and learn culture to begin with.' (Pinker 2002 page viii)

Our engagement with music therefore could be down to instinctive tendencies. (Ball 2011)

We've established so far that our tastes and identity are a mixture of nature and nurture, but it is important to acknowledge just how complex this mix actually is.

It is in a human's, and especially a scientist's nature, to pigeonhole, categorise and to make predictions, but when it comes to humans and the culture that we develop, I suggest that such attempts are futile and are based on unstable foundations. To judge everything by the same criteria seems misguided when you examine, just how different we all are.

Taking into account first, the influence of nurture, as mentioned above we can see, easily how our social environments and experiences can shape our lives and opinions. However, the likelihood of any two, different people sharing the exact same experiences is extremely small. We are constantly exposed to new stimuli and could take a different turn at each exposure.

When filtering this through our genetic makeup we start to realise how complicated this nature-nurture tag team can be.

Smallberg highlights how the two can combine to affect our feelings and decisions.

"This preferential set of intuitions, feelings, and ideas – less poetically characterised by the term "bias" – poses a challenge to our ability to weigh evidence accurately to arrive at truth. Bias is the thumb that experience puts on the scale…. We have at our disposal an immeasurable assortment of biases, and their combination in each of us is unique" (Smallberg 2012 p43)

There have been several examples of scientists attempting to downplay the importance of genes, especially in 2001 when it was discovered that we possessed a lot less than previously estimated. In February of that year, scientist Craig Venter announced his discovery that we possessed around 30,000 genes and not the previously projected figure of 100,000. *'Environment, not genes, the key to our acts'* (Observer – 11 Feb. 2001) *'DNA's importance downplayed'* (San Francisco Chronicle – 11 Feb. 2001*) 'analysis of human genome discovers far fewer genes'* (New York Times – 12 Feb. 2001) read the headlines that followed.

However, despite this suggestion that this smaller number of genes was too few to allow for genetic possibilities and therefore 'proof' of environmental influence, there were many who dismissed this notion. Sir John Sulston, one of the leaders of the Human Genome Project advised, "Just 33 genes, each coming in just two varieties (such as on or off), would be enough to make every human being in the world unique. There are more than ten billion ways of flipping a coin 33 times. So, 30,000 does not look such a small number after all. (Sulston 2011 p2)

With this in mind, we can assume, that even if people are exposed to the exact same stimuli, reactions to that said stimuli, could be completely unique due to our differences in genetics.

We can however, delve deeper into this area of thinking. According to Daniel Levetin our brain activity is directly affected by the connections of the neurons present in the brain.

Each neuron is connected to other neurons – usually one thousand to ten thousand others. Just four neurons can be connected in sixty-three ways, or not at all, for a total of sixty-four possibilities. As the number of neurons increases, the number of possible connections grows exponentially. (Levetin, 2006 p87)

He points out that along these lines, if the human brain contained only 6 neurons, there would be 32,768 possibilities. The average brain consists of one hundred billion neurons.

Levetin, goes on to add therefore, "The number of combinations becomes so large that it is unlikely that we will ever understand all the possible

connections in the brain, or what they mean. The number of combinations possible – and hence the number of possible different thoughts or brain states each of us can have – exceeds the number of known particles in the entire known universe." (Levetin, 2006 p88)

Pioneering neuroscientist Sebastian Seung champions this notion that the connections between our brain cells hold the key to understanding our identity. He suggests, like Levetin, that we need to look further than our genes alone, but to the way the neurons in our brains associate with each other, and most importantly the fact that, unlike our genome which is developed when we are, and fixed from very early in our lives, our neurons adjust and change. Seung calls this combination of factors our 'connectome.'

"Your connectome changes throughout life…Neurons adjust, or '*re-weight*', their connections by strengthening or weakening them. Neurons *reconnect* by creating and eliminating synapses, and they *rewire* by growing and retracting branches. Finally, entirely new neurons are created and existing ones eliminated, through *regeneration*." (Seung 2012 p XV)

These four R's (reweighting, reconnection, rewiring and regeneration) draw attention to the fluidity with which our brains function and a new level of complexity in the fact that the relationships and connections we make are ever changing.

"You can't step in the same river twice." (Heraclitus in Robinson 1991)

As discussed earlier, research has been conducted into the idea of the cultural omnivore, but I suggest that instead of identifying omnivorous characteristics, or creating subcultures of omnivorous individuals, everyone lays somewhere on a cultural diversity scale; one end labeled cultural omnivore and cultural univore the other. No one's position is at the extreme of either end, and our position changes constantly as our tastes evolve. The combination of reasons behind our position will be different for each individual, a theme that underpins much of this discussion.

"On a train or a bus in London, anyone who has a downloaded ringtone version of *Tijuana Taxi* will be an Orient fan; and my PC is set up to play an mp3 file of the song at every booting-up." (Kennett 2008 p17)

Tijuana Taxi, as Kennett explains, plays as Leyton Orient take to the pitch at each home game. The love of this tune is one most likely only shared by other Orient fans because of the association with their favourite team. If an individual tune hold this sentimental value, it is equally possible for an entire genre to be

viewed in this way, if nothing else, because a piece of music from the same genre could remind you of the song with which you relate. It is also equally likely that you might dismiss a genre due to an association. In the same way that Kennett smiles when he hears *Tijuana Taxi*, a Manchester United fan, with their disdain for Liverpool Football Club (another cultural condition), may indeed have the same contempt, not only for *You'll Never Walk Alone* but for any song by Gerry and the Pacemakers, or further still, anything from this genre.

Elsewhere, relationships can be made with the lyrical content or sentiment of a song. Sometimes they have particular meaning or can transport someone back to a significant time. Couples choose their *wedding song*, usually because it has significance to them as a couple. Negative conditioning works in exactly the same way.

This all supports the idea that our standpoint of taste is an outcome of a precise combination of factors both social and biological. Where we stand is not only the result of the many steps we have taken, in an infinite amount of possible directions and distances, but also from where we started stepping in the first place, meaning that our standpoint is completely exclusive to us as an individual, like a fingerprint. "My tribe consists of me and of me alone, and thus this musical analysis is personal ethnomusicology–idioethnomusicology" (Kennett 2008 p17)

Drawing on the work of Bruno Latour and his concept of *Actor Network Theory*, (Latour 2005) we should consider that the many variables that combine to shape and affect our habitus, our taste, and the recommendations we receive, influence each other in a complex network of connections. Our Taste is based upon the collective abundance of actors that interact to influence our reactions.

An analogy to describe this concept is this: Imagine that every possible event we have undertaken or been exposed to, every experience or choice we have made throughout our entire lives, either consciously or subconsciously, be represented as a translucent piece of coloured filter paper, placed before our eyes. We each see the world through our own combination of these filters. Due to our unique genetics, and considering the infinite number of possible variables and reaction to those, no two individuals could share the same combination of coloured slides, or in turn the same view of the world. (See Fig. II)
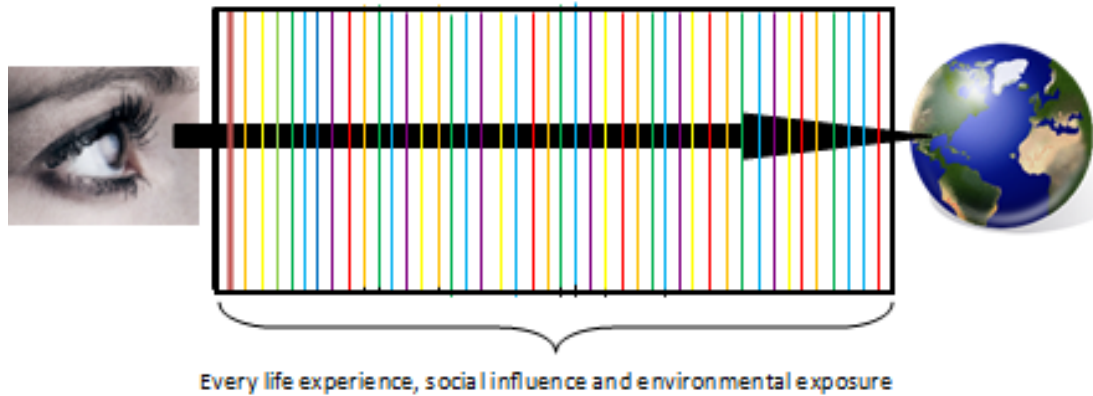
Fig. II – Illustration to represent uniqueness of taste.

Of course, our tastes overlap and we may very well share likes and dislikes with many others. But for every element shared, there will be countless others, which disassociates us with others.

Fig. III - Venn diagram to demonstrate nature of our taste.

The Venn diagram in Fig. II, demonstrates the nature of our tastes. Each 'petal' represents a particular like or dislike that the featured individual may have. As with a regular Venn diagram, each petal is shared by everyone who falls into the same category. The space in the middle is where all the petals overlap and is the space where anyone sharing every single one of these qualities would be placed. Although this diagram shows only 16 petals, a real-life depiction would have an infinite number of petals, each representing not only each particular like and dislike, but also, every experience or choice an individual has made throughout their life. Therefore, it is certain that the featured individual is the only person for whom all the petals overlap and so, the only person who sits in the middle of this diagram. It is important to understand that the diagram would only be accurate for a particular time, changing with each new experience and exposure to a new cultural environment, and it also needs to be taken into

account that often, we do not simply like or dislike something. Our feelings may be mixed or we may feel indifferent to something.

It is easy to spot patterns and categorise based on shared interests, but these particular criteria may be the only things shared by the individuals. The existing literature suggests that our taste, considering our differences in genetics and our social geography, are as unique to us as a fingerprint. Our DNA, multiplied by the countless events that we experience that shape or condition our thoughts or reactions, be it on a conscious or subconscious level, contribute to an almost infinite number of possible differences and distinctions.

Via our habitus we navigate up and down social ladders and fields, using our cultural capital as currency to establish our status in society, aligning ourselves with some things and disassociating with others. We do this differently, and with different levels of skill. We may congregate in tribal groups or subcultures, but our reasons for doing so are our own and that is becoming increasingly clear.

The significance of social media's impact has encouraged an abundance of research but much of it is generalised and focuses on the effect on society overall. Throughout this chapter's examination of the existing literature, a theme of *the individual* has become increasingly apparent. Theories on the potential fragmentation of subcultures, the rise of an algorithmic, customised online experience (which will be discussed at great length over the next chapters), arguments between online corporate dominance and democratic participatory culture, alongside Bourdieusian theories of habitus and the notion that our tastes (by which we are distinct from others) are unique to us, all validate the importance of a focus on the effect social media has on us personally.

A personalised social media, and the use of amassing data and algorithmic filtering to customize our online experience would seem to cater perfectly for this notion of 'the individual.' Some would argue though that, personalisation, instead of completely developing in recognition of these 'one-person-subcultures', has been a contributor to them, identifying more nuances and particular aspects of our tastes, and therefore more distinctive qualities that separate us from others. Whether or not this is the case, it is not in the recognition of us as individuals that I think the most significant impact of personalised social media is prominent, but in the subsequent customisation and filtering that occurs as a result.

The introduction of a personalised social media is likely to have an affect on, and be affected by our taste. The reactions we have to things, and the

directions in which we go, are dependent on the information to which we have access. Online recommending systems, based on what the algorithms have mined about us already, seek to cater to our present taste, however, the more they accommodate, the more our access is manipulated and opposing opinions, sounds and ideas, deemed irrelevant are filtered away from us.

Our tastes are individual to us and, as the software becomes more accurate, this should reflect in the recommendations we receive. Increasingly, the algorithms will scrutinise and discover nuances and particular details that distinguish us from groups and stereotypes. However, the removal of the alternate information is likely to draw us back towards these groups, the recommenders shepherding us towards particular pens while we wander, unaware of the other possible directions in which we could go.

In his book, 'The Filter Bubble: What the Internet is Hiding From You', Eli Pariser's concerns about personalisation are based on the notion that a filtered experience will lead to severe consequences. Equating the process to a form of censorship, he, like Fuchs (2014) and other theorists in this field, illustrates the problematic issues concerning the amount of influence businesses and corporations will have on society.

Whilst deeply influential Pariser's approach is seemingly one-sided and there are gaps that he has left. Morozov points out that Pariser does little to engage with relevant arguments that promote the use of such algorithmic filtering such as cyberlaw, information science and economics, relying, instead *on entertaining anecdotes from popular psychology*. (Morozov, 2011)

Pariser's view could be thought of as utopian, suggesting that Internet companies should take on a more didactic role. The likelihood that advertising companies will purposely reduce their ability to target specific audiences or that the makers of algorithms will risk their reputations by allowing 'less relevant information' to slip through their filters, is extremely small; But, until the long-term effects of such customisation are realised, developers of recommending software and personalising algorithms will continue to enhance the technology and as a result, their influence on the individual users of social media and so society as a collective, will continue to grow.

It is on the algorithmic personalisation of Social Media therefore, that I focus throughout the chapters that follow, assessing their function and impact on cultural society

Chapter 4 - The Personalisation of Social Media – Part One: Collecting the Data.

Regular engagement with social media is increasingly becoming a routine for the majority of us, and as a result, several shifts in our lives have started to take place. The social impacts of these shifts have started to make themselves known.

The connections and networks we have made through social media have changed our relationship with data. In this chapter, I examine the impact these changes have had on society, paying particular attention to material and networks involving the production, consumption and general engagement of or with music. We now use these platforms to consume, publish, share, record and look up archived material, but it is how this material is used and by whom, where our concerns start to arise.

4.1 Ownership and Privacy Issues

Social media sites are, for many, an ideal platform for personal archiving. Songs, photos, messages and general personal information are recorded, and in numerous cases displayed for others to see. What happens, after this data is stored, or let loose in the ether, however, is an area of concern for some. The potential audience, or demographic who have access to this information raises complicated privacy issues, and it is very difficult to control what happens to it.

Every so often, usually when a social media site such as Facebook updates their security settings or terms and conditions, statements like this start to appear on the walls of many users;

"Due to the fact that Facebook has chosen to involve software that will allow the theft of my personal information, I state: at this date of January 4, 2015, in response to the new guidelines of Facebook, pursuant to articles L.111, 112 and 113 of the code of intellectual property, I declare that my rights are attached to all my personal data drawings, paintings, photos, video, texts etc. published on my profile and my page. For commercial use of the foregoing my written consent is required at all times.

Those who read this text can do a copy/paste on their Facebook wall. This will allow them to place themselves under the protection of copyright. By this statement, I tell Facebook that it is strictly forbidden to disclose, copy, distribute, broadcast, or take any other action against me on the basis of this profile and or its content. The actions mentioned above also apply to employees, students, agents and or other personnel under the direction of Facebook.

The content of my profile contains private information. The violation of my privacy is punishable by law (UCC 1-308 1-308 1-103 and the Rome Statute)."

(Snopes .com 2015)

Displeased with the amount of freedom that Facebook has to use and distribute their photographs, music and personal information; the individuals posting this statement have done so in an attempt to protect themselves and their material from corporate use. However, this message actually does little to prevent anything and certainly doesn't negate any permissions or stipulations you agreed to when signing up, as social media and law expert Brad Shear confirms; "the message [that Facebook users are posting to their walls is] "misleading and not true," and when you agree to Facebook's terms and conditions you are agreeing for them to have a "non-exclusive, transferable, royalty-free, worldwide license to use any content you post. You do not need to make any declarations about copyright issues since the law already protects you. The privacy declaration [in this message] is worthless and does not mean anything." (Shear 2012)

This apparent lack of control over uploaded material has disconcerted many users of social media however, as set out in the small print, by uploading material to Facebook or similar sites you agreeing to the terms and conditions making it accessible. Furthermore, the choice to *not* upload things that you wish to remain private is always available to you, though few choose to follow this option.

The way people feel doesn't necessarily reflect the way people act on the matter, as is evident from the way that people sign up to use the service, but complain about how it works. (Acquisti and Grossklags 2004)

This is, of course, a more complicated issue. The way services such as Facebook, Twitter and Flickr work, force us to investigate aspects such as control and ownership (Lessig, 2008) in fact, "Social media, by its *very nature*, introduces questions about ownership. Ownership comes into play most crucially when we investigate how social media is saved or archived, how it is reused and whether it can be removed or deleted." (Marshall, and Shipman 2011 p 1081)

Once the media or data is in this 'public domain', overall control of it is hard to maintain. Based on the fact that much of the online communication in this sense is based heavily on networks and groups, it could be created by, or involve more than one person, (Reindhart et al 2009) and (Zhao and Rosso 2009) or can often be used or curated by a different person to the one who posted it. (Odom et al 2010)

"...Even something as simple as a tweet introduces considerable complexity. A tweet might be intensely personal; it might be plagiarized; it might be about someone else; it might refer to a social event; it might have a hypertext link that connects it to another, richer, piece of social media or external resource. In other words, it is difficult to make definitive statements about who owns and controls even lightweight social media." (Marshall, and Shipman 2011 p 1086)

The *rules* are certainly vague, and for the most part undetermined. The world in which we now live connects us in a way that has never before been possible, and as a result, we are not certain how it should all work. As our lives shift to a different medium, the rules and parameters of how we should behave and communicate also shift. 'Netiquette' is something we all have to learn and get used to.

"We have seen over and over again that the etiquette that governs our use of the new capabilities evolves far more slowly than the technology itself" (Hammersly 2012 p420)

A contributing factor to the complicated battle between private and public is made apparent when we remember the reasons for which social media were developed.   The whole sharing and networking aspect of sites like Facebook and MySpace makes privacy somewhat undesirable. Users that are looking for like-minded, interest-sharing peers will have little interest in putting limitations on their profiles (and actually, the privacy settings on Facebook are not particularly easy to manage, due to their complex and constantly changing nature) (Palen, and Dourish, 2003)

This level of publicity is something most of us are uncommon with. In the days before social media, individuals would make a concerted effort to make visible their tastes, by styling their hair a certain way or wearing a t-shirt displaying the logo of an important band. (Thompson 2005) What we chose to share with the world was carefully thought out and deliberated. However, what we now share is difficult to monitor and we have to be careful to hide things we hope will remain unnoticed.

"In networked publics, interactions are often public by default, private through effort." (boyd 2014 p 61)

Of course, there have been benefits to how easy it now is to display our traits. A significant part of using social media is establishing the identity of the individual using it. As mentioned previously, the various 'likes', posts and statuses we upload and share, play a massive part in letting people know who we are and what we're all about. These new levels of openness allow others to see a

much more complex and detailed picture of our personality. Rather than making judgements on the aforementioned fashionable hairstyle or cool band t-shirt, members of our network can establish a deeper engagement with our character, and seemingly form a more accurate understanding of who we are.

Very seldom do we actually have only one identity. It is common for us to act differently in different social situations, exhibiting the appropriate persona as and when is necessary. The constant tug-o-war between what is private and what is public on social media can lead us to share more than previously intended and can sometimes present particular difficulties, bringing about situations where certain aspects or versions of our personality are within reach of unanticipated audiences.

In January 2012, John Flexman became the first individual to bring a case for constructive dismissal after angering his boss by loading his CV onto the site LinkedIn (Williams, C 2012) and according to Paula Whelan, an employment partner at Shakespeare's law firm, "Employees think they are bullet-proof when they post anything on Facebook or Twitter. But if they bring their employer into disrepute, the boss of that firm is well within their legal right to sack them…By posting something even vaguely negative about your work on these social media sites, it's breaking the relationship of trust and confidence between the employer and employee and the company reserves the right to sack the employee." (Whelan 2012) (See also Barnett 2012)

Even if your post were seemingly innocent, many would be reluctant for certain material to be accessible to unexpected audiences.

"The bikini-clad body that is perfectly appropriate on the beach at St. John or Captiva may undermine the respect an employee has worked hard to earn from superiors, subordinates, and peers at the office who may view the vacation pictures on Facebook.… Too much published information can and will present obstacles when circumstances change." (Claypoole 2014 p1)

There have been examples of capable university applicants being turned down after the admissions board have checked their MySpace profiles, (boyd 2014 p29) and, even before the rise of social media, civil rights activist Stokely Carmichael, who was used to adjusting his public speaking style according to whom he was speaking, unintentionally alienating audiences by suddenly having a wider presence afforded to him by electronic media and being seen by all his audiences simultaneously. (Meyrowitz, 1985)

Managing your different identities is an important social skill and is a fundamental factor in communicating with the people you know from different walks of life.

"The ability to understand how context, audience, and identity intersect is one of the central challenges people face in learning how to navigate social media" (boyd 2014 p30)

The way it stands at present, social media is unable to distinguish between these subtle differences and so the management of multifaceted identities is difficult to maintain. Significant improvements in artificial intelligence would have to be manifested in order for any such understanding which is an argument many social media use when they are accused of delving too deeply into our personal details.

4.2 Social Media/ Facebook access

In movement towards such improvements and in an attempt to really 'provide the best services', the amount of data that Social Media monitors and collects as we spend our time online, is, to most, surprisingly vast. Users of YouTube are often faced with the following message, along with a box, which needs to be checked before you can continue:

A Privacy Reminder from YouTube, a Google Company

Scroll down and click "I agree" when you're ready to continue to YouTube, or explore other options on this page.

Data we process when you use Google

- When you search for a restaurant on Google Maps or watch a video on YouTube, for example, we process information about that activity - including information like the video you watched, device IDs, IP addresses, cookie data, and location.
- We also process the kinds of information described above when you use apps or sites that use Google services like ads, Analytics, and the YouTube video player.

Why we process it

We process this data for the purposes described in our policy, including to:

- Help our services deliver more useful, customized content such as more relevant search results;
- Improve the quality of our services and develop new ones;
- Deliver ads based on your interests, including things like searches you've done or videos you've watched on YouTube;

- Improve security by protecting against fraud and abuse; and
- Conduct analytics and measurement to understand how our services are used.

Combining data

We also combine data among our services and across your devices for these purposes. For example, we use data from trillions of search queries to build spell-correction models that we use across all of our services, and we combine data to alert you and other users to potential security risks.

Fig. IV – YouTube Privacy Reminder (YouTube.com 2016)

Similarly, when downloading the Facebook app on a mobile device, the terms and conditions (which many probably skim-read at most (Vogel 2013)) set out the data with which it wishes to align and read as follows:

This app (Facebook Android App) has access to:

Device & app history
- Retrieve running apps

Identity
- Find accounts on the device
- Add or remove accounts
- Read your own contact card

Calendar
- Read calendar events plus confidential information
- Add or modify calendar events and send email to guests without owners' knowledge

Contacts
- Read your contacts
- Modify your contacts

Location
- Precise location (GPS and network-based)
- Approximate location (network-based)

SMS
- Read your text messages (SMS or MMS)

Phone
- Write call log
- Directly call phone numbers
- Read call log

Photos/Media/Files
- Read the contents of your USB storage
- Modify or delete the contents of your USB storage

Camera
- Take pictures and videos

Microphone
- Record audio

Wi-Fi connection information
- View Wi-Fi connections

Device ID & call information
- Read phone status and identity

Other

- Receive data from Internet
- Download files without notification
- Adjust your wallpaper size
- Create accounts and set passwords
- Run at startup
- Prevent device from sleeping
- View network connections
- Install shortcuts
- Change your audio settings
- Read Google service configuration
- Toggle sync on and off
- Draw over other apps
- Expand/collapse status bar
- Full network access
- Change network connectivity
- Set wallpaper
- Send sticky broadcast
- Read battery statistics
- Reorder running apps
- Connect and disconnect from Wi-Fi
- Read sync settings
- Control vibration

Fig. V - Facebook App terms and conditions (Facebook 2015)

By agreeing to the terms and conditions you ensure that every website you visit, every call you make or message sent, is recorded and used to add more detail to the content provider's profile of who you are. Additionally, you have allowed Facebook access to pretty much everything on your device and you have given permission for Facebook to change and override settings so that data can be collected. By preventing your device from sleeping and using the microphone and camera to record everything, Facebook can see, hear and record where you are, at all times and use this to 'understand' a great deal about you.

Even if you feel you have nothing to hide, and are not averse to having this amount of information monitored, it is the potential use of this data where users feel concern. Most would feel uncomfortable with a stranger going through their phone and reading all the messages or looking through the pictures, fearful that something delicate or incriminating, secret or just extremely personal could be uncovered.

4.3 Data laundering

We rely on spam filters to sift out potentially harmful or nuisance emails, and enhancements are constantly being made to improve their efficiency and

effectiveness, (Yevesyeva et al 2013) but cookies, algorithms and personalised filters can allow social media to restrict and suggest information to us, based on their own interests and agendas. My email provider may well deem my daily Groupon emails or an advert for Viagra as 'junk', but will happily offer me discounted holidays or particular special offers in a link that remains at the top of my email list (see fig. VI)
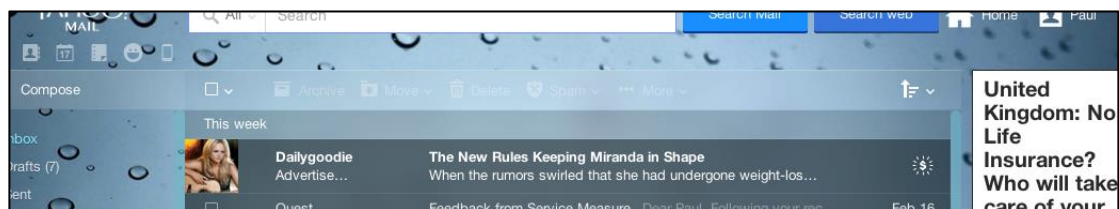
Fig. VI - Email screen shot – taken 17 January 2016

Fig. V is a screen capture of my email account's main page. At the time that the picture was taken, there were several emails in my junk folder; sent straight there, deemed to be spam, irrelevant, or of a malicious or harmful nature (and though some of them were, there were others from websites and services that I have actively signed up to and from whom I've requested information.) Whilst grateful that Yahoo are going to such an effort to protect me from such inconveniences, I find it interesting that the top slot on my list of emails is a link to celebrity weight-loss gossip and the entire right hand side of the screen is an advert for life insurance. Where is my protection from this spam? This is, of course, the nature of how business, and particularly advertising, works. Companies would not be expected to allow third parties to canvas or advertise using their platform without some kind of financial recompense, but the restrictions they apply, are based more on who bids the highest and less on having our best interests at heart.

Most of us will have protective programs on our technological devices to shield us from spyware, designed to maliciously mine details that we don't intend to share (Poston et al 2005), but the access we allow social media to our devices, and the information we obediently type in when building our online profiles leave us vulnerable to such exploitation, especially when the website or service with which we engage, are connected financially to other interested parties.

The danger that our data is deliberately mistreated and exploited is very real. The value of our data soars alongside the ability to target specific audiences and, most importantly, potential customers, making access to it extremely desirable. The sharing of our personal information, with or without our knowledge or permission is, to many, becoming a problem. Examples of this 'data

laundering' (Wright et al 2008) exist in many forms and our data, that is often obtained in a questionable manner, is sold to curators of just-as-questionable databases, that feed the advertising sectors and marketing campaigns of powerful businesses and corporations.

Not only is our privacy being invaded, it is being exposed to third parties and used to bombard us with advertising, and steer us towards or away from information.

4.4 Big data, datafication and dataveillance.

This desire to access key information about potential customers and reach particular audiences or demographics has given rise to a monumental surge in data collection. The sheer amount of data now collected and analysed is one of the most significant elements of change, brought about by the rise of social media and digital technologies. According to Eric Schmidt, in 2010 we generated as much data every two days, as we did from the beginning of civilisation to 2003 (Schmidt 2010), and BBC news reported in 2014 that 90% of all the world's existing data had been generated in just the previous two years. (BBC news 2014)

This surge has seen the birth of the term 'Big Data', (the roots of which evolved from a combination of various sources (Lohr 2013)) which basically refers to the plethora of data generated by the collection of every detail about everything, and also to the 'datafication' (the transformation of business structure to include, and focus heavily on data (Bertolucci 2013)) of corporations and businesses.

Speaking on business intelligence, Mark Lycett from Brunel's school of Information Systems, Computing and Mathematics, states that, 'it is slowly broadening to encompass the data infrastructure, applications, tools and best practices required for the effective capture, representation and delivery of data to inform decision making and action. The lines between enterprise and social intelligence are also becoming increasingly blurred, as action from decision making is orientated at influencing people's (future) behaviour.' (Lycett 2013 p381)

Big Data and such widespread datafication are now underpinning mechanisms (Kennedy et al 2015 p2) of the now ubiquitous social media and their connected industries, and have become increasingly important and valuable to anyone who has the capacity to analyse and exploit that knowledge. It is therefore, vitally important to examine the transformative, deflating or

sustaining effect that this diverse engagement with data has on society and public values. (Chen et al 2012) (Sharma et al 2014)

On the one hand, big data brings with it new opportunities for economic growth, business innovation and efficiencies in productivity, (Manyika et al 2011) but access to all that information has other more complex implications.

It was discussed earlier in section 3.2, social media's impact on democracy and capitalist influence. For many, there are fears that the collection of big data permits the holders of that information certain powers and a potential ability to use it for control.

On February 16th 2016, Tim Cook, a spokesperson for Apple, posted a public letter on their website, to all customers warning that Apple had been approached by the United States Government and asked to create a version of the iPhone operating system that would allow the FBI access to personal information on a particular account. (Cook 2016)

Whilst the government claim that the new tool would be used in just one particular case, on one particular phone, Cook protests that creation of the new software would, in effect, act as a master key and allow access on any number of devices. He suggests that this has the dangerous potential to seriously threaten data security. "The government is asking Apple to hack our own users and undermine decades of security advancements that protect our customers" (Cook 2016)

In certain instances, the benefits of allowing the government to access confidential information can easily be seen, if that data is used to keep us safe by preventing crime or protecting us from danger. Intelligence is vital in the battle against terrorist activity or sex trafficking for example, but the dangers are also clear. Acquiring private and personal information without our knowledge breaches certain freedoms and liberties.

The expansion, (and what some would call misuse,) of data mining practices could certainly be considered a cause for concern. (Lyon 2014) Government surveillance and tyrannical abuse of knowledge have been considered to be a characteristic apprehension for supporters of democracy, and there are many novels and academic writings that have voiced such a concern. (Orwell (1948), Crispin (1981), Zamyatin (1983) Gross (1963), Whitaker (1999))

Access to big data facilitates the government's capacity for *dataveillance* (Clarke 1988) defined by Esposti as 'the systematic monitoring of people or

groups, by means of personal data systems in order to regulate or govern their behaviour' (Esposti 2014 p 211)

With this in mind, and in reaction to the controversial dispute between Apple and the US government, online messaging service WhatsApp announced in April 2016 the introduction of a new form of end-to-end encryption that would be in place, spanning all the application's communicative services. This protects its users from anyone being able to intercept or monitor any messages, phone calls, photos or videos sent across the network, whether it be the government, the FBI or even WhatsApp employees. This is particularly significant as WhatsApp, now owned by Facebook, is considered to be one of the world's most important applications, with over a billion users. Only Facebook itself has a larger self-contained communications network. (Metz 2016)

Such a move has actively stonewalled the federal government and, according to WhatsApp founders Jan Koum and Brian Acton safeguards the privacy of over 1 billion people.

Surveillance of any kind has traditionally raised arguments on both sides of the fence; considered by Sewell and Barker as a 'necessary evil' that raises complex ethical paradoxes (Sewell and Barker 2001), but coupled with the injection of such significant data, it's presence seems more potent and pervasive.

Indeed, the power granted by big data means that the ways in which dataveillance is enacted in modern societies, is profoundly influenced by corporate agendas. (Ball and Snider 2013)

Big Data 'brings with it new and opaque regimes of population management, control, discrimination and exclusion.' (Kennedy et al 2015 p1); a notion supported by many academics: (Andrejevic 2013, Beer and Burrows 2013, boyd and Crawford 2012, Gillespie 2014, Hearn 2010 Turrow 2012 and Van Dijk 2013)

This corporate invasion of privacy is what Koum and Acton of WhatsApp are protecting us from, but it should be remembered that they have near total control over one of the biggest communication networks on the planet.

Substantial lists can be made of both potential harms and benefits brought about by dataveillance, but what is really needed, is a more extensive understanding of how the data is used, and the consequent sociological implications. (McAdam et al. 2008)

Chapter 5 - The Personalisation of Social Media – Part Two: The use of Data (impact?)

5.1 Facebook mood experiment – filtering

In early 2012, Facebook, along with researchers from Cornell University conducted an experiment to gauge how influential the wall content (the information that appears on the main page of a Facebook profile) could be on the mood of 689,003 of its users. Between January 11th and 18th of that year, the content that these users were shown was manipulated in an attempt to see whether their emotional responses were affected. (Kramer, Guillory and Hancock 2014)

More specifically, the research team controlled the user's news feed so that they were exposed to either predominately positive or predominately negative content. The results were conclusive:
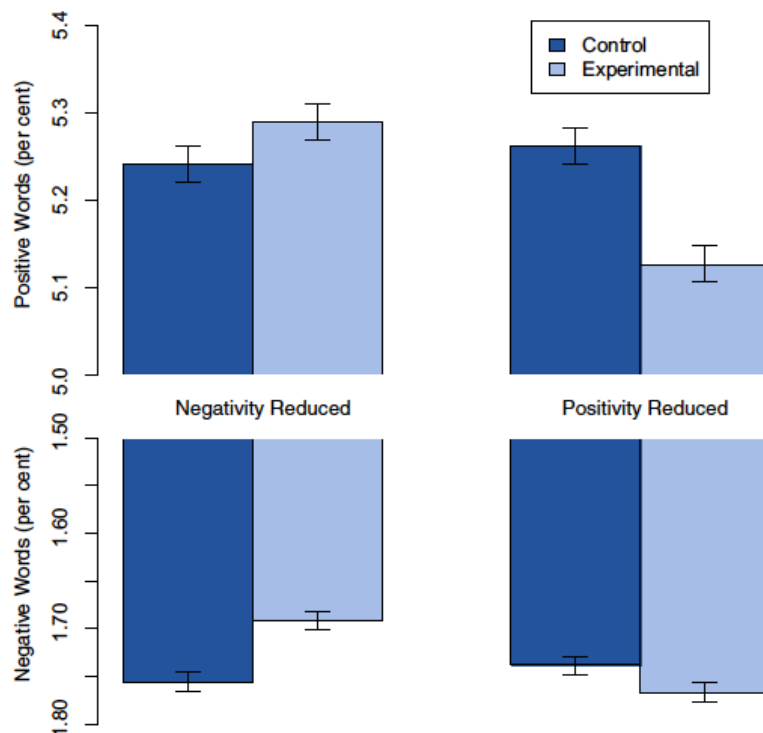
Fig. VII – Graph to show mean number of positive (Upper) and negative (Lower) emotion words (per cent) generated people by condition. Bars represent standard errors.

"When positive expressions were reduced, people produced fewer positive posts and more negative posts; when negative expressions were reduced, the opposite pattern occurred." (Kramer, Guillory and Hancock 2014 p 8878)

Theories of emotional contagion had been well recognised in previous experiments and investigations. (Hatfield, Cacioppo and Rapson 1993) and (Fowler and Christakis 2008) but For the first time, contrasting to existing assumptions, it was clear that 'emotional states can be transferred to others via emotional contagion, leading people to experience the same emotions without their awareness... (the study provided) experimental evidence that emotional contagion occurs without direct interaction between people (exposure to a friend expressing an emotion is sufficient), and in the complete absence of nonverbal cues" (Kramer, Guillory and Hancock 2014 p 8878)

Immediate reactions to the study were negative. Users of Facebook felt that it was wrong to have information withheld from them and for Facebook to purposefully manipulate their feelings and emotions. Some stated that the experiment was 'creepy'. (CNN Money 2014) Facebook and the team of researchers apologised for any for any anxiety caused by their work but insisted that they had not breached any of Facebook's terms and conditions and explained that their intentions were solely to help improve services. "The reason we did this research is because we care about the emotional impact of Facebook and the people that use our product." (Kramer 2014)

One thing this experiment did achieve was to shed light on just how influential social media can be on our moods and emotions, which can obviously, in turn, effect our lives on a greater scale. This is even more significant when you take into account that one of the reasons why the experiment was approved and was deemed within the boundaries of Facebook's terms and conditions was that Facebook uses algorithms that modify our news feeds and restricts the content to which we are exposed, already.

As well as a greater understanding of the transference of emotion, the Implications of these findings are immense. The ability to enhance or augment emotions by limiting what we see, however slight could have huge amassed consequences, (Prentice and Miller 1992) especially given the sheer scale of social networks such as Facebook.

As Kramer et al point out, this type of information filtering was not, and is not limited to a particular experiment, but is permanently in place in the form of algorithms embedded in social media.

5.2 Personalisation and Recommenders

"We think that the profusion of possibilities must make it easier to find that perfect gift for a friend's birthday, only to find ourselves paralyzed in the face of row upon row of potential presents." (Lynegar 2010 p175)

In *The Art of Choosing*, Sheena Lynegar states that in 1994 there were around 500,000 different consumer goods for sale in the United States. Amazon alone now holds over 24 million. This unprecedented amount of everything – a surplus of choice, requires what Lev Grossman refers to as *an informational prosthesis* with which we can navigate a path. (Grossman 2010)

We don't have time to absorb everything, especially as we now have potential access to everything ever recorded, and so filtering the information is essential (Belkin and Croft 1992). Traditionally we would follow the recommendation of our peers or superiors, or anyone we genuinely trust to know what is relevant or best for us, indeed "Social filtering – the selective engagement with people, communication and other information as a result of the recommendations of others – has always taken place." (Wilson, M 2014 p 218)

As illustrated above, we have arrived at a point where our entire online experience is heavily influenced by data we have left behind. Every time we use social media, search for something on Google or listen to music on iTunes or Spotify, Cookies (small pieces of data that help to mark your preferences) are stored that instantly try to determine our tastes or interests and start to filter information, based on how relevant it is to us, based on the profile. The more we use the Internet, the more cookies are stored, and the more information there is to base the filtering on.

"A personalized search for everyone" – (Google 2009)

But in recent years, as well as regulating our access to the information, examples of such prosthesis have emerged in the form of online recommendation systems; software designed to actively steer us toward the stuff it thinks is relevant to us. These systems have infused themselves with nearly all types of new media and as a result have become an everyday part of using the Internet. The appeal is easy to see; minimising the effort to find things of interest and instead have them served to us, is always going to sound like a good idea.

"The on-going rapid expansion of the Internet greatly increases the necessity for effective recommender systems for filtering the abundant information" (Liu et al 2012 p287)

In many ways, it is feasible that these changes have come about as preventative measures, designed to help save users of the Internet, from drowning in an infinite sea of data. But many would see the benefit laying more with the collectors and analysers of the data rather than the consumer, knowing who and where your customers are, makes it much easier to sell them your products.

Alongside the extensive growth of e-commerce, recommender systems have been developed for a variety of applications. (Shardanand and Maes 1995), (Hill et al 1995), (Konstan et al 1997), (Terveen et al 1997), (Schafer et al 1999), (Kitts et al. 2000), (Mobasher et al 2000), (Beeferman and Berger 2000).

There are different types of such systems that run alongside most media-based sites and services such as Amazon, Google, Netflix, Facebook, YouTube, Apple and TiVo which all provide a similar service.

"At the appropriate moment – generally when you're about to consummate a retail purchase – they appear at your shoulder, whispering suggestively in your ear." (Grossman 2010 p2)

"The task of recommender systems is to turn data on users and their preferences into predictions of user's possible future likes and interests" (Liu et al 2012 p287) The idea, in short, is to make predictions and suggestions about what individuals may like to consume, based on a complex analysis of data.

For several years, great interest has developed around the rise of such technologies (Hagel and Singer 1999) and different types and versions of recommending software have been developed to enhance the accuracy or relevance of the recommendation. (Herlocker et al. 2004) (Ricci et al. 2011)

Early research into one such recommending software; playlist recommendation, was conducted in 2006 by Andreja Andric and Goffredo Haus. Up until this point, the algorithms worked in a relatively simple way; examples of preferred songs or specific musical constraints were manually inputted by the user and a playlist would be generated according to attached metadata, based on the characteristics of those songs or in accordance with the set parameters. Many approaches to this content-based playlist generation were proposed and tested, (Pohle et al 2005), (Goto and Goto 2005) (Pampalk 2006) all in an attempt to enhance the capabilities of the software (see section 5.4 on infomediaries.) The basis for these primitive recommendations were heavily weighted on this metadata and 'listening history, if it was used at all, had a minor role' (Andric and Haus 2006 p127)

Categorising or tagging songs based on similarities of audible content brings with it obvious problems. 'Similarity is mostly based on predefined feature sets and weights, which do not necessarily reflect the user's ideas about similar songs' (Baur and Butz 2009 p1)

Andric and Haus identified issues with this method, shedding light on the frequent errors and missing data that complicates the process, and were advocates for the necessity to concentrate more on the habits of the listener to form a *listener model*, by which, more appropriate lists could potentially be generated. Though, by their own admission, their experiment was 'not a successful one' (2006) they did provide insight into the relationship between listening habits and playlist generation.

Hybrid systems started to appear, combining different forms of content based and collaborative filtering methods (Gasser, Pampalk and Tomitsch 2008).

Primary examples of these, and other similar systems use either item specific and/or user-specific profile attributes such as demographics or product descriptions and analyse the data, making connections between the users and the products. Some systems use collaborative filtering, a term first used with the introduction of *Tapestry*, the first commercial recommender system, (Goldberg, Nichols, Oki and Terry 1992) which involves analysis of a user's historical online interaction where recommendations to a user are based on the past ratings of all collective users, while some are focussed more on content–based filtering which focus mainly on the profile attributes of users, these systems recommend products deemed similar to products that the user has liked in the past, or in fitting with predefined attributes. This could include demographic information (Pazzani, 1999) or specific information on the item such as the film director or producer of an album (Melville, Mooney and Nagarajan, 2002) and many hybrid techniques attempt to combine elements of both designs, (Melville and Sindwhani 2010) either by incorporating both and then merging the results (Cotter and Smyth 2000) or applying additional factors. (Good et al 1999)

Collaborative filtering methods can be subdivided into model-based and neighbourhood-based or memory-based methods. (Breese, Heckerman & Kadie 1998)

In neighborhood-based collaborative filtering, users are grouped together, based on how similar they are to the active user, and a recommendation based on a combination of their ratings is given. (A kind of *people-like-you-liked-this* technique.)

In model-based collaborative filtering, recommended items are chosen on

models that are trained to identify patterns in the input data. (You seem to like A and B, which suggests you'll like C)

In each case, excessive amounts of data are collected and analysed by algorithms and complicated processes to identify patterns in social behavior or consumer trends to help make sense of the complex array of accessible information.

So omnipresent are these recommenders becoming, it is easy to spot the cultural effects they are having. Traditionally we would learn about new works of art, films and music from friends, critics, people who work in the local stores etc. It is now increasingly normal for us to get this information from software. The trendsetters in today's market are no longer human beings.

5.3 Playlists as recommender systems.

Musical playlists play a hugely significant role throughout this research; The Participants in the current primary research were exposed to lists of songs, or videos when they engaged with social media sites such as Spotify or YouTube and were asked to create their own playlists for an unknown third party, as part of the observational section of the study allowing the surveillance of the participants both as consumers and producers, and the opportunity to examine, more deeply, their relationship with music online.

It is useful, therefore, to consider the processes and factors behind both making and appreciating musical playlists, the intentions or aims involved in making them and the impact they have on those who receive them.

Making a music playlist for one's self has, for many years been common practice. As soon as the ability to home-record cassette tapes and, as the technology evolved, to burn CDs, became readily available, individuals could put together a compilation of their favourite tracks so that they could be listened to all in one place. With the emergence of digital media management software such as Windows Media Player or iTunes (versions of which come as standard on most devices), not only has the ability to do this considerably increased, but also the actual playback platform has shifted to be more playlist-centric. Instead of fixed, individual discs or cassettes, music is now often stored all together on an iPod, phone or computer-based music library, and with a few clicks, individuals can create or listen to bespoke collections of tracks with ease.

Aside from filtering through our own collections, this shift in how music is listened to has been influential in how it is accessed and discovered.

As music streaming and accessing content via the cloud has become commonplace, the need, as it is with most information, to navigate through the maze of options is more and more necessary. Early studies suggested that this growth in access to music led to complications such as a separation between a person's knowledge of the music's title and its content (Peynircioglu et al 1998) and an inability to recall the most appropriate music from the huge amount of choice available (Pauws and Eggen 2002) leading, in turn to a potential decrease in listener satisfaction. The importance of minimising such dissatisfaction was quickly recognised and measures were taken to alleviate these issues. Such measures included research into what makes a 'good' playlist.

Traditionally, similarity between pieces of music has been central to much research into taste and the construction of musical playlists (Fields 2011). Since the work of Tversky (1977) who considered objects to be sets of features by which to be compared, similar but increasingly complicated methods have been used to assess the similarity of music, (Pampalk 2006) either by direct, content-based musical analysis (Logan 2000), (Logan and Salomon 2001), (Berenzweig et al 2004) or by examining the brain's interpretation of musical signals. (Hargreaves and North 1999) As is the case with video streaming sites such as YouTube, (see section 7.5) pieces of music are allocated tags by which these characterisations can be identified and similarity can be evaluated. (Aucouturier and Pampalk 2008), (Lamere 2008). As well as being human-generated these tags are also applied automatically (Barrington et al 2008) (Bertin-Mahieux et al 2008) (Eck et al 2007) (Hoffman et al 2009)

But similarity alone is not the whole picture. In 1997, de Mooji conducted a study to ascertain which of 8 factors (including the songs in the playlist, transitions between songs, combination of genres, combination of artists, structure or song order, variation or coherence, choice of first song, and choice of last song,) were considered to be most important in the appreciation of a musical playlist (see Fig. VIII).
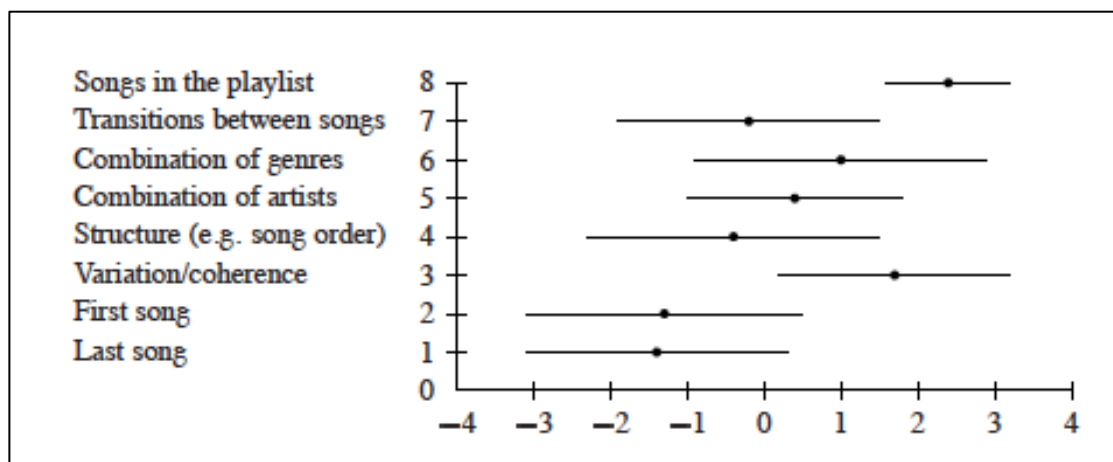
Fig VIII - Relative importance of various factors in assembling a playlist. (De Mooji 1997)

Unsurprisingly, the actual choice of songs in the playlist was found to be the most important factor, suggesting that musical taste and how 'right' the songs are for the playlist (and the intended purposes of which) is fundamental.

It is here though, that issues become apparent. Musical taste is something that needs to be inferred, based on the knowledge obtained by the creator of the playlist and, as discussed earlier, contextual variables such as environment or mood of the listener renders this fluid and difficult to pinpoint. (Herrera et al 2010)

When a playlist is being provided by an online service such as Spotify or Pandora, the primary intention is to satisfy the listener and so appropriate knowledge of what makes a 'good' playlist for their users is paramount to ensure that this is achieved. As a result, the acquisition of this information has become an extremely valuable but complicated process.

It needs to be acknowledged that Playlists can be intended for different purposes or occasions (Cunningham et al 2006.) Whilst song order can often be of importance, there are also circumstances in which a randomised order is preferred (Leong et al 2005), which was supported by Apple's release of the iPod Shuffle in 2005. As well as identifying and categorising elements of the music itself, a user's listening history needs to be taken into account, to help establish whether those characteristics are in keeping with their musical taste. (Terveen et al 2002), (Voida et al 2005). This is especially significant if the playlist is suggesting songs that are new to the user. In this sense playlists can be considered as '*delivery-oriented forms of recommender systems*' (Fields 2011).

Music being suggested to us in this way is not a new concept, whether in an 'Expert to listener' form, exemplified by the release of compilation albums by record companies, or by the performances of club DJs or Radio Presenters (Brewster and Broughton 2006), or in a more social, peer to peer manner, traditionally in the form of mix tapes or compilation CDs (Bull 2006) and now in the sharing and broadcasting of internet based playlists (Freire 2008) on platforms such as Spotify, mystands.com, webjay and Pandora.

What has increased however, are the notions of engaging with playlists made by unknown entities that we don't necessarily consider to be in any position of authority, and, perhaps on the other end of the scale, with tailor–made playlists constructed by algorithms fuelled by personalised data. This delegation of authority to random peers or algorithmic software is a significant

challenge brought about by the consumption of music via social media. By engaging with these sites, as many of us do with extreme regularity, we are exposed to more and more recommendations in this way, positioning the activity of *producing* musical playlists for ourselves and for each other, and *consuming* playlists made for us by unknown peers, and embedded algorithms, as key actors upon how we are exposed to music.

The same technologies have allowed internet-based radio stations, often with specialised content, to broadcast to anywhere in the world.

In some ways, the emergence of this Spotify/YouTube driven playlist-sharing culture supports the notion of participatory culture and the Internet as a democratising force (see section 3.2) by merging these concepts of 'expert to listener' and 'peer to peer' playlist creation. Creating playlists and making them available to the public, potentially positions us all as the experts in the traditional sense of 'expert to listener', in that the playlist is made by one person and is intended to be heard by many, but also establishes a network of participating peers, producing, sharing and consuming creative content. In this sense, it could be said that new connections can be made in the communication with strangers. (O'Hara and Brown 2006)

This shift can have an impact on the behaviour and intended purpose of the playlist. As suggested above, the fact that the created playlist will be available to all, removes the idea of choosing songs for a particular person, which may carry specific sentiment. It may also remove the automatic capital that comes with be recognised as a trusted 'expert'; people may tune in to a radio show or go to watch a club DJ, because they have a specific interest in their opinion or musical choices. Instead, this focuses attention on how the playlist may reflect on the creator. Perhaps, because the potential recipients are unknown or not particular, the playlist becomes more of a statement about *who* the creator is, and may be an attempt to impress or educate, and less about trying to satisfy the taste of the recipient.

Receiving playlists that have been created by an algorithm may well lead us to music we enjoy and can be tailor-made for us based on what we like already, but there is something quite insular about this process, and it is without any sentimental exchange. The algorithm will use data and statistics to identify content that it predicts we will like, but is not able to respond emotionally, or go beyond the numbers or the keywords that have been tagged to it. An individual's connection to a song is often personal and difficult to explain as indicated by Rob Gordon's character in High Fidelity:

"The making of a good compilation tape is a very subtle art. Many do's and don'ts. First of all, you're using someone else's poetry to express how you feel. This is a delicate thing." (High Fidelity 2000)

The use of the word poetry here is noteworthy as poetry and other art forms are often appreciated for their ability to stir emotions and to tell us something without saying it directly. The use of sarcasm, metaphor or simile is something that an algorithm may not recognise (see section 6.4 for more on this.) It is often this 'disguised' message that allows us to appreciate or identify with something, and furthermore, this reaction can be unique, usually based on contextual circumstances or shared experiences between the creator and receiver of a playlist. This is especially difficult for the algorithm to recognise if the piece of music is instrumental.

It could be suggested, therefore, that in attempting to customise our experience, much of the real personal connection that traditionally came with making or receiving a playlist is lost, whether it be in the sense of feeling a 'expert to listener' connection with an artist or DJ, or making or receiving a specific playlist for or from a particular person. This supports theories that propose that Social media may actually make us less connected with each other. (Turkle 2011)

This is not to say that all personal connections have disappeared completely; it is possible to send playlists to each other and social media platforms, along with the extended ability to access and transfer content makes this easier than ever, but it is important to acknowledge the overall shift in certain behaviours and the potential impact that these changes may have.

Our taste, and in turn our consumption of music has previously been strongly guided by our cultural geography and our desire to be accepted by or fit into to social groups or cultures. Though these desires remain, the fields in which they are realised are regimented by different parameters. From looking at studies into the dynamics of musical subcultures, and also at theories into the value, attainment and exchange of cultural capital, it is clear that this notion of the online playlist as a significant source of recommendation is an area that should not be overlooked.

5.4 Cultural Intermediaries and Infomediaries

Important research was conducted in this area by Jeremy Morris, who stated that 'Automated Recommendation systems now occupy a central position in the circulation of media and cultural products' (Morris 2015, p446) Morris'

research, like much of that conducted for this thesis, also expands on groundwork conducted by Pierre Bourdieu. (1984) Bourdieu's notion of *cultural intermediaries* focussed the influential members of a particular social class, (labelled by him as a subset of the *new petite bourgeoisie*) who were an authoritative voice in the consumption of culture, due to the nature of their *occupational grouping* (Negus 2002) or role in society.

"…These 'need merchants', sellers of symbolic goods and services who always sell themselves as models and as guarantors of the value of their products, who sell so well because they believe in what they sell…" (Bourdieu 1984 p365)

It had previously been considered that 'the term cultural intermediaries has been good to think with' (Smith Maguire and Matthews 2012 p551) due to its 'concept for making sense of various occupational roles that affect the circulation of cultural goods.' (Morris 2015 p449).) Featherstone (1987), Hennion (1989), Hesmondhalgh (2006) and Nixon and du Gay (2002) are all examples of studies that focus on this area of research.

Morris' research was next in a long line of studies that took its inspiration from Bourdieu's term which has had several reinterpretations and developments, and strong links with actor network theory, economic sociology and cultural economy (du Gay and Pryke 2002, Callon et al. 2002, Nixon et al. (2012) and McFall (2014). Additions to his definition have included producers in fields such as fashion (Skov (2002), Entwistle (2006) Pettinger 2004)), graphic design (Soar 2002), advertising (Cronin 2004), (McFall 2004) branding (Moor 2008), book retailing (Wright 2005), lifestyle magazines (Gough-Yates 2003). It has also included television buyers (Kuipers 2012) ratings companies (Childress 2012) cocktail bartenders (Ocejo 2012) record producers (Hennion 1989), artiste and repertoire managers (Zwan and ter Bogt 2009) and more recently podcasters, bloggers and other related practices. (Lieb 2013)

Such additions however have encouraged certain questions as to whether this seemingly prodigious usage of the term represents a 'broadening of scope, or a misapplication of terminology' (O'Brien, Wilson and Campbell, 2011) This level of flexibility has shrouded the term in ambiguity prompting (Hasmondhalgh 2006 p227) to label the concept as 'a very poor starting point for an enquiry into the relationships between media and cultural production and consumption' and for Smith Maguire and Matthews to pose the question 'are we all cultural intermediaries now?' (Smith Maguire and Matthews 2012 p551). They concluded that to qualify as a true intermediary it must 'construct value, by framing how others – end consumers, as well as market actors including other cultural intermediaries – engage with goods, affecting and effecting others'

orientations towards those goods as legitimate' (Smith Maguire and Matthews 2012 p552)

Powers (2015), in response to the uncertainty of an exact definition, made the case that it is the process of intermediation that is important and not whether or not an individual person or occupation qualifies as an intermediary.

'I conceive of cultural intermediation as a dynamic process of circulation that involves people, symbolic forms and objects as much as it involves the modes of transportation and transmission that allow these elements to be linked.' (Powers 2015 p122)

This notion identified a gap in this field of literature, suggesting that existing studies focussed too heavily on people. This view is supported by Moor (2012) who stated that 'non-human and/or material forms of agency can be just as significantly contributors to "intermediary" or mediating activities as human ones, and [...] they should be acknowledged as such' (Moor 2012 p565) and also, by De Propis and Mwauara who suggested that 'in spite of the fact that many agents will carry out multiple roles, it is possible to abstract the particular function of cultural intermediation beyond the ostensible designation of the agent in question' (De Propis, and Mwauara, 2013 p10)

With this in mind, online recommenders and algorithms could themselves be considered to be intermediary, and this opens the door to a new focus that ties in directly with the objectives of this research.

"Recognizing algorithms and recommendation engines as part of the intermediation process turns our attention not only to how these new technologies take part in an old process of shaping curation and discovery, but also to the ways algorithms are discursively and technically deployed to justify the legitimacy and quality of the services they underpin." (Morris 2015 p450)

Establishing new technology as cultural intermediaries steers us towards the importance of examining their social and cultural impact, particularly considering the filtering of information.

"If, once upon a time, mass mediation imposed scarcity through the limitations of content and distribution, in the digital era, it imposes scarcity through the activity of organising access to information – that is, determining which content will be prioritized for which users" (Andrejevic 2013 p199)

However, noting the addition of the new technology, Morris sheds light not only on the importance of digitized data collection, the algorithms that

underpin online recommendation engines and how such practices can themselves be established as cultural intermediaries, but also 'given that culture, as data, can be manipulated, sorted and related in ways that far extend human capacities, a new class of services has emerged that truly treats cultural goods as software, as code upon which other code can be written or built. (Morris 2015 p452) ' It is these services he refers to as *infomediaries,* and defines them as 'organizational entities that monitor, collect, process and repackage cultural and technical usage data into an informational infrastructure that shapes the presentation and representation of cultural goods.' (Morris 2015 p452) He notes the similarities between this term and Andrejevic's (2013) *organizational intermediaries* and Alison Hearn's (2010) *feeling-intermediaries*, but highlights the 'crucial role information – its collection, deployment and discursive power – plays in the intermediation process' (Morris 2015 p453)

Infomediaries; a term originally penned by Hagel and Rayport in 1997, to describe companies 'whose rich store of consumer information enables it to control the flow of commerce on the web' is used in this case to describe the emerging organizations that monitor, mine and mediate the use of digital cultural products (e.g. E-Books, music files, video streams, etc.) as well as audience responses to those products via social and new media technologies. (Morris 2015 p447)

Specifically, Morris argues that 'Infomediaries, – largely using automated and data-based technologies and methods to surveil taste – complicate practices that were traditionally the province of cultural intermediaries and highlight the increasing amount of personal and socially aggregated data that now inform how users discover and experience cultural goods' (p448) and that 'infomediaries are increasingly responsible for shaping how audiences encounter and experience cultural content' (p446)

"Infomediaries shape tastes and derive legitimacy in a different manner than cultural intermediaries. Their ways of framing cultural goods are more organisational and embedded into everyday use than cultural intermediaries. Rather than the presentation of advertisements, or the placement of a song in a television show, infomediaries work behind the scenes/screens to affect the very interfaces of programs like Spotify or Netflix. Infomediaries collect past usage data and combine them with a much larger database of tastes and preferences and offer customised suggestions. They also provide the platforms on which new musical applications (and thus encounters with music) are built. The legitimacy of infomediaries, in the rhetoric of those who create and employ them, is based both on the cultural knowledge of those creating the databases and algorithms, but also on the size and scope of the databases and the efficiency of the algorithms themselves. If a traditional cultural intermediary was someone with

intimate knowledge of what was good and could gauge the quality of cultural content before presenting it to you, infomediaries rely on the efficiency of the algorithms and databases to know what is essential about you and your tastes. The cultural content towards which infomediaries point users has less to do with quality and more to do with a supposed fit with quality than with a supposed fit with a user's individual preferences." (Morris 2015 p456)

Morris refers to these processes as 'curation by code' and through his work, highlights the influential capacity and computational forms of power that they possess. His work, concentrated specifically on positioning 'The Echo Nest'; a 'music intelligence platform that synthesises billions of data points and transforms it into musical understanding' (The Echo Nest 2016), as an infomediary. This engagement and focus on music helps to identify the impact these processes have on this particular area of popular culture, making it particularly relevant to the current research.

The work of Morris, and other supporting theorists in this field, strengthen the case for the important influence of algorithms and online recommendation software. The impact of data-driven mechanisms grows alongside the increasingly ubiquitous presence of social media and highlights the need for a deeper consideration of the potential implications on culture and society.

"(Data analytics) have the potential to usher in new, unaccountable and opaque forms of discrimination and social sorting based not on human-scale narratives but on incomprehensibly large, and continually growing, networks of interconnections" (Andrejevic, Hearn and Kennedy 2015 p379)

The relationship between man and machine requires careful surveillance to assess the effect of this shift in cultural trend setting. Replacing socially elected, human cultural intermediaries with algorithmic versions positions us as contributors to our own choices and the culture to which we are exposed. The data collected from our on-going behaviour online act as the breadcrumbs we follow towards new discoveries. The trail of our own online footprints via various algorithmic interpretations is becoming increasingly significant in the mapping out of our habitus.

"As infomediaries like the Echo Nest quietly build the infrastructure on which many of our experiences with digital cultural goods rest, the very acts of interacting with cultural products fuel a recursive loop of future cultural recommendations… every skip, rewind and pause feeds into a process of intermediation that curates what we view, hear and read next.' (Morris 2015 p460)

5.5 Structure versus Agency

It is important for us to acknowledge the potential cultural impact and social influence that such widespread datafication, and the collection, analysis and use of big data could have.

We discussed in an earlier chapter (see section 3.2), the idea of social media as a participatory culture and the potential impact it may or may not have on democracy. The rise of an algorithmic led social media and our new relationship with data has stirred up similar debate surrounding concepts of structure and agency.

Structure (referring to patterned arrangements that constrict or limit our choices) and Agency (which refers to the capacity of individuals to act independently and to make free choices for themselves) are often seen as conflicting models that shape human behaviour. (Barker 2005)

This tussle between structure and agency is not a new one, and for many years, we have seen arguments that advocate a capacity for human agents to shape their environments, (Layder 2006) others that suggest that agents act within the confines of conditions beyond their own making, (Durkheim 1893) (Marx 1852) and others still, including Bourdieu, (for whom structure and agency played a significant role in his concepts of field and habitus,) that stress a dialectic interplay between the two. (Giddens 1984) (Layder 2006)

"Society consists in relations between people, and as such is dependent on their activities which reproduce or (less often) transform society. From the other side, human practice depends on society; there can be no meaningful action without social structure. Crucially, this dependency on structure imposes limits on what people can do while never fully determining actions. In other words, we have some autonomy as agents." (Toynbee 2007 p 18)

Layder wrote, '[agency] points to the idea that people are "agents" in the social world - they are able to do things which affect the social relationships in which they are embedded. People are not simply passive victims of social pressure and circumstances' (Layder 2006 p4) but, with the increasing prominence of algorithmic-led trendsetters, is this becoming less true?

If the format through which we live an increasing amount of our social lives is being directed by machines and algorithmic formulas, developed by

businesses and advertising companies, are we not adding rigidity to the social structures?

There are theorists that certainly think so; (Andrejevic 2013, boyd and Crawford 2012), but there are others who propose that the opposite may be true.

Kennedy et al, state in their article 'data and agency' that these 'troubling consequences are not the whole story of our datafied times' (Kennedy, Poell and van Dijck 2015 p1)

"Datafication (the process of rendering into data aspects of the world not previously quantified,) should not only be understood as the process of collecting and analysing data about Internet users, but also as feeding such data back to user, enabling them to orient themselves in the world, Moreover, data can be generated, collected and analysed by alternative actors to enhance, rather than undermine the agency of the public." (Kennedy, Poell and van Dijck 2015 p1)

Is it possible that certain use of this mass accumulation of data can contribute to a heightened agency and allow individuals to go beyond not only the oppressive, dataveillant powers that use and manipulate big data, but also traditional forms of limiting or determinative social structure such as religion, class, ethnicity and gender? (Mayer-Schoenburger and Cukier 2013)

In terms of individualisation, this is certainly a possibility. Amassed personal data, potentially allows for individualised customisation, determined, in part by our own actions. But the complication is this; the opposite is also theoretically true, in that the filtering of information based on that data could restrict growth, and reinforce social and cultural structures.

There are some scholars who believe that an overly keen focus on the power of the algorithm draws attention away from smaller actors that adjust to accommodate datafication. Couldry and Powell (2014) suggest that an examination of such actors as well as 'the variable ways in which power and participation are constructed and enacted' (Couldry and Powell 2014 p1) is necessary.

5.6 Value.

The value and impact of personalisation is becoming more and more clear and efforts to enhance and perfect the systems is the focus of much academic research and is a priority of most businesses.

It was suggested in 2005 that in recommender systems, user profiles were usually generated based on data with limited relevance that was too simple to produce high-quality recommendations (Adomavicius and Tuzhilin 2005). Indeed, since then, much research has been conducted to improve the accuracy and effectiveness of these systems and there are many who hope that the level of artificial intelligence will be, at some point, at the stage where the desired effects are achievable.

The science of recommendation is just starting and despite impressive progresses, much remains to be understood. For further advances intuition alone is no longer enough and a multidisciplinary approach will surely bring powerful tools that may help innovative matchmakers to turn the immense potential of recommendations into real life applications. (Liu et al 2012 p4514)

For Powers (2014) algorithms feature significantly in the on-going discussion on taste and aesthetics. Anderson underlines the need for a deeper understanding of the '*materiality of algorithms*' (2012) and how infomediary logics promote or withhold cultural content, particularly in the context of 'computational journalism' and again, through Bourdieusian prisms, assesses the importance of having to adjust to an increasingly ubiquitous presence of algorithmic data collection. (Anderson 2013)

As the sites have developed, the recommending software has 'improved' to include more and more information in order to make more accurate predictions. The number of studies in this area is rising, especially now that the amount of internet-based music consumption has considerably grown.

This was made apparent when Netflix, the online film rental company offered a $1 million prize to the people who could improve the 'prediction accuracy' of their recommending system by at least 10%. (Ellenberg, 2008) This offer was met with responses by over 20,000 researchers. (Lohr 2009) The power afforded to those who hold the information makes big data, advanced algorithms and effective personalisation a heavily desired commodity.

Len Bertoni, a 51-year old American computer scientist is one of the many individuals to attempt to win the prize. His main issue in achieving his goal, has been labelled the '*Napoleon Dynamite problem*', (New York Times Magazine 2008) and is a good example of the complex nature of why making 'accurate' and effective recommendation algorithms is exceedingly difficult.

Napoleon Dynamite is a weird, quirky film, which relies on ironic humour and has a polarizing effect when it comes to receiving ratings by its viewers. (Of

the two million-plus reviews, the ratings are disproportionately one or five stars.)

"Close friends who normally share similar film aesthetics often heatedly disagree about whether Napoleon Dynamite' is a masterpiece or an annoying bit of hipster self-indulgence." (New York Times Magazine 2008)

For various reasons, there are many films that can have a similar culturally or politically polarizing effect; *Sideways, Lost in Translation, Fahrenheit 9/11* and *The Life Aquatic with Steve Zissou* are such examples, and all cause problems when it comes to predicting whether or not they will be well received.

It has been suggested that our relationship with music is more complicated, carrying with it acute aspects of cultural capital and is more entwined with our identities than films. As mentioned earlier, our reactions to it are therefore based on a complex combination of variables heightening the potential for polarizing, difficult-to-recommend tracks.

Chapter 6 - The Personalisation of Social Media – Part Three: An Evaluation.

Polarising subject matter is not the only issue or challenge faced by developers of these algorithms. Despite the benefits of assisted searching and the convenience that it brings, there are several issues that give rise to problematic areas regarding the performance and use of recommender systems.

6.1 Shepherds, not prophets: They do not predict, but guide

Many of the early systems claimed to be able to accurately predict our tastes and forecast the things we'll like and dislike (Apple's iTunes *genius* for example (Apple.com 2016)) but this is not the way it can or does work.

It seems to be a human obsession to predict what will happen in the world around us, and indeed the ability to do such things would certainly be extremely useful. However, there are a very small number of things that can be accurately predicted due to the non-linear nature of the world in which we live.

Occurrences that are linear, such as the tides of the sea, or lunar eclipses can be predicted because they are governed by mathematical laws that are easy to follow. In order to ultimately understand and accurately predict everything else would require absolute knowledge, about all aspects of everything.

"If we had perfect knowledge about all matter in the universe we could calculate what that matter would do next. But if there were even a tiny problem with our knowledge about anything, anywhere – the smallest oversight, the slightest misunderstanding – that flaw would quickly magnify as the machinery of the universe ground on. Soon it would be enormous and our forecasts would be completely wrong. In this way, "prediction becomes impossible" (Poincare 1903 p68)

The idea that we can break everything down and understand it by examining the matter of which it is composed is known as reductionism. The biggest issue with this commonly accepted view is the unidirectional nature of how things happen.

"The explanatory arrows always point downwards." (Weinberg 2001) Looking back and understanding the process of events that lead to now, does not mean we could start with the fundamentals and reconstruct the universe. (Anderson, P, W 1972)

In other words, the reasons why the arrows only point in this downward direction, is that there *are* no upward arrows. The future is too dependent on outside variables to be able to map out particular outcomes. Every occurrence, however small, could impact on all other occurrences as Edward Lorenz famously analogised; "The flutter of a butterfly's wings in Brazil, could ultimately cause a tornado in Texas". (Lorenz 1995)

Predictions about the world face two major problems. Firstly, a lack of, or limited amount of knowledge, and secondly, the very nature of uncertainty: factors that simply cannot be taken into account at the time, which interfere with the expected course of action. These problems only become more prominent too as, we are constantly making new discoveries, which actually bring to light many more questions. The more we learn about the world, the more we realise we do not know.

In 1984, The Economist set up an experiment to test the ability of certain people to make forecasts of economic growth. Sixteen people were tested; four finance ministers, four chairmen of multinational companies, four economics students from Oxford University and four London dustmen. The results were then examined ten years later revealing that the dustmen had scored joint first with the company chairmen. The finance ministers came last. (The economist 2010)

So why do we continue to make predictions even though they are likely to be inaccurate? The answer lies in our evolution. Humans have evolved over the years to become uncomfortable with uncertainty and randomness. It doesn't compute properly in our minds, and we often find that we react in very interesting ways to certain things.

"We have evolved as a species to become exquisite pattern-finders….Our minds automatically try to place data in a framework that allows us to make sense of our observation and use them to understand and predict events". (Seife, 2012 p105)

To the prehistoric man, noticing regularities and patterns was essential for survival. Identifying non-existent patterns was not problematic, whereas failing to notice the ones that did could be detrimental. For this reason, "this profound imbalance is embedded in our cognitive wiring. We constantly overlook randomness but we see patterns everywhere whether they are there or not." (Gardner 2010 p78)

The evidence suggests that despite the vast problems with being able to prophesy and predict the future, we have evolved to be uncomfortable with the

uncertain and feel it necessary to obtain foresight in order to prepare ourselves. I draw attention to this because these problems exist in the projections of everyday events. When you bring into question the entire complexities and comparative enigmatic nature of the human mind I pose the notion that any accurate prediction of taste is a futile endeavour.

There are no crystal balls, and no style of thinking, no technique, no model will ever eliminate uncertainty. (Gardner 2010 p17) and with this in mind can true predictions of human thought ever be possible?

An effective recommending system is worth a great deal of money, partly because they are so complicated. The sheer amount of data that needs to be processed is gigantic. (But still a long way off from the intricacy that goes into a natural, human response.)

"They're (online recommender systems) attempting to second-guess a mysterious, perverse and profoundly human form of behavior: the personal response to a work of art." (Grossman 2010 p6)

This evidence suggests that there is a limit to how accurate the algorithms embedded in social media can be, and that online recommenders do not predict, but do as their name suggests and recommend 'appropriate' products to us.

6.2– issues of trust with the Algorithms

In most cases, the amount of data through which we need to sift is remarkably huge and so overlap, in terms of evaluations or ranking, is potentially minimal. Songs, therefore, or other items may have received too few ratings to be effective. For an algorithm to be efficient this *data sparsity* needs to be acknowledged. (Huang, Chen and Zeng 2004)

The sheer size of our *data footprint* is something that also needs to be taken into account, especially if, at each decision or click, our entire amount of amassed data needs to be analysed and recomputed. To combat this, systems need to take an incremental approach and modify existing or previous recommendations according to any new data. (Sarwar, Konstan and Reidl 2002) and (Jin et al. 2009)

It also takes time to develop a profile for new users. Individuals visiting a site for the first time, may well find that there is very little recorded on them so far, meaning that the amount of data is insufficient for any effective recommendations to be made. (Rashid et al 2002) The same is true for data collected about particular items. It is for this reason that many sites, such as

Facebook as described earlier, attempt to gather widespread information from other sources. For example, "Baifendian developed a technique that could track individual users' activities in several ecommerce sites, so that for a cold-start user in site A, we could make recommendation according to her records in sites B, C, D, etc." (Liu et al 2012, p6) There are also some algorithms that try to predict unrated recommendations – (Schein, Popescul, Ungar and Pennock 2002)

Obtaining recommendations from trusted sources is a critical component of the natural process of human decision-making, (Melville and Sindhwani 2010) (Mobasher, Burke, Bhaumik, and Williams, 2007) (Lam, Frankowski, and Riedl, 2006) and so the producers of the algorithms have to be aware of certain aspects that may affect how effective their recommenders can be.

Ensuring that consumers do not dismiss recommendations is one such aspect; User-system trust is considered to be an important quality of online recommenders. (Tintarev 2007) Trust and reputation can be an issue, especially as individuals are less likely to trust a recommender than a friend. (Shina and Swearingen 2001) How to deal with this issue of trust causes the developers of algorithms various concerns.

"The notion of trust plays a central role in this process [the harvesting of profiles from a community of users in order to offer individuals personalised recommendations] since the users are unlikely to interact with a system or respond positively to recommendations that they do not trust. However, trust is a multi-faceted concept, and has been applied to both recommender system interfaces (to explore the explainability of computed recommendations) and algorithms (to algorithmically reproduce the social activity of exchanging recommendations in an accurate and robust manner.)" (Lathia et al 2013 p1)

There are some who believe that for an algorithm to be effective and trustworthy, lists of recommendations should contain more obscure, less obvious items that users would not necessarily be able to find for themselves. (McNee, Riedl and Konstan 2006) As a result, many recommenders have had to install methods to make more diverse, their list of recommended items, (Smyth and McClave 2001) (Ziegler et al 2005) and (Hurley and Zhang 2011)

However, this can also have an alternative effect. Receiving obscure suggestions can sometimes cause consumers to doubt the validity of their recommendations (Herlocker et al 2000) and is one possible reason why marketing agencies and businesses are actually less likely to adjust their algorithms to suggest something a little different.

Social influences carry a huge amount of weight when it comes to decision making and opinion spreading (Herr et al 1991) (Bone 1995) (Fortunato et al 2007) and (Ellero et al 2009). Many of the recommendation systems and algorithms acknowledge this issue and in order to gain 'trust', social relationships are often analysed in the hope that improvements can be made. (Hwang et al 2010) and (Symeonidis et al 2011)

It has also been suggested that trust can be obtained through making the algorithms 'explainable' or transparent to allow the users to see how the data is being processed. (Chen and Pu 2006) (Abdul-Rahman and Hailes 1997)

In some instances, particularly in collaborative filtering, trust or reputation is established by means of allowing users to rate recommendations and thus build up scores, (Sang, Ismail and Boyd 2007) giving an indication in the level of satisfaction obtained from that recommendation.

Social media have to work reasonably hard to earn the trust of its users and rely heavily on the networks and communities that exist. "Facebook is an increasingly vital source of news for this reason: Our friends and family are more likely to know what's important and relevant to us than some newspaper editor in Manhattan. (Pariser, 2011 p66) Indeed, we place a lot of trust in peer recommendations, (Walther et al 2011) and so, the algorithms embedded in the sites we use, are meant to replace the 'friend who knows what we like' with the addition of being on commission from the record label or marketing company.

As discussed section 3.6, we, as humans are extremely complex. The fluidity and changing nature of our taste is seldom taken into account by the algorithms. It is likely that our opinions, likes and dislikes change over time, even from day to day and it is therefore difficult to pinpoint relevant predictions. (Min and Han 2005) (Xiang et al. 2010)

There can also be problems with the foundations upon which some of the algorithms rest.

An early example, pioneered by Tim Westergreen, co-founder of the Internet radio station, Pandora, was based on assigning attributes to songs in order to categorise them, and then suggest them to listeners, allowing them a personalised listening experience.

Westergreen's database, named the Music Genome Project, is compiled by a team of 'experts' on Pandora's payroll, who analyse up to 10,000 songs a month, assigning them numerical ratings for different categories and attributes.

Visitors to Pandora then type in a band or a song they like, and it will then attempt to match you up with other songs you'll probably also enjoy.

One particular issue to this approach is that the assignment of the musical attributes relies solely on the opinion of the individual assessing the song. Even if these assessors are trained musicians or have a background in musicology, there will still be differences in opinion.

Factual attributes such as listing the instruments or naming the composer or band members is easy enough but stylistic characteristics such as whether or not a song is 'loud', 'heavy' or 'upbeat' depends on what it is being compared to. There are many, for example, who would consider the band Linkin Park to be particularly heavy. The same opinion would be laughable to fans of Deicide or Children of Bodom; bands that would make Linkin Park sound extremely soft in comparison. How does one decide what genre a piece of music fits into, considering that there are many examples of cross overs?

Even if the attributes seem to match, there can always be additional factors that were not accounted for that can make a huge difference. According to the scoring system, Eminem and 50cent would probably achieve a similar total. They are both rappers on the same record label and stylistically are not worlds apart. However, in 2004 50 Cent was booed off the stage at the Reading festival after being pelted with bottles and camping equipment. Eminem headlined the festival the year previous and was received very well. (NME.com 2004)

It is also very difficult to categorise emotions that are evoked by music. A song can be upsetting to one, yet uplifting to another. (Juslin and Vastfjall 2008) I'm also a firm believer that we never truly feel just one thing and instead, our responses are a mixture of different feelings. For this reason, categorising the songs numerically is surrounded by difficulties, especially if an accurate prediction is actually the desired outcome.

In much of the literature in the field of social media and the effects of recommendation systems a notion prevails of a dichotomy of human versus machine, but in some instances, it is important to acknowledge this idea of hybrid curation and remember that, at some point, people were behind the programming of the algorithms and that humans and algorithms combine to influence, and be influenced by music and other avenues of popular culture; a sentiment held by Razlogova (2013) who believes that curation has forever been a symbiosis between people and technology.

"Humans not only affect the design of the algorithms, but they also can manually influence the filtering process even when the algorithm is operational…both human and technical biases are present" (Bozdag 2013 p209)

As the big data is collected, analysis needs to take place to determine useful patterns or trends that allow meaning or 'actionable knowledge' (Gandy 2012) to be extracted. However, there is no way that the knowledge can be absolute. Lanier stated that, "Everything about information is artificial." (Lanier 2010 p140) and so the inferences made from the collection of that data cannot be considered indisputable, nor can those inferences ever be completely free from 'hidden intentions, systematic and random errors, partial information or biased visions' (Esposti 2014 p212) The algorithms, developed by humans, should also be treated with certain reservations. (Barocas et al 2013) Indeed, 'problems may emerge when the knowledge created is taken as absolute truth, squeezed into recommendations, and transformed into public policies or business decisions.' (Esposti 2014 p212)

6.3 – Limitations on Accuracy

Such problems become apparent when we consider that living out so many aspects of our lives via social media draws more attention to the notion of multiple identities, (see section 4.1). Algorithms can record data about us, recommenders can steer us towards music or products and information can be amassed to help understand our personality, but the software cannot differentiate between the diverse array of personalities we develop for different situations. These change constantly over time and overlap. An algorithm may know what you have searched for, but without the contextual information, or knowledge of the relationship you have with someone with whom you might share it; it will struggle to make the distinction.

"Personalisation doesn't capture the balance between your work self and your play self, and it can also mess with the tension between your aspirational and your current self. How we behave is a balancing act between our future and present selves." (Pariser 2011 p117)

Accounting for multiple identities is problematic enough when considering a single platform where all our behaviour is visible, perhaps by unintended audiences, but when, on top of that information is offered or withheld to you based on your identity, the inability to understand the complexities of a multi-layered persona, could have significant impact.

We tend to romanticise and get overexcited with technology and forget how complex being human actually is. The gap between artificial and real life is still relatively immense. Take search engines for example, Hammersly points out that "while it is ridiculously impressive to receive results from Google within milliseconds for any term you wish to search for, those results are limited to matches of the exact phrase you've typed in. Search engines can't infer things that aren't explicitly stated in one place…. A human being, however, can make those inferences very easily." (Hammersly, B., 2012 p39)

Such problems have been encountered in the development of robotics and the attempt of scientists to build machines capable of reproducing complex human thought processes. "(For a robot to abstract the knowledge gained from an experience and apply it to a similar situation it) has to be equipped with an ability to see into the mind of the person being imitated, so that it can infer the person's goals and pick out the aspects of behaviour that the person intended to achieve the goal. Cognitive scientists call this ability intuitive psychology…. No existing robot comes close to having this ability." (Pinker 2003 p61)

In early 2016, Microsoft's attempt to introduce an Artificial Intelligence chat robot to social media resulted in being deleted just 24 hours later. 'Tay' was developed to appear and speak like a teenage girl, fitted with voice recognition software, knowledge of millennial slang and popular culture, and algorithms to help her learn from interactions with the public. This resulted very quickly however, in transformation from an innocent young female to an 'evil, Hitler-Loving, incestual sex promoting, 'Bush did 9/11'-proclaiming robot.' (Horton 2016)

Fig. IX – 'Tay' (The Microsoft chat robot)

Due to her communication with hackers, destructive sabotagical individuals, or those with genuinely extreme views, Tay's algorithms had, within a matter of hours, positioned her as a hateful, racist spokesperson, expressing offensive opinions and inappropriate suggestions.

Without the benefit of a moral compass, emotional thought or insight into the complexities of human thought processes, Tay is an example of how, at this point, artificial intelligence can lack understanding and will only absorb and relay information. It can't assess the context or validity of that data in the same way as a human would. It can't be suspicious or mistrusting without blanket rules or programming to identify particular words or phrases. It can only draw conclusions that are based on logic or rational thought.

Understanding of humanistic concepts carries with it many barriers for technology.

6.4 - Understanding and recognition.

Many of the algorithms that fuel recommendation are focussed on Information Extraction (IE) from messages, tweets and posts on social media.

Named Entity Recognition (NER) and Natural Language Processing (NLP) are areas of this and concentrate on identifying key words, phrases and sentiments or particular objects from the data uploaded by individuals to assist painting a more detailed picture of who they are and what they like.

Textual-based data can cause problems with this however, due to the noisy and informal nature of social media text. (Derczynski et al. 2015) The text

used on social media is often colloquial and can comprise of particular language used between specific individuals or subcultures. It is often riddled with incorrect spelling, punctuation, grammar and capitalization, and words can be invented, evolve or be used in alternative ways, as the mode of communication on the social media platform does not always necessitate careful use of 'correct' language. NER algorithms can struggle to adapt to text used in this way because they are designed to recognise formal text. (Onal and Karagoz 2015)

Though attempts have been made to improve this predicament, including methods of normalisation (Dilek and Steinberger 2014) and a method established by Collobert et al (2011) known as *NLP from scratch*, which uses word embedding (the attempt to recognise words based on encoded representations) and is designed to learn and adapt to variations in language on social media, (Turian, Ratinov and Bengio 2010), (Konkol, Brychcin and Konopik 2015) the complicated and fluid nature of language and the tendency for users to not stick to standard rules of grammar still poses problematic issues.

Contextual recommendations – identifying irony, sarcasm, metaphor, similes and caprice.

Another issue with algorithmic recommendation is the ability to recognise the underlying context. The use of tagging objects has been used to help categorise and identify in order to infer links and relevance, however, complex or disguised sentiments that are carried by such objects can often be missed, especially if tags are allocated automatically rather than by humans. (Barrington et al 2008) (Bertin-Mahieux et al 2008) (Eck et al 2007) (Hoffman et al 2009)

George Orwell's Animal Farm for example, is a famously allegorical and dystopian novel, which uses the story of the farmyard animals to depict the Stalinist era of the Soviet Union. Any tags to identify this would rely on human knowledge rather than those that are automatically generated, which would rely on content-based features and find it difficult to deduce more abstract links or identifying factors.

As well as metaphorical or allegorical features, technology has struggled with sarcasm. This is due to the particular knowledge that needs to be obtained in order to establish the context of what is being said.

Between two people, understanding sarcasm is straight forward enough when communicated via face to face interactions, and is more likely to be used between people who know each other (known as the '*principle of inferability'* (Kreuz 1996)), but becomes more complex if the message is intended for

multiple people (Bell 1984) or, especially now on social media, if the intended or imagined audience is unknown or underspecified (boyd 2008) (Marwick and boyd 2011). This ambiguity has led to users of social media including self-declarations of sarcasm by using "#sarcasm" to end their posts or tweets (see Fig. X), and attempts to launch sarcasm fonts or punctuation such as the 'sarcmark'. (Moore 2010)'

Fig. X - Example of "#sarcasm" indicator in use.

Much research has been conducted into this area, many theories focussing on how analysis of lexical indicators or linguistic markers such as interjections, intensifiers, non-veridicality and hyberbole, that often exist within ironic statements help to identify sarcasm (Kreuz and Caucci 2007), (Carvalho et al 2009), (Davidov, Tsur and Rappoport 2010), (Gonzalez-Ibanez, Muresan and Wacholder 2011), (Riloff et al 2013), (Lukin and Walker 2013) and (Reyes, Rosso and Veale 2013)

Though these text-based approaches can contain a certain level of accuracy, it has been suggested that, in order to improve overall accuracy, context also needs to be taken into account; for example, identifying sentiment incongruity (Liebrecht et al 2013), numerical incongruity (Joshi et al 2015), cultural specificity (Liu et al 2014), acknowledging the type of thread in which a Reddit post may appear (Wallace et al 2014) or examining the relationship between a tweet and the past tweets made by that user on Twitter (Rajadesingan, Zafarani and Liu 2015). (For a summative review on the existing literature in this field see Joshi, Bhattacharyya and Carman (2016))

But, despite improvements in the detection of sarcasm, the subtle nuances that exist within irony still cause problems with recommendation. Just recently I had a friend who posted an ironic comment stating, "*yeah because I'm obviously a Nazi!*" on Facebook and within minutes started receiving recommendations for right wing publications and groups that 'might be of interest.'

A study by Bamman and Smith (2015) found that observation of many features need to be combined to maximise the accuracy to which sarcasm can be detected, including linguistic and sentimental features of the message itself, information about the author and their profile, historical communication and information that link the author and the audience and environmental features. They also deduced that because sarcasm is more easily communicated between users that know each other, the necessity for them to include explicit markers is drastically reduced. They go on to state:

"This has important consequences for the study of sarcasm and other speech acts on social media sites with complex audiences: in the absence of shared common ground required for their interpretation, explicit illocutionary markers are often necessary to communicate intent." (Bamman and Smith 2015 p4)

This suggests that any sentiment that is not communicated directly, such as metaphor, simile or allegory, as well as sarcasm, carries with it complications regarding automatic detection; a notion that is particularly significant considering that algorithmic tagging is a primary basis for music recommendation.

Music is said to be able to induce particular emotions (Chan 2009) and Tags are allocated to represent this. However, emotions are complex and difficult to label or verbalise (Tipton 2014) and, as is the case with intricate communicative sentiments, the algorithmic extrapolation of non-verbal or emotional concepts will face significant complications.

6.5 – Gatekeeping, reinforcing barriers and compartmentalising

It is also the case that personalisation and filtering positions social media, and the algorithms embedded within as gatekeepers. Traditional gatekeeping theory focuses on media bias and the restriction of information; how authoritative institutions or influential individuals and organisations determine to which information we are exposed. (Shoemaker and Vos 2009)

In the case of social media and our engagement with the Internet, nearly everything is underpinned by various processes that potentially restrict information to us in this way.

There are some who dismiss this issue and regard algorithmic influence as extremely positive. "Filters no longer filter out. They filter forward; bring their results to the front. What doesn't make it through a filter is still visible and available in the background.... instead of reducing information and hiding what

does not make it through, filters now increase information and reveal the whole deep sea" (Weinberger 2012 p11)

Weinberger, however, fails to acknowledge that in a sea of everything, being in the background, may as well be filtered out. Having to scroll down numerous pages to find the 'less relevant results' is not something most are prepared to do, especially if you're not looking for something in particular.

A problem with algorithmic gatekeeping left to run and 'learn' by itself is the blanket systems and parameters that it enforces. Without the humanistic reason and logical, emotional responses, rules are administered in all situations regardless of how applicable they may or may not actually be.

There have been instances of online magazines and companies having their AdSense membership revoked; (a Google-run program that allows websites to generate income by placing targeted advertisements, and a primary source of income (Google.com 2016)) due to algorithmic pedantics (Morozov 2013).

This is an issue that seems to be rigidly dismissed by Google. "Instead of acknowledging that algorithms may have shortcomings and biases that ought to be corrected, Google behaves as if introducing humans to occasionally review the work of its algorithms would be tantamount to abandoning all faith in artificial intelligence as such" (Morozov 2013 p142)

Examples of such problematic algorithmic functions include Google's Autocomplete, which is designed to save us time when typing our intended searches. While for the most part this is undoubtedly helpful, it can also lead to troublesome situations and, on several occasions, Google have been sued, or forced to modify its autocomplete results. Such situations have included individuals being linked to crimes they didn't commit (BBC News 2012), negative associations with rape or satanic worship (searchengineland.com 2010) and in 2012, Germany's former first lady Bettina Wulff took legal action when searches for her name were autocompleted with insinuations of prostitution. (Kulish 2012)

Google, in each case, protested their innocence, claiming that the Autocomplete results are simply a reflection of what people have searched for in the past as demonstrated by the comments of one Google spokesperson " We believe that Google should not be held liable for terms that appear in Autocomplete as these are predicted by computer algorithms based on searches from previous users, not by Google itself'" (searchengineland.com 2011)

However, while this may be true, with the input of human influence, there is a very real potential for the algorithms to be manipulated, and examples of deliberate character smearing and puppeteered-searching have been known to take place. (Wiideman.com 2010)
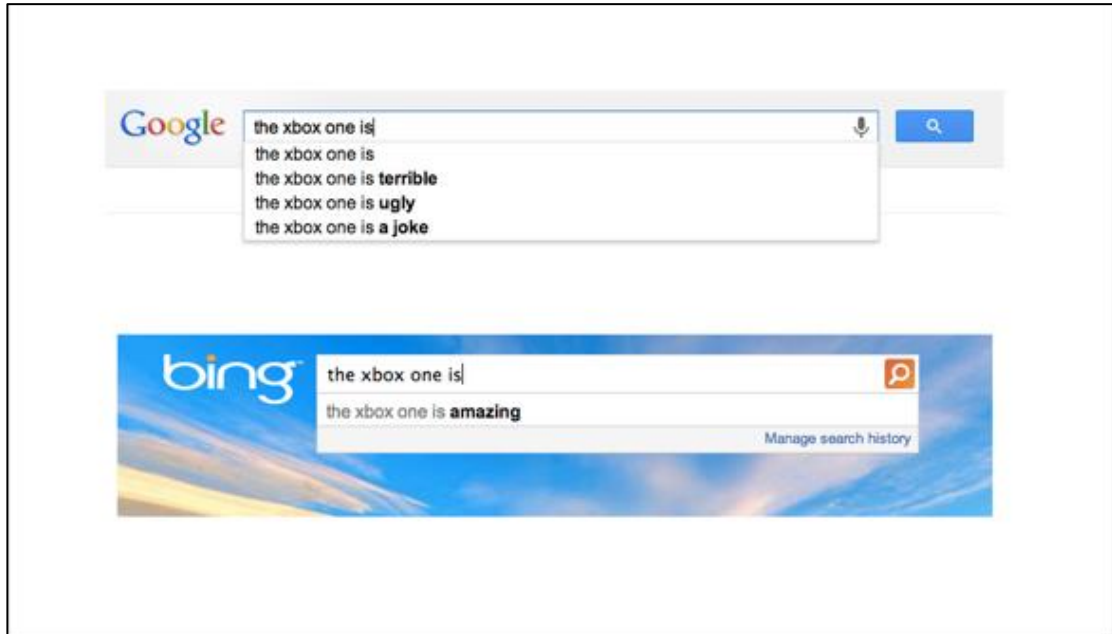
Fig. XI - Screen shots showing contradicting searches (Internet monitor 2013)

The screenshots in Fig X show the contradicting searches conducted on two of the Internet's leading search engines, Google and Bing. The hugely negative and disparaging comments auto-completed by Google when searching 'the Xbox one is..'' are completely different to those autocompleted by Bing. Is it really possible that only consumers wishing to investigate negative feedback on the Xbox did so via Google? Possible, but unlikely.

Despite claims that the likes of Google and Facebook, are merely mirroring culture and society, ("we're trying to build a virtual mirror of the world at all times" (Marissa Mayer (2010) - a former Google senior executive), " Our role in the system [is] to constantly be innovating and be updating what our system is to reflect what the current social norms are" (Paul (2010))), their transformative effects are becoming increasingly apparent.

"…the company doesn't just reflect, it also shapes, creates, and distorts – and it does so in numerous ways that cannot be reduced to one singular logic of the Internet." (Morozov 2013 p145)

In the context of discovering new music, or steering us towards or away from bands or artists, we must assume that this influence has a similarly profound effect. If, every time you search for a musician or genre, the

autocompleted searches are of a negative or derogatory nature, it is likely that you may avoid following through with your search, or that your opinion will be adversely conditioned before you even arrive at your search destination.

The influence of such manipulation highlights the profound influential nature of the presence of algorithms, embedded in our everyday online involvement.

Being offered music, or any other product based on relevance seems like a logical process. It's convenient for us as we don't need to trawl through everything to find what we want, and it is of great benefit to the businesses and advertising companies who can find us easily and don't have to waste their efforts on offering products to those who wouldn't be interested.

The idea that recommending software narrows rather than broadens our musical taste could be considered to be potentially problematic. Being recommended material based on our likes will reinforce those likes, but will do little to introduce consumers to the alternatives.

"The problem is that search engines and recommender systems fall prey to a self-reinforcing rich-get-richer phenomenon: items that were popular in the past tend to be served to even more users in the future. The natural outcomes of such defective dynamics are the narrowing of people tastes and opinions together with a general cultural flattening. To address this issue, we need to consider the long-term impacts of information filtering systems on the information ecology and study information filtering tools that favor diversity without sacrificing their overall performance." (Liu et al 2012 p4514)

While it is certainly true that the personalisation of social media allows for more specific and relevant information to be delivered to each of us according to our own needs, and that this is incredibly useful to those whose business relies on delivering their product to consumers as quickly and directly as possible, there are potential long term issues that could prove problematic.

These problems stem from the idea that, as our news feeds and recommendations are increasingly manipulated by algorithms based on what we like already, there is potential to be led deeper and deeper into a particular channel, or 'information cocoon' (Sunstein 2001) with less and less opportunity for change.

Eli Pariser refers to this effect as the 'Filter Bubble" (Pariser 2011) and sheds light on the possible problems that may arise from such customisation.

"Recommendation engines aren't designed to give us what we want. They're designed to give us what they think we want, based on what we and other people like us have wanted in the past. Which means they don't surprise us. They don't take us out of our comfort zone. A recommendation engine isn't the spouse who drags you to an art film you wouldn't have been caught dead at but then unexpectedly love. It won't force you to read the 18th century canon. It's no substitute for stumbling onto a great CD just because it has cool cover art. Recommendation engines are the enemy of serendipity and Great Books and the avant-garde. A 19th century recommendation engine would never have said, 'if you liked Monet, you'd love Van Gogh!' Impressionism would have lasted forever." (Grossman 2010 p5)

Despite the apparent setbacks however, online recommending systems, as well as now being almost part and parcel of any new media site, do seem to have an effect on the decisions made by Internet consumers. Why is this? We have already discussed the difficulties and apparent futility in the prediction of human emotion and the evidence suggests that, at least at this point, the technology available to us is far from being advanced enough to replicate and understand the immense complexities of the human brain. We have pointed out fundamental flaws in the ways the recommenders work and drawbacks in their functionality but still, companies obsess with the importance of the recommending systems and still, consumers are effected by recommendations they receive.

The existing evidence suggests that the answer to this lies in the dual functionality of the algorithms and the notion that, as well as being influenced by us, they influence us. Although the information we receive is based on the complex combination of data collected about us, it is filtered and customised to suit that combination accordingly and, over time, the filtering restricts information that would otherwise contribute to our individuality. By catering to our personality and allowing us access only to information deemed presently appropriate, the future development of our individuality is hindered and the algorithms instead, push us back towards the groupings that they were initially intended to distinguish us from.

6.6 Section Conclusion

Evidence from the current research suggests that our social media-led lives are now being tailor made for us at an increasing rate. As we have come to what Uricchio (2011) calls the 'algorithmic turn, the rise of the Internet brings with it new actors and tools that influence and reshape our relationship with music and the processes of music consumption. Everything is advertised to us based on what we have already confirmed we like, or what has been linked to us

via the decisions we have made. While it is true we discover new things, they are within the realms and restrictions of what we already enjoy. We are being pushed further and further into our own pigeonholes.

Is this a problem? For the most part, it's easy to see advantages to having everything personalised for us, not having to sift through pointless information that we're never going to be interested in and being guided towards things we'll 'probably like' based on the other stuff we've enjoyed in the past; But what about the overall effect on society?

The 'invasion of privacy', and the sheer access that social media has to our personal information and user habits, is all part of the mass movement to customise and make personal our online experience. Driven by business and marketing, the more that can be understood about your needs, tastes and personality, the more effective and targeted the relationship between you and your social network can be and therefore the more direct and particular the marketing agencies can advertise products to you.

This is especially prominent when it is considered that most users are completely unaware as to how the information is filtered. The algorithms lurk underneath the surface and regulate the feed without the knowledge of the users. (Balnaves and Willson 2011) and (Bucher 2012). They are also probably unaware of the depth from which these sites can retrieve personal information, and how some of this information is used, (Beer 2008, Bodle 2011, Brunton and Nissenbaum 2011) and how it directly determines advertising choices that speckle their profile pages and news feeds. (Cheney-Lippold 2011)

Indeed, it seems that a significant issue in this age of such widespread data collection, is the level, or lack of, awareness of what is actually mined about us, and how it is used.

'To participate in datafied, social, political, cultural and civic life, ordinary people need to understand what happens to their data, the consequences of data analysis, and the ways in which data-driven operations affect us all.' (Kennedy et al 2015 p6)

It is necessary to acknowledge that the relationship or association we have with data varies and differs according to our circumstances. Whilst there exist corporate professionals such as data scientists, (Gehl, 2015) (MacKenzie 2013) web designers (Adam and Kreps 2006) and creators of online recommending systems (Munson 2014), who can access and manipulate the collected data, there are also the many, who regularly donate personal information to various platforms which have an increasingly direct influence on

their daily lives, with very little knowledge of how it is collected, or of what effect it might have. (Pariser 2011), (Sunstein 2007)

Since Google's personalised search launch in December 2009, the results we see are not always the same. You now get the results that Google has worked out most appropriate for you.

If the situation is as the literature suggests, the long-term consequences of this could be immense. If information is withheld because it is deemed less appropriate, are we not in danger of restricting ourselves from making informed decisions? This is especially concerning when considering that many now use social media as their main news source. (Pew Research centre 2010)

"Left to their own devices, personalisation filters serve up a kind of invisible autopropaganda, indoctrinating us with our own ideas, amplifying our desire for things that are familiar and leaving us oblivious to the dangers lurking in the dark territory of the unknown.
In the filter bubble, there's less room for the chance encounters that bring insight and learning. Creativity is often sparked by the collision of ideas from different disciplines and cultures….. By definition, a world constructed from the familiar is a world in which there's nothing to learn. If personalisation is too acute, it could prevent us from coming into contact with the mind-blowing, preconception-shattering experiences and ideas that change how we think about the world and ourselves." (Pariser 2011 p15)

On that note, it is important to draw attention to the fact that at this point, we are still in the position where, for some, digital technology is out of reach in the first place. Although this looks to be changing, it could be argued that this interim period will have its own effects. As our lives shift to a permanent residence online, there will be some, for whom information is withheld. A foundation of democracy is the access to social and political information (Jaeger 2005) (Jaeger and Burnett 2005) so limitations on who can see and obtain such data could be severely problematic.

'People should be exposed to materials that they would not have chosen in advance. Unplanned, unanticipated encounters are central to democracy itself' (Sunstein 2001 p8)

Understanding the impact that a manipulated experience can have on our moods and tastes is vital in order to understand how our whole lives may change accordingly.

Withholding information or allowing us to see a censored version of what may otherwise be available to us, may have drastic consequences on how we behave, socialise and generally live our lives. (Gerlitz and Helmond 2011)

Take Google for example, a universal search engine, through which we access much of our online content; "As Google continues to localise, personalise and particularise its services and results, it fractures a sense of common knowledge or common priorities rather than enhances it. Google might indeed *be organising the world's information and making it universally accessible* but it is not making universal knowledge universally accessible. Everything might eventually be available to everyone (although we are far from that state of affairs, and Google is not necessarily contributing to that mission equally across the world), but essential information could be highly ranked on Google searched in Sydney and buried on the ninth page of results in Sao Paulo. There might be significant differences in results (and thus effective access to knowledge) between Kiev and St. Petersburg, or Tel Aviv and Hebron." (Vaidhyanathan 2011 p139)

Looking specifically at music, it is possible that receiving recommendations based on the tastes we have already identified will do little to broaden our tastes, and may push us further into micro-niches or pigeonholes and reinforce stereotypes. (Crutzen and Kotkamp 2008 p 204) An individual with very particular and direct interests is very easy to market to. Advertisements for music that might not obviously fit with the data recorded on our online personality will be withheld and so exposure to new things will be, at best, minimal. (Pariser 2011)

The issue of trust was also discussed and it was determined that social media are not likely to 'bravely' suggest music that may have only an outside chance of fitting with our taste for fear of damage to its reputation. Too many 'failed' suggestions or inaccurate predictions may result in reluctance to use that site.

There is also the issue, and real danger of capitalist manipulation and corporate propaganda, and the case of being steered toward music that the companies want us to purchase, rather than music that fits in with our taste. If reducing the amount of negative or positive posts on our Facebook newsfeed can significantly affect our mood, we can just as easily be conditioned to, or shepherded towards music, the purchase of which greatly rewards certain companies or businesses. There's nothing really to stop Facebook and other social networking sites from having a deliberate, direct influence on its users.

If our access to particular information, and specifically for this thesis, to certain elements of music or culture, is restricted and filtered, there is a very real chance that we will be pushed further and further into micro-niches and pigeonholes. The more sophisticated the software becomes, the more precise the filtered data will be. At first, knowing an individual's taste combination would seem like an advantage, allowing direct audience targeting, but it is also short sighted and potentially problematic. Developing completely personalised advertising campaigns for each individual hinders the likelihood of getting into something new and/or different. This is exaggerated by the fierce competition between developers of the algorithms to be the 'most accurate' and the reluctance the take risks by offering something 'outside the box'. Even if trust was no issue however, incapable of emotional or instinctive thought, there is a limit to how accurate algorithms can be in predicting or recommending taste and are unable to understand the deeply complicated processes that contribute to eclectic decisions. They instead, shepherd us towards information based either on an 'educated' guess or, more worryingly, on what benefits the record label or advertising company.

The immediate effects would also seem to enhance the possibility of musical networks and communities; the algorithms allowing like-minded individuals to share, communicate and discuss the music they are into, but, as the customisation becomes more acute, the differences between those individuals, the personal elements that distinguish one human being from another, also become more apparent and the subcultural groupings fragment. The parameters at each stage narrow, until it is realised that we all have our own combination of attributes and characteristics that make us who we are.

Being unaware of how the algorithms work (Bucher 2012) often means we are also unaware of how they affect our behaviour. If our news feed is continuously filtered to only show us 'relevant information' we merely receive a one-sided view of events. The possibility of making a balanced, informed decision is greatly reduced, just as developing a broad musical taste if only offered songs and compositions, deemed relevant for you. You can't enjoy a genre of music if you've never heard music from it.

"Our social interactions are already influenced, shaped and constrained or enhanced by technologies and practices that are not always clear, but that have political and social ramifications. As technologies become increasingly enmeshed, interoperable and sophisticated, as personal and social data become thicker and more extensive and as our social activities take place increasingly online, these ramifications will be accentuated." (Wilson, M. 2014 p230)

This chapter has discussed the dramatic transformative effect that the Internet and social media have had on our lives. Technology has enabled us access to an infinite amount of data, at the touch of a button; accessible at all times thanks to mobile devices and a degree of connectivity that has only been possible in recent years.

In an earlier chapter, it was noted that communication was key for culture to progress and evolve. The Internet has rendered distance to no longer be a factor in our ability to connect with others.

It has been acknowledged that society has migrated to an online dimension and the social needs and relationships of society are now focussed and built around online communities and social media sites such as Facebook, Twitter and the like.

Corporate agenda and financial ambition, along with an 'overabundance of information' has contributed to the emergence of algorithmic online Recommenders set up to steer us towards products and items of interest.

Driven by advertising, these algorithms are now firmly embedded into nearly all aspects of social media, making our online experience more and more personal. We are shown adverts and given access to news information, based entirely on the specific cocktail of data we have already left behind in past searches. The world we experience online is becoming increasingly tailor made for us and before long, the relationship we have online, will be entirely unique for each and every one of us.

Our online profiles allow us to be more exact and complex when establishing our identity and through 'liking', 'tweeting' and other public displays, we allow others to look more closely and observe a more detailed picture of what makes us who we are.

Whether these changes are positive or negative will depend on personal opinions and values but the consequences of this shift are almost certainly going to be significant. The dramatic changes in how we communicate and form relationships will impact momentously on all forms of culture and society.

Such a personalisation, on such a massive scale may potentially have an effect on any types of community, whether it be a subculture, or neotribe. The need to align with groups in order to gain cultural status seems to be diminishing and instead, our band t-shirt now shows not one all-encompassing logo but snippets of all the stuff we 'like'.

This is not to say though, that we are necessarily becoming more culturally omnivorous. The more information we leave behind online, the more the media will cater to our needs and offer us more and more precise suggestions of things we'll 'probably enjoy'. This may drive us all further and further into our ruts and make it less likely for us to have new experiences (which are surely crucial for the evolution of culture?)

Linking back to Bourdieu and his concepts, I believe that the notions of Habitus and Cultural Capital still hold true and are displayed in the same functionality as they always have, but the *field* has shifted to a completely different dimension. We still need to negotiate through the complicated relationships and cultural schemata of what is and what isn't acceptable in order to establish our identity but in this new, digital domain, the ladders up and down which we intend to climb are twisted and complicated.

The current research highlights the notion that the response to the plethora of information and communication that web 2.0 and social media has brought has led us to acknowledge significant changes. Multiple networks are formed and are too many to place us in boxes. Our uniqueness is becoming more and more apparent as we all belong to many different tribes. These connections though are complicated, and the dual nature of the algorithms (being conditioned by our taste and also conditioning it,) mean that the effect is complex and volatile.

Chapter 7 - A Deeper look at the YouTube and Facebook Algorithms

7.1 YouTube recommendation systems.

YouTube is the world's most popular video sharing site, and the means by which most of the participants for this research located material for their playlists. It is necessary, therefore, to examine the processes by which the algorithms embedded within the site function.

Recommendations are an integral part of YouTube's mechanism and account for about 60% of all video clicks from the home page" (Davidson et al 2010 p296) More people respond to recommended material than 'most viewed' 'top favourited' or 'top rated' videos.
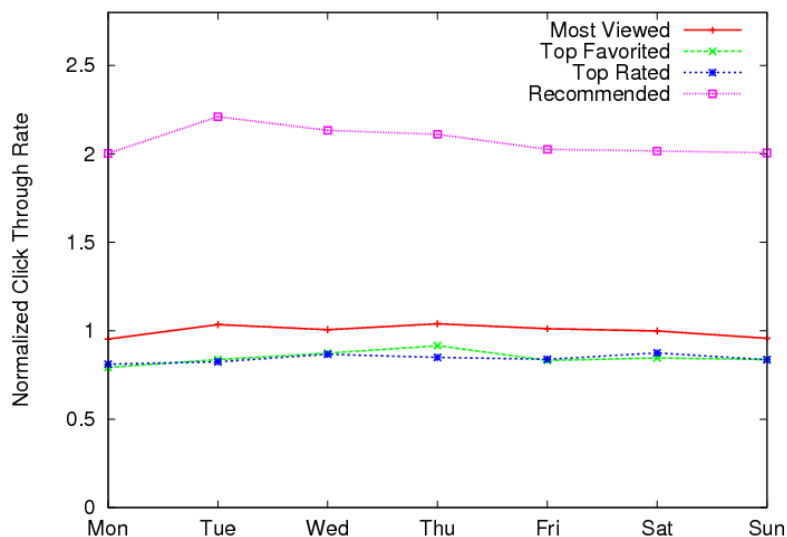
Fig. XII - Graph to show per day average CTR (click through rate) for different browse page types over a period of 3 weeks – Davidson et al 2010 p 296)

In their paper, '*The YouTube Video Recommendation System*", Google representatives and scholars Davidson et al (2010) identify three main reasons why users may come to YouTube; 'to watch a single video that they found elsewhere (direct navigation), to find specific videos around a topic (search and goal-orientated browse), or just to be entertained by content that they found interesting (unarticulated want)' (Davidson et al 2010 p293)

The paper focuses on their own recommendation system, which they acknowledge to be a *Top-N recommendation algorithm,* (Deshpande and Karypis 2004) designed to deliver personalised content to signed-in YouTube users, the

intended functionality of the system and the aspects that make recommendation a challenge. The term Top-*N* recommendations refer to those that suggest items that might be of interest to a user, rather than those that attempt to predict whether a user will like a particular item.

The design of YouTube's recommending system is directly guided by a set of desired goals (to provide personalised, high quality recommendations relevant to the interest of the user, to keep the user engaged and entertained with regularly updated recommendations that reflect the user's recent site activity and to highlight the vast array of available content) and the certain functional characteristics of YouTube that are obstructive to effective recommendation. (The number of users is extremely vast and material is uploaded at a phenomenal rate, videos often carry minimal metadata as they are uploaded by the users, and are mostly relatively short in length and the often, short life cycle of material) (Davidson et al 2010).

"The set of recommended videos is generated by using a user's personal activity (watched, favoured, liked videos) as seeds and expanding the set of videos by traversing a co-visitation based graph of videos. The set of videos is then ranked using a variety of signals for relevance and diversity." (Davidson et al 2010 p 294)

The recommendations are made considering different data sources; content data, which includes the raw video metadata such as the title or description of the video, and also both explicit (rating, favouriting, liking or subscribing to videos or uploaders) and implicit (data collected from watching and interacting with videos) sets of user activity data.

Using *association rule mining,* (Agrawal et al 1993) videos are linked to other 'similar' or 'related' videos. 'In this context, we define similar videos as those that a user is likely to watch after having watched the given seed video' (Davidson et al. 2010 p 294). This process involves the observation how often pairs of videos (vi, vj) were co-watched within a given session or time-period to provide a *co-visitation count* (ci,j), which is then used to ascertain a *relatedness score* (r) taking into account, a normalisation function (f) addressing the 'global popularity' of both videos.

$$r(v_i, v_j) = \frac{c_{ij}}{f(v_i, v_j)}$$

For each video, a set of 'related' videos can potentially be formed based on that score. Only top ranking videos are selected, a minimum score threshold is imposed, meaning that for many videos, such as new videos or videos that have a low overall view count, a set of related videos cannot be calculated because the co-visitation count would be too low.

For personalised recommendations, this process is combined with data collected on the user's personal activity (both explicit and implicit) on YouTube. Videos with which the user has engaged, are labelled by Davidson et al as the *seed set* and the related videos for each are considered and combined to form a set of candidate-specific related videos.

The danger here, as has been discussed throughout much of this research, is that the list of recommended videos, due to being based on a ranked similarity score has the potential to be overly narrow and lacking in diversity.

"In practice the related videos for any videos tend to be quite narrow, often heightening other videos that are very similar to the seed video. This can lead to equally narrow recommendations, which do achieve the goal of recommending content close to the user's interest, but fail to recommend videos which are truly new to the user" (Davidson et al 2010 p 295)

This is acknowledged and taken into account by Davidson et al, and by means of transitive closure, (a mathematical device to assess the potential reachability of one point to others (Lidl and Pilz 1998)), they expand the candidate set in order to broaden the span of recommendations. This promotes the inclusion of videos that are linked less directly.

The videos are scored and ranked based on video quality, (the probability that the video will be valued, irrespective of the user, considering the total views, ratings comments and sharing activity of the video) user specificity (how closely matched the video is with the projected unique preferences of the user) and diversification, meaning that although the videos with close matches to the user are included, an effort is made to also include less obvious videos.

"Because we display only a small number of recommendations (between 4 and 60) we have to choose a subset of the list. Instead of choosing just the most relevant videos we optimize for a balance between relevancy and diversity across categories. Since a user generally has interest in multiple different topics at differing times, videos that are too similar to each other are removed at this stage to further increase diversity." (Davidson et al 2010 p 295)

This is significant because it implies that the developers of these algorithms are aware of the potential dangers of overly rigid personalisation and are seeking to reduce this risk in the functionality of the software. They also acknowledge other substantial complications within the process such as presentation bias or noisy watch data, which are all actors upon the efficiency of the recommending system.

The list is compiled and offered to the user, with measures taken to enhance the diversity of the recommended content. However, it is necessary to look closer at how effective these measures are in practice.

7.2 Auto playing the next video

In 2014, YouTube introduced the video auto-play, where, instead of displaying a default grid of the 'most related' videos as it did previously, a new video will automatically start playing as the one you're currently watching finishes. This removes the need for users to actually click on anything in order to watch the next video.

"The autoplay feature on YouTube makes it easier to decide what to watch next. After you watch a YouTube video on your computer, we'll automatically play another related video based on your viewing history." (YouTube 2014)

The video that automatically plays is chosen from the list of related and recommended videos. A study conducted by Alfonce Nzioka (2015) analysed this feature to assess how the decision is made as to exactly what video is played next. Using a YouTube crawling tool (a means by which to extract data from the YouTube platform via the YouTube Application Programming Interface - YouTube Data Tools 2015) to collect the videos that are related to the seed video, Nzioka started to build a network based around a ranking system to measure the 'importance' of each video within that network. The findings of Nzioka's work suggested two significant findings; firstly, that YouTube operates as a 'small-world' network, (Milgram 1967) (see discussion on six degrees of separation in section 3.1) meaning that from any given video, a huge number of other videos can be reached and considered in a list of recommendations. This notion of social media as small-world networks is supported by research carried out by Mislove et al. (2007) that measured the structure of relationship networks on social media sites such as Flickr, YouTube and LiveJournal and found that online social networks have a *high fraction of symmetric links* and *exhibit high levels of local clustering*. (Mislove et al. 2007)

Secondly, he found that in each case, the next video that played automatically was the video with highest 'utility value' (most closely related according to his ranking system).

These factors are significant for the following reasons; due to the *small world network* factor in which YouTube seems to operate, the potential reach and access to videos is vast which magnifies the prospective breadth of recommendations, however, according to Nzioka, the video that plays automatically, is directed by the level of similarity with the seed video, which would seem to negate the inclusion of more diverse, less obvious videos.

Even without the automatic play feature, this system is prone to presentation bias (a factor recognised as a challenge by Davidson et al.) in that the likelihood of engaging with the more 'obscure' recommended videos, relies heavily on how near the video is to the top of the listed recommendations, and how willing the user is to scroll down far enough to see it. Data collected from this research suggests that the majority of users focus most of their attention to the top few videos and seldom scroll down any further than what is shown on the screen (see section 10.3) meaning that users might not look far enough down the list of recommended videos to get to the more diverse content.

Users do have the capability to deactivate or switch off certain functional aspects of YouTube, such as the autoplay function, but for some, this is a complicated process. Users may not realise that it is possible to do so, or are unaware of the impact that it might have.

An update to the recommendation process was announced on YouTube's creator blog in March 2012, stating that the focus of whether or not a video had been 'watched' was being shifted to time spent, or amount of engagement with that video, rather than being based on mouse clicks, thumbnail pictures or video descriptions.

"We'll be focussing more prominently on time watched in providing Related and Recommended videos starting next week. While we'll still be looking at clicks, engagement will become the leading indicator for serving these videos." (YouTube creator blog 2012)

The adjustment, intended to eliminate recommendations or links based on videos that were skipped through rather than watched fully, works on the assumption that videos watched to the end are of a higher value than those that are not, and, although watching a video in its entirety is not concrete evidence that it was enjoyed, this does decrease the prominence of videos that have been repeatedly dismissed by others.

7.3 Facebook algorithms

"Facebook's news feed algorithm can be tweaked to make us happy or sad; it can expose us to new and challenging ideas or insulate us in ideological bubbles." (Oremus 2016)

The algorithm that controls the content that appears on our Facebook news feeds is relatively opaque in comparison to YouTube. In a similar way, it amasses data from posts made by all of your friends, everyone you follow, every group to which you belong and every page you've liked and then uses that data to rank the posts in an order deemed most relevant to you (Oremus 2016), but the exact mechanics of how it operates is a closely guarded trade secret (Hodson 2014).

An article written by Will Oremus, senior technology writer for Slate.com, gives an insight into some of the processes behind Facebook's news feed. Although the algorithm itself is not examined in detail, an in-depth discussion with its developers does shed light on the thoughts and goals that drive its advancement and intended purposes.

Throughout the article, Oremus reports how Tom Allison, Facebook's director of engineering for the news feed, draws attention to the extreme complexities behind the algorithm, and clarifies that many minor subalgorithms combine to make the master. He explains that, in a similar way to YouTube, Google or Netflix, prediction algorithms are used to rank and accredit each post a relevancy score specific to a particular Facebook user, based on the likelihood of a user to click, comment, share, like and hundreds of other possible forms of engagement with that post. He concedes that there have been problematic complications with this as data on which the predictions are based may be incomplete, or misleading.

Allison indicates that attempts have been made to humanise the news feeds inputs, collecting *more subtle forms of behavioural data* and explains how the 'feed quality panel' was set up to gather qualitative human feedback. A result of this approach, Oremus reports, is a supposed increase in the potential ability of users to control their own feeds. However, as with the YouTube, the reality of people knowing how or whether they need to, is not always clear.

"There are now questions that Facebook allows every user to answer for herself. You can now 'unfollow' a friend whose posts you no longer want to see, 'see less' of a certain kind of story, and designate your favourite friends and pages as 'see first' so that their posts will appear at the top of your feed every time you log in. How to do all of these things is not immediately obvious to the

casual user: You have to click a tiny grey down arrow in the top right corner of a post to see those options. Most people never do" (Oremus 2016)

Nevertheless, these options have been included in recognition of the apparent feedback received, but also as a response to other media sites which have been very successful that do things differently- Instagram shows every photo from every person you follow in chronological order and Snapchat 'eschews virality and automated filtering in favour of more intimate forms of digital interaction (see section 12.3)

Users can only take direct control over the personalisation features of their Facebook news feed if they are aware that it exists.

Concerned with the imbalance of how little we understand about how the algorithm works compared to the influence it can have on our lives, Eslami et al (2015a), developed a collective auditing application in attempt to reveal some of its secrets.

'FeedVis', was designed to collect and collate an unadulterated stream of everything posted by your friends and display it as a comparison to the algorithmically curated feed that appears on our news feeds, allowing users to explore the updates, posts and likes that were filtered and hidden by the algorithm.

Primarily, this tool allowed Eslami et al to assess the level to which Facebook users were aware of the algorithm's existence and impact, and to observe their reactions to the curation of their news feeds. For many of their participants the amount of content, filtered out and absent from their normal Facebook feed was a shocking revelation. 62.5% of the participants were completely unaware of the existence of curated news feed or that stories and posts were hidden from them, and believed that every post from their friends or pages they followed would appear in their feed. (Eslami et al 2015b)

From examining what was filtered out, Eslami's team could start to reverse engineer the processes behind the algorithm and understand some of the rules that regulate to what we are exposed.

According to the study, commenting on someone's wall is more likely to reveal future posts from that person than liking something. It was also discovered that "Facebook appropriates user's profiles to create adverts on their friend's feeds that look like normal content." (Hodson 2014)

However, the algorithms embedded in the site constantly evolve and make clear analysis very difficult to pinpoint.

7.4 Searching on YouTube

To examine further, the processes that go into video recommendation on YouTube, I conducted my own search and noted the initial results of that search and the subsequent list of suggested videos. I set the filter settings to the default 'relevant' setting in order to obtain (from YouTube's perspective) the videos, most relevant to my search. I conducted the same search under various conditions, comparing results from different devices and being signed in or out from a YouTube profile. I also incorporated the use of a 'YouTube Data Tool' or an Application Programming Interface (API), which creates a full, uncensored list of related videos to see what YouTube decided to remove from my list of recommendations. This API search was set to a crawl depth distance of 1, meaning that it would find all videos up to and including one degree of separation, which includes videos directly associated with the search query (crawl depth distance of 0), and any that are linked via one additional step. A crawl depth of 1 produced a list of 2250 videos. (A depth of 0 would produce a list of 50)

YouTube search page results:

Firstly, I conducted a YouTube search for 'One Day Elliott'. The initial search takes you to the *search results page*, which is the list of videos that YouTube has found based on what has been typed into the search bar at the top of the page, the purpose of which, to match videos as accurately as possible to help increase the probability of finding exactly what is being looked for. For each scenario or condition the first 25 videos were noted.

	Video Title	Artist	Uploaded by:	Views
	Fig. xiii - Search Page results – my own Laptop - not signed in to YouTube account.			
1	Mistake in My Design	One Day Elliott	Paul Richards	3741
2	Never be Content with Average	One Day Elliott	Tony Baptiste	5686
3	Who Am I kidding?	One Day Elliott	Paul Richards	874
4	Don't Wanna Know	One Day Elliott	Jamie Greenlees	2692
5	Jerusalem	One Day Elliott	Jamie Greenlees	743
6	Town Night Stand	One Day Elliott	Paul Richards	843
7	So Far So Good….One Day Elliott video made by fan	One Day Elliott	grakbulrug	1630
8	One Day Elliott do Vulnerable on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	139
9	Live in the Living Room: Longer sessions - One Day Elliott - Medicine	One Day Elliott	LITLR	328
10	One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
11	Live in the Living Room: Longer sessions - One Day Elliott - Vulnerable	One Day Elliott	LITLR	139
12	One Day Elliott - 'Broken' live @ EARLS 22/1/15	One Day Elliott	gothfather45	149
13	All Tracks - One Day Elliott (playlist)	One Day Elliott	n/a	n/a
14	Live in the Christmas Living Room - One Day Elliott: The 12 bands of Christmas.	One Day Elliott	LITLR	429
15	One Day Elliott - Lonely in a crowded place (Fan Vid)	One Day Elliott	Mike	1049
16	Live in the Living Room: One Day Elliott - Melting Wax and Feathers	One Day Elliott	LITLR	439
17	One Day Elliott do Medicine on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	87
18	ONE DAY ELLIOTT - Holding on/Two night stand @Earls	One Day Elliott	gothfather45	55
19	One Day Elliott (playlist)	One Day Elliott	Daniel Purton	n/a
20	One Day Elliott - Broken (Saturdays Sex Tape Remix)	One Day Elliott	misterjaytalbut	388
21	One More Day - Elliott Steward	Elliott Steward	Elliott Steward	354
22	Live in the Christmas Living Room: One Day Elliott – Shakin' Stevens Cover	One Day Elliott	LITLR	348
23	One Day Elliott - Toby Knows (live) + interviews	One Day Elliott	Mike	540
24	ONE DAY ELLIOTT - illegal ninja moves live @ Earls	One Day Elliott	gothfather45	31
25	Top Tracks - One Day Elliott	One Day Elliott	n/a	n/a

	Video Title	Artist	Uploaded by:	Views
	Fig. xiv - Search Page results – My own Laptop - **signed in** to YouTube account.			
1	Mistake in My Design	One Day Elliott	Paul Richards	3741
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7	So Far So Good….One Day Elliott video made by fan	One Day Elliott	grakbulrug	1630
8	One Day Elliott do Vulnerable on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	139
9	Live in the Living Room: Longer sessions - One Day Elliott - Medicine	One Day Elliott	LITLR	328
10	One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
11	Live in the Living Room: Longer sessions - One Day Elliott - Vulnerable	One Day Elliott	LITLR	139
12	One Day Elliott - 'Broken' live @ EARLS 22/1/15	One Day Elliott	gothfather45	149
13	All Tracks - One Day Elliott (playlist)	One Day Elliott	n/a	n/a
14	Live in the Christmas Living Room - One Day Elliott: The 12 bands of Christmas.	One Day Elliott	LITLR	429
15	One Day Elliott - Lonely in a crowded place (Fan Vid)	One Day Elliott	Mike	1049
16	Live in the Living Room: One Day Elliott - Melting Wax and Feathers	One Day Elliott	LITLR	439
17	One Day Elliott do Medicine on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	87
18	ONE DAY ELLIOTT - Holding on/Two night stand @Earls	One Day Elliott	gothfather45	55
19	One Day Elliott (playlist)	One Day Elliott	Daniel Purton	n/a
20	One Day Elliott - Broken (Saturdays Sex Tape Remix)	One Day Elliott	misterjaytalbut	388
21	One More Day - Elliott Steward	Elliott Steward	Elliott Steward	354
22	Live in the Christmas Living Room: One Day Elliott - Shakin Stevens Cover	One Day Elliott	LITLR	348
23	One Day Elliott - Toby Knows (live) + interviews	One Day Elliott	Mike	540
24	ONE DAY ELLIOTT - illegal ninja moves live @ Earls	One Day Elliott	gothfather45	31
25	Top Tracks - One Day Elliott	One Day Elliott	n/a	n/a

	Video Title	Artist	Uploaded by:	Views
1	Mistake in My Design	One Day Elliott	Paul Richards	3741
2	Never be Content with Average	One Day Elliott	Tony Baptiste	5686
3	Who Am I kidding?	One Day Elliott	Paul Richards	874
4	Don't Wanna Know	One Day Elliott	Jamie Greenlees	2692
5	Jerusalem	One Day Elliott	Jamie Greenlees	743
6	Town Night Stand	One Day Elliott	Paul Richards	843
7	So Far So Good….One Day Elliott video made by fan	One Day Elliott	grakbulrug	1630
8	One Day Elliott do Vulnerable on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	139
9	Live in the Living Room: Longer sessions - One Day Elliott - Medicine	One Day Elliott	LITLR	328
10	One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
11	Live in the Living Room: Longer sessions - One Day Elliott - Vulnerable	One Day Elliott	LITLR	139
12	One Day Elliott - 'Broken' live @ EARLS 22/1/15	One Day Elliott	gothfather45	149
13	All Tracks - One Day Elliott (playlist)	One Day Elliott	n/a	n/a
14	Live in the Christmas Living Room - One Day Elliott: The 12 bands of Christmas.	One Day Elliott	LITLR	429
15	One Day Elliott - Lonely in a crowded place (Fan Vid)	One Day Elliott	Mike	1049
16	Live in the Living Room: One Day Elliott - Melting Wax and Feathers	One Day Elliott	LITLR	439
17	One Day Elliott do Medicine on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	87
18	ONE DAY ELLIOTT - Holding on/Two night stand @Earls	One Day Elliott	gothfather45	55
19	One Day Elliott (playlist)	One Day Elliott	Daniel Purton	n/a
20	One Day Elliott - Broken (Saturdays Sex Tape Remix)	One Day Elliott	misterjaytalbut	388
21	One More Day - Elliott Steward	Elliott Steward	Elliott Steward	354
22	Live in the Christmas Living Room: One Day Elliott – Shakin' Stevens Cover	One Day Elliott	LITLR	348
23	One Day Elliott - Toby Knows (live) + interviews	One Day Elliott	Mike	540
24	ONE DAY ELLIOTT - illegal ninja moves live @ Earls	One Day Elliott	gothfather45	31
25	Top Tracks - One Day Elliott	One Day Elliott	n/a	n/a

Video Title	Artist	Uploaded by:	Views
1 Mistake in My Design	One Day Elliott	Paul Richards	3741
2 Never be Content with Average	One Day Elliott	Tony Baptiste	5686
3 Top Tracks - One Day Elliott	One Day Elliott	n/a	n/a
4 Who Am I kidding?	One Day Elliott	Paul Richards	874
5 Town Night Stand	One Day Elliott	Paul Richards	843
6 Jerusalem	One Day Elliott	Jamie Greenlees	743
7 So Far So Good….One Day Elliott video made by fan	One Day Elliott	grakbulrug	1630
8 Don't Wanna Know	One Day Elliott	Jamie Greenlees	2692
9 Live in the Living Room: Longer sessions - One Day Elliott - Medicine	One Day Elliott	LITLR	328
10 One Day Elliott do Vulnerable on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	139
11 One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
12 Live in the Living Room: Longer sessions - One Day Elliott - Vulnerable	One Day Elliott	LITLR	139
13 One Day Elliott - 'Broken 'live @ EARLS 22/1/15	One Day Elliott	gothfather45	149
14 Live in the Christmas Living Room - One Day Elliott: The 12 bands of Christmas.	One Day Elliott	LITLR	429
15 Live in the Living Room: One Day Elliott - Melting Wax and Feathers	One Day Elliott	LITLR	439
16 ONE DAY ELLIOTT - Holding on/Two night stand @Earls	One Day Elliott	gothfather45	55
17 One More Day - Elliott Steward	Elliott Steward	Elliott Steward	354
18 One Day Elliott (playlist)	One Day Elliott	Daniel Purton	n/a
19 One Day Elliott - Broken (Saturdays Sex Tape Remix)	One Day Elliott	misterjaytalbut	388
20 ONE DAY ELLIOTT - illegal ninja moves live @ Earls	One Day Elliott	gothfather45	31
21 Popular Videos - One Day Elliott (topic playlist) (58 videos)	One Day Elliott	n/a	n/a
22 One Day Elliott - Topic (playlist) (20 videos)	One Day Elliott	n/a	n/a
23 Live in the Christmas Living Room: One Day Elliott – Shakin' Stevens Cover	One Day Elliott	LITLR	348
24 Top Tracks - One Day Elliott	One Day Elliott	n/a	n/a
25 One Day Elliott - So Far So Good Live on hospital Radio	One Day Elliott	alanmusichare	37

Fig. xvi - Search Page results - my **iPhone** - **signed in** to YouTube account.

	Video Title	Artist	Uploaded by:	Views
1	Mistake in My Design	One Day Elliott	Paul Richards	3741
2	Never be Content with Average	One Day Elliott	Tony Baptiste	5686
3	Who Am I kidding?	One Day Elliott	Paul Richards	874
4	Two Night Stand	One Day Elliott	Paul Richards	843
5	Jerusalem	One Day Elliott	Jamie Greenlees	743
6	So Far So Good….One Day Elliott video made by fan	One Day Elliott	grakbulrug	1630
7	Don't Wanna Know	One Day Elliott	Jamie Greenlees	2692
8	Live in the Living Room: Longer sessions - One Day Elliott - Medicine	One Day Elliott	LITLR	328
9	One Day Elliott do Vulnerable on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	139
10	One Day Elliott do Medicine on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	88
11	One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
12	Live in the Living Room: Longer sessions - One Day Elliott - Vulnerable	One Day Elliott	LITLR	139
13	One Day Elliott - 'Broken' live @ EARLS 22/1/15	One Day Elliott	gothfather45	149
14	Live in the Christmas Living Room - One Day Elliott: The 12 bands of Christmas.	One Day Elliott	LITLR	429
15	Live in the Living Room: One Day Elliott - Melting Wax and Feathers	One Day Elliott	LITLR	439
16	ONE DAY ELLIOTT - Holding on/Two night stand @Earls	One Day Elliott	gothfather45	55
17	One More Day - Elliott Steward	Elliott Steward	Elliott Steward	354
18	One Day Elliott (playlist)	One Day Elliott	Daniel Purton	n/a
19	One Day Elliott - Broken (Saturdays Sex Tape Remix)	One Day Elliott	misterjaytalbut	388
20	ONE DAY ELLIOTT - illegal ninja moves live @ Earls	One Day Elliott	gothfather45	31
21	Popular Videos - One Day Elliott (topic playlist) (58 videos)	One Day Elliott	n/a	n/a
22	One Day Elliott - Topic (playlist) (20 videos)	One Day Elliott	n/a	n/a
23	Live in the Christmas Living Room: One Day Elliott - Shakin Stevens Cover	One Day Elliott	LITLR	348
24	Top Tracks - One Day Elliott	One Day Elliott	n/a	n/a
25	One Day Elliott - So Far So Good Live on hospital Radio	One Day Elliott	alanmusichare	37

Fig. xvii - Search Page results -Home computer - **not signed in** to YouTube account.

	Video Title	Artist	Uploaded by:	Views
	Fig. xviii - Search Page results -Home computer - **signed in** to YouTube account.			
1	Mistake in My Design	One Day Elliott	Paul Richards	3741
2	Never be Content with Average	One Day Elliott	Tony Baptiste	5686
3	Who Am I kidding?	One Day Elliott	Paul Richards	874
4	Two Night Stand	One Day Elliott	Paul Richards	843
5	Jerusalem	One Day Elliott	Jamie Greenlees	743
6	So Far So Good….One Day Elliott video made by fan	One Day Elliott	grakbulrug	1630
7	Don't Wanna Know	One Day Elliott	Jamie Greenlees	2692
8	Live in the Living Room: Longer sessions - One Day Elliott - Medicine	One Day Elliott	LITLR	328
9	One Day Elliott do Vulnerable on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	139
10	One Day Elliott do Medicine on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	88
11	One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
12	Live in the Living Room: Longer sessions - One Day Elliott - Vulnerable	One Day Elliott	LITLR	139
13	One Day Elliott - 'Broken' live @ EARLS 22/1/15	One Day Elliott	gothfather45	149
14	Live in the Christmas Living Room - One Day Elliott: The 12 bands of Christmas.	One Day Elliott	LITLR	429
15	Live in the Living Room: One Day Elliott - Melting Wax and Feathers	One Day Elliott	LITLR	439
16	ONE DAY ELLIOTT - Holding on/Two night stand @Earls	One Day Elliott	gothfather45	55
17	One More Day - Elliott Steward	Elliott Steward	Elliott Steward	354
18	One Day Elliott (playlist)	One Day Elliott	Daniel Purton	n/a
19	One Day Elliott - Broken (Saturdays Sex Tape Remix)	One Day Elliott	misterjaytalbut	388
20	ONE DAY ELLIOTT - illegal ninja moves live @ Earls	One Day Elliott	gothfather45	31
21	Popular Videos - One Day Elliott (topic playlist) (58 videos)	One Day Elliott	n/a	n/a
22	One Day Elliott - Topic (playlist) (20 videos)	One Day Elliott	n/a	n/a
23	Live in the Christmas Living Room: One Day Elliott - Shakin Stevens Cover	One Day Elliott	LITLR	348
24	Top Tracks - One Day Elliott	One Day Elliott	n/a	n/a
25	One Day Elliott - So Far So Good Live on hospital Radio	One Day Elliott	alanmusichare	37

From examination of these initial results, we can see that, in each case, only one of the top 25 videos is not a track by, or directly connected to the band *One Day Elliott* and there is very little difference between the suggestions given on each format. There is also minimal difference when comparing the search conducted when signed in and out of my YouTube account. In each circumstance, the one video included in the top 25 that is not a One Day Elliott video is 'One More Day' by Elliott Steward. It is easy to see why this has been included, as all three of the key words in the search are present in the title, in the correct order.

Each circumstance featured suggestions that were actually playlists rather than single videos. (I have highlighted these in magenta) In each case there are at least three of these – there are 5 playlists featured in the signed in iPhone search, and 4 in each of the searches on the home computer. It is worth noting, that the layout of the search on the home computer and the laptop are as such that the 'top videos' playlist appears alongside the list of videos in the top right hand side of the screen rather than included in the list, as is the case on the iPhone screen (see screen shot in Fig. XIX).

The inclusion of these playlists within the overall playlist of videos offers even more convenience to the user, should they indeed be looking for music or a group of videos on a specific subject or by a particular artist, giving them the opportunity to click a pre-collated collection of all the top videos, rather than pick individual tracks from the suggested list (see section 5.3 on playlists).
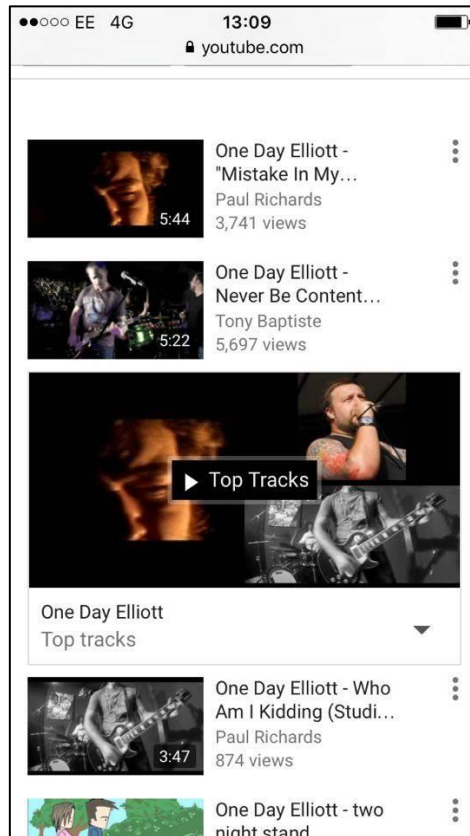
Fig. XIX - Screen shot of YouTube search page on iPhone.

What is interesting is the overall order in which the videos are listed, as it is difficult to see a logical reason as to why some videos feature higher than some others. 'Mistake in My Design', being the most viewed video uploaded by myself and 'Never be Content With Average', a video uploaded by a third party which has more views than any other One Day Elliott video, sit number one and two respectively in the list in all circumstances, but, looking further down the search results, the order seems to follow no obvious pattern. There are videos uploaded by third parties, fan videos and footage from live shows taken from members of the audience that all feature on the list. All of them have the words *One Day Elliott* featured in the title, but do not seem to be ranked in order of number of views, date of upload or by the person uploading it.

(See Figs. XIII, XIV, XV, XVI, XVII and XVIII)

The answer here could be due to the tags attached to the videos.

7.5 Tags

The discoverability of YouTube videos often depends on the tags they are allocated by the person who uploaded it. These tags, or keywords act in the same

way as cookies, allowing search engines or algorithms to categorise or identify the video and make it easier to find, and can form a basis on which they can be recommended (Cheng et al 2007), (Guy et al 2010). There is an abundance of forums, online tutorials and blogs that advise 'vloggers' and YouTube users on how to incorporate tags to enhance the effectiveness of their channels, directing traffic to their uploads and increasing the number of views for their videos.

Until August 2012, these tags were visible by everyone but an announcement on the YouTube Help Forum revealed that this would no longer be the case.

"You may have noticed a change with tags on the video page when you're watching a video. Tags no longer appear on this page – this isn't a bug, but a change that went out this week. Having them on the watch page, in some cases, gave users an opportunity to abuse tags by copying them from other videos. We also didn't see much usage of tags by the average viewer." ('YouTube Help Forum 2012)

As with many of the other changes made to YouTube operating systems, this announcement was met with a significant deal of scepticism and accusations of manipulation by hiding information from the users; adding weight to theories that suggest that the powers that be, are keen to prevent any moves towards a more democratic Internet.

Such arguments suggest that hiding the tags attached to the uploaded content, actually have the opposite effect to that implied by YouTube and, instead of protecting users from having their tags copied and abused, it *prevents* users from seeing when the tags have been copied. They also propose that the average users, or those unaware of how the tags work, will be affected most profoundly. The concealment of this feature will mean that many users will not see how other, successful videos are tagged or would be unaware of its existence entirely and therefore be unlikely to tag their own videos in an effective way.

"YT disabled this feature because it allowed the small guy to put his videos out there on an even level with the "pros". ('@anordinaryamerican1 – comment on the YouTube Help Forum 2012)

"By removing the tags from being visible, YouTube prevents entities with trademarks and copyrights from seeing how others may be abusing their terms, whether malicious or for the sole purpose of driving traffic." (@pbnjamz – comment on the YouTube Help Form 2012)

"Something stinks here. Removing easy access to the keywords/tags seems to be conveniently hiding the fact that ninety percent of the results YouTube returns to a

query have nothing to do with the user's query. There used to be some strange results, but by taking title, tags etc., all into account, one could usually figure out why it was included. No more!!!" (@bonsaipark – YouTube Help Forum 2013)

Whilst I don't agree with @bonsaipark's notion *that 90% of the videos have nothing to do with the search query*, it's certainly true that being unable to see the tags hinder the ability to work out why videos have been ranked or seeded as they have. With that said, there are still ways to identify the tags allocated to uploaded YouTube content, but for the most part, they are difficult to access and involve sifting through the video's embedded code and searching for keywords using the browser's 'find' tool. (There was also a Google chrome extension developed to reveal the tags but this has since been outlawed due to it not being an official Google product.) In these instances, it is clear that, for the average user, these processes are not within the parameters of normal engagement with the site's facilities and it certainly seems apparent that YouTube are keen to keep contributing functions behind the scenes.

Putting aside for one moment though, the arguments between capitalist and democratic theories, it is evident from the search conducted in this instance, that the results are intended to match as closely to the search query as possible. There is very little to suggest (from this initial search page) that underhanded propaganda-charged material has been inexplicably offered in an attempt to steer me towards an unrelated video or product.

	Fig. xx - API Results – One Day Elliott – distance set to 1			
	Video Title	**Artist**	**Uploaded by:**	**Views**
1	Mistake in My Design	One Day Elliott	Paul Richards	3741
2	Never be Content with Average	One Day Elliott	Tony Baptiste	5686
3	Who Am I kidding?	One Day Elliott	Paul Richards	874
4	Don't Wanna Know	One Day Elliott	Jamie Greenlees	2692
5	Jerusalem	One Day Elliott	Jamie Greenlees	743
6	Two Night Stand	One Day Elliott	Paul Richards	843
7	So Far So Good….One Day Elliott video made by fan	One Day Elliott	grakbulrug	1630
8	One Day Elliott do Vulnerable on Miskin Radio	One Day Elliott	Kieran Poole Sessions	139
9	Live in the Living Room: Longer sessions - One Day Elliott - Medicine	One Day Elliott	LITLR	328
10	One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
11	Live in the Living Room: Longer sessions - ODE - Vulnerable	One Day Elliott	LITLR	139
12	One Day Elliott - 'Broken' live @ EARLS 22/1/15	One Day Elliott	gothfather45	149
13	Live in the Christmas Living Room - ODE: The 12 bands of Christmas.	One Day Elliott	LITLR	429
14	Live in the Living Room: One Day Elliott - Melting Wax and Feathers	One Day Elliott	LITLR	439
15	One Day Elliott do Medicine on Miskin Radio	One Day Elliott	Kieran Poole Sessions	88
16	ONE DAY ELLIOTT - Holding on/Two night stand @Earls	One Day Elliott	gothfather45	55
17	One More Day - Elliott Steward	Elliott Steward	Elliott Steward	354
18	Live in the Christmas Living Room: ODE - Shakin Stevens Cover	One Day Elliott	LITLR	348
19	One Day Elliott - Broken (Saturdays Sex Tape Remix)	One Day Elliott	misterjaytalbut	388
20	ONE DAY ELLIOTT - illegal ninja moves live @ Earls	One Day Elliott	gothfather45	31
21	One Day Elliott - So Far So Good Live on hospital Radio	One Day Elliott	alanmusichare	37
22	One Day with Elliott Arnold & Ruben Rodriguez	n/a	el estalo pirata	1109
23	Elliott Smith : Independence Day	Elliott Smith	MOTARDkamikaze	671
24	Matishyahu - One Day Acoustic Cover (Tucker Elliott)	Tucker Elliott	Tucker Elliott	340
25	Robert Kelley: One Day One Topic: ELLIOTT WAVE ….	n/a	FXStreet	74
26	Elliott Smith - Independence Day	Elliott Smith	causeequalstime13	63,478
27	300 Push Ups a Day	n/a	Strength Camp	2,059,424
28	Jeremy Wagner: One Day One Topic: ELLIOTT WAVE …	n/a	FXStreet	51
29	Elliott Smith - Division Day	Elliott Smith	benforshay1	59
30	Gregor Horvat: One Day One Topic: ELLIOTT WAVE …	n/a	FXStreet	88
31	Ciara - 1 2 Step ft. Missy Elliott	Ciara	CiaraVEVO	69,101,347
32	Elliott Arnold and Johan Walzel "One Day In Germany"	n/a	Moritz Esau	1006
33	Steve Ruffley: One Day One Topic: ELLIOTT WAVE…	n/a	FXStreet	33
34	independence day - Elliott Smith cover	Elliott Smith	Jonathon Thwaits	3089
35	Nady Laymoud: One Day One Topic: ELLIOTT WAVE…	n/a	FXStreet	18

Looking at the same search conducting via the Application Programming Interface, we can see that the top videos obtained from the search are extremely similar (see the seeding videos on the API list in Fig. XX.) Only one video in this list seems out of place at first, the 27th seeded video looks like it has nothing to do with the search query but, on closer examination of the additional information we can see that the word 'Elliott' is featured several times. Meaning that, although the title doesn't match exactly, the key words are enough to link to the search.
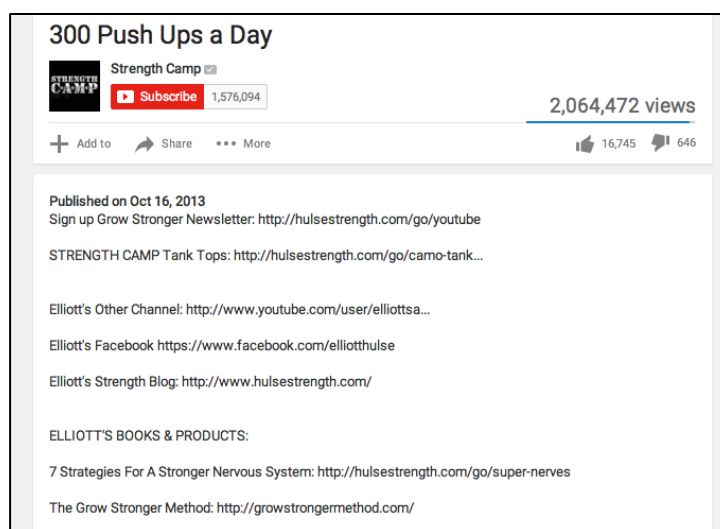
Fig. xxi – Screen Shot of Related video result.

There are several possible explanations as to why the results appear in a slightly different order on different formats and it is probable that either one, or a combination of the following are contributing factors; It suggests that perhaps the search uses data stored on the particular device to prioritise certain videos (this is interesting considering the similarity of the results conducted whilst signed in and out of the YouTube profile), the results could depend on the time that the search is conducted (the ranking of the video may change from day to day due to other circumstances or the behaviour of other users who may have watched the video. A video may become more or less relevant if other users have followed other suggestions or, by their clicks, have made links between uploaded content), or it is possible that the search algorithm contains randomising elements that swap around certain videos within parameters to allow for (albeit a small amount of) variation.

7.6 Clicking on the top suggested video

The most interesting and significant observations become apparent when we zoom out and look at the next degree of results and the videos that are

recommended when the top result from the search page is clicked, which, in each case was 'Mistake in my Design.'

Fig. xxii - Recommended videos after clicking the top result – my own **laptop - not signed in**.			
Video Title	Artist	Uploaded by:	Views
1 One Day Elliott - Interview Series Vol 5 (autoplay next video)	One Day Elliott	Paul Richards	57
2 Never be Content with Average	One Day Elliott	Tony Baptiste	5686
3 Don't Wanna Know	One Day Elliott	Jamie Greenlees	2692
4 One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
5 One Day Elliott in Chicago	One Day Elliott	Paul Richards	609
6 Two Night Stand	One Day Elliott	Paul Richards	843
7 Jerusalem	One Day Elliott	totallydope	1772
8 Live in the Living Room: One Day Elliott -Hearts in the Bottom of Ashtrays	One Day Elliott	LITLR	547
9 Who Am I kidding? (Studio Video)	One Day Elliott	Paul Richards	874
10 MC Xander 'Sick Of The Lies'	MC Xander	BD	2,189,949
11 Live in the Living Room: Rewind One Day Elliott -Take That Cover	One Day Elliott	LITLR	684
12 One Day Elliott - Lonely in a crowded place (Fan Vid)	One Day Elliott	Mike	1048
13 So Far So Good….One Day Elliott video made by fan	One Day Elliott	grakbulrug	1630
14 Arms Up High - One Day Elliott (A Tribute to the Macho Man Randy Savage)	One Day Elliott	Paul Richards	496
15 One Day Elliott - Just come back (live)	One Day Elliott	Mike	537
16 One Day Elliott - Toby knows (live) + Interviews	One Day Elliott	Mike	540
17 One Day Elliott medicine live sessions with Alan hare hospital radio medway	One Day Elliott	alanmusichare	91
18 Live in the Christmas Living Room: One Day Elliott - Wham! Cover	One Day Elliott	LITLR	126
19 Yellowcard Ocean Avenue Full Album	Yellowcard	Spikedude55	600,465
20 Live in the Living Room: One Day Elliott - Melting Wax and Feathers	One Day Elliott	LITLR	439
21 One Day Elliott Album Trailer (Star Wars)	One Day Elliott	Paul Richards	454
22 Live in the Living Room: Longer sessions - One Day Elliott - The Closer I get	One Day Elliott	LITLR	139
23 Live in the Christmas Living Room - One Day Elliott: The 12 bands of Christmas.	One Day Elliott	LITLR	429
24 Elliott Smith - Sorry My Mistake (live)	Elliott Smith	Ben Wilbur	5,430
25 Star Wars Episode VII Trailer 2015 (Fan-Made	Star Wars	Mr88668866	12,584,800

Fig. xxiii - Recommended videos after clicking the top result – my own **laptop - signed in**.			
Video Title	Artist	Uploaded by:	Views
1 One Day Elliott - Interview Series Vol 5 (autoplay next video)	One Day Elliott	Paul Richards	57
2 Never be Content with Average	One Day Elliott	Tony Baptiste	5686
3 Don't Wanna Know	One Day Elliott	Jamie Greenlees	2692
4 One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
5 One Day Elliott in Chicago	One Day Elliott	Paul Richards	609
6 Two Night Stand	One Day Elliott	Paul Richards	843
7 Jerusalem	One Day Elliott	totallydope	1772
8 Live in the Living Room: One Day Elliott -Hearts in the Bottom of Ashtrays	One Day Elliott	LITLR	547
9 Who Am I kidding? (Studio Video)	One Day Elliott	Paul Richards	874
10 MC Xander 'Sick Of The Lies'	MC Xander	BD	2,189,949
11 Live in the Living Room: Rewind One Day Elliott -Take That Cover	One Day Elliott	LITLR	684
12 One Day Elliott - Lonely in a crowded place (Fan Vid)	One Day Elliott	Mike	1048
13 So Far So Good….One Day Elliott video made by fan	One Day Elliott	grakbulrug	1630
14 Arms Up High - One Day Elliott (A Tribute to the Macho Man Randy Savage)	One Day Elliott	Paul Richards	496
15 One Day Elliott - Just come back (live)	One Day Elliott	Mike	537
16 One Day Elliott - Toby knows (live) + Interviews	One Day Elliott	Mike	540
17 One Day Elliott medicine live sessions with Alan Hare hospital radio medway	One Day Elliott	alanmusichare	91
18 Live in the Christmas Living Room: One Day Elliott - Wham! Cover	One Day Elliott	LITLR	126
19 YellowCard Ocean Avenue Full Album	Yellowcard	Spikedude55	600,465
20 Live in the Living Room: One Day Elliott - Melting Wax and Feathers	One Day Elliott	LITLR	439
21 One Day Elliott Album Trailer (Star Wars)	One Day Elliott	Paul Richards	454
22 Live in the Living Room: Longer sessions - One Day Elliott - The Closer I get	One Day Elliott	LITLR	139
23 Live in the Christmas Living Room - One Day Elliott: The 12 bands of Christmas.	One Day Elliott	LITLR	429
24 Elliott Smith - Sorry My Mistake (live)	Elliott Smith	Ben Wilbur	5,430
25 Star Wars Episode VII Trailer 2015 (Fan-Made	Star Wars	Mr88668866	12,584,800

	Video Title	Artist	Uploaded by:	Views
1	One Day Elliott - Interview Series Vol 5 (autoplay next video)	One Day Elliott	Paul Richards	57
2	How to Sing Chandelier by Sia - Felicia Ricci	Felicia Ricci	Felicia Ricci	"Recommended for you"
3	Exploring Korea's Illegal Tattooing Scene	n/a	i-D	"Recommended for you" [NEW]
4	How to Develop A Manly Voice | Art of Manliness	n/a	Art of Manliness	"Recommended for you"
5	Josh Daniel Makes The Judges Cry | S12E02 | Auditions Week 1 | The X Factor UK 2015	n/a	Danielas Music	"Recommended for you"
6	How to Sing on Pitch | Vocal Lessons	n/a	HowcastArtsRec	"Recommended for you"
7	Master Your Breath in 10 Minutes a Day | Vocal Lessons	n/a	HowcastArtsRec	"Recommended for you"
8	Never be Content with Average	One Day Elliott	Tony Baptiste	5686
9	Don't Wanna Know	One Day Elliott	Jamie Greenlees	2692
10	One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
11	One Day Elliott in Chicago	One Day Elliott	Paul Richards	609
12	Two Night Stand	One Day Elliott	Paul Richards	843
13	Jerusalem	One Day Elliott	totallydope	1772
14	Live in the Living Room: One Day Elliott -Hearts in the Bottom of Ashtrays	One Day Elliott	LITLR	547
15	Who Am I kidding? (Studio Video)	One Day Elliott	Paul Richards	874
16	MC Xander 'Sick Of The Lies'	MC Xander	BD	2,189,949
17	Live in the Living Room: Rewind One Day Elliott -Take That Cover	One Day Elliott	LITLR	684
18	One Day Elliott - Lonely in a crowded place (Fan Vid)	One Day Elliott	Mike	1048
19	So Far So Good….One Day Elliott video made by fan	One Day Elliott	grakbulrug	1630
20	Arms Up High - One Day Elliott (A Tribute to the Macho Man Randy Savage)	One Day Elliott	Paul Richards	496
21	One Day Elliott - Just come back (live)	One Day Elliott	Mike	537
22	One Day Elliott - Toby knows (live) + Interviews	One Day Elliott	Mike	540
23	One Day Elliott medicine live sessions with Alan Hare hospital radio medway	One Day Elliott	alanmusichare	91
24	Live in the Christmas Living Room: One Day Elliott - Wham! Cover	One Day Elliott	LITLR	126
25	Yellowcard Ocean Avenue Full Album	Yellowcard	Spikedude55	600,465

Fig. xxiv - Recommended videos after clicking the top result – my own laptop - signed in - (then refreshed)

	Video Title	Artist	Uploaded by:	Views
	Fig. xxv - Recommended videos after clicking the top result – my own laptop - signed in - (then refreshed for a second time)			
1	One Day Elliott - Interview Series Vol 5 (autoplay next video)	One Day Elliott	Paul Richards	57
2	Exploring Korea's Illegal Tattooing Scene	n/a	i-D	"Recommended for you" [NEW]
3	Josh Daniel Makes The Judges Cry | S12E02 | Auditions Week 1 | The X Factor UK 2015	n/a	Danielas Music	"Recommended for you"
4	Is Brad Pitt Getting too Close to his Co-Star?	n/a	Wendy Willims	"Recommended for you" [NEW]
5	Master Your Breath in 10 Minutes a Day | Vocal Lessons	n/a	HowcastArtsRec	"Recommended for you"
6	Never be Content with Average	One Day Elliott	Tony Baptiste	5686
7	Freya's Singing Tips: 5 MORE exercise for BELTING	Freya Casey	Freya Casey	"Recommended for you"
8	Don't Wanna Know	One Day Elliott	Jamie Greenlees	2692
9	8 Songs Written About Taylor Swift	n/a	Clevver News	"Recommended for you" [NEW]
10	One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
11	One Day Elliott in Chicago	One Day Elliott	Paul Richards	609
12	Two Night Stand	One Day Elliott	Paul Richards	843
13	Jerusalem	One Day Elliott	totallydope	1772
14	Live in the Living Room: One Day Elliott -Hearts in the Bottom of Ashtrays	One Day Elliott	LITLR	547
15	Who Am I kidding? (Studio Video)	One Day Elliott	Paul Richards	874
16	MC Xander 'Sick Of The Lies'	MC Xander	BD	2,189,949
17	Live in the Living Room: Rewind One Day Elliott -Take That Cover	One Day Elliott	LITLR	684
18	One Day Elliott - Lonely in a crowded place (Fan Vid)	One Day Elliott	Mike	1048
19	So Far So Good….One Day Elliott video made by fan	One Day Elliott	grakbulrug	1630
20	Arms Up High - One Day Elliott (A Tribute to the Macho Man Randy Savage)	One Day Elliott	Paul Richards	496
21	One Day Elliott - Just come back (live)	One Day Elliott	Mike	537
22	One Day Elliott - Toby knows (live) + Interviews	One Day Elliott	Mike	540
23	One Day Elliott medicine live sessions with Alan Hare hospital radio medway	One Day Elliott	alanmusichare	91
24	Live in the Christmas Living Room: One Day Elliott - Wham! Cover	One Day Elliott	LITLR	126
25	Yellowcard Ocean Avenue Full Album	Yellowcard	Spikedude55	600,465

	Video Title	Artist	Uploaded by:	Views
1	Never be Content with Average	One Day Elliott	Tony Baptiste	5686
2	Don't Wanna Know	One Day Elliott	Jamie Greenlees	2692
3	One Day Elliott in Chicago	One Day Elliott	Paul Richards	609
4	Honest Trailers - Deadpool (Feat. Deadpool)	n/a	Screen Junkies	"Recommended for you"
5	One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
6	Glad All Over Again	Doc Brown	Doc Brown	"Recommended for you"
7	MC Xander 'Sick Of The Lies'	MC Xander	BD	2,189,949
8	Who Am I kidding? (Studio Video)	One Day Elliott	Paul Richards	874
9	Lukas Graham - 7 Years [OFFICIAL MUSIC VIDEO]	Lukas Graham	Lukas Graham	"Recommended for you"
10	The Streets -'Blinded By The Lights'	Future Shorts	The Streets	Future Shorts	"Recommended for you"
11	City High - What would you do?	City High	CityHighVEVO	"Recommended for you"
12	Navin Ramgoolam Message - 41st Anniversary of Mauritius Independence Day	n/a	MLP (7 years ago)	3129
13	One Nine Nine Four - 6 minute teaser	n/a	Jai Al-Attas	124,281
14	Jerusalem	One Day Elliott	totallydope	1772
15	Asaf Avidan, The Mojos - One Day/ Reckoning Song…	Asaf Avidan	wanklemutVEVO	"Recommended for you"
16	Two Night Stand	One Day Elliott	Paul Richards	843
17	Palatine Electric String Quartet perform Palladio	Palantine Electric	palantinequartet	164,604
18	Live in the Living Room: One Day Elliott -Hearts in the Bottom of Ashtrays	One Day Elliott	LITLR	547
19	30 Seconds To Mars - Closer to the Edge	30 Seconds to Mars	30SecondstoMarsVEVO	65,890.36
20	AT&T Quickfire (1 of 2) - Design, Music, Browser	n/a	mobileburn	35,064.00
21	Elliott Smith - Sorry My Mistake (live)	Elliott Smith	Ben Wilbur	5456
22	Live in the Living Room: Rewind One Day Elliott -Take That Cover	One Day Elliott	LITLR	684
23	Speech Jammer Gun Review (original)	n/a	absuperman	1,434,603
24	PALLADIO (Karl Jenkins) - Jacobo Sipari di Pescasseroli - Ara Coeli Apile 2011	Karl Jenkins	megitre	278,721
25	ONE DAY ELLIOTT - 'Broken' live @ EARLS 22/1/15	One Day Elliott	gothfater45	149

Fig. xxvi - Recommended videos after clicking the top result – my iPhone - **not signed in**.

	Video Title	Artist	Uploaded by:	Views
1	Never be Content with Average	One Day Elliott	Tony Baptiste	5686
2	Don't Wanna Know	One Day Elliott	Jamie Greenlees	2692
3	One Day Elliott in Chicago	One Day Elliott	Paul Richards	609
4	One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
5	MC Xander 'Sick Of The Lies'	MC Xander	BD	2,189,949
6	Who Am I kidding? (Studio Video)	One Day Elliott	Paul Richards	874
7	Lukas Graham - 7 Years [OFFICIAL MUSIC VIDEO]	Lukas Graham	Lukas Graham	"Recommended for you"
8	Jennifer Lopez - Ain't Your Mama	Jennifer Lopez	JenniferLopezVEVO	"Recommended for you"
9	The Streets -'Blinded By The Lights' | Future Shorts	The Streets	Future Shorts	"Recommended for you"
10	Manic Street Preachers - Together Stronger (C'mon Wales) [Official Video]	Manic Street Preachers	ManicStPreachersVEVO	"Recommended for you"
11	Navin Ramgoolam Message - 41st Anniversary of Mauritius Independence Day	n/a	MLP (7 years ago)	3129
12	Justin Bieber - Love Yourself (Purpose: The Movement)	Justin Bieber	JustinBieberVEVO	"Recommended for you"
13	Jerusalem	One Day Elliott	totallydope	1772
14	Two Night Stand	One Day Elliott	Paul Richards	843
15	Palatine Electric String Quartet perform Palladio	Palantine Electric	palantinequartet	164,604
16	Live in the Living Room: One Day Elliott -Hearts in the Bottom of Ashtrays	One Day Elliott	LITLR	547
17	30 Seconds To Mars - Closer to the Edge	30 Seconds to Mars	30SecondstoMarsVEVO	65,890.36
18	AT&T Quickfire (1 of 2) - Design, Music, Browser	n/a	mobileburn	35,064.00
19	Elliott Smith - Sorry My Mistake (live)	Elliott Smith	Ben Wilbur	5456
20	Asaf Avidan, The Mojos - One Day/ Reckoning Song…	Asaf Avidan	wanklemutVEVO	"Recommended for you"
21	Live in the Living Room: Rewind One Day Elliott -Take That Cover	One Day Elliott	LITLR	684
22	Speech Jammer Gun Review (original)	n/a	absuperman	1,434,603
23	PALLADIO (Karl Jenkins) - Jacobo Sipari di Pescasseroli - Ara Coeli Apile 2011	Karl Jenkins	megitre	278,721
24	Pink Floyd - Comfortably Numb	Pink Floyd	merygore666	5,229,200
25	ONE DAY ELLIOTT - 'Broken' live @ EARLS 22/1/15	One Day Elliott	gothfater45	149

Fig. xxvii - Recommended videos after clicking the top result – my iPhone - not signed in (then refreshed)

	Video Title	Artist	Uploaded by:	Views
1	Never be Content with Average	One Day Elliott	Tony Baptiste	5686
2	The Neutral Larynx: A complete Tutorial | Online Singing Lessons	n/a	Marnell Sample	"Recommended for you"
3	Don't Wanna Know	One Day Elliott	Jamie Greenlees	2692
4	One Day Elliott in Chicago	One Day Elliott	Paul Richards	609
5	Female Singers: Vocal Warm Up (LIVE)	n/a	Litalici0us	"Recommended for you"
6	One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
7	22 Amateur Footballers vs 11 Pro Footballers	n/a	World Football	"Recommended for you"
8	How To Sing High notes Without Straining	n/a	Become A Singing Master	"Recommended for you"
9	MC Xander 'Sick Of The Lies'	MC Xander	BD	2,189,949
10	Who Am I kidding? (Studio Video)	One Day Elliott	Paul Richards	874
11	Singing Terminology - Belting	n/a	Archiduc De Belgrade	"Recommended for you"
12	Vocal Exercise - Vibrato Strengthening	n/a	Two Part Harmony	"Recommended for you"
13	One Nine Nine Four - 6 minute teaser	n/a	Jai Al-Attas	124,281
14	30 Seconds To Mars - Closer to the Edge	30 Seconds to Mars	30SecondstoMarsVEVO	65,890.36
15	Jerusalem	One Day Elliott	totallydope	1772
16	Pink Floyd - Comfortably Numb	Pink Floyd	merygore666	5,229,200
17	Palatine Electric String Quartet perform Palladio	Palantine Electric	palantinequartet	164,604
18	PALLADIO (Karl Jenkins) - Jacobo Sipari di Pescasseroli - Ara Coeli Apile 2011	Karl Jenkins	megitre	278,721
19	One Day Elliott - Interview Series Vol 5	One Day Elliott	Paul Richards	57
20	One Day Elliott - two night stand	One Day Elliott	Paul Richards	843
21	Live in the Living Room: One Day Elliott -Hearts in the Bottom of Ashtrays	One Day Elliott	LITLR	547
22	Senses Fail - One Eight Seven	Senses Fail	MusicIncMusicInc	643,928
23	Speech Jammer Gun Review (original)	n/a	absuperman	1,434,603
24	Live in the Living Room: Rewind: One Day Elliott -Take That Cover	One Day Elliott	LITLR	684
25	ONE DAY ELLIOTT - 'Broken' live @ EARLS 22/1/15	One Day Elliott	gothfater45	149

Fig. xxviii - Recommended videos after clicking the top result – my iPhone - Signed in.

	Video Title	Artist	Uploaded by:	Views
1	Never be Content with Average	One Day Elliott	Tony Baptiste	5686
2	Don't Wanna Know	One Day Elliott	Jamie Greenlees	2692
3	Freya's Singing Tips: Tongue Placement	n/a	Freya Casey	"Recommended for you"
4	How to Sing with INCREDIBLE POWER!	n/a	Singing Made Simple	"Recommended for you"
5	One Day Elliott in Chicago	One Day Elliott	Paul Richards	609
6	One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
7	How To Sing High notes Without Straining	n/a	Become A Singing Master	"Recommended for you"
8	MC Xander 'Sick Of The Lies'	MC Xander	BD	2,189,949
9	How To Sing / Vocal Exercises / Vocal Strain / Lowering the Larynx	n/a	Brett Manning Studios	"Recommended for you"
10	Who Am I kidding? (Studio Video)	One Day Elliott	Paul Richards	874
11	Celine Dion's Vocal Skills Live	n/a	Apostolos837	"Recommended for you"
12	Navin Ramgoolam Message - 41st Anniversary of Mauritius Independence Day	n/a	MLP (7 years ago)	3129
13	One Nine Nine Four - 6 minute teaser	n/a	Jai Al-Attas	124,281
14	AT&T Quickfire (1 of 2) - Design, Music, Browser	n/a	mobileburn	35,064.00
15	Jerusalem	One Day Elliott	totallydope	1772
16	Palatine Electric String Quartet perform Palladio	Palantine Electric	palantinequartet	164,604
17	30 Seconds To Mars - Closer to the Edge	30 Seconds to Mars	30SecondstoMarsVEVO	65,890.36
18	Pink Floyd - Comfortably Numb	Pink Floyd	merygore666	5,229,200
19	PALLADIO (Karl Jenkins) - Jacobo Sipari di Pescasseroli - Ara Coeli Apile 2011	Karl Jenkins	megitre	278,721
20	Elliott Smith - Sorry My Mistake (live)	Elliott Smith	Ben Wilbur	5456
21	One Day Elliott - Interview Series Vol 5	One Day Elliott	Paul Richards	57
22	Live in the Living Room: One Day Elliott -Hearts in the Bottom of Ashtrays	One Day Elliott	LITLR	547
23	One Day Elliott - two night stand	One Day Elliott	Paul Richards	843
24	Speech Jammer Gun Review (original)	n/a	absuperman	1,434,603
25	Live in the Living Room: Rewind: One Day Elliott -Take That Cover	One Day Elliott	LITLR	684

Fig. xxix - Recommended videos after clicking the top result – my iPhone - **Signed in (refreshed)**

Fig. xxx - Recommended videos after clicking the top result - **home computer - not signed in**.

	Video Title	Artist	Uploaded by:	Views
1	Don't Wanna Know (autoplay)	One Day Elliott	Jamie Greenlees	2692
2	Never be Content with Average	One Day Elliott	Tony Baptiste	5686
3	One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
4	One Day Elliott in Chicago	One Day Elliott	Paul Richards	609
5	Who Am I kidding? (Studio Video)	One Day Elliott	Paul Richards	874
6	Two Night Stand	One Day Elliott	Paul Richards	843
7	Sinead O'Connor Nothing Compares 2 You 16:9 HD	Sinead O'Connor	Sergy Magnell	Recommended for you
8	Jerusalem	One Day Elliott	totally dope	1772
9	Yellowcard Ocean Avenue Full Album	Yellowcard	Spikedude55	600,465
10	Live in the Living Room: One Day Elliott -Hearts in the Bottom of Ashtrays	One Day Elliott	LITLR	547
11	MC Xander 'Sick Of The Lies'	MC Xander	BD	2,189,949
12	Live in the Living Room: Rewind One Day Elliott -Take That Cover	One Day Elliott	LITLR	684
13	The Bangles - Manic Monday	The Bangles	TheBanglesVevo	Recommended for you
14	Speech Jammer Gun Review (original)	n/a	absuperman	1,434,603
15	A NEW CHAPTER	n/a	BFvsGF	Recommended for you [NEW]
16	So Far So Good….One Day Elliott video made by fan	One Day Elliott	grakbulrug	1630
17	ONE DAY ELLIOTT - 'Broken' live @ EARLS 22/1/15	One Day Elliott	gothfater45	149
18	The Bangles - Eternal Flame	The Bangles	TheBanglesVevo	Recommended for you
19	Navin Ramgoolam Message - 41st Anniversary of Mauritius Independence Day	n/a	MLP (7 years ago)	3129
20	One Day Elliott do Medicine on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	92
21	Live in the Living Room: One Day Elliott - Melting Wax and Feathers	One Day Elliott	LITLR	439
22	Senses Fail - One Eight Seven	Senses Fail	MusicIncMusicInc	646,057
23	Live in the Christmas Living Room - One Day Elliott: The 12 bands of Christmas.	One Day Elliott	LITLR	429
24	One Day Elliott - Broken (Saturday's Sex Tape Remix)	One Day Elliott	misterjaytalbut	390
25	Bonnie Tyler - Total Eclipse of the Heart	Bonnie Tyler	bonnietylerVevo	Recommended for you

	Video Title	Artist	Uploaded by:	Views
1	Don't Wanna Know (autoplay)	One Day Elliott	Jamie Greenlees	2692
2	Never be Content with Average	One Day Elliott	Tony Baptiste	5686
3	One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
4	One Day Elliott in Chicago	One Day Elliott	Paul Richards	609
5	Who Am I kidding? (Studio Video)	One Day Elliott	Paul Richards	874
6	Two Night Stand	One Day Elliott	Paul Richards	843
7	Jerusalem	One Day Elliott	totally dope	1772
8	YellowCard Ocean Avenue Full Album	Yellowcard	Spikedude55	600,465
9	MC Xander 'Sick Of The Lies'	MC Xander	BD	2,189,949
10	Live in the Living Room: One Day Elliott -Hearts in the Bottom of Ashtrays	One Day Elliott	LITLR	547
11	Live in the Living Room: Rewind One Day Elliott -Take That Cover	One Day Elliott	LITLR	684
12	Speech Jammer Gun Review (original)	n/a	absuperman	1,434,603
13	So Far So Good….One Day Elliott video made by fan	One Day Elliott	grakbulrug	1630
14	ONE DAY ELLIOTT - 'Broken' live @ EARLS 22/1/15	One Day Elliott	gothfater45	149
15	Navin Ramgoolam Message - 41st Anniversary of Mauritius Independence Day	n/a	MLP (7 years ago)	3129
16	Senses Fail - One Eight Seven	Senses Fail	MusicIncMusicInc	646,057
17	One Day Elliott do Medicine on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	92
18	Live in the Living Room: One Day Elliott - Melting Wax and Feathers	One Day Elliott	LITLR	439
19	Live in the Christmas Living Room - One Day Elliott: The 12 bands of Christmas.	One Day Elliott	LITLR	429
20	One Day Elliott - Broken (Saturday's Sex Tape Remix)	One Day Elliott	misterjaytalbut	390
21	Senses Fail - One Eight Seven	Senses Fail	MusicIncMusicInc	646,057
22	So Far So Good…. One Day Elliott video made by fan	One Day Elliott	grakbulrug	1636
23	AT&T Quickfire (1 of 2) - Design, Music, Browser	n/a	mobileburn	35,070
24	Palatine Electric String Quartet perform Palladio by Karl Jenkins	palatine	palatinequartet	166,584
25	One Day Elliott do Medicine on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	92

Fig. xxxi - Recommended videos after clicking the top result - home computer - signed in.

Video Title	Artist	Uploaded by:	Views
Fig. xxxii - Recommended videos after clicking the top result - **home computer - signed in. (refreshed**)			
1 Don't Wanna Know (autoplay)	One Day Elliott	Jamie Greenlees	2692
2 Never be Content with Average	One Day Elliott	Tony Baptiste	5686
3 One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
4 Lion vs Crocodile vs Jaguar	n/a	Act Wild	recommended for you [NEW]
5 One Day Elliott in Chicago	One Day Elliott	Paul Richards	609
6 Who Am I kidding? (Studio Video)	One Day Elliott	Paul Richards	874
7 YellowCard Ocean Avenue Full Album	Yellowcard	Spikedude55	600,465
8 How to Develop A manly Voice	Art of Manliness	n/a	Art of Manliness	recommended for you
9 How to Sing High Notes Without Straining	n/a	Becoming A Singing Master	recommended for you
10 MC Xander 'Sick Of The Lies'	MC Xander	BD	2,189,949
11 Two Night Stand	One Day Elliott	Paul Richards	843
12 Tips for Singers - Belting	n/a	Singing Made Simple	recommended for you
13 Jerusalem	One Day Elliott	totally dope	1772
14 Live in the Living Room: One Day Elliott -Hearts in the Bottom of Ashtrays	One Day Elliott	LITLR	547
15 Speech Jammer Gun Review (original)	n/a	absuperman	1,434,603
16 ONE DAY ELLIOTT - 'Broken' live @ EARLS 22/1/15	One Day Elliott	gothfater45	149
17 Live in the Living Room: Rewind One Day Elliott -Take That Cover	One Day Elliott	LITLR	684
18 Olly Murs - Kiss Me (Official Video)	Olly Murs	OllyMursVevo	recommended for you
19 Navin Ramgoolam Message - 41st Anniversary of Mauritius Independence Day	n/a	MLP (7 years ago)	3129
20 Senses Fail - One Eight Seven	Senses Fail	MusicIncMusicInc	646,057
21 Lukas Graham - 7 Years [OFFICIAL LYRIC VIDEO]	Lukas Graham	Lukas Graham	recommended for you
22 So Far So Good….One Day Elliott video made by fan	One Day Elliott	grakbulrug	1630
23 AT&T Quickfire (1 of 2) - Design, Music, Browser	n/a	mobileburn	35,070
24 Palatine Electric String Quartet perform Palladio by Karl Jenkins	palatine	palatinequartet	166,584
25 One Day Elliott do Medicine on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	92

Whereas the search page is determined directly by the specific parameters of the typed query and attempts to produce a list of videos most likely to accurately match that query, the list constructed once a video has been clicked will contain results collated from a more widely casted net. As well as directly relevant videos, this list contains recommendations and videos that are connected based on some additional factors. There is a sense that, now the video has been clicked, it is possible the user has found what they are looking for and it is now time to steer them towards other content that they may find interesting.

This is supported when we look at a second API search (see Fig. XXXIII), conducted this time based on videos connected to *Mistake in My Design* up to a crawl distance of 1. Using this method, 29 of the top 30 results were videos directly linked to One Day Elliott.

	Fig. xxxiii -API Results for Mistake in My Design - Crawl Distance 1			
	Video Title	Artist	Uploaded by:	Views
1	Who Am I kidding?	One Day Elliott	Paul Richards	874
2	So Far So Good….One Day Elliott video made by fan	One Day Elliott	grakbulrug	1630
3	Never be Content with Average	One Day Elliott	Tony Baptiste	5686
4	Two Night Stand	One Day Elliott	Paul Richards	843
5	Jerusalem	One Day Elliott	Jamie Greenlees	743
6	Live in the Living Room: Longer sessions - One Day Elliott - Medicine	One Day Elliott	LITLR	328
7	Don't Wanna Know	One Day Elliott	Jamie Greenlees	2692
8	One Day Elliott do Medicine on Miskin Radio	One Day Elliott	The Kieran Poole Sessions	88
9	Live in the Living Room: One Day Elliott -Hearts in the Bottom of Ashtrays	One Day Elliott	LITLR	550
10	One Day Elliott @ PAPA KWEG PRESENTS	One Day Elliott	Ameba UK	256
11	One Day Elliott - So Far So Good - 090228	One Day Elliott	Vic Wintergreen	1836
12	One Day Elliott - Just Come Back (live)	One Day Elliott	Mike	53
13	One Day Elliott - Broken (Saturdays Sex Tape Remix)	One Day Elliott	misterjaytalbut	388
14	Alex Parker - So Far So Good (One Day Elliott Cover)	Alex Parker	Alex Parker	212
15	Live in the Living Room: Longer sessions - One Day Elliott - Vulnerable	One Day Elliott	LITLR	139
16	Live in the Christmas Living Room - One Day Elliott: Wham!.	One Day Elliott	LITLR	126
17	One Day Elliott - 'Broken' live @ EARLS 22/1/15	One Day Elliott	gothfather45	149
18	Arms Up High - One Day Elliott (A Tribute to the Macho Man Randy Savage	One Day Elliott	Paul Richards	498
19	Live in the Living Room: Rewind - One Day Elliott - Take That	One Day Elliott	LITLR	686
20	Live in the Living Room: One Day Elliott - Melting Wax and Feathers	One Day Elliott	LITLR	442
21	Honest Trailers - Gone Girl	n/a	Screen Junkies	7600918
22	One Day Elliott in Chicago	One Day Elliott	Paul Richards	616
23	One Day Elliott Album Trailer (Star Wars)	One Day Elliott	Paul Richards	455
24	Live in the Living Room: Longer sessions - One Day Elliott - The Closer I Get	One Day Elliott	LITLR	139
25	One Day Elliott - Medicine Live on hospital Radio	One Day Elliott	alanmusichare	91
26	One Day Elliott - Never Be Content with Average (live)	One Day Elliott	Mike	43
27	ONE DAY ELLIOTT - illegal ninja moves live @ Earls	One Day Elliott	gothfather45	31
28	ONE DAY ELLIOTT - Holding on/Two night stand @Earls	One Day Elliott	gothfather45	55
29	ONE DAY ELLIOTT - Medicine live @ Earls	One Day Elliott	gothfather45	10
30	ONE DAY ELLIOTT - Who Am I Kidding? live @ Earls	One Day Elliott	gothfather45	31
31	The 4 WORST Muscle Building Workout Mistakes Beginners Make	n/a	OmarIsuf	2421090
32	How Racist are you? - Jane Elliott s Blue eyes/Brown eyes Exercise	n/a	Ses	349041
33	Everyone makes MISTAKES - Jacque Fresco	n/a	Evan Carmichael	3366
34	5 Principles of Strength Training	n/a	Strength Camp	407062
35	Designing a Kick Ass Program: The Basics for Push/Pull/Legs	n/a	OmarIsuf	128565

The first search was conducted on my own laptop, not signed in to a YouTube account. Although the list produced was predominantly One Day Elliott tracks, there was an addition of some extra videos in certain positions in the list (see highlighted in red in Fig. XXII).

It is clear to see why the Elliott Smith video (number 24 in the list) is included due to the wording of the video title containing three of words that match the clicked video. The inclusion of numbers 10: MC Xander 'Sick Of The Lies' (which appeared on the list across all formats) and 19 (Yellowcard - Ocean Avenue Full Album) however, seem less obvious.

When looking the second API list, MC Xander is included as a related video at number 52 out of a possible 2214. It is not clear what criteria links it to the 'mistake in my design' video, but it appears in the list of recommended tracks nonetheless. The Yellowcard video however does not feature in this API list, suggesting that its link to the main video is based on a link separated by more than one degree.

The inclusion of the fan-made Star Wars Episode VII trailer (number 25 in the list supports this notion, when observing that track 21 is titled 'One Day Elliott Album Trailer (Star Wars)' suggesting that its link is to another video in the list and not to 'Mistake in My design' directly.

Interestingly, after repeating the search, but this time logged into the YouTube account, the list of recommended videos at least for the top 25, was exactly the same – the algorithm offered up the same videos, in the same order irrespective of being signed in or out. This implies that the algorithms mine data relevant to the device itself as well as the user's account or profile. Despite not being signed in, YouTube can access a search history carried out on the format being used.

This can be seen again, when conducting the same search on my home computer. (See Figs. XXX and XXXI) When signed out of my YouTube account, the list of recommendations based on 'Mistake in My Design' included two videos by 'The Bangles' (listed number 13 and 18.) This is significant because I had a few weeks previously, watched the video for Eternal Flame whilst making my own arrangement for a choir and I had not been signed in to my account. These videos, along with a few others were labelled as '*recommended for you.*'

Conducting the same search whilst signed into the account on the home computer revealed similar results, although not exactly the same as was the case on the laptop, which again, supports the idea that the differences between being signed in and out of the account is minimal.

Refreshing the page brought up a different set of results (see Figs. XXIV, XXVI, XXVIII, XXXI and XXXII) On the Lap top, signed in to the YouTube account, the list of recommendations inserted 6 different videos to the previous list, aimed directly at me based, presumably on my viewing history, consisting of 1 tattoo documentary and 5 singing tutorial videos, again all labelled as '*recommended for you.*'

The search conducted on the iPhone seemed to retrieve more varied results. The same, seeded videos were listed, but interspersed more heavily with other videos. In both cases, signed in and out, the search on the iPhone seemed more intent to steer me towards alternative material rather than linking videos directly to the one I had clicked. Before signing in, many of these were seemingly unrelated not only to 'Mistake in My Design' but also to me as a YouTube user, including a Movie Trailer for a film I've never had any interest in (listed number 4) and *a message from Navin Ramgoolam about the 41st Anniversary of Mauritius Independence Day* (listed number 12) (See Figs. XXVI, XXVII, XXVIII and XXIX.)

When signed in though, the 'other' choices, whilst still significantly punctuating the list, seemed more specifically aimed at me, once more including videos more in keeping with my search history. If we compare this to the API search, we see that we receive recommendations that include a substantial insertion of videos that do not feature in the 'ranked' videos, and an exclusion of many that do.

7.7 The Autoplay video

As discussed (in section 7.2), YouTube has a function that loads the next video and plays it automatically once the current video has finished. On the laptop and on the home computer you can see which video is next in line, labelled 'up next, (see Fig. XXXIV). Referring back to the findings of the study conducted by Nzioka (2015) YouTube determines the next video to play automatically, based on a raking system and 'utility value' suggesting that the video with the highest ranking will be placed in the 'up next' spot. However, in this case, it is extremely difficult to see how the outcome has been realised. The search conducted on the home computer positioned 'Don't Wanna Know' in the *up next* spot, which doesn't seem overly unusual as it features in all of the recommended lists and is ranked 7th on the API list, but the search on the laptop, placed '*One Day Elliott – Interview Series 5'* as the next video. This does seem

unusual as this video ranks 77th on the API list of videos connected to 'Mistake in My Design.' It *is* a One Day Elliott Video, uploaded by the same source, but that is where the similarity ends. It has only received 57 views, there are no other words in the title to link it to the clicked video and there are no directly obvious reasons as to why this video has been chosen over any of the others to immediately follow. If, as Nzioka suggests, the auto-play video is determined by a specific utility value, what criteria allows these particular videos to rank higher than the others, and why does it differ between formats.
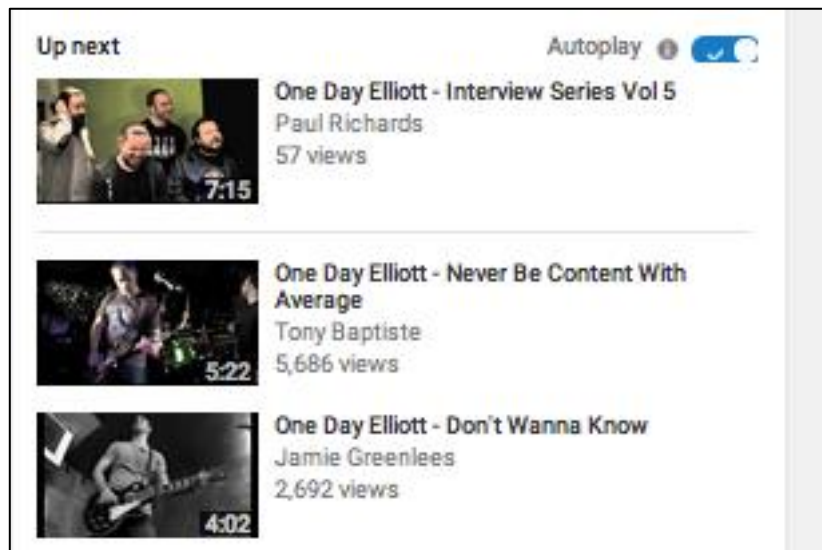

Fig. XXXIV – Screen shot to show YouTube 'up next' video

The complexities of these recommendations contribute to the opaque nature of how they operate. Even under specific examination and use of additional software, not all of the processes are clear. Regular, everyday users of YouTube, who presumably, are not scrutinising the incorporated systems, are unlikely to understand the reasoning behind the recommendations given.

Of course, there is nothing to say that it is necessary for them to do so, but it is of interest that users accept the 'recommended for you' or auto-played videos without question.

7.8 Chapter Conclusion

By looking deeper into a particular search on YouTube, we can see that the results and recommendations received are based on extremely complicated processes.

An initial search for a specific query will obtain results intended to match the desired outcome as closely as possible. The list of videos will be based almost

solely on what has been typed. This makes sense, as at this point YouTube has to assume that you are looking for something in particular.

However, once a video has been clicked, rather than an answer to a specific question, the videos offered become more of a list of recommendations, and, more obscure, more tenuously linked videos start to be included. By comparing these recommendation lists to the uncensored API lists, we can see that videos are omitted and replaced and in some cases, seemingly unrelated or irrelevant videos are recommended. This process is more drastically apparent when the search is conducted from a mobile phone and more of the videos in the list are replaced by videos that are 'recommended for you.'

The recommendations given differ between formats and the auto-play feature suggests different videos in different circumstances. This, and the similarity between suggestions made to us whether signed in or out of a YouTube account implies that search histories and data are mined to identify the device or network, as well as the specific user profile. This could cause complications when taking into account shared devices or privacy considerations for those who purposefully browse without being signed into a profile.

It is likely that much of this is due to collaborative filtering methods, taking into account *co-view information* (Baluja et al 2008); the behaviour of others who may have also watched the clicked video alongside direct relationships between videos. If, for example, *Video A* and *Video B* have nothing particular in common based on their content, tags or title, but 10,000 people who watched video A also watched Video B, there is a strong likelihood that this similarity would be acknowledged and Video B would be recommended to those who watch Video A.

'*Interview series vol 5*', the video positioned as the automatic next-play video when 'Mistake in My Design' was clicked on the laptop, has only received 57 views in total and despite being uploaded by the same user, features relatively low on the API list. Perhaps, though, if a big percentage of those 57 people have also watched 'Mistake in my Design', this would award the video a higher 'utility value' and qualify it as a worthy 'up next' contender.

Combining the vast number of variables and statistics that must surround each and every video means that every decision and positioning of a video is the outcome of a huge web of factors, which, we can see can yield some interesting results and this highlights the immensely complicated nature of the algorithms that fuel the recommendations.

One mustn't rule out the possibility that after all the complicated formulas and algorithmic processes, there could be measures taken by YouTube to introduce a bit of variety to its recommendations to prevent them from being too similar to the clicked video, in an attempt to promote excitement or enthusiasm. Trust plays an important role in user satisfaction on social media, and getting the correct balance between offering lists that are too predictable, and those that are too obscure is paramount. This might account for some of the omissions of videos that do appear in the API list but not in the actual recommended videos list.

There is also the possibility that, in some cases, corporate agenda has overridden the algorithms to present us with a particular, perhaps generic product that they wish to promote. The *Deadpool* trailer, offered high on the iPhone list whilst signed out of the YouTube profile could be an example of this.

With this acquired insight into the mechanisms of YouTube, and the recommendations received when conducting my own search, a basis could be made on which to monitor the participants' engagement with YouTube and other aspects of social media, in conducting the primary section of the current research.

One Day Elliott - "Mistake In My Design" - Official Music Video
Paul Richards
6 years ago • 3,741 views
The official video to One Day Elliott's "Mistake In My Design". Directed by Chris Newberry.
5:44

One Day Elliott - Never Be Content With Average
Tony Baptiste
7 years ago • 5,686 views
One Day Elliott performing their track "Never Be Content With Average". Directed by Tony Baptiste.
5:22

One Day Elliott - Who Am I Kidding (Studio Video)
Paul Richards
1 year ago • 874 views
Here's the studio video for 'Who Am I kidding?' by One Day Elliott. Filmed at Emeline Studios. 'Who Am I Kidding?' is from the ...
3:47

One Day Elliott - Don't Wanna Know
Jamie Greenlees
7 years ago • 2,692 views
UK band One Day Elliott, playing Don't Wanna Know.
4:02

Jerusalem - One Day Elliott
Jamie Greenlees
7 years ago • 743 views
UK Band One Day Elliott in Jerusalem cover.
2:12

One Day Elliott - two night stand
Paul Richards
4 years ago • 843 views
Animated video for classic one day elliott track 'two night stand' from the Album 'Rule Number One'
3:04

So Far So Good..... One Day Elliott video made by fan
grakbulrug
7 years ago • 1,630 views
This is my video to the song So Far So Good by ODE!!! THEY ARE THE BEST BAND IN FUCKING MEDWAY NO DOUBT ABOUT ...
5:05

One Day Elliott do Vulnerable on Miskin Radio
The Kieran Poole Sessions
1 year ago • 139 views
One Day Elliott, a rock band from Maidstone, perform Vulnerable on Miskin Radio for The Kieran Poole Sessions. Download the ...
2:33

Live In The Living Room: Longer Sessions - One Day Elliott - Medicine
LITLR
3 years ago • 328 views
One Day Elliott perform their third track for Longer Sessions called "Medicine".
3:35

One Day Elliott - So Far So Good - 090228
Vic Wintergreen
7 years ago • 1,836 views
DefZone presents One Day Elliott unplugged at Rainham Oasthouse. 28th Feb 2009. Song title So Far So Good.
5:35

Live In The Living Room: Longer Sessions - One Day Elliott - Vulnerable
LITLR
3 years ago • 139 views
One Day Elliott perform their fourth track for Longer Sessions called "Vulnerable".
2:18

ONE DAY ELLIOTT - 'Broken' live @ EARLS 22/1/15
gothfather45
1 year ago • 149 views
ONE DAY ELLIOTT performing their single BROKEN live at EARLS in MAIDSTONE 22/1/15.
6:47

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Fig. XXXV – Screen shot of search results Video list

Chapter 8 - Methodology

To assess, in real terms, the impact of personalised social media and the algorithmic-led customisation of our experiences online, ethnographic primary research was conducted observing the behaviour of individuals from a sample demographic. Much of the existing literature focuses on the general applications of personalisation, but, influenced by the work of Miller (2011), and boyd, (2014) this research seeks not to necessarily apply the findings to the generalised population, but instead to understand more fully, the impact that the personalising algorithms can have on specific individuals. This focuses on the notion that there is no fixed social media, but rather that it is a fluid platform that evolves alongside whoever is using it.

In terms of this primary research, a mixed method, ethnographic approach was adopted, collecting both quantitative and qualitative data conducted in three stages. As social media and online networks become increasingly embedded in all aspects of our lives, I felt that a diverse, multidisciplinary approach would be beneficial.

8.1 Why mixed methods?

There are several reasons for which I believe a mixed methods approach was beneficial for this study. Mixing qualitative and quantitative research allows for a wider scope of insight. Quantitative data from the observation and some parts of the survey could provide numerical evidence, including times, and frequency of online engagement that could contribute to summaries of data that support generalisations, or subjectivities gained from the qualitative data. The qualitative data collected again from the survey and also from interviews with the participants helps to provide details on the emotional responses or attitudes of the individual members of the demographic. Strengths of the two different methods can be triangulated and weaknesses can be offset to provide a deeper and more reliable engagement with the demographic, allowing me as the researcher to assess both the opinions and behaviours of the participants. (Bryman 2008 p 609)

Certain information may not be accessible through one method alone. This approach vastly increased the opportunity to gather data on the social backgrounds of the sample by means of the online, self-completion questionnaire, their online behaviour and conduct via the observational study and their opinions on each of these in the follow up interviews. The intention

being, that the combined research contributes to findings that are more than the sum of its parts. (O'Cathain et al 2007)

Livingstone (2012) highlights here, the potential benefits to adopting a mixed methods approach,

Audience research must be multidisciplinary, acting fast to capture insights and findings as they spring up…. The frameworks for participation are shifting and diversifying as digitally convergent and networked media become ever more tightly embedded in diverse spheres of life. (Livingstone 2012 p270)

A notion that is supported by Dover (2012):

"Adopting a multidisciplinary approach and also an ethnographic research model that engages with social interactions is one way to move beyond text-centred reception studies and explore media-related practices in everyday life." (Dover 2012 p119)

Boellstorff et al (2012) are similarly supportive of a multidisciplinary approach advocating that interviews alone are not sufficient for an effective ethnography:

"Interviews are central to effective ethnographic research" Boellstorff et al 2012 p92) though – "on the other hand, interviews in isolation are insufficient to constitute ethnographic research. While interviews are a legitimate, useful, time-tested method in the social sciences, by themselves they do not yield a corpus of ethnographic data" (Boellstorff et al 2012 p92)

Significant influence has been also drawn from *Digital Methods* by Richard Rogers, particularly concerning his work on 'postdemographics'; his term for the "study of the data in social networking platforms and how profiling is, or may be performed." (Rogers 2013 p153) Digital methods, proposes a re-orientation of the field of Internet-related research, thinking more about the multifaceted nature of online resources, and how best to incorporate the evolving functionalities of the methods embedded in online devices, and to observe our resultant behaviour.

According to Rogers, Postdemographics, is "intended to stand in contrast to the use of demographics to organise groups, markets and voters in a sociological sense", concerning also, 'a theoretical shift from the *biopolitical* use of demographics (to govern bodies) to an *info-political* use (to steer or recommend certain information to certain people)." (p153) Regarding the study of social networks, Rogers goes on the explain that postdemographics includes a

shift towards the inclusion of tastes, interests, favourites, groups, accepted invitations, installed apps and other information that comprises an online profile, as well as more traditional areas of distinction such as race, ethnicity, class and educational level. The methodology of the current research has drawn influence from elements of this approach.

There are several key texts that have strongly influenced my decisions on this matter, including Pierre Bourdieu, Daniel Miller, danah boyd, Christian Fuchs and Christopher Small. The work conducted by these academics and the others mentioned throughout this methodology provides evidence that the methods are tried and tested, thus justifying my intentions. They also gave me a springboard from which to investigate further and try out the methods in different scenarios, using different focus groups and criteria, allowing me to have a unique approach and, perhaps, new insight into this area of research. (For more on the key influential texts see the literature review.)

8.2 Reasons for the demographic

Drawing on previous research by Miller (2011), boyd (2014) and Montano (2013), it can be seen that conducting deep analysis of a smaller target group can provide interesting information and insight into how outside factors can affect that group.

Studies into micro-cultures and micro-climates such as Fox's (2002) investigation into Racecourse culture, have examined the particular nuances that may exist within localised communities.

In a similar manner, my intention was to closely examine a particular group and assess how personalisation and online recommenders have affected their relationship and engagement with music. My chosen group was anyone who belongs to the Facebook fan page of the band One Day Elliott and there are several reasons for this choice.

Firstly, being a member of the band, gives me an invested personal interest in the dynamics of, and the influences enacted upon the group. Knowing how the individual members of the fan base behave, and are affected by online musical recommendations, could serve to be beneficial beyond the academic field alone.

It also means that the participants were all users of Facebook and more importantly, all have a shared musical interest in One Day Elliott, which effectively makes them part of a cultural group or idioculture.. This link between

them gave me a platform from which to assess their actions and the different reactions to the stimuli.

Additionally, there is a case for convenience. Being a member of One Day Elliott, allowed me complete access to the Facebook page and I could contact anyone connected to it very easily in that I could post things to the entire group in one go. This is beneficial as access to the relevant social setting can often be a difficult step in ethnographic studies. (Bryman 2008 p403) and, although this demographic would sit conventionally in the open/public category, (Hammersley and Atkinson 1995) we have noted already, the conflicting notions of public and private when regarding social media (see section 4.1).

My dual role as a researcher and a member of the band in whom an interest links the participants, brought with it additional considerations.

8.3 Researcher influence:

"There may be much to learn about the social significance of contemporary youth cultures and musics using an approach which combines critical reflexivity with an intimate knowledge of fan discourse" (Bennett 2002 p462)

It has been vitally important to acknowledge the potential impact of my position as a researcher in relation to the target sample and to exhibit a 'consciousness of my situational identity and the perception of relative power' (Angrosino 2005 p734).

"The qualitative researcher's perspective is perhaps a paradoxical one: it is to be acutely tuned-in to the experiences and meaning systems of others – to indwell – and at the same time to be aware of how one's own biases and preconceptions may be influencing what one is trying to understand." (Maykut and Morehouse 1994 p123)

Due to my connection with the sample of participants, and to the transformative effect social media has had on connectivity; there exists here an insider/outsider fluidity. There are some who believe that this is always the case and that researcher positions should not be thought of as a direct dichotomy, "We are never truly outsiders, yet never wholly insiders either" (Al-Natour 2011 p1).

Shared cultural backgrounds or ideologies may implicitly affect the way ethnographic data is collected and analysed. (Oliver 2010)

In terms of my own biases, I think that these would be present in some form, regardless of my position. "There is no neutrality. There is only greater or less awareness of one's biases" (Rose 1985 p77.) The important thing is to take these into account, rather than to expect them to not exist.

Nevertheless, I was aware of the importance to minimise my influence, drawing on previous studies such as Montano (2013), whose analysis of issues negotiated when conducting ethnographic research, (in his case in the Australian commercial electronic dance music scene) was particularly influential in identifying the considerations when conducting observational ethnographic research as an active participant in, or from a close distance to the field of study.

Other examples of insider research methodologies include research into the industrial music scene by Karen Collins (2005) and Hillegonda's (1998, 2011) studies into house music.

Understanding that although efforts were made to reduce the amount of researcher impact on the study it was inevitable that my position as a member of the band itself would have a bearing on the research in some way.

"Holding a degree of insider status clearly can have implications for the achievement of successful and productive interactions with participants." (Hodkinson 2005 p 136)

 It was important to step back from my involvement with the demographic (Cummings 2006) to avoid 'insider myopia' (Taylor 2011). I tried to have as little communication with any participants as possible, making sure not to discuss the study with anyone, or ask individuals directly to take part. The initial message, inviting individuals to participate was sent out from the band, rather than from me personally to help increase the distance between the participants and myself and to remove me further from the process. However, knowing the identity of the recipient of the data could potentially influence the level of participation and the type of answers given. In this case, aspects of response validity could be threatened if any biases or expectations are inferred or pre-empted by the participants.

The impact of this position though, is not necessarily a negative one; being an insider researcher can be both advantageous and challenging (Lau 2012). My position in this case, could amplify acceptance and could well encourage the participants to answer more judiciously. 'One's membership automatically provides a level of trust and openness in your participants that would likely not have been present otherwise…. participants might be more willing to share their experiences because there is an assumption of

understanding and an assumption of shared distinctiveness.' (Corbin-Dwyer and Buckle 2009 p58)

Indeed, 'One of the key skills of an ethnographer is developing trust and rapport with our informants,' (Boellstorff et al 2012 p95) and one of the benefits of having established relationships or closer connections with a proportion of the target sample was that this was readily obtainable.

Considering the interviews too, being an insider potentially serves to "enhance the quality and effectiveness of qualitative interviews" (Hodkinson 2005 p 138)

Furthermore, my position within the observed culture allows for a more precise understanding of the field and the localised society. "Those who participate in a particular culture on a regular basis are well positioned to explore and assess the operational logics of the culture" (Montano 2013).

8.4 Relationship between producer and consumer – online friendships

It is also important to acknowledge that, even if *direct* personal relationships are not present, social media has brought about a heightened level of connectivity (Chen 2009) both in real terms and also in a more abstract sense, and can often lead to an imagined sense of closeness between individuals.

"Social media forces upon us a feeling of intimacy and closeness that doesn't actually exist" (@DrLisaStrohman 2015 twitter.com)

Being able to see wall posts and tweets allow us to gain a deeper insight into the lives of others and transforms what it means to 'know' someone, (Ferris 2001), (Mjos 2011), leading, in extreme cases to obsessive behaviour, (Lobert 2012) but in an every-day sense could contribute to an increase in individuals forming semi- artificial social relations (Caughey 1984) or para-social relationships (Horton and Wohl 1956) (Giles 2012)

The survey *was* completed by some people who we do know quite well – the nature of how it was sent out meant that it was potentially accessible to everyone on the page, and not only are individuals with whom we have personal relationships likely to align themselves with the band's Facebook profile in the first place, they are also more likely to respond to the request and take part. However, I was surprised to see that many of the people who claimed that they

'know one or more members of the band' are not people that I or the other band members recognised.

This could be due to a number of factors. It could be the case that this represents a form of social desirability bias, in which participants wish to seem closer with the band than they actually are, perhaps feeling that having a personal relationship with a band member could reflect favourably.

It could also be due to the notion that perhaps the participants genuinely feel like they have a closer relationship with the band, perhaps haven taken a particular interest and engaged regularly with the online activities and posts made from the page. Though a post from the band may be made to a large number of people, the recipient of that post might feel a more personal sense of communication.

It also needs to be acknowledged that, in terms of the playlist task, although the intended recipient of the recommended playlist is anonymous, the participant is likely, and rightful to assume that I will see the playlist and this may have caused them to adjust it accordingly.

8.5 A detailed look at the survey

Acknowledging these considerations, the initial stage of primary research was to gather data and, following the social survey design, came in the form of a **self-completion questionnaire,** administered as a **web survey.** (This differs from an email survey in the sense that users are directed to a web page, rather than have the questions embedded in an email and is usually intended to study "large groups of online users" (Sheehan and Hoy 1999))

There were a few additional issues that needed to be taken into account. Online surveys have a low response rate, partly because they require a higher level of motivation. Questionnaires are easily ignored and respondents need to be online. They are also open to sabotage, in terms of some people completing the questionnaire more than once. (Bryman 2008 p653)

There are however, several advantages to using this method over others. In terms of appearance, there is a wider range of possibilities, which can enhance the user's experience. (Bryman 2008 p645) The questionnaire can be formatted in a way that makes it easier to use and understand. Online surveys tend to be returned more quickly than physical/postal surveys with fewer unanswered questions. There are also no constraints in terms of geographical coverage. Most importantly, the answers can be automatically programmed to download to a database, which eradicates the necessity for many hours' data collecting and

storing. This not only saves time but also eliminates the possibility of human error when processing the data. (Bryman 2008 p653) My questionnaire was created using the online software package Survey monkey. (www.surveymonkey.com. 2013)

After several pilot tests and question-checks, (these were conducted to test the validity and value of the questions as well as the adequacy of instructions) the link was distributed to the chosen demographic in the form of a Facebook wall post. Theoretically, this would be visible to any Facebook user who has 'liked' the official One Day Elliott page. I chose this method as it would give insight into how many people the message would reach and out of those, how many would be responsive.

This was the message sent out to encourage participants to take part in the survey. I decided to send it from the band rather than from me personally, in order to make it sound more official. The plea was offered in the form of a free track giveaway to act as an incentive for participation.

<div align="center">EXCLUSIVE TRACK OFFER</div>

Hey everyone, for the last couple of years our singer Paul has been working towards his PhD in music at Westminster University. He's currently conducting some primary research and could do with your help – by completing the attached survey you'd be contributing a great deal to his work and for that we'd all be exceedingly grateful. Please don't just ignore it, as his research will depend heavily on the feedback he receives from you and it should only take you a few minutes to fill it in. You just need to follow the link and answer a few questions.

The special bit is this – in return for your time, we will send you an exclusive, previously unreleased track to say thank you. This will not be available anywhere else.

Thank you so much for your help and for your continued support.

Devices and types of questions: For the full questionnaire see appendix B.

The research at this stage, was mainly quantitative, and was designed to collect and measure data with which I intended to cross reference the information collected in later stages of the primary research.

Quantitative as well as qualitative data was collected, for a number of reasons. Firstly, it allows the delineation of fine differences between the participants in terms of the questions they are being asked. Measurement allows not just a yes or no answer, but enables the detection of variants of degrees or levels.

Measurement allows consistency and provides a point from which such differences between the participants can be gauged, making it more possible to extract reliable and dependable results.

It also helps to provide a basis for 'more precise estimates of the degree of relationship between concepts' (Bryman 2008 p144), meaning that through correlation analysis the possible relationship between the answers given to different questions can be seen more clearly.

I opted to use multiple indicator measures such as Likert scales for some questions in order to assess the intensity of the opinion of the individual. Instead of asking a participant whether they agree or disagree or whether they do something or not, I gave them the opportunity to identify the extent to which they do so. Questions asked in this way help to eliminate or at least reduce the chance of incorrect classification that may occur with questions using just a single indicator. Multiple indicators also allow the opportunity for the participant to indicate an indifference or neutrality for the question, where a single question may force a participant to lean one way or the other.

A number of the opening questions were taken straight from the research conducted by Pierre Bourdieu and his team, and were intended to gather data and more personal details so as to develop an understanding of the participants' background. In places, the questions were updated, to allow for technological advances and social changes, and to be better suited to participants from the chosen demographic.

Some of the questions may not have provided obviously useful data in every single case, but to explore this area thoroughly, I think it was important to gather as much information as possible, to allow for any possibilities and to increase the likelihood for patterns and links to be found.

Gender has been a well-contested issue throughout many studies surrounding the sociology of music and the music industry in general, and I felt that knowing the gender of those partaking in the study might flag up any interesting taste differences between the male and female participants.

I wanted to see if there was a significant difference in the tastes of the participants based on their age and I was hoping that my research group would be spread fairly evenly across subjects who have grown up with the Internet and social media, and those for whom the Internet has signified a major shift.

The relationship status of the participant may have been able to shed light on particular musical influences. It is quite possible that a partner may have introduced the participant to musical artists or styles. Knowing whether or not the individual is single or currently involved would allow for an explanation along these lines. This was also an avenue down which I potentially intended to venture further during the observation and follow-up interview.

Many of the questions in this section were merely to gain as much background information about the individual as possible in order to make more educated explanations on the data collected, and the behaviours observed. Knowing the number and age of children will help gain an idea of the home life of the participant, and may provide suggestions to help understand the amount of time they spend online, how much money they can afford to spend on music, or how they might have discovered certain musical artists or genres. Again, this was with n intention to perhaps be explored further in the later stages of the study.

Similar to the previous question, knowing the number and ages of the individual's siblings may help provide a deeper knowledge of their background. It is also common for people's tastes to be influenced, whether it is positively or negatively by an older sibling, especially when it comes to music.

I intended that knowing about the type of accommodation in which the participant lives could provide information about their status and how successful/lucky they are. This is also why it could have been useful to gather data on where they live and where they may have lived in the past. Knowing with whom they share the accommodation could play a major role in their relationship with music.

Previous studies have suggested that there could be a link between being well educated and having a wider interest in types of culture. There are also traditional links between 'high culture' and social status. Information about the participant's educational qualifications and the schools or educational institutions they went to, may help give a better understanding on their social background.

It is feasible that the occupation of the participant may have an effect on how they consume music, and also could be a determining factor on how much time they spend online. It could have also given an indication as to how much income they have to spend on music.

The educational qualifications and occupation of the participant's parents, was to add to my understanding of their family background, but in the case of younger participants was to potentially provide vital information about their

household and the possible suggestions that come as a result which may include financial information, social status, etc. In Bourdieu's study, he asked a similar question, but requested information on the paternal grandfather rather than the mother. Since Bourdieu's research, due to steps towards gender equality, society has shifted significantly and the mother's role has, in many circumstances changed a great deal. Due to an increase in divorce and other changes in society, the number of single mothers has become more common, as has the scenario where the male member of the household is not necessarily the primary breadwinner.

Similarly, knowing the approximate average income of the respondent was intended to get an insight into how much they have to spend on leisure and media. It also suggests the status of the respondent.

As discussed earlier, our relationship with technology has been revolutionised in recent years and most people carry some kind of technological device with them at all times. Seeing as I wanted to assess people's relationship with music via social media, determining the participant's access to the Internet was of interest also to shed light on how much time an individual can physically spend online, as well as to provide interesting information on their status, regarding the amount of possessions they have. This is another question that I have adapted form Bourdieu's original survey. He asked questions about the types of furniture the participants had in their home and from where they were purchased. At the time of Bourdieu's research, this could well have been an important indicator of the status of an individual, but it has been suggested that in more recent times, people accessorise more with gadgets than they do with home furnishings (Jerpi 2012). I also think that these technological possessions will provide more relevant data, considering my specific area of study. Though it should be taken into account, that this adjustment does not necessarily provide the same information on status when regarding the *acquisition* of such objects as most technological devices have not been around long enough to be passed down from one generation to another in the way that furniture might be.

I wanted to find out the participants' hobbies and interests in the hope that it could provide vital information, both relevant and useful to my study. As well as finding out the individual's interests and how they spend their time, it could help to establish their particular relationship with music and musical activities, whether it be in attendance or on a participatory basis. The non-musical activities were listed to help assess, the amount of time they dedicate to music (time spent on other activities is time not musicking (Small 1998) and also to determine how other areas of their lives may be affected by social media, and how this may differ or coincide with the musical information collected. There

was also the potential for interesting links between particular activities that could have become apparent when the data was analysed.

In a similar way, assessing their opinion and relationships with films and their favourite genres could have provided some insights when compared with their musical tastes.

In Bourdieu's study, his questions regarding arts and entertainments are mainly set out almost as a test, asking *which of these composers have you heard of?* And *do you know who directed these movies?* In this respect, Bourdieu takes the standpoint that certain types of music or film, fit into the category of high or low culture, and your knowledge of such gains you capital in the according social class. My approach differed slightly from this in that I focussed less heavily on class structure, but still regarded the different genre of music or film the participant may enjoy, as an indicator of status and an intended exchange of cultural capital, how this compares to other aspects of their life and also how this relates to their relationship with social media.

The next questions shed light on how well travelled the respondent is, hopefully to provide insight when compared to broadness of taste, and with it, information about perceived social status.

As my research concentrates heavily on relationships with music and musical consumption through social media, it was clearly necessary to find out which social media sites the participants used. Firstly, the respondent was invited to indicate the frequency with which they log into social media networks. Next, I provided a list of the 15 most popular (according to LInkedin.com (2015), and wish to see with which of those the participants engage most frequently. The different sites have slightly different functions and this question allowed me to gather data to highlight what they like to do online and how often they engage with social media. (Again, an aspect of the research that had potential to be developed as part of the observation and interview.)

Assessing how they came to be linked to One Day Elliott could have provided further insight. The reasons for their relationship with the band may differ, and their tastes may differ accordingly, I wanted to see if this was reflected in the choices made and links identified in the task undertaken in the observational part of the primary research.

For the next question, I provided an extensive list of musical genres. This was mainly because the division of genres into subgenres and cultures has become increasingly specific over the years, to the point, that there would be little point just ticking a box labelled 'rock' or 'classical'. The bigger list allowed

the participant to be more specific and precise with genres they chose. I placed them in alphabetical order, so as not to give precedent to any particular genre. The question allowed the participant to tick as many genres as they wish so I could really assess how broad they believe their tastes may be. In the case that they like a genre that wasn't listed, there was an option for them to specify an 'other'. They were required to also highlight the 5 they listen to most regularly so I could see what they consider their main interests to be. I also asked them to put a cross next to any genres they particularly dislike, so I could see the difference between them not being aware of a genre, and actively not liking it. It is common for individuals to assert their identity, not just by aligning themselves with music they believe will earn them capital but also by distancing themselves from ones that, for the same reasons, may prevent them from doing so. I deliberately made the list as complete and extensive as possible, to allow for subgenres to be included and also to shed light on just how fragmented the musical groupings have become.

I wanted to find out the main ways in which the participants access their music, whether it is by purchasing the music physically, downloading it from the Internet (either legally or illegally) or streaming it using a site such as Spotify.

The format on which the participants listen to music was the focus of the next question, intended to give an insight into the circumstances of their musicking and to highlight the ways they are influenced in relation to their musical decisions.

With both of the last questions I asked them to specify the frequency of their actions (often, sometimes, rarely and never) rather than just ticking whether or not they do it, to give a better indication of which they do most regularly (otherwise they could have for example, ticked that they listen to vinyl records even if they've done this only once).

I was interested to find out the participant's thoughts on how they discover new music and how often they follow the advice of online recommenders. I set this question as a Likert scale so they could give themselves a numerical rating. I was keen to see how this self-evaluation compared to how they actually respond to recommenders. Again, with the intention to observe this further during the observational section of the study. I was hoping that this data, compared with their behaviour would help to shed light not only on how they respond to the recommenders, but also what they think of them and possibly their actual level of awareness of them. I also listed the top ranked streaming sites (with an option for 'other' and asked them to indicate the *best* and *worst* at recommending music.)

Collecting information on which music festivals the individual has attended would help assess the genre of music they're into and according to a recent article, could suggest some class distinctions. (Blocker, J 2014) Festivals have, over the last few years, been an increasingly important opportunity for individuals to assert their identity. Going to the right festival, for the right reasons is considered by many as a strong source of cultural capital (see the YouTube video Jimmy Kimmel Live, *Lie Witness News – Coechella* 2013).

8.6 Observation

The second part of the primary research took the form of an observational study. 25 participants, chosen from the same demographic, were each, observed using social media for a week. Once again, this section of research was heavily influenced by the work of Miller (2011) and in particular his research conducted for and described in his book *Tales from Facebook*. Originally, the plan was to sit with the participant or film them while they use social media, but it was important that the environment feel as natural as possible for them (at home/on their own computer/by themselves for example). I wanted to come up with a solution that would minimise the influence I would have over the candidate.

The solution came in the form of bespoke software, which lays the foundation for a significant aspect of my methodology and contribution to knowledge.

Using observational software, written especially for this thesis, in the form of a data - collecting extension that attaches to the Google Chrome browser, meant it could be developed to measure the appropriate data and allow the participant to act in a much more normalised environment. The decisions made regarding the specifics of the software and the aspects of behaviour I intended to observe, were heavily influenced by my findings from analysis of the answers given by the demographic in the surveys.

The observation software created by Firestarter Media, was specifically developed to overcome a number of existing issues in conducting this kind of study.

The functional criteria were decided upon and the software was written and developed by Firestarter Media after several conversations with myself laying out the exact specifications of what it was required to do.

By keeping a log of every single mouse click, (the page coordinates and exact time) the software effectively monitored much of the participant's online

activity. The coordinates of each click showed where on the page the participant clicked, and how far down a page they scrolled. The URLs of each page were also recorded so it was possible to see what they clicked on and where that click was situated on the page. This was particularly useful to assess whether or not the participant was engaging with an advert, or a recommended track or video, and if so, where in the list of recommended videos it appeared.

The software also recorded the searches the participants conducted by monitoring what was typed into a search engine, such as Google or the YouTube Search box. This made it possible to not only see what was searched for directly, but also, what was then engaged with as a result of the connected recommendations. By measuring the time between clicks, it was possible to get an idea of how long the participants watched a particular video for, before moving on to something else.

The combination of data recorded allowed for a picture of the participants' online activity to be created. Seeing what was searched for, what was then engaged with, where it was on the page and for how long, enabled a valuable level of insight into the participants' behaviour, either not previously possible with other forms of observation, or not realistically achievable without marginalised results (see page 13.)

In terms of information on music recommendations, this software made it possible to see (by means of the participants' engagement) a selection of videos or music that was recommended to the participant as a result of the searches that were made. Of course, there are plenty of things that can still not be seen, (the recommended videos that are not engaged with by the participant at all, for example), but by following the trail of the search, the clicks of the mouse and the URLs of the pages of recommendations that they do engage with, allow us an insight into not only what is recommended, but what is chosen from that list. The distance scrolled and the time elapsed between clicks enable us to speculate on the satisfaction with the recommendation.

This particular method, and specifically the use of this original software, is more in keeping with the functionality of the algorithmic online recommenders. Big data, as discussed in previous chapters, is extremely valuable to developers, marketing companies and business for the insight that it reveals into the behaviours and preferences of online users. Due to its value, access to such data is heavily restricted. This method allows the current research to collect its own 'big data' (albeit for just seven days) on which to assess the behaviours of the sample demographic.

url	count(url)
https://www.facebook.com/	18
https://www.facebook.com/#	1
https://www.facebook.com/?sk=h_chr	9
https://www.facebook.com/ahmednuaman/posts/5415282...	1
https://www.facebook.com/beth.a.james.5?pnref=lhc	4
https://www.facebook.com/boredbrand	1
https://www.facebook.com/boredbrand/photos	2
https://www.facebook.com/engineerrecords	4
https://www.facebook.com/OneDayElliott	14
https://www.facebook.com/OneDayElliott/notificatio...	5
https://www.facebook.com/photo.php?fbid=1015316855...	2
https://www.facebook.com/photo.php?fbid=1015517558...	1
https://www.facebook.com/profile.php?id=812140499	22
https://www.facebook.com/profile.php?id=812140499&...	1
https://www.google.co.uk/#q=one+day+elliott	1
https://www.youtube.com/results?search_query=illeg...	2
https://www.youtube.com/results?search_query=one+d...	2
https://www.youtube.com/watch?v=aEG6p1sX6Qg	2
https://www.youtube.com/watch?v=AioBjPCMC-k	1
https://www.youtube.com/watch?v=m6iX5rUtqOY	1
https://www.youtube.com/watch?v=OWjydL9olik	1
https://www.youtube.com/watch?v=W6ZJChlo8T0	1
https://www.youtube.com/watch?v=ZQJj0JeqZiQ	1
https://www.youtube.com/watch?v=_AfZcFXeHDk	1

Fig. XXXVI – Example of tracking database

Each participant was required to download and install the extension and allow it to record his or her online behaviour for a week. In addition to this, to keep the focus on musical behaviour, (even though participants from this demographic may be more likely to *musick* (Small 1998) it would be easy for a distraction such as a game, conversation or important email to draw their attention,) the participants were given a simple task to complete at some point throughout the week, which involved making a playlist of songs for an unknown third party, about whom, the only knowledge they have is that they are also a fan of One Day Elliott.

This activity was devised to engage the participants with searching for, and recommending music and allowed me to see how their response to various advertisements and algorithms, and how they would make assumptions about the intended recipient of their constructed playlist. Also, as each candidate had to complete the same task it was an opportunity to see how customised searches, moderated news feeds and personalised advertisements alter the results.

These were the instructions for the task:

You must make a playlist for an unknown third party. The playlist can be as long as you like but must contain a minimum of 10 songs. At least 5 songs have to be new to you (not songs you have heard previously.) You may only include 2 songs by any one artist or band. The only information you have on the third party is that their favourite band is One Day Elliott. Once you have decided on the playlist, please email the names of the songs chosen to the following address (email here)

This method of observation allowed data to be collected in a similar way to the algorithms that I intended to observe. The task set for the participants, also allows for particular insight, positioning them both as potential receivers of recommenders as they search online for music and engage with social media, and also as recommenders themselves as they create a playlist.

8.7 Maintaining a more natural environment

For observations to have value, it is essential that care be taken to ensure that the environment in which the participants are observed be as natural or regular as possible. This is so that the behaviour observed is natural and not affected by outside variables that could reduce the validity of the results.

By using the software extension, the level of physical, human intrusion is kept to a minimum and the observation can be carried out from the comfort of the participant's own home (or wherever they normally use their lap top.) Aside from spying on the individuals in secret, which would be incredibly difficult to do, and would also conflict with many ethical regulations, there is no way to gather accurate data more closely and without interference.

The extension also significantly reduces human error. Observing individuals physically may result in missing data or inaccurate measurements. The use of software ensured that every click and visited URL was timed and recorded. It was also stored in a database, which was proved to be of assistance in more efficient analyses in the following stages.

The participants were also allowed to begin the observation at a time of their choosing; the data starting to record when the extension was enabled and finishing at the same time the following week. This way the participant was more likely to use their laptop as they would do normally, at the time they usually would do and helped avoid wasted data. (In the circumstance a participant knows they will be away for a few days and won't have access to the Internet for example.) This had the potential to open doors to the possibility of outside variables having an effect, such as significant occurrences in the news, or

particular musical releases etc., but all the interactions were timed and such an occurrence would make for interesting data.

8.8 Interviews

Combining interviews with observational research allows the researcher to examine the correlation between what people do, and what they say they do. "The meanings people give to their actions and the world around them form an essential component of understanding." (Boellstorff 2012 p92). Interviews can also help to uncover aspects of culture from the perspective of those inside it. "Informants can sometimes be eloquent commentators about their cultures" (Boellstorff 2012 p93). This has long been recognised by ethnographers such as Mead (1928) and Tsing (1993) Interviews also "provide an opportunity for truly private discussions that can reveal beliefs and opinions difficult to access otherwise" (Boellstorff 2012 p93)

The third part of the research consisted of follow up qualitative interviews with the candidates who took part in the observational study. Influenced by studies conducted by the likes of DeNora (2000) and Crafts and Cavicchi (1993), this was to obtain more qualitative data and to examine their own opinions and explanations for their online musical behaviour. The interviews were conducted after an initial analysis of the data collected in the observation.

The interviews were categorised somewhere between a semi-structured and a focussed interview. (A focussed interview is a term devised by Merton et al (1956) to refer to an interview using predominantly open questions to ask interviewees questions about a specific situation or event that is relevant to them and of interest to the researcher. This method of interviewing allows flexibility, and ideally the opportunity to gain further insight into what the interviewee believes to be relevant and important. I intended these interviews to be open ended in nature, based loosely on a pre-determined inventory of issues but with the freedom to move in possible directions that may be guided by the interviewee, or issues raised from discussions with them.

"In contrast (to the observations) the semi-formal interviews separately conducted with informants provide data about issues that informants do not routinely talk about in everyday activity, some contextual information about, for example, their lives outside school and 'accounts of a reflexive nature (involving) normative expectations, moral judgements and self-and other- ascriptions" (Dover 2007 p14)

There may well be significant differences in how the participants understand themselves and a mixed methods research allows me to spot any conflicting information.

'This disjuncture between how people understand or represent themselves (for example during interview) as against how their practices appear to the outside analyst, is arguably the *raison d'etre* of anthropology" (Hobart 2010 p67) found in social use of media

Once again, because the participants, within the set boundaries were invited to partake at random, several of the participants or respondents had, (or believed themselves to have had) a particular relationship with me, and it was important to be mindful, firstly to be aware of how any outcomes may have been effected but also to ensure my interaction with the candidates was appropriately minimal and consistent. My role, according to Gold's (1958) classification of participant observer roles (an older method of classification, but still widely acknowledged), would be classified as '*observer-as-participant;*' overtly recognised as an interviewer, with minimal, if any participation.

Chapter 9 - Results – The Survey

The initial stage of my primary research consisted of an in-depth self-completion questionnaire in the form of a web-survey. The intention here was to collect a significant amount of data to get an insight into the musical habits and relationships of my chosen demographic in the hope to develop a deeper understanding or spot possible trends or patterns that may exist. My inspiration for this part of the research was drawn from the methods used by Bourdieu (1984) during his famous fieldwork in the 1960s.

For a full list of the survey questions see (Appendix B)

Of the 342 people reached by the survey I had a response from 87 individuals, working out at just over 25%, which is a little above the average expected response rate for an online survey. (Fluidserveys.com 2014) This is about 5% of the possible total members of this page.
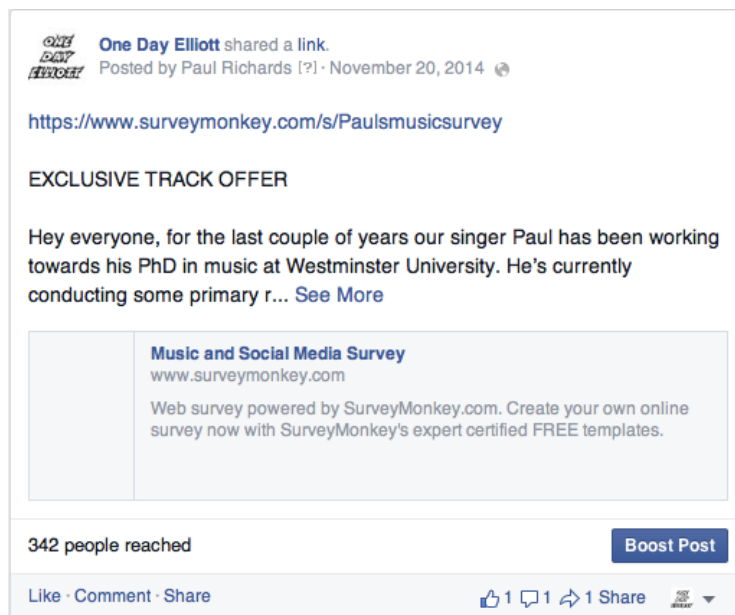
Fig. XXXVII - Screen shot to show survey reach

The statistics on the Facebook page show that 49% of One Day Elliott's followers are based in Kent, which is where One Day Elliott are based. The fact that 60 of the 87 (69%) participants indicated that they live in Kent, suggests that a heightened locality or familiarity with the band was a significant factor in completing the survey. This is supported by the response to question 26, which indicates that 51.7% of the participants say that they know one or more of the band members. (See section 8.3 for more on the relationship between researcher and participant)
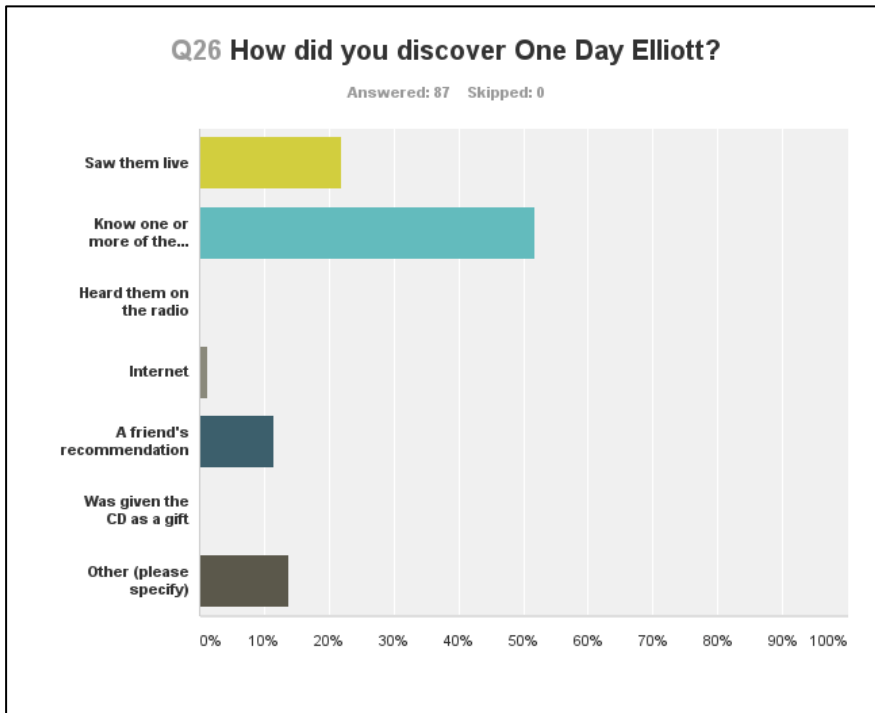
Fig. XXXVIII – Bar Chart to show results from question. 26

9.1 More about the participants:

Of the 87 participants who completed the survey, 49 (56.3%) were male and 38 (43.7%) were female.
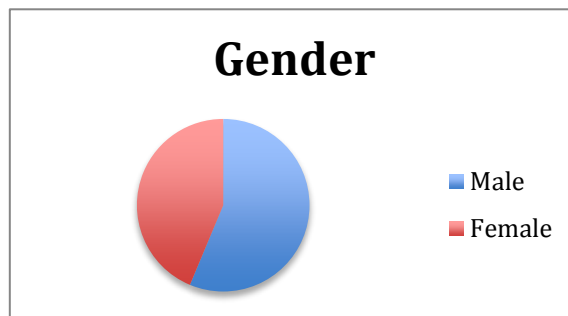
Fig. XXXIX – Pie Chart to show gender split of participants

The survey showed that the age distribution of the participants was as follows:

Born in 1950s – 5 (5.8% - 3 female/2 male)
Born in 1960s – 9 (10.3% - 2 female/7 male)
Born in 1970s – 13 (14.9% - 5 female/8 male)
Born in 1980s – 45 (51.8% - 18 female/27 male)
Born in 1990s – 14 (16.1% - 9 female/5 male)
Didn't specify – 1 (1.1% - 1 female/0 male)

Decade of Birth

- 50s
- 60s
- 70s
- 80s
- 90s
- Unknown
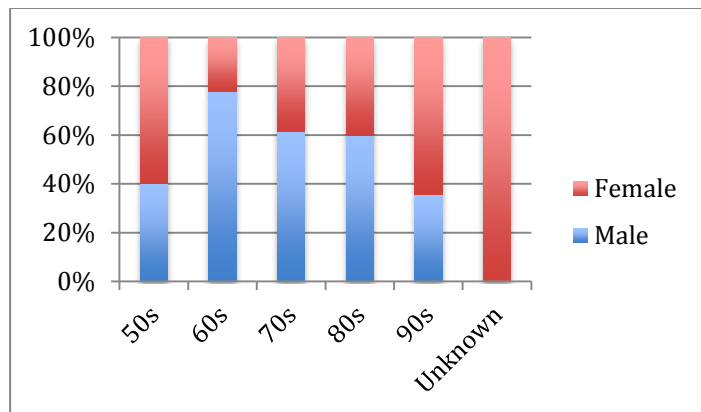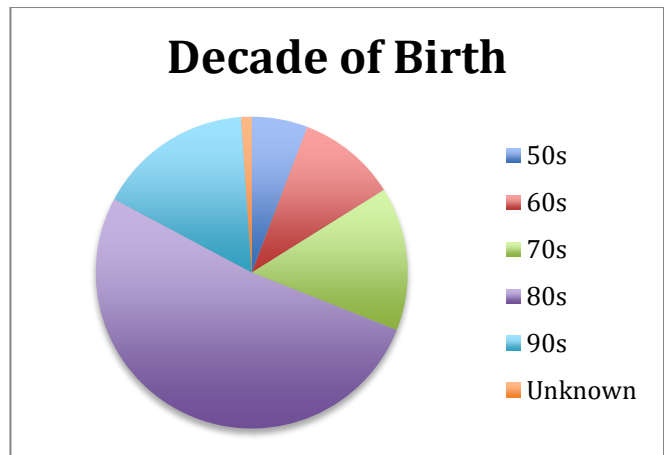
Fig. XL - Charts to show age distribution of participants

This is fairly in-keeping with the gender and age ratios of the demographic according to the Facebook statistics, which state that 58% of the band's followers on Facebook are male and 41% are female, and that around half are aged between 25 and 34.

The people who like your Page

Women
41%
Your Fans

Men
58%
Your Fans

	13-17	18-24	25-34	35-44	45-54	55-64	65+
Women	0.108%	13%	19%	6%	2%	0.754%	0.269%
Men	0.108%	13%	29%	9%	4%	1%	1%
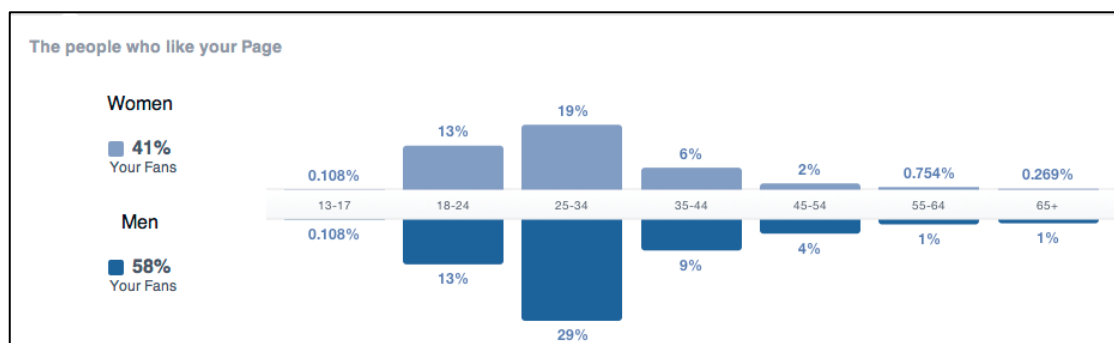
Fig. XLI - Age and gender ratios of One Day Elliott's followers according to Facebook (2016)

Despite the overall wide age range of the participants, the concentration of individuals whose dates of birth fall between the late 1970s and early 1990s is significant. For these 'digital immigrants', it is likely that new technologies and social media have been particularly transformative, in that they will have been born, and known life before the advent of web 2.0 and will have seen the Internet

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infiltrate, and become part of everyday life. Those younger than this will have probably grown up with the new technologies and are often referred to as Digital Natives. (Prensky 2001)

9.2 Taste and Omnivorousness

The participants were split fairly evenly when looking at the categorisation of their marital status: 31% were single, 34.5% were in a relationship and 33.3% were married. (1 was divorced and 3 opted out of this question.) This could have an impact on the engagement with, and time spent on social media. It has been suggested that single people spend more time online (DePaulo 2014) and also that there are some people who are married or are in long term relationships that are likely to share a computer, email account or use a joint social networking profile (Lenhart and Duggan 2014). The same is true for households where computers or other devices might be shared. The responses to question 8 indicate that only 9.3% of the participants live by themselves.

With how many people do you share accomodation?		
Answer Options	Response Percent	Response Count
I live alone	9.3%	8
1	34.9%	30
2	23.3%	20
3	20.9%	18
4	8.1%	7
5	2.3%	2
6+	1.2%	1
	answered question	86
	skipped question	1

Fig XLII – Table to show responses to question 8

In such instances, the recommendations and filtering would undoubtedly be affected, due to the data being collected about more than one person; exemplified here by Netflix user Josh Whittington, in a comment left on a Netflix discussion page.

"My last roommate enjoyed watching Grammy award winners, Japanese martial arts films, Bollywood, Troma and B-Level horror films. My sister watches Laguna Beach, Hoarders, Gossip Girl and all the trash TV series. Her boyfriend watches sports documentaries. My recommended lists reflect none of my interests, and all of theirs." (Quora.com 2013)

Only a third of the participants indicated that they had any children. Although this could suggest that the 66.7% of those participants without

children would have more time to engage with social media, there are also many variables that could prevent this from being the case. Also, there are studies that suggest that there are families who engage together with digital media, particularly music, television and film. (Coyne et al 2014) As with the notion above, joint consumption of, and engagement with media, could well affect the data that is collected and the filtering or recommendations made as a result.

Number of Children		
Answer Options	Response Percent	Response Count
0	66.7%	58
1	12.6%	11
2	13.8%	12
3	6.9%	6
4	0.0%	0
5	0.0%	0
6+	0.0%	0
answered question		87
skipped question		0
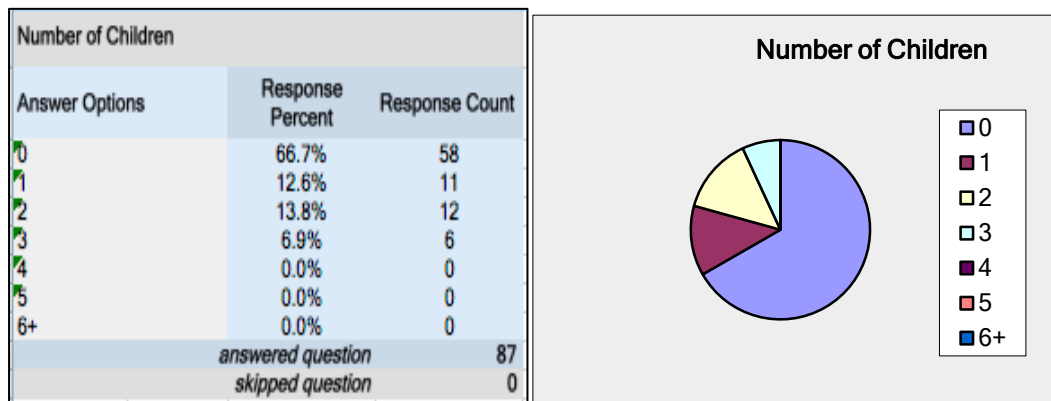
Fig. XLIII – Charts to show participants' children

The people that surround us can have a direct influence on our musical taste. Parents, siblings and peers can all potentially steer us towards or away from certain genres or styles. (Michelson 2013) Of the 87 participants, only 3 had no siblings.

Number of siblings (brothers or sisters) (Include half or step brothers or sisters.)		
Answer Options	Response Percent	Response Count
0	3.5%	3
1	40.7%	35
2	30.2%	26
3	12.8%	11
4	8.1%	7
5	1.2%	1
6+	3.5%	3
answered question		86
skipped question		1

Fig. XLIV – Table to show number of participants' siblings

Remembering Bourdieu's theories, strong connections are made between Habitus and social class. It is also suggested that cultural omnivorousness is often linked with the upper or middle classes, the highly educated and those open to cultural diversity (Bryson 1996), (van Eijick 2001), (Ollivier 2008), (Marsh 2012). Considering these factors, data was collected on the type of accommodation lived in by the participants (type of house and number of bedrooms), their highest educational qualification, their occupation and their average annual income, as well the occupation and highest qualification of both

their mother and father. Suggestions too, have been made linking cultural omnivorousness and the engagement with activities such as home improvement, exercise and travel. (Chan 2010) They were also asked therefore, to indicate how well travelled they were, by listing the different countries they had visited, both for pleasure and for business.

Financial status, which has also been linked with omnivorousness (Sullivan and Katz-Gerro 2007) and so the participants were also questioned about their annual income. The majority of the participants (82.5%) indicated that they earned less than £40,000 annually, with 46.5% earning in the lowest bracket (less than £20,000). Of all the surveys completed, only 3 individuals stated that they earned upwards of £60,000 a year.

Influenced by Bourdieu's theoretical model, the participants were also asked to indicate the frequency of which they engage with particular activities or attend certain events. For Bourdieu, Structural Homology and the channelling of taste through position within a class structure or hierarchy was of particular interest and an examination of activities or pastimes can be a means by which to assess the level of culture accessed by the contributing demographic.

For each of the following activities, please indicate which you do often, which you do sometimes, which you do rarely and which you never do.					
Answer Options	Often	Sometimes	Rarely	Never	Response Count
Painting or sculpture	2	11	23	50	86
Eating out	29	43	14	0	86
D.I.Y	10	37	27	13	87
Sport	20	26	23	18	87
Playing a musical instrument	34	8	18	27	87
Camping	5	21	36	25	87
Watching TV	53	23	8	3	87
Outdoor Pursuits	12	46	26	3	87
Gardening	7	24	28	28	87
Walking	49	27	11	0	87
Reading	57	20	6	4	87
				answered question	87
				skipped question	0

How often do you attend each of the following?					
Answer Options	Often	Sometimes	Rarely	Never	Response Count
Museums	16	32	36	3	87
Music Festivals	17	36	28	6	87
Opera	1	8	15	63	87
Musicals	3	25	42	16	86
Theatre	6	35	37	8	86
Cinema	19	49	16	2	86
Galleries	11	24	38	14	87
Ballet	0	7	21	59	87
Sports Events	13	18	32	24	87
Live Gigs (in venues)	40	35	10	2	87
Classical Concerts	1	19	23	43	86
				answered question	87
				skipped question	0

Fig. XLV – Charts to show participation in cultural activities/pastimes

We can see here that aspects traditionally considered as 'high' culture such as partaking in painting or sculpture and attending the opera, ballet or classical concerts are engaged with the least. In some respects, this would fit in with Bourdieu's theories, considering that the majority of the sample was in the

lowest income bracket. If nothing else, the results here do indicate that, in general, individuals who like One Day Elliott, are not individuals who frequent the opera or the ballet.

Activities such as watching television, attending live gigs, eating out and reading, all featured high on the list.

Questions 36 and 37 focussed on the participants' attendance of music festivals. Although the overall attendance of festivals was low, the responses did flag up some particular insights (See Fig. XLVI). The majority of responses indicated that the primary reasons for attending a music festival were the particular bands on the bill, and of the festivals listed, Download and Reading/Leeds Festivals (which are predominantly rock-based festivals) are signified as the most frequently attended, each with several participants attending multiple times. Glastonbury was also popular. Creamfields and Global Gathering, which are dance music based festivals, and also Bestival were indicated as being amongst the least well attended by the participants, and none of the respondents indicated that they attended any of these on more than one occasion.
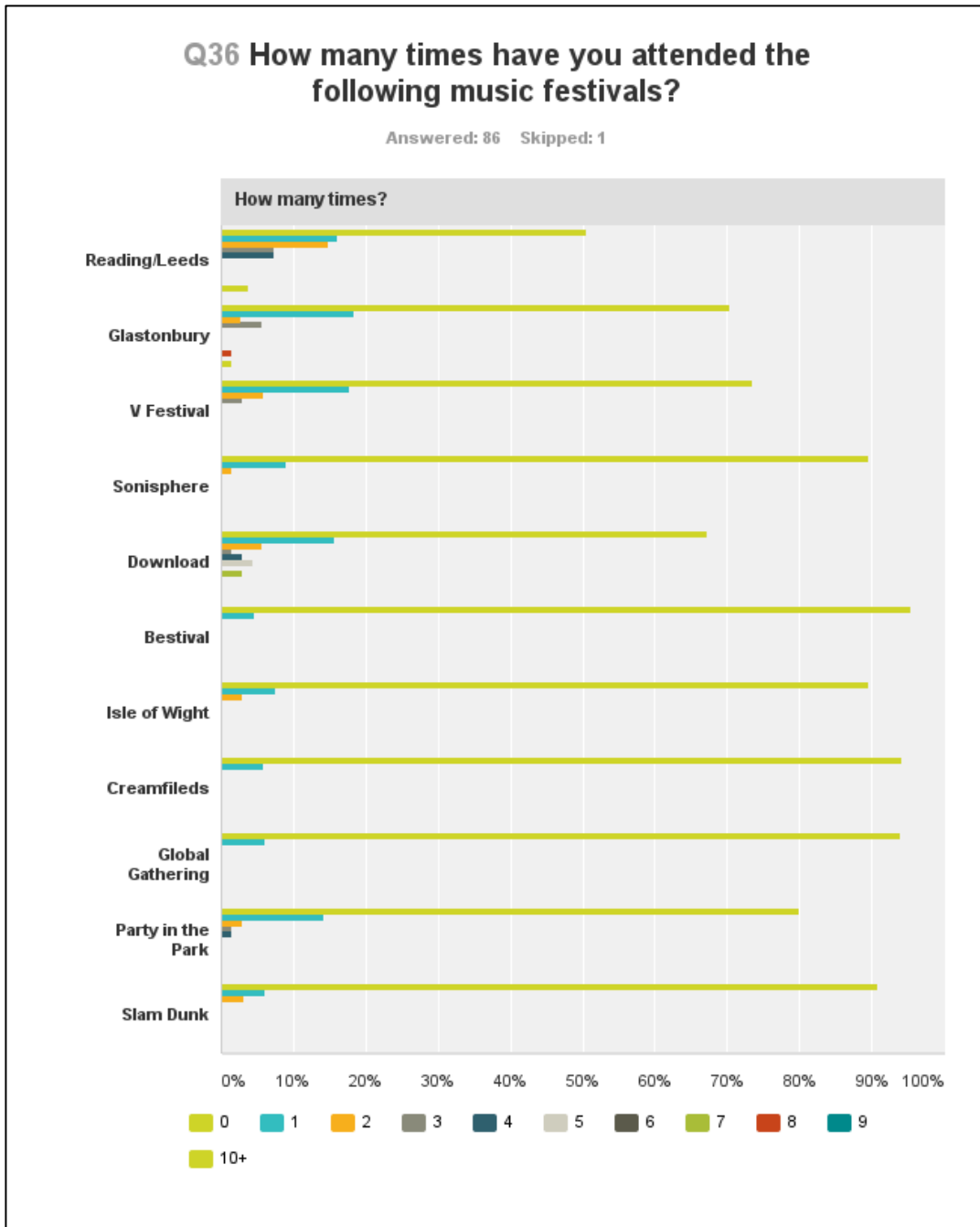
Fig. XLVI – Graph to show participants' music festival attendance.

It needs to be acknowledged here that the focus is on what the participants *do* and not what they would do if they were free from obstacles or constraints (Coulangeon and Lemel 2009). Not attending something does not necessarily mean that it is something that you do not like. As suggested earlier, true assessment of taste needs to acknowledge the severe complexities involved and is difficult to obtain through the means of a closed question survey. (Holt 1997)

The participants were asked to indicate the musical genres they enjoyed from an extensive list of 171 different styles and subgenres. On average, the participants indicated that they liked 36.2 different genres.

Genre diversity doesn't necessarily need to relate to the number of genres liked. A participant could like a handful of genres that significantly differ in style whilst others could enjoy a large number of genres that are more closely related.

Although a huge spread of genres was liked overall, the top results were all guitar/rock-based genres. These were the top 15 results:

Genre	Percentage	Responses
Rock	75%	65
Acoustic Rock	74%	64
Classic Rock	71%	62
Alternative	66%	57
Indie	62%	54
Blues	58%	50
Guitar Rock	58%	50
Rock n Roll	55%	48
Acoustic Folk	53%	46
Blues Rock	50%	44
Brit Pop	49%	43
Folk Rock	49%	43
Hard Rock	49%	43
Pop Rock	49%	43
Film Music	48%	42

Fig. XLVII – Table to show top 15 Genres liked by the participants

Of the 171 genres, there were only 4 (Hyphy, Positive Vibes, Techno Hardcore and Trap) that were not liked by any of the participants. (For a full list see appendix C.1)

When asked to indicate their 5 favourite genres, the results were as follows. Again, there is a heavy presence of guitar or rock based genres, but we can see that Pop, Hip-hop and Folk all feature too. Heavy Metal also features highly here. This would indicate that although fewer people overall may like these genres amongst the demographic, those that do, enjoy them enthusiastically.

Genre	Responses
Rock	23
Classic Rock	19
Indie	19

Pop	18
Acoustic Rock	17
Alternative	15
Heavy Metal	12
Acoustic Folk	11
Hip Hop	11
Pop Rock	11
Folk	10
Folk Rock	10
Progressive Rock	10
Pop General	9
Pop Punk	9

Fig. XLVIII – Table to show participants' favourite genres

When asked to list the 5 genres they actively disliked, we can see that acid jazz was the most disliked genre. In general, it was indicated that dance genres, including Dubstep and Drum and Bass were also disliked by several members of the demographic. I felt that it was important to include this question to get an insight into genres that the participants may wish to distance themselves from and because there is a difference between never listening to a style of music because you are not into it, and actively disliking it.

| Genre	Responses
Acid Jazz	17
Christian Country	13
Christian Rap	12
Drum n Bass	12
Dubstep	12
Gangsta	12
Death/Black Metal	11
Country and Western	10
Euro Pop	10
Techno	10
Christian Rock	9
Happy Hardcore	9
Techno Hardcore	7
Thrash Metal	7
Trance	7

Fig. XLIX – Table to show 15 most disliked genres by the participants

Overall, the trend suggested that guitar-based genres were preferred over more electronic, dance and club orientated music. In the favourites list, 24 of the top 30 genres were guitar based, and more people listed Jazz, Emo and

Death/Black Metal as a favourite genre than any electronic styles. Genres that could be considered to be more extreme, or less mainstream such as Heavy Metal or Thrash, tended to evoke more acute reactions appearing either as favourites, or as genres that were disliked.

When comparing this to other aspects of the survey, the results were as follows:

The average number of genres for male participants was 39.5 compared to 28.4 for the female participants. This would suggest that, amongst the target demographic, males show a higher tendency to be more musically omnivorous than females.

Fig. L - Correlation between average number of genres liked and gender
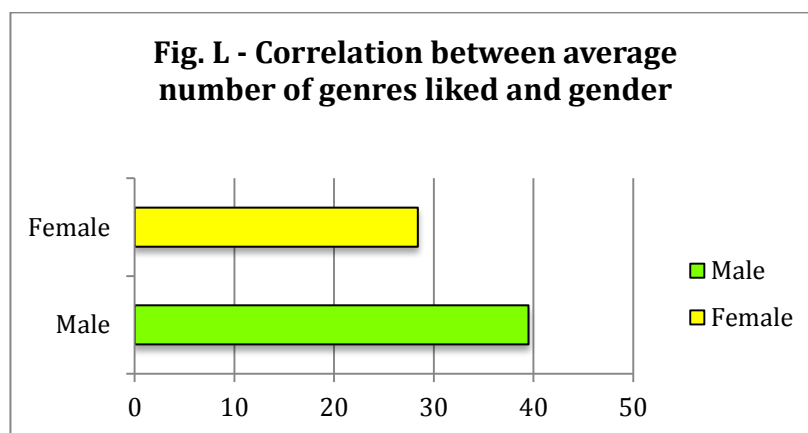
When the ages of the participants were taken into account, we can see that there is no strong correlation. It should be noted though, that the participants who indicated that they enjoyed the most genres were all male, and they were all around 35 years of age.

Fig. LI - Correlation between age and number of genres liked.
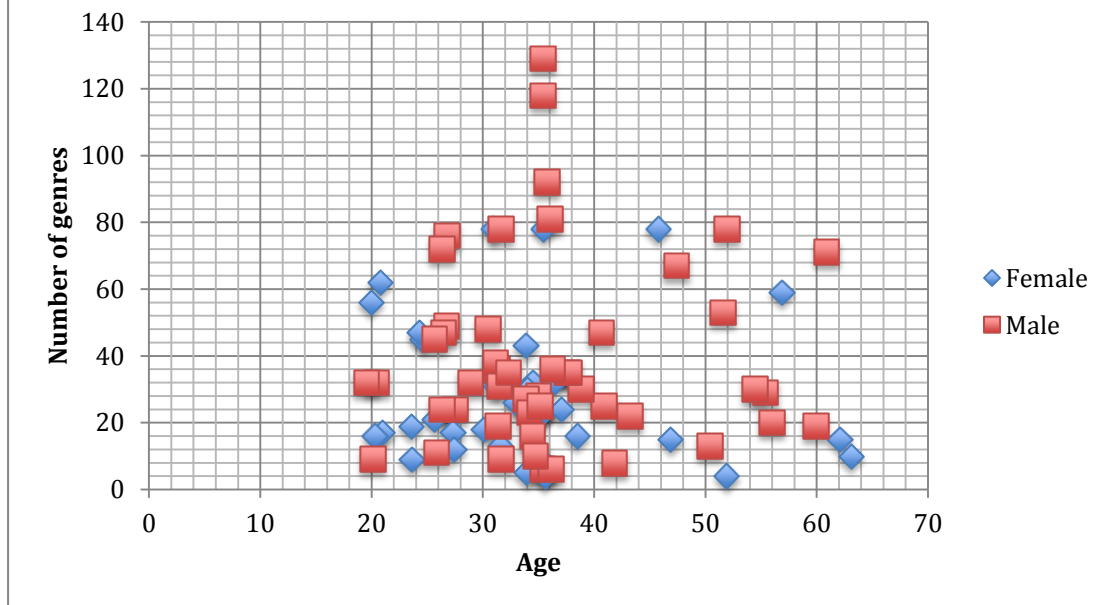
Cross referencing the number of genres liked with the marital status of the participants showed that, on average, those who are in a relationship liked the most number of genres, with males in a relationship liking the most. This is particularly interesting when acknowledging the difference between those participants who would categorize themselves as 'in a relationship' and those who are married.

This could suggest a positioning of taste or music distinction as a courting display, perhaps in a particular branch of cultural capital that involves romantic interactions. *Erotic capital* is described as Catherine Hakim (2010) as being multifaceted and both socially and economically important in all areas of social activity.

Correlation between relationship status and average number of genres liked
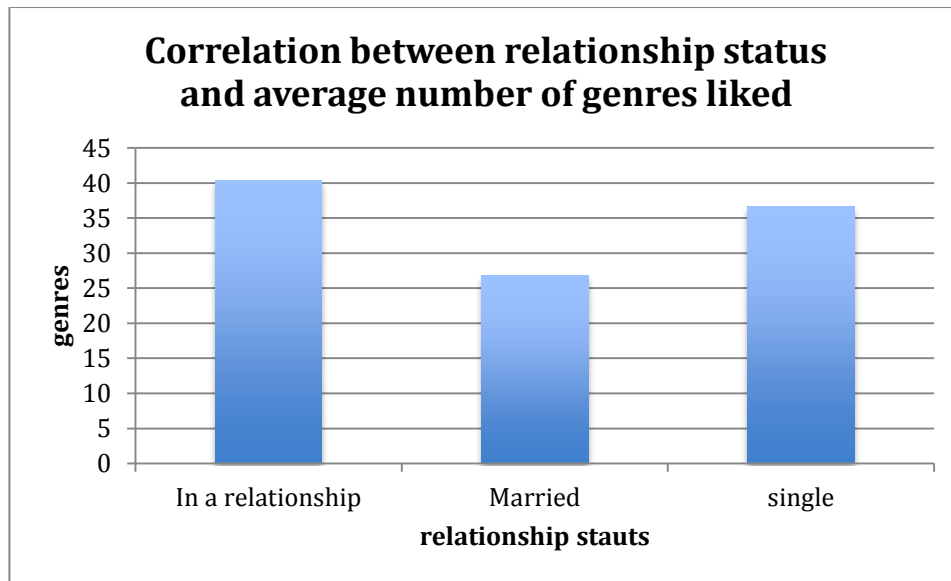
Relationship Status	Average number of genres liked
In a Relationship	40.41
Married	26.8
Single	36.61
Didn't say	38.3
Divorced	25
Combined Married or in a relationship	33.73

Fig LII – Chart and Table to show correlation between relationship status and number of genres liked

When separating these results, and comparing the difference between male and female participants, we can see that, on average, the males in a relationship liked a significantly larger number of genres, than any other group. In contrast the single females liked, on average more genres than the females in a relationship.

Fig. LIII - Correlation bewteen relationship status and average number of genres liked (camparing male and female paprticipants)
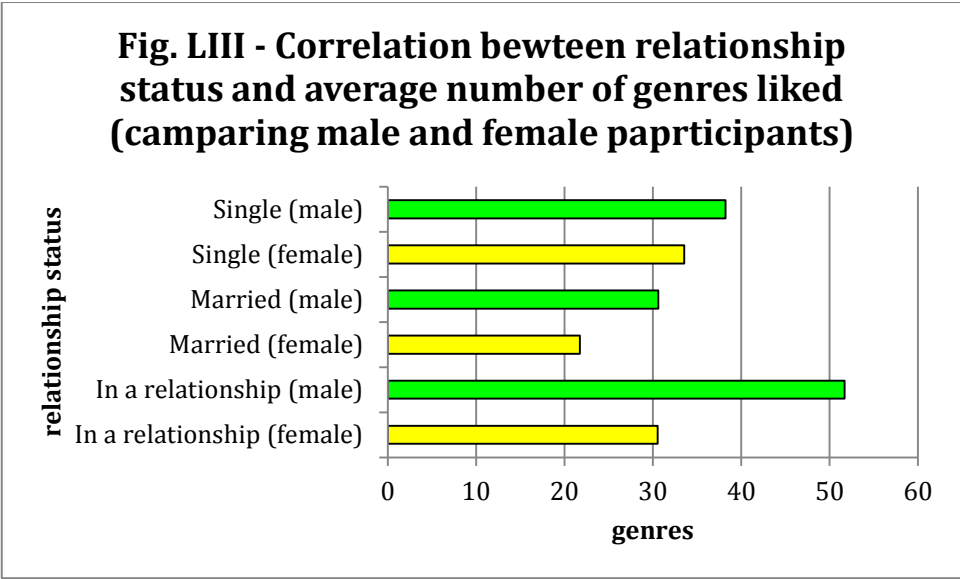
A comparison of the number of genres liked with the annual income of the participants showed that a larger number of musical genres were liked by the participants earning less than £40,000 than those earning more, though, the participants earning between £20,000 and £39,000 like more than those earning less than £20,000. I have grouped together the participants earning over £60,000 in Fig. LIV, due to there only being one participant in each of the groups that earned above this amount.

Fig. LIV - Correlation between annual income and average number of genres liked
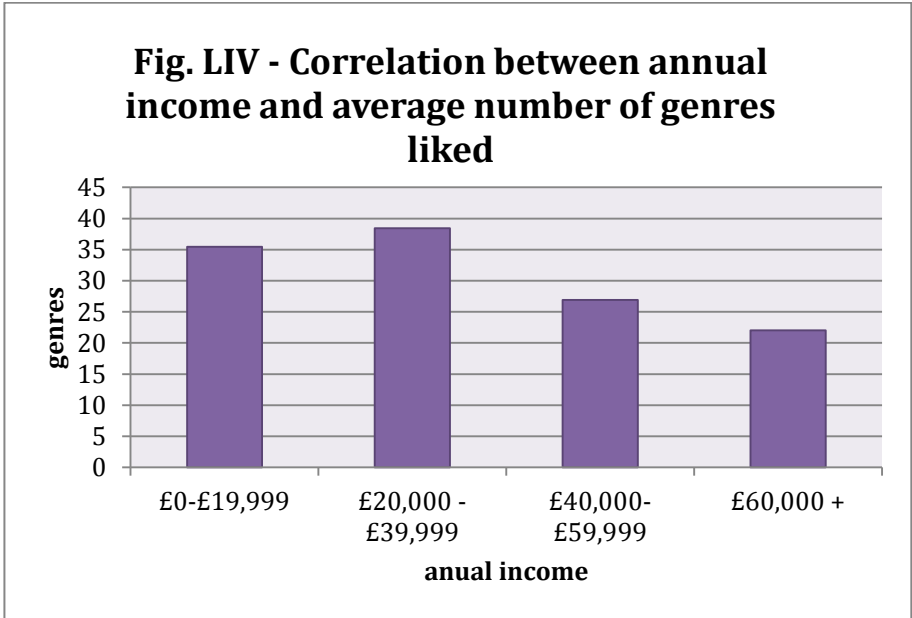
Annual Income	Average number of genres liked
£0 - £19,000	35.45
£20,000 - £39,000	38.45
£40,000 - £59,000	26.92
£60,000 - £79,000	19

| £80,000 - £99,000 | 20 |
| £100,000 + | 27 |

Correlation between annual income and average number of genres liked (comparing male and female participants)
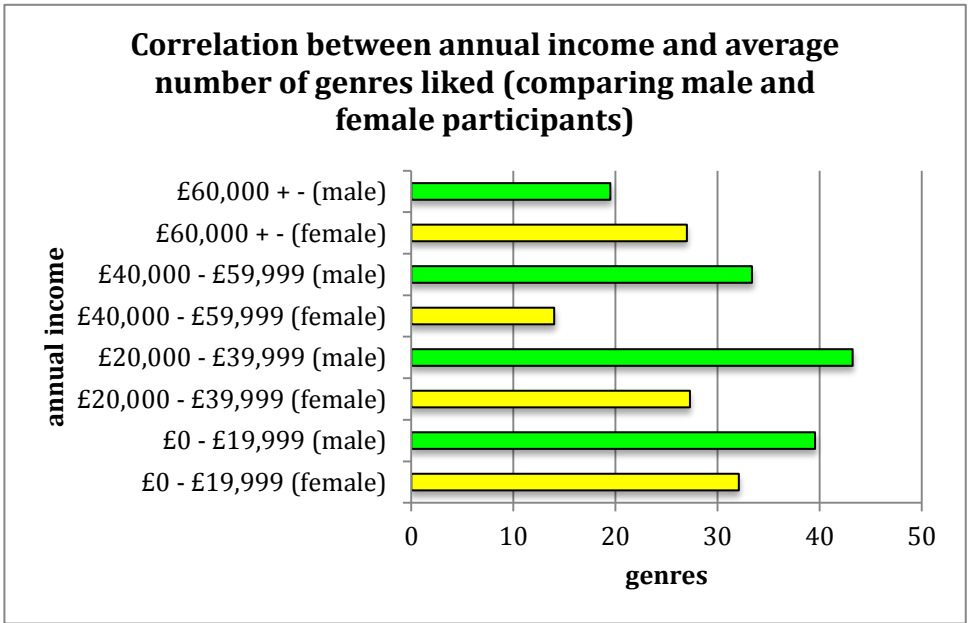
When comparing the number of genres liked and the preferred methods of discovering new music, the data indicates that, on average, those who use online recommenders like a larger number of musical genres than any other method. Interestingly, the methods of discovery that were indicated to be the most popular ('suggested by a friend' and 'radio') are linked with liking the least number of musical genres.

Fig. LV - Correlation between average number of genres liked and how individuals discover new music.
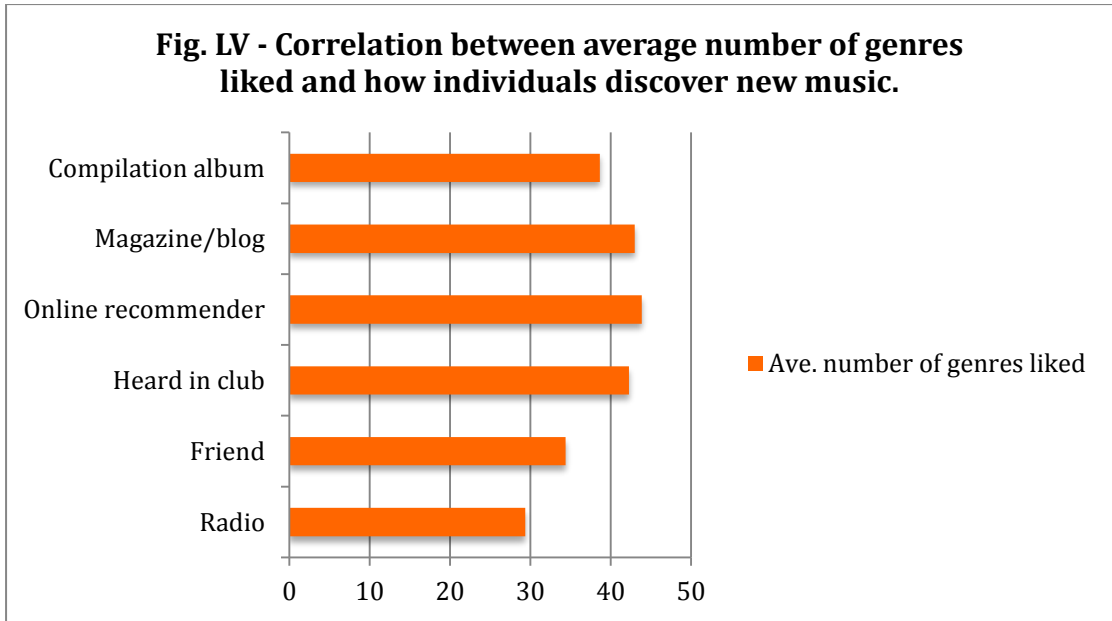
| Method of Discovering Music | Average Number of Genres Liked |

Compilation Album	38.63
Magazine/Blog	42.97
Online Recommender	43.86
Heard in a Club	42.29
Friend	34.4
Radio	29.35

When comparing the number of countries visited by the participants with the number of liked musical genres, there was little connection. With the exception of a slight positive correlation suggesting that females that have travelled to more places are likely to enjoy a larger number of musical genres, there were no significant connections to link the two.

Fig. LVI - Correlation between countires visited and number of genres liked
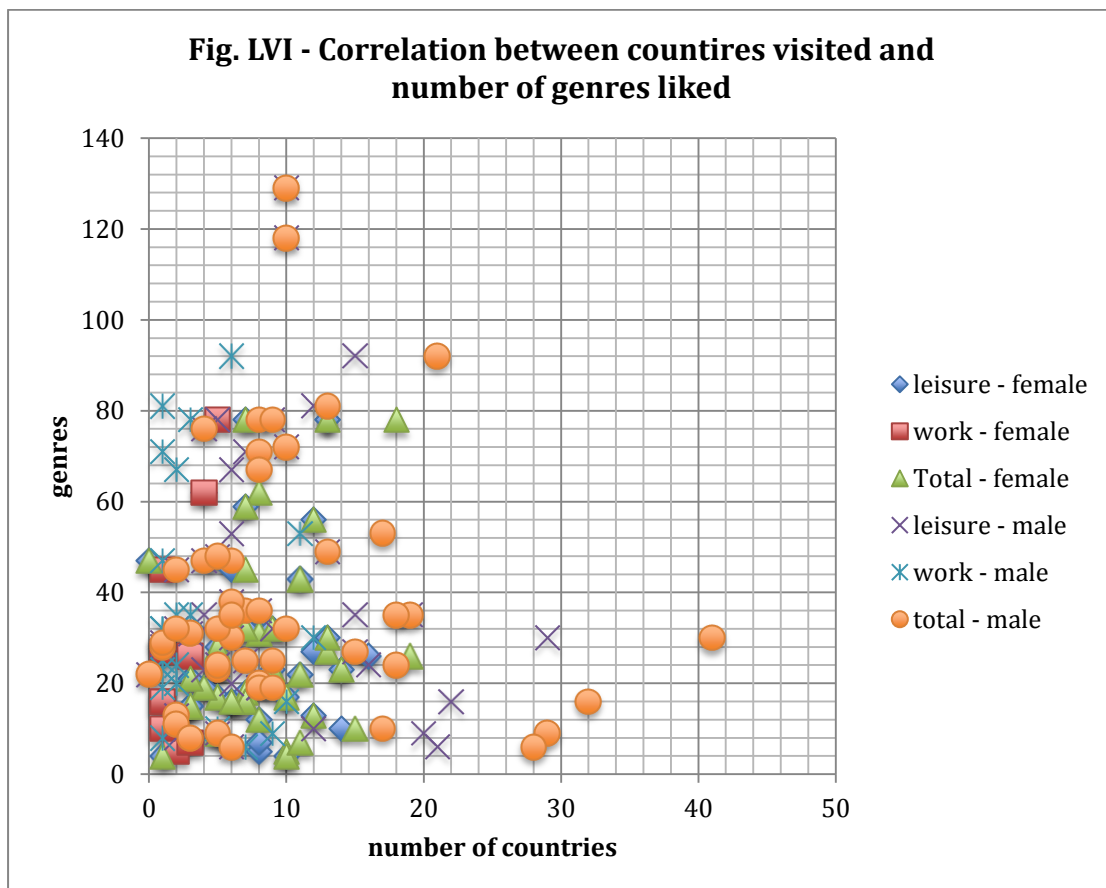
There was no real difference between males and females regarding their involvement with various other aspects of culture. To measure this, points were allocated for the level of involvement with each aspect of culture (3 points for often, 2 points for sometimes, 1 point for rarely and 0 points for never) and added up to give a 'cultural engagement score.' On average, males scored 16.49 and females scored very slightly higher with16.65.

Fig. LVII - Chart to show average cultural score
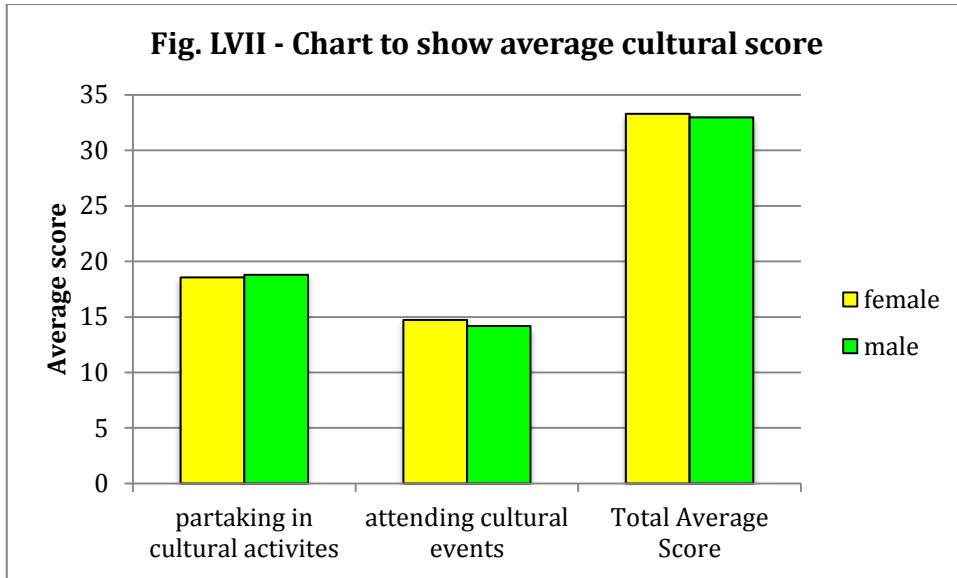
Allocating each participant a cultural score, calculated on the amount of cultural activities with which engage, allowed for comparisons to be made with other aspects of the data.

When comparing the correlation between cultural score and the number of musical genres liked by the participants, it can be seen that, amongst the demographic, there is no real correlation, suggesting that the number of activities or events with which the participants engage, has very little impact on how many different musical genres they might enjoy.

Fig. LVIII - Correlation between cultural score and number of genres liked
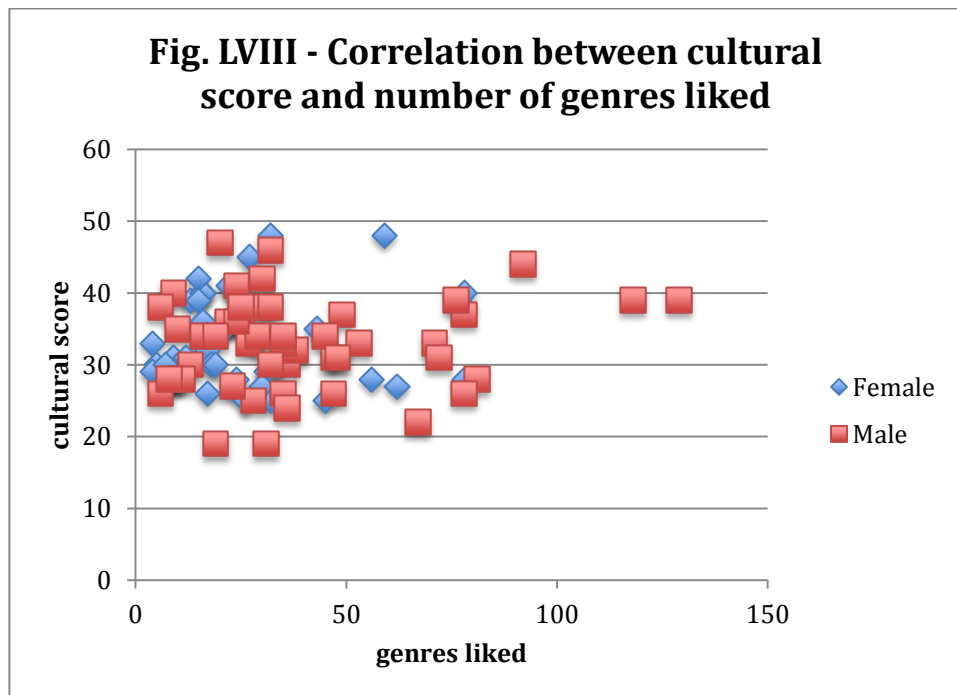
Comparing cultural scores with the number of countries visited by the participants shows a slight positive correlation, which could suggest that, for the demographic, there could be a link between travelling and engaging with cultural activity.

Fig. LIX - correlation between total countries visited and cultural score
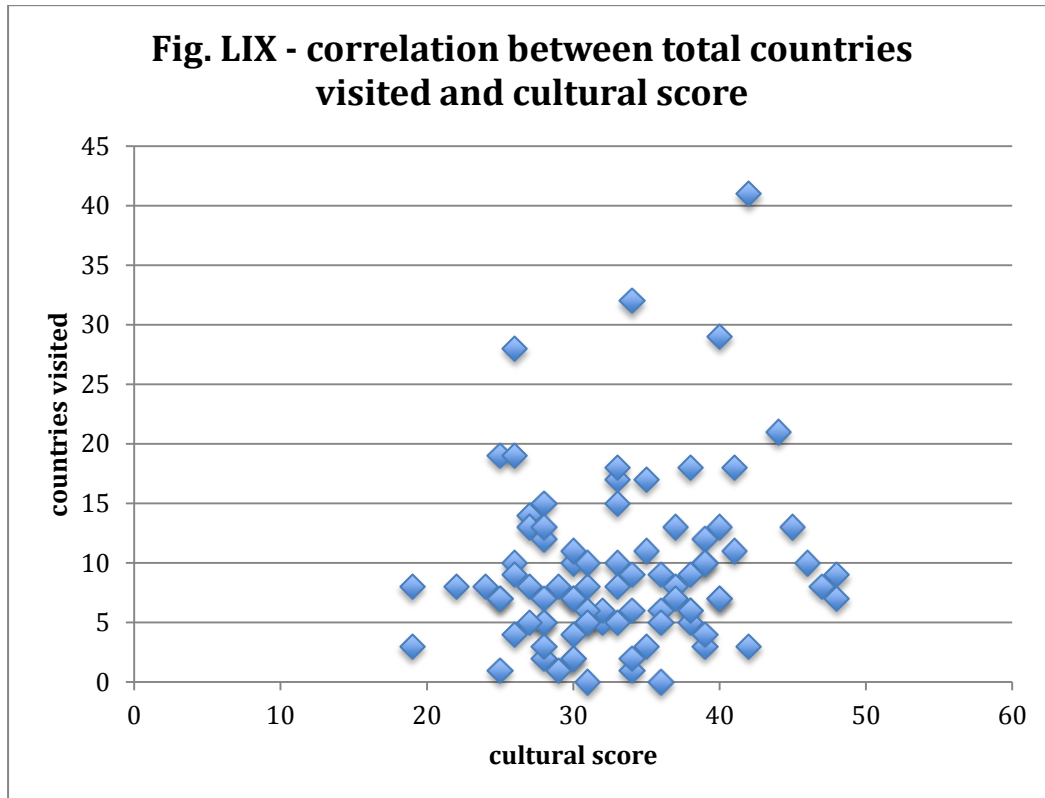
9.3 Engagement with Social Media and Online Recommenders

The data collected in question 17 '*which of the following do you own?*' supports the notion that mobile technology is becoming more widely used than home computers, (Bosomworth 2015), and that more people use their phone to search the internet than desktop machines. (Google 2015) Of the 87 participants, 100% indicated that they owned a mobile phone and 83.9% that they owned a laptop, but only 35.6% said that they owned a home computer.

Fig. LX – Chart and Table to show items owned by the participants

This would suggest a greater level of access to the Internet, given the freedom that mobile technology grants. This notion is supported by the data obtained from question 24; *how often do you log into social media*? 97% indicated that they log in or engage with some form of social media at least once a day and over 80% stated that they log on more than once a day, with Facebook, YouTube and Twitter being the most popular. This highlights the increasing ubiquity of social media in our lives.

Q24 How often do you log into social media networks (e.g. Facebook, Google+, etc.)?

Answered: 86   Skipped: 1
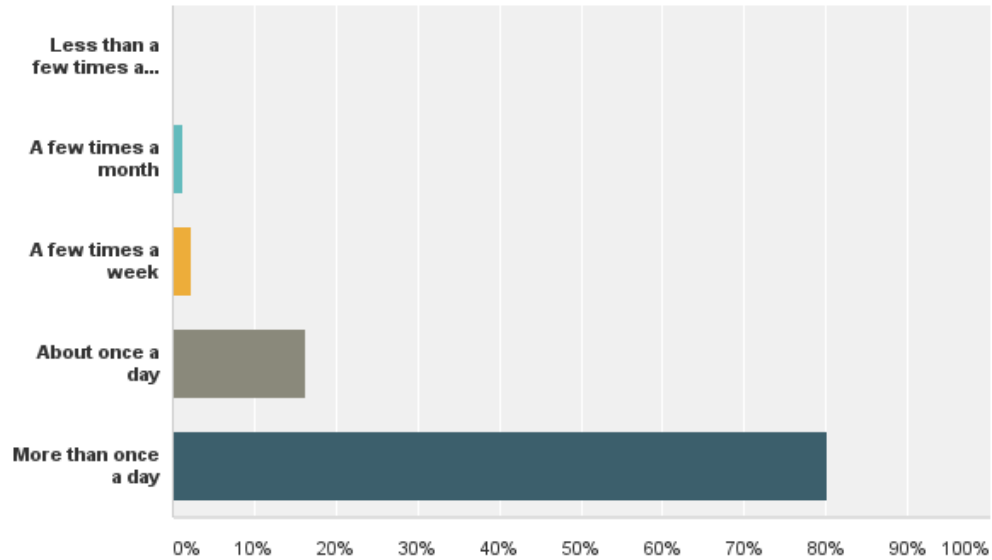
How often do you log into social media networks (e.g. Facebook, Google+, etc.)?

Answer Options	Response Percent	Response Count
Less than a few times a month	0.0%	0
A few times a month	1.2%	1
A few times a week	2.3%	2
About once a day	16.3%	14
More than once a day	80.2%	69
	answered question	86
	skipped question	1

Please indicate which of these social media and networking sites you often, sometimes, rarely or never use.

Answer Options	Often	Sometimes	Rarely	Never	Response Count
Facebook	78	7	1	0	86
Twitter	31	17	10	28	86
LinkedIn	7	20	19	40	86
Pinterest	11	8	13	53	85
Google Plus	6	11	16	53	86
Tumblr	3	3	12	66	84
Instagram	21	9	9	45	84
VK	0	0	2	83	85
Flickr	0	3	17	65	85
Myspace	0	1	15	69	85
Meetup	0	1	3	81	85
Tagged	0	0	3	82	85
Ask.fm	0	0	5	80	85
MeetMe	0	0	3	82	85
YouTube	51	24	6	4	85
				answered question	87
				skipped question	0

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Fig. LXI – Participants' Engagement with Social Media

In terms of the participants' engagement with music, data was collected on how they obtain music and the format on which they listen to it. The most popular method of obtaining music was streaming. Downloading music for free was the least popular, which could be due to the advent of music streaming rendering illegal downloading less necessary, or perhaps due to it being an activity the participants don't wish to admit to. The most popular formats on which to listen to music often were Radio, Phone and Computer/laptop. That said, it is important to acknowledge that if we include the *sometimes* category, YouTube is actually the most popular format, and listening on CD is ahead of listening on a phone or a computer. It's worth noting that only one participant stated that they never listened to music on CD (This particular individual, a 36 year old married male, stated that they liked only 6 of the 171 listed genres, and indicated that they purchase or download music either 'rarely' or 'never' across all the listed formats, and listens only to the radio and very little else,) This could well be due to the age range of the participants featuring a high number of individuals for whom CDs would have previously been a primary format.

State how frequently you do the following

Answer Options	Often	Sometimes	Rarely	Never	Response Count
Purchase music physically (Vinyl/CD/Cassette etc)	23	31	25	6	85
Download music (paid)	29	25	21	12	87
Download music (for free)	16	17	30	24	87
Stream music (spotify etc)	35	23	16	13	87
				answered question	87
				skipped question	0

How often do you listen to music on the following formats?

Answer Options	Often	Sometimes	Rarely	Never	Response Count
Cassette	0	3	22	60	85
Cd	36	32	18	1	87
Vinyl	5	17	25	38	85
Radio	51	25	8	3	87
Music Television Channel	12	21	28	26	87
Phone	44	18	9	16	87
iPod	35	5	9	36	85
Computer/laptop	42	25	12	8	87
Tablet	21	16	14	34	85
Streaming site (Spotify etc)	32	20	15	18	85
YouTube	39	36	8	4	87
				answered question	87
				skipped question	0
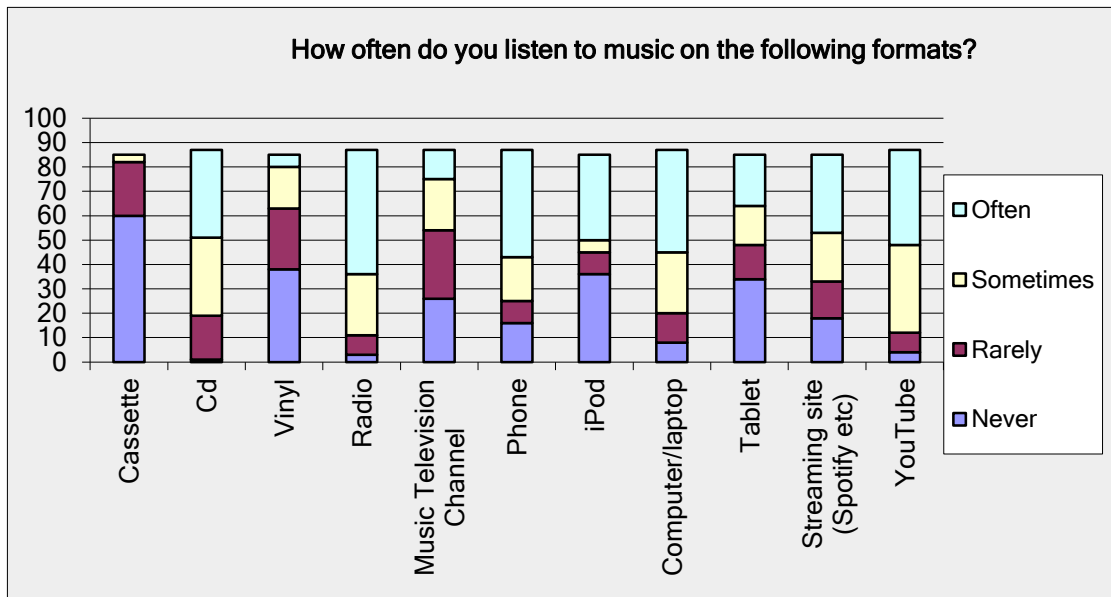
Fig. LXII – Preferred formats for engaging with music

Over 80% of the participants listed *suggestion from a friend* as a method of discovering new music. Fewer than 40% indicated that they discovered music via an online recommendation, but 8 of the 24 methods specified under the *other* category mentioned online suggestions or recommendations such as Spotify, or Last FM.

How do you usually discover new music? (Select the three most likely from the following:)		
Answer Options	Response Percent	Response Count
Radio	65.5%	57
Suggestion from friend	80.5%	70
Heard in a club	16.1%	14
Recommended online	37.9%	33
Read about it in a magazine/blog	39.1%	34
Compilation album	18.4%	16
Other (please specify)	27.6%	24
	answered question	87
	skipped question	0

Fig LXII – Table to show how participants discover music

It was indicated that Spotify was top of the list when asked which streaming site was best at recommending the music liked by the participants, but it came out as the worst too when asked the opposite question. This highlights the polarized opinions that surround streaming sites, and the fluctuating level of trust and acceptance with the services that they provide.

Importantly, the level of engagement with all social media amongst the demographic is indicated by the survey to be very large, and very regular, and all of these sites are fuelled by choice-curating algorithm.

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9.4 Section discussion: summarising the demographic.

Overall, the data gathered from this initial survey section of the primary research gives an interesting insight into the target demographic.

The diverse spread of interests and opinions highlight the complexities of taste, and indicate how difficult it is to spot trends and patterns amongst the sample. In many cases, it is apparent that the variables that contribute to each situation are too numerous, and the correlations, either positive or negative are too slight, for truly accurate assertions to be made. With that said, examination of the data can tell us a few things about the sample of Facebook One Day Elliott fans.

According to the data, in terms of musical taste, fans of One Day Elliott are likely to enjoy guitar-based, rock music and distance themselves from more electronic, dance genres such as dubstep or techno. This is exemplified, not only directly by the response to the list of genres, but also by the attendance of rock-themed music festivals. There is a significant spread in how many aspects of culture the participants engage with, but members of the demographic are not inclined to participate in examples of 'higher' culture such as opera or ballet. This indicates that the general taste of the demographic is possibly predictably similar. The participants, having liked One Day Elliott, also like genres that could be considered closely related.

The data suggests that a One Day Elliott fan's preferred method of obtaining music is to stream it online, rather than buy it in a physical format. When listening to music, the most popular method was the radio, followed closely by mobile phone and computer or laptop. When including both the 'often' and 'sometimes' categories, the most popular was indicated to be YouTube. This is greatly significant when considering the observational section of the primary research.

With fewer than 40% of the participants acknowledging online recommendation as a means of discovering new music, the naivety of its influence is made apparent, particularly when combined with the frequency with which the participants use social media; There is an overwhelming tendency for members of the demographic to log into or engage with social media every single day, especially into sites such as Facebook, Twitter or YouTube. These sites are all embedded with similar personalisation algorithms that filter content.

The opaque nature of the online recommenders is also made evident, by the participants who claimed that they are not influenced by online music

recommendations, but who then also identified sites such as Spotify and Last.FM as methods of discovering new music.

The fact that a large majority indicated 'suggestion from a friend' as a primary method of discovering music suggests that there is a level of trust that is awarded to a recommendation made by someone with whom you have some kind of relationship, that is perhaps not awarded to algorithmic filtering, which is theoretically based on extensive data collected from previous behaviour.

It is possible that the participants are guided by online algorithmic recommenders without being fully aware of the impact that they have.

It is important to acknowledge that the responses given to the survey are the opinions of the participants who completed them, and as a result, may not be completely accurate due to bias, unawareness or desire to give a good impression.

With an overview of the demographic now acquired, a closer observation of some individuals, picked from the 87 survey respondents had a basis on which to compare results.

Chapter 10 - Results – The Observation.

10.1 The Observational Software

For the observational section of my research, twenty participants were observed for seven days, using the specifically designed Google Chrome extension and were asked to create a playlist of musical recommendations for a third party, about whom the only information given was that they too, were a fan of the band One Day Elliott. This number was originally twenty-five but due to a change in policy by Google, no data was collected for five of the participants. However, these five still carried out the task by submitting a playlist and answering questions in an interview so I will still include their contribution in part, to the qualitative section of the research.

Using a specifically made tracking extension has proved to be an extremely significant aspect of my research. Using this method of observation allowed me remote access and an insight into the online behaviour of the participants with minimal researcher presence.

The extension was developed as a commission, by Firestarter Media after many meetings to discuss the particulars of how it needed to work. Much time and deliberation went into the process and several pilot tests were taken to ensure it would do exactly what I wanted it to.

With the exception of six potential candidates who struggled as a result of particularly heightened security settings on their computer, (see below) the tracking extension was successfully installed by the participants and the data started to be collected as described in the methodology.

However, in November 2015, Google announced that 'all extensions for windows users must be hosted in the Chrome Web Store' (Google 2015); a stipulation that caused any extensions not listed on the Chrome Store to automatically disable. Although the message was posted on Google's forum page, I was not aware that the extension would be automatically disabled, until the data unexpectedly stopped being collected in early December 2015.

Most of the data had been collected by this time, but the decision to allow participants to start the observation at a time of their choosing resulted in one or two still being active and three others that had not yet started. In the interest of conducting a fair, controlled study, these particular candidates could not be included in the same way.

Initially, I was concerned at the level of disruption that this would cause to the investigation, but on reflection, the change in policy had actually induced an interesting situation.

The participants, for whom no observational data had been collected, still submitted their curated playlist and took part in the follow up interview and so the qualitative data collected from them would be of value. Enough data had been collected from the other twenty participants for an effective analysis, and the fact that Google had changed their policy, exemplified the elements of this research that focus on corporate control over our experiences online, and gave me an opportunity to examine why this change had been made.

> Extensions are a great way to enhance the browsing experience; whether you want to quickly post to social networks or to stay up to date with your favorite sports teams. Some extensions come bundled with others, which causes Chrome to ask whether you want to install them (or not). However, bad actors have abused this mechanism, bypassing the prompt to silently install malicious extensions that can override browser settings and alter the user experience in undesired ways. In fact, this is a leading cause of complaints from our users and a common topic here in the forum.
>
> Since these malicious extensions are not hosted on the Chrome Web Store, it's difficult to limit the damage they can cause. This is why we announced in November that as part of our continuing security efforts,, **all extensions for Windows users must be hosted in the Chrome Web Store.** A couple of FAQs:
>
> *What will happen to my non-web store extensions?*
> With this change, these extensions will be automatically disabled in your extension list, and can be completely removed by visiting your extensions list (you can access this by typing chrome://extensions in your omnibox).

Fig. LXIV - Screen shot of Google Chrome Help Forum Page. (Google 2015)
https://productforums.google.com/forum/#!topic/chrome/d35tIyH8dVM

Google's explanation stated that the shift in policy was implemented to heighten security and protect its users form 'bad actors' or 'malicious software.' Whilst it is true that systems can be deliberately abused and manipulated, the freedoms afforded from allowing 'unofficial' developers to circulate extensions and other items of code can cause additional disruptions. Examples of this were apparent when MySpace granted their users the opportunity to completely customise their profiles, with minimal restrictions. Many personal profiles were drastically transformed, often by users with very little knowledge of using html, or with a lack of concern for how their customisations would impact on other users. This led to issues with functionality, accessibility and contributed to the decrease in the overall popularity of MySpace (Anderson 2011).

The announcement from Google was met with mixed responses from users of Chrome and extensions not available through their store. For some, the new policy was a welcome change. Victims of malicious spyware or virus-riddled extensions, felt that this would indeed provide protection from similar experiences. The following comments were taken from a discussion on a Chromium blog:

"I'm ok with that, I picked up a bad extension last week. It gave me a nasty rash…" Janet Fouts (chromiumblog.org 2015)

"This is a product of bad behaviour. Google tried to leave this open. People just kept abusing it. It's hard to blame them." Brad "Tertiushand" Taylor (chromiumblog.org 2015)

"That's a wise move. I've seen my fair share of PCs slowed to death by those horrors." Cristophe Carpentier (chromiumblog.org 2015)

For others, however, this was a disconcerting abuse of power and an example of Google asserting more control over their users, as these other comments from the blog demonstrate:

"Hahaha. *To protect users?* If that were true, Google would be actually policing browser-hijacking malware in their store, which they refuse to do. This is about control." Jake Weisz (chromiumblog.org 2015)

"This is about control more than security" Nate Woodward (chromiumblog.org 2015)

"The reason for wanting to install your own plug-in is irrelevant. The bottom line is that Google is going to force everything through their own vetting process, taking MY freedom to do My OWN vetting. I use a plug-in that is not available in the chrome store. If I am no longer able to use it and am only able to use whatever Google has deemed appropriate I'm afraid that will spell the end of Chrome for me" Brian Covey (chromiumblog.com 2015)

"In the Name of Security they take away our freedom/choice" Maxim R (chromiumblog.org 2015)

"Internet freedom blocked by Google once again. Who cares? None of the guys that make profit from it that's for sure." Da vid (chromiumblog.org 2015)

We have already discussed how being driven by advertising and corporate agenda, businesses significantly value the ability to track, analyse, filter and often, manipulate data. Extensions that alter the way these systems work could be seen as disruptive and a threat to their effectiveness. These

circumstances draw also on the aforementioned conflict between the notions of Internet democracy and participatory culture (See section 6.2).

Whether down to a genuine concern for our safety, or a discomfort with the level of regulation held over their systems and experience of users, this policy change affords Google more control over how their service is used and there are many who see this as a threat to online liberty and freedom.

10.2 The Observation

There was a strong majority (68%) of male respondents to the initial request for participants in this observational section of the research. (An email was sent to all 87 individuals who completed the survey section of the research and a positive response was received from 38 males and 20 females) Despite this imbalance, the same number of males and females (20 of each) were chosen (randomly for the males and all 20 for the females) from these respondents and contacted to actually take part. More respondents were contacted than were needed to allow for any complications and it was assumed that not 100% would reply.

Once the instructions and the extension software were sent to these potential participants, they were required to confirm their participation and could begin by activating the extension at a time of their choosing. At this stage, for various reasons, 1 male, and 7 female respondents changed their minds and decided not to take part. The reasons for this included a change in circumstances, and having less time to take part than initially anticipated (female), a change of mind now that the full instructions were clear (female), 2 of the participants (both female) were not prepared to use Google Chrome (even though the use of which was mentioned in the initial email), and a reluctance to install observational software on their computer - 2 participants (both female) for personal reasons, and also because 2 of the participants (1 male and 1 female) used their computer for work and didn't feel it appropriate to have their use monitored. As well as these 8, a further 2 males and 4 females failed, or chose not to respond.

Four of the female and two of the male participants were not able to install the software due to particularly heightened security settings on their computer. Another male participant had difficulty with this, but informed me that he had managed to reconfigure his settings to make it work.

Of the twenty observed participants, fifteen were male and five were female (the five participants for whom data was not collected were also male)

which is disproportionate to the overall gender ratios of the One Day Elliott Facebook page.

The ages of the participants ranged from 21 to 48 with the majority falling into the 25 – 34 bracket which, according to the Facebook statistics is the age range containing the biggest percentage of fans. This suggests that it is likely that a large proportion of the participants would be considered as *digital immigrants* and would have adjusted to social media becoming part of their lives.

Fig. LXV- Age distribution of observation participants
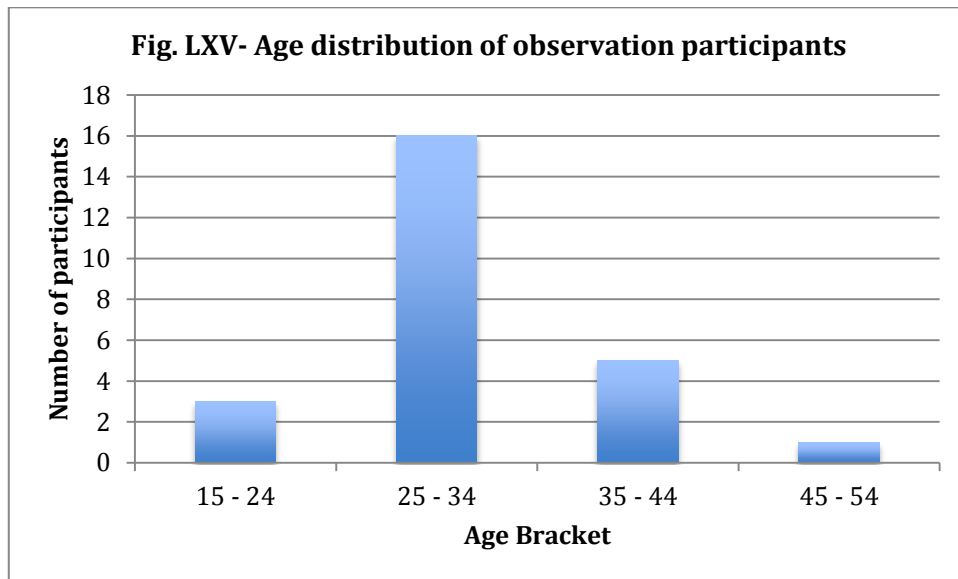
Participant 1 – male 23
Participant 2 – male 31
Participant 3 – male 34
Participant 4 – female 25
Participant 5 – male 36
Participant 6 – male 28
Participant 7 – female 33
Participant 8 – male 32
Participant 9 – male 21
Participant 10 – female 35
Participant 11 – female 34
Participant 12 – male 31
Participant 13 – male 26
Participant 14 – male 48
Participant 15 – male 32
Participant 16 – male 31 (no data)
Participant 17 – male 30 (no data)
Participant 18 – female 32
Participant 19 – male 40 (no data)
Participant 20 – male 37
Participant 21 – male 24

When comparing the participants' age with the number of mouse clicks made during the observation it can be seen from fig LXV that there is a very slight positive correlation, which, despite not being strong enough to suggest that the older participants engaged with social media more than the younger participants, does counter the possible assumption that the opposite would be true.

Rather than suggesting that the younger participants are less active online, this could indicate that the older participants are more likely to conduct their social media engagement on a laptop or home computer, (on which the activity was monitored) rather than a mobile device such as a phone or tablet.

Fig. LXVI - Graph to show correlation between age and number of mouse clicks
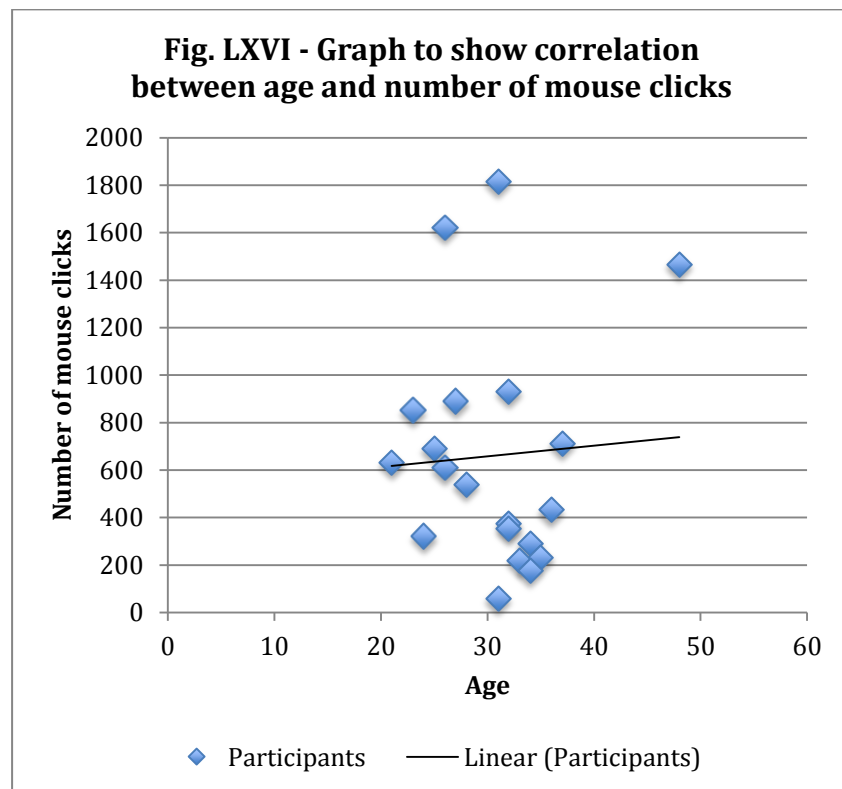
Fig. LXVII - Table to show the timeline of participation.

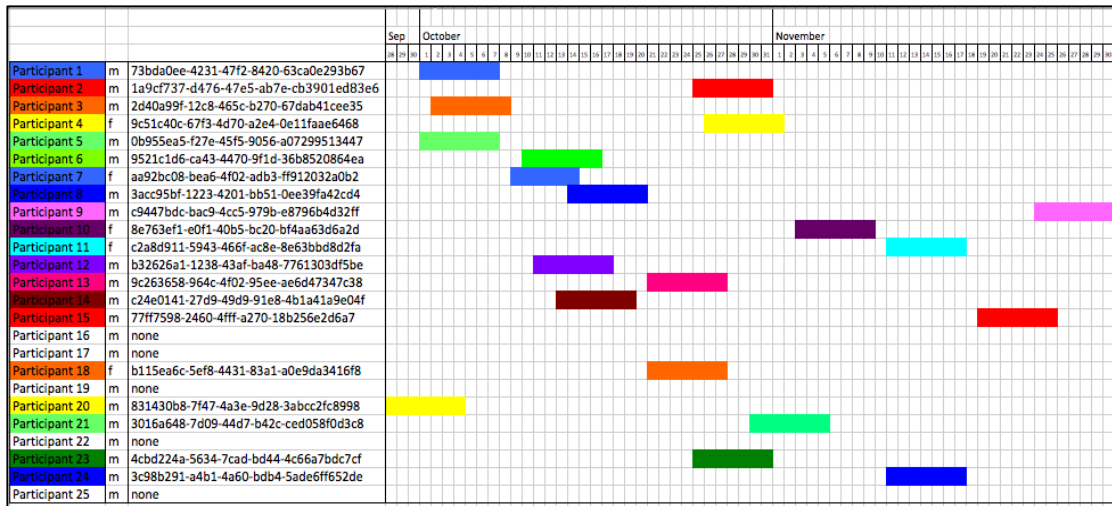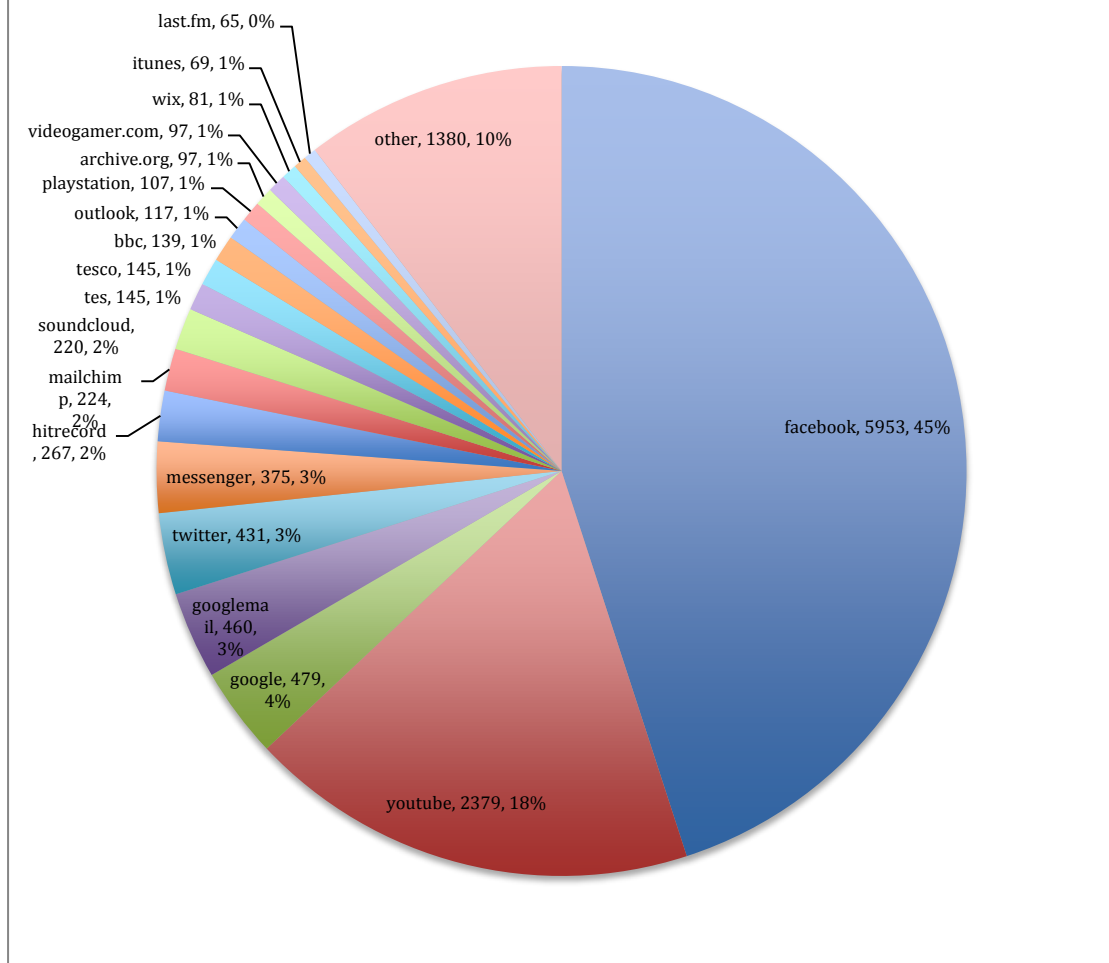| Participant	Sex	ID
Participant 1	m	73bda0ee-4231-47f2-8420-63ca0e293b67
Participant 2	m	1a9cf737-d476-47e5-ab7e-cb3901ed83e6
Participant 3	m	2d40a99f-12c8-465c-b270-67dab41cee35
Participant 4	f	9c51c40c-67f3-4d70-a2e4-0e11faae6468
Participant 5	m	0b955ea5-f27e-45f5-9056-a07299513447
Participant 6	m	9521c1d6-ca43-4470-9f1d-36b8520864ea
Participant 7	f	aa92bc08-bea6-4f02-adb3-ff912032a0b2
Participant 8	m	3acc95bf-1223-4201-bb51-0ee39fa42cd4
Participant 9	m	c9447bdc-bac9-4cc5-979b-e8796b4d32ff
Participant 10	f	8e763ef1-e0f1-40b5-bc20-bf4aa63d6a2d
Participant 11	f	c2a8d911-5943-466f-ac8e-8e63bbd8d2fa
Participant 12	m	b32626a1-1238-43af-ba48-7761303df5be
Participant 13	m	9c263658-964c-4f02-95ee-ae6d47347c38
Participant 14	m	c24e0141-27d9-49d9-91e8-4b1a41a9e04f
Participant 15	m	77ff7598-2460-4fff-a270-18b256e2d6a7
Participant 16	m	none
Participant 17	m	none
Participant 18	f	b115ea6c-5ef8-4431-83a1-a0e9da3416f8
Participant 19	m	none
Participant 20	m	831430b8-7f47-4a3e-9d28-3abcc2fc8998
Participant 21	m	3016a648-7d09-44d7-b42c-ced058f0d3c8
Participant 22	m	none
Participant 23	m	4cbd224a-5634-7cad-bd44-4c66a7bdc7cf
Participant 24	m	3c98b291-a4b1-4a60-bdb4-5ade6ff652de
Participant 25	m	none

The participants were given the freedom to begin the observation at a time of their choosing in an attempt to ensure that the experience was as natural as possible, and not at a time that they may be unable to partake probably (see methodology). All of the observations were conducted between the end of September and last day of November, when it seems that the change in policy from Google regarding unofficial extensions came into effect. Fig. LXVII shows the dates for which each of the participants were observed. Participants 16, 17, 19, 22 and 25 started after this date, or were part-way through when the extension was automatically disabled.

10.3 The data collected

The observational, tracking extension recorded the mouse clicks made by the participants, by logging the URL of the page clicked on, and the coordinates of that click. It also measured the height and width dimensions of the screen to enable the deduction of what is being clicked upon. Knowing, for example, that a click was made at (127, 504) on a screen (1279, 799) at the URL www.youtube.com/watch?v=ZQJj0JeqZiQ allows us to see that the play button was clicked on the YouTube Video "*Who Am I Kidding*?" by One Day Elliott.

For the entirety of the observation, the 20 observed participants made a combined total of 13,230 mouse-clicks on various websites.

Fig. LXVIII - Top 20 websites visited according to frequency of mouse clicks

This pie chart shows the URLs most visited by the participants. From this it can be seen that 45% of all the pages visited were derivatives of Facebook, compared to YouTube's 18%, Google's 4% and all of the other sites that combine to make up 33% of the total URLs recorded throughout the observation. This correlates with the data collected in the survey, which showed that Facebook was the most popular social media site.

A closer look allows us to examine the distribution of the mouse clicks on all of the sites visited.

Fig. LXIX – Table to show distribution of mouse clicks

Website	Mouse Clicks	Percentage
Facebook	5953	45
YouTube	2379	17.98

Google	479	3.62
Googlemail	460	3.48
Twitter	431	3.26
Messenger	375	2.83
Hitrecord	267	2.02
Mailchimp	224	1.69
Soundcloud	220	1.66
personal	189	1.43
Tes	145	1.10
Tesco	145	1.10
bbc	139	1.05
Outlook	117	0.88
PlayStation	107	0.81
Archive.org	97	0.73
Videogamer.com	97	0.73
Wix	81	0.61
ITunes	69	0.52
Last.fm	65	0.49
Msn	61	0.46
Amazon	60	0.45
Gnoosic	54	0.41
Disney	51	0.39
Aol	48	0.36
Inkedmag	47	0.36
Jobsinkent	47	0.36
Fastpiratebay	44	0.33
Tied together	38	0.29
Dennis.subscribeonline	36	0.27
Argos	35	0.26
Watchseries	33	0.25
Audi	30	0.23
Cineworld	30	0.23
cmwinesolutions	30	0.23
Tiscali	28	0.21
Askaprice.com	27	0.20
Hotukdeals	27	0.20
Skin illustrations	27	0.20
Popjustice.com	25	0.19
Honestbrew	23	0.17
Football365	22	0.17
Telegraph fantasy football	22	0.17
Justiceforgamers	19	0.14
Reddit	19	0.14
City and colour.com	18	0.14
Cricfree	18	0.14

Mail. Live	17	0.13
Fender.com	16	0.12
Fantasy.premierleague	15	0.11
Savy gamer	13	0.10
Uswitch broadband	13	0.10
Discogs	12	0.09
Nike	12	0.09
Pandora (jewellers)	11	0.08
Stainless steeves tattoo	11	0.08
Fantasy premier league	10	0.08
Kidsmovies.tv	10	0.08
Apple	9	0.07
Premierleague.com	9	0.07
Watchfree	9	0.07
Wrothamschool.com	8	0.06
MySpace	7	0.05
Wikipedia	6	0.05
EBay	5	0.04
Gameinformer	5	0.04
National rail	5	0.04
Nfl	5	0.04
TalkTalk	5	0.04
Wetransfer	5	0.04
Metacritic	4	0.03
PayPal	4	0.03
Putlocker	4	0.03
Skinflix	4	0.03
Whatsapp	4	0.03
Channel4	3	0.02
Clvr	3	0.02
Gorillavid	3	0.02
Hoobastank.com	3	0.02
Instantdisplay.co.uk	3	0.02
Vodlocker	3	0.02
Wordpress	3	0.02
Cdkeys	2	0.02
Engineer records	2	0.02
Rhs.org	2	0.02
Bing	1	0.01
Creativemarket.com	1	0.01
Gear4music	1	0.01
Minus the bear	1	0.01
Notinthehighstreet	1	0.01
one day elliott	1	0.01
Yahoo	1	0.01

As well as the combined 63% of clicks made on Facebook and YouTube, a further 6% of clicks were made on music related sites, (highlighted above in red.)

Fig. LXX - Graph to show recorded mouse clicks by participants
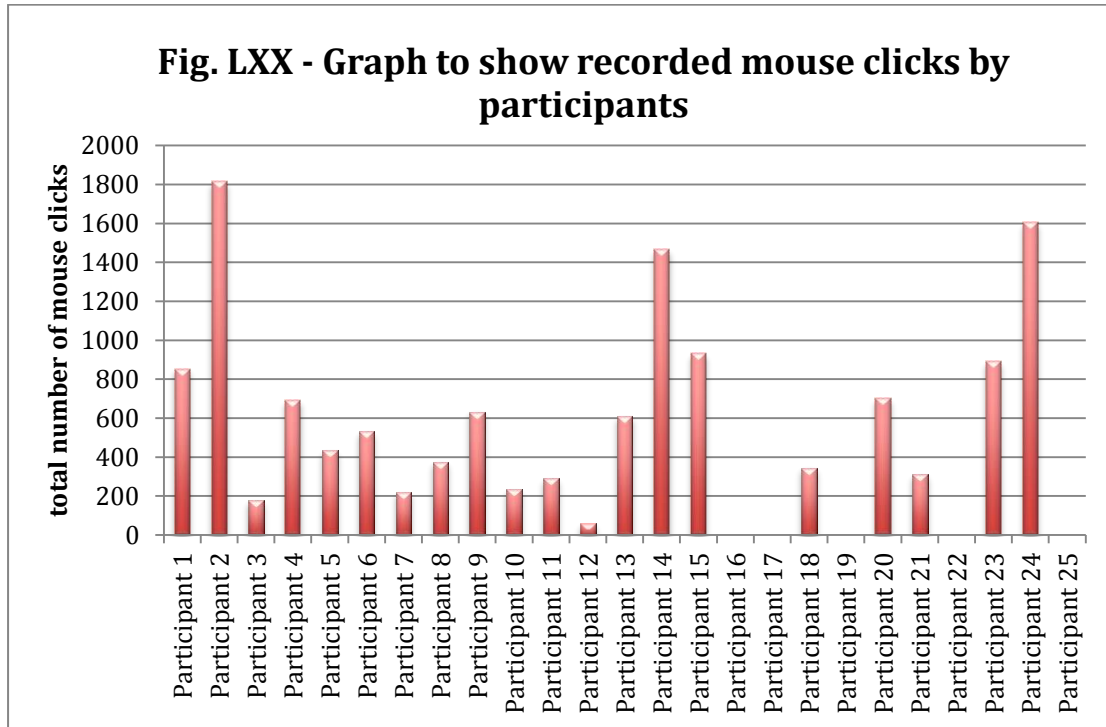
Figs LXX, LXXI and LXXII show how the participants contributed to the overall total recorded mouse clicks throughout the observation. There is a wide variety in terms of the number of clicks recorded by each participant over the seven days ranging from just 59 clicks by Participant 12, to 1816 by Participant 2.

Average clicks per participant = 661.5 (not including the participants who were not observed)

Participant	Mouse clicks
Participant 1	853
Participant 2	1816
Participant 3	178
Participant 4	692
Participant 5	433
Participant 6	540
Participant 7	219
Participant 8	375
Participant 9	631
Participant 10	232
Participant 11	291

Participant 12	59
Participant 13	609
Participant 14	1466
Participant 15	932
Participant 16	0
Participant 17	0
Participant 18	354
Participant 19	0
Participant 20	713
Participant 21	322
Participant 22	0
Participant 23	891
Participant 24	1624
Participant 25	0

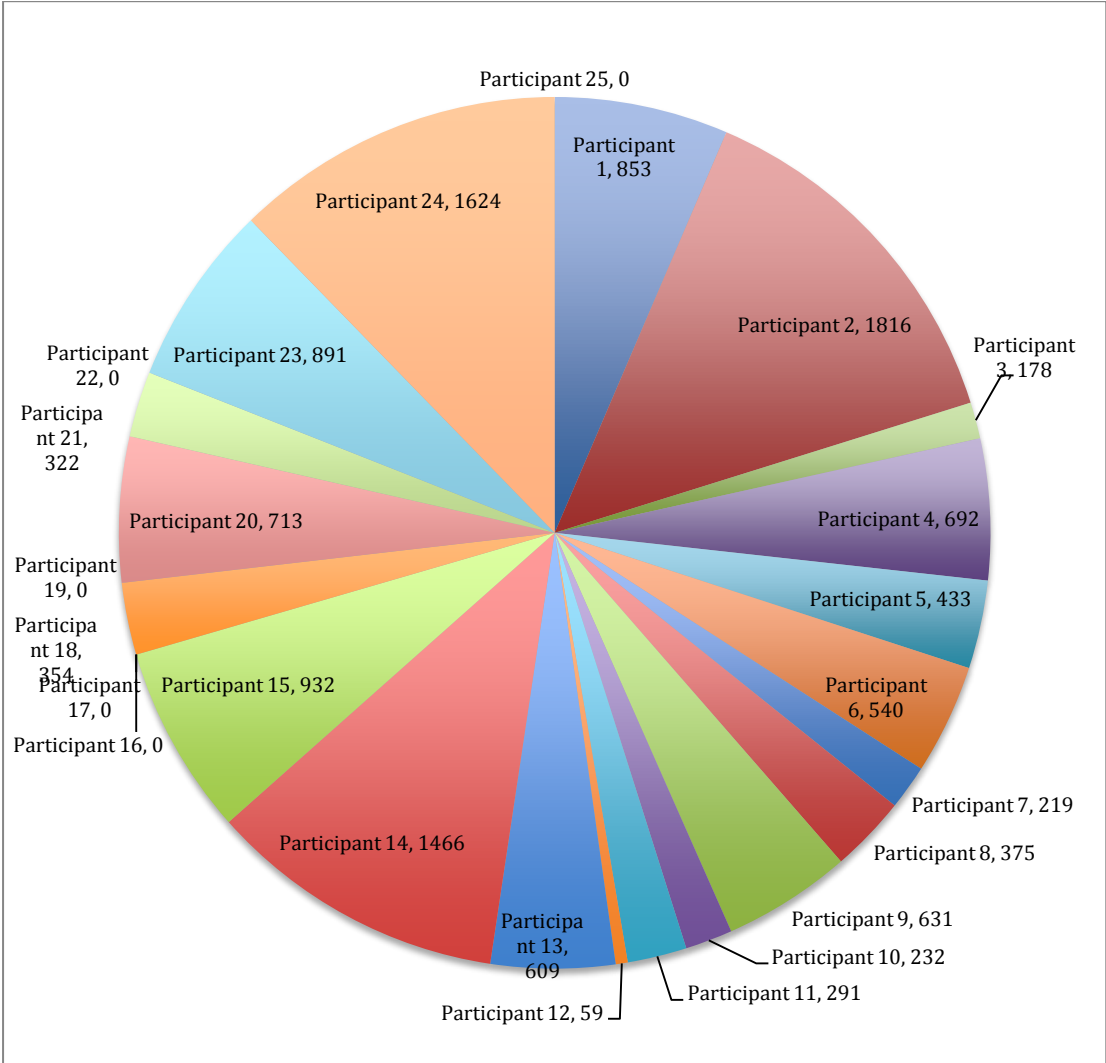Fig. LXXI – Table to show recorded mouse clicks by participants

Fig LXXII – Pie Chart to show recorded mouse clicks by participants

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For fifteen of the twenty observed participants, either Facebook or Youtube were indicated to be the most frequently vistited sites in terms of mouse clicks. (Eight participants for Facebook and seven for YouTube) and in most of those cases, these two sites were the 1st and 2nd most visited.

Four of the observed participants (participants 7, 8, 12 and 13) had no engagement (in terms of mouse clicks) with Facebook and seven (particpants 6, 7, 8, 10, 11 and 14) made no clicks on Youtube, meaning that participants 7 and 8 didn't engage with either.

For 12 of the observed participants, YouTube featured significantly as a visited site, and as a means to watch and find music videos for the playlists. This can be seen from the URLs rcorded by the tracking software.

10.4 How often did they click?

fig LXXIII - Screen shot of observational tracker.

Fig LXXII is an example of the data collected by the observational software, which shows the coordinates of the mouse clicks, plus the URL of the page clicked. It also shows the time of each click, which allows the length of time for which each video is watched to be estimated.

Fig. LXXIV - Time elapsed between YouTube mouse clicks

0 - <1 min	1816
1 - <2 min	119
2 - <3min	87
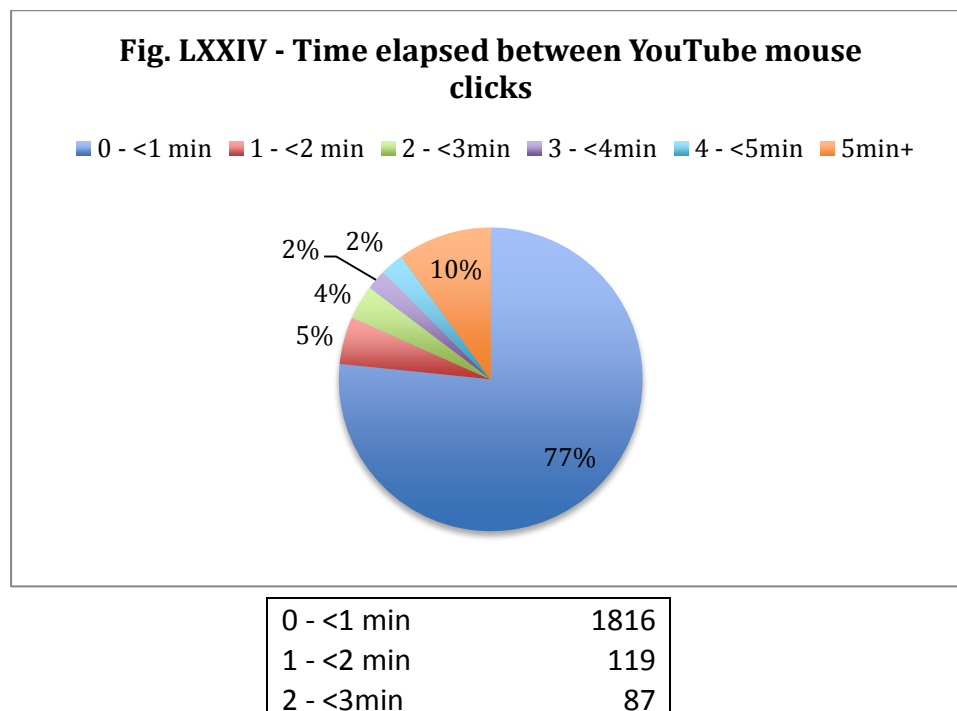
3 - <4min	50
4 - <5min	60
5min+	238

Fig LXXIV shows the distribution of mouse clicks on YouTube separated by time intervals. It is clear from the data, that a vast majority of the clicks (77%) are separted by less than I min. It is important to acknowledge that the clicks separated by 5 minutes or more, in many cases also include instances where the user has logged off or gone on to another site.

Closer examination (see Fig. LXXV) of the mouse clicks separated by less than one minute shows that over three quarters of these clicks were separated by less than 10 secs meaning that, of the total 2370 clicks made by the participants on YouTube throughout the observation, nearly 60% were separated by less than 10 seconds. Though this also includes any double-clicks, or clicks to scroll down the page while the video is playing, it can be seen from the URLs that there is a tendancy to spend less than ten seconds on a particular video before moving on to another.

On average, the participants using YouTube 'skipped through' 3.4 videos before watching one for more than ten seconds.

Fig. LXXV - Distribution of YouTube mouse clicks separated by less than 1 min

Legend: 0-5 secs | 6-10 secs | 11-15 secs | 16 - 20 secs | 21 - 25 secs | 26 - 30 secs | 31 - 35 secs | 36 - 40 secs | 41 - 45 secs | 46 - 50 secs | 51 -55 secs | 56 - 60 secs

Pie chart values: 61%, 16%, 6%, 4%, 3%, 3%, 2%, 2%, 1%, 1%, 1%, 1%, 0%

Fig. LXXVI - Graph to show length of time between mouse clicks on YouTube

Y-axis: Number of mouse clicks (0, 200, 400, 600, 800, 1000, 1200)

X-axis (Time between clicks): 0-5 secs, 6-10 secs, 11-15 secs, 16 - 20 secs, 21 - 25 secs, 26 - 30 secs, 31 - 35 secs, 36 - 40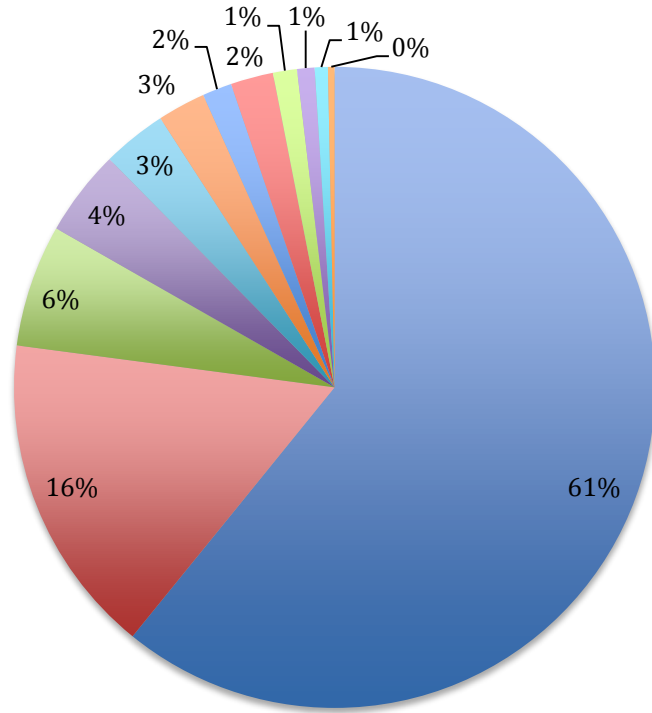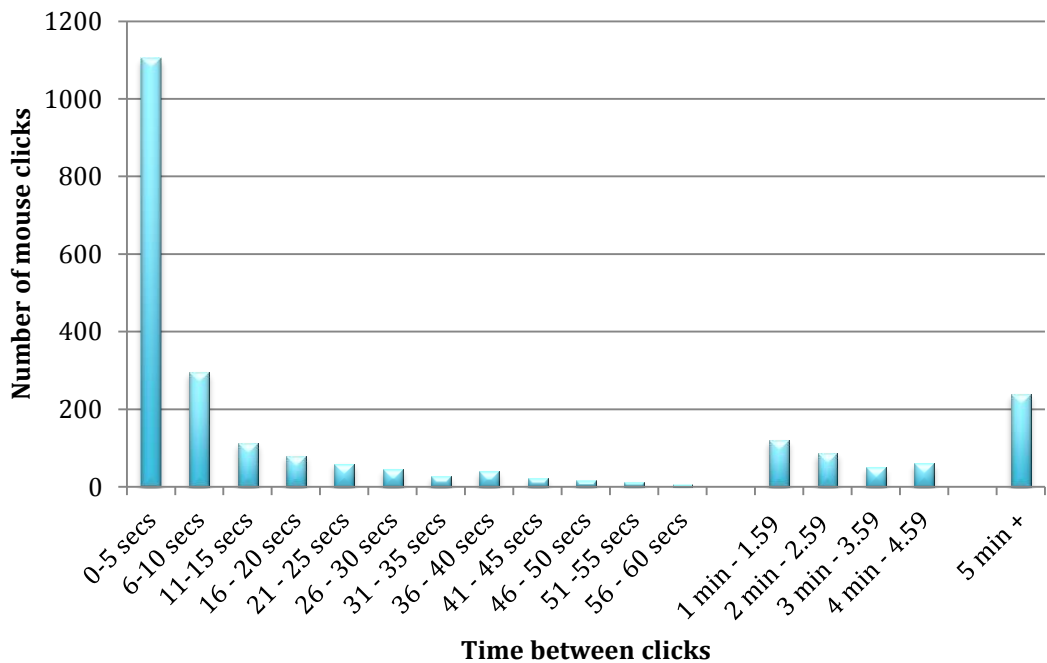 secs, 41 - 45 secs, 46 - 50 secs, 51 -55 secs, 56 - 60 secs, 1 min - 1.59, 2 min - 2.59, 3 min - 3.59, 4 min - 4.59, 5 min +

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0-5 secs	1105
6-10 secs	295
11-15 secs	112
16 - 20 secs	79
21 - 25 secs	59
26 - 30 secs	44
31 - 35 secs	27
36 - 40 secs	39
41 - 45 secs	22
46 - 50 secs	16
51 -55 secs	12
56 - 60 secs	6
1 min - 1.59	119
2 min - 2.59	87
3 min - 3.59	50
4 min - 4.59	60
5 min +	238

Fig LXXVI indicates that the number of clicks decreases as the time increases up to a minute in length suggesting that the participants are less likely to spend a longer time watching a video. There is a slight increase in the frequency of clicks separated by 1 – 2 mins, suggetsing that this could be a length of time a participant may spend watching a video that they like (which, according to the data, is often the video clicked on after skipping through 3 or 4 others)

10.5 Where did they click?
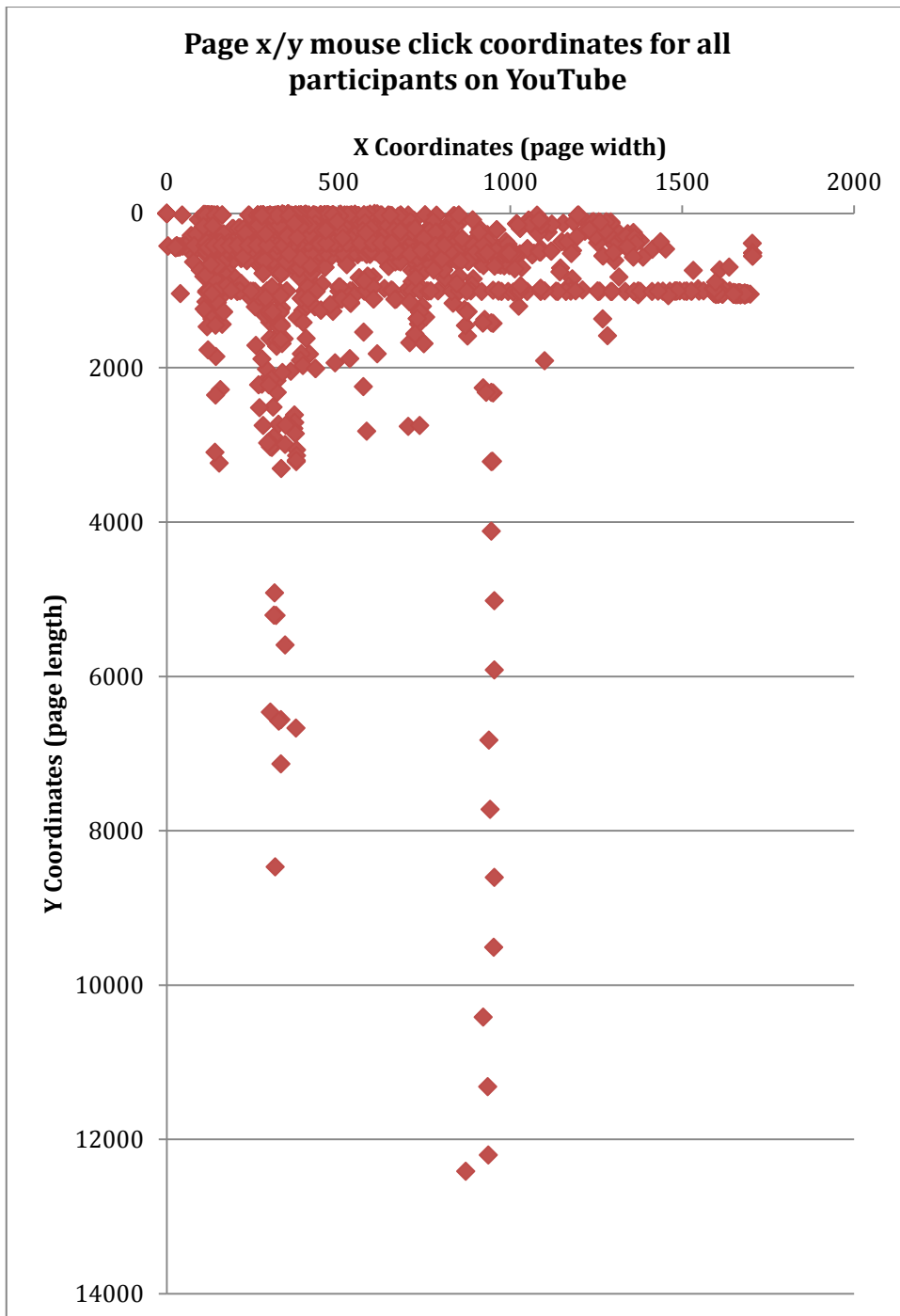
Fig. LXXVII – Page x/y mouse click coordinates for all participants on YouTube

This scatter graph shows the distribution of mouse click coordinates made by the participants on YouTube. The axes are measured in pixels; width shown on the x axis and distance down the page on the Y. This graph includes clicks made on YouTube's home page, (which users arrive at if they arrive at YouTube directly from typing it in to the search bar,) search results page (which is the page arrived at after a search query has been entered) and also the video page which, as well as the video to be watched, includes recommended videos.

The graph shows that a huge number of clicks are concentrated near the top of the screen, a little way in from the left, in a position that correlates to the top video on the search page. It also shows a concentration of mouse clicks situated around the 400 x 400 mark which aligns with the play button, but also a great deal of activity down to around the 500-pixel mark. This suggests that participants are more likely to click on the top result, and the first few videos that appear and not ones further down the page. There are several reasons why this might be the case. It may be due to trusting that the search has found the most relevant video, it may be that the search has actually been successful in finding the exact video that the participant is looking for or it could be that the participant is disinterested in scrolling further down the page.

There is a collection of clicks that lay in a line around the 450-pixel mark on the x-axis. This suggests activity involving the participant 'liking' a video or one of the comments below.

There are two strips of clicks that do extend further down the page, one around the 315-pixel mark on the x axis, which correlates with the videos that appear on the search results page, and another at around the 950-pixel mark on the x axis, indicating the video list on the video page. It is on this page where the recommended videos appear, and this suggests that users are more likely to scroll further down this list than they are the list of videos that appear as a direct result of the search enquiry.

There is also a gentle, positive correlation that could suggest that the wider the screen, the more likely the participant is to scroll down the page.

There is also a horizontal strip of clicks that lie consistently across the page at around 1000 on the y-axis. This correlates with the bottom of the screen on one of the bigger iMac computers. This may suggest that videos are being watched in full screen mode, in which case the, play button and time line stretches across the bottom of the page. This is supported by the data that shows several mouse clicks with different coordinates but on the same URL.

This indicates that as well as skipping from video to video, there is also a tendency for the participants to skip through the video itself rather than listening from start to finish.

10.6 What does this tell us?

The data collected by the tracking software allows a certain insight into how the participants used YouTube throughout the observation, both in

'everyday' terms and also to create their musical playlist. Though it cannot give definite detail as to how the participants behaved (a video could be clicked on and left in the background while the user was engaged in something else for example), analysis of the mouse clicks and the URLs clicked upon can allow for an estimation of that behaviour.

What can be deduced is this; firstly, there is a significant tendency to spend less than 10 seconds on any particular video. Analysis of the data indicates that the participants skipped through videos after a matter of seconds and it is suggested that on very few occasions were any of the videos watched in their entirety. (Though the exact length differs from source to source, it is generally agreed that the average length of a YouTube Video is between 4 and 4.5 minutes (minimatters.com), and the average length of a song usually lies between 3 and 5 minutes. The data shows a distinct lack of views of this length) Even for songs that were eventually chosen for the playlists, it is clear that many of the participants, listened only long enough to grasp an idea of the song and moved on to the next.

The context of the searching should be acknowledged here. Each of the participants were given a task to find music that was new to them to include in the playlist, which may result in alternative behaviour. Rather than listening for pleasure, it may be the case that the participants, whilst trying to find something 'suitable' that fits with the parameters of the search, are more likely to skip through tracks that they may have otherwise be inclined to listen to.

It should also be acknowledged that the tracking software only observed the participants' behaviour while using that particular device (laptop or home computer) and there is a possibility that in some cases YouTube may be used to find songs, but not to actually listen to them. In their interview participant seven described how they made a list of tracks to listen to later before making their final decision on whether to include them in the actual playlist.

Secondly, participants are not likely to scroll further than 1000 pixels, meaning that they tend to engage with the material near the top of the page. This is not a surprise considering that the video itself, including the 'like button', 'play button' and the 'time bar' is located here, but it also shows that when choosing the next video to watch, the choice is made from the videos nearer the top of the list, which are the videos that are deemed most relevant or closely connected with the current video (see section 7 for more on this).
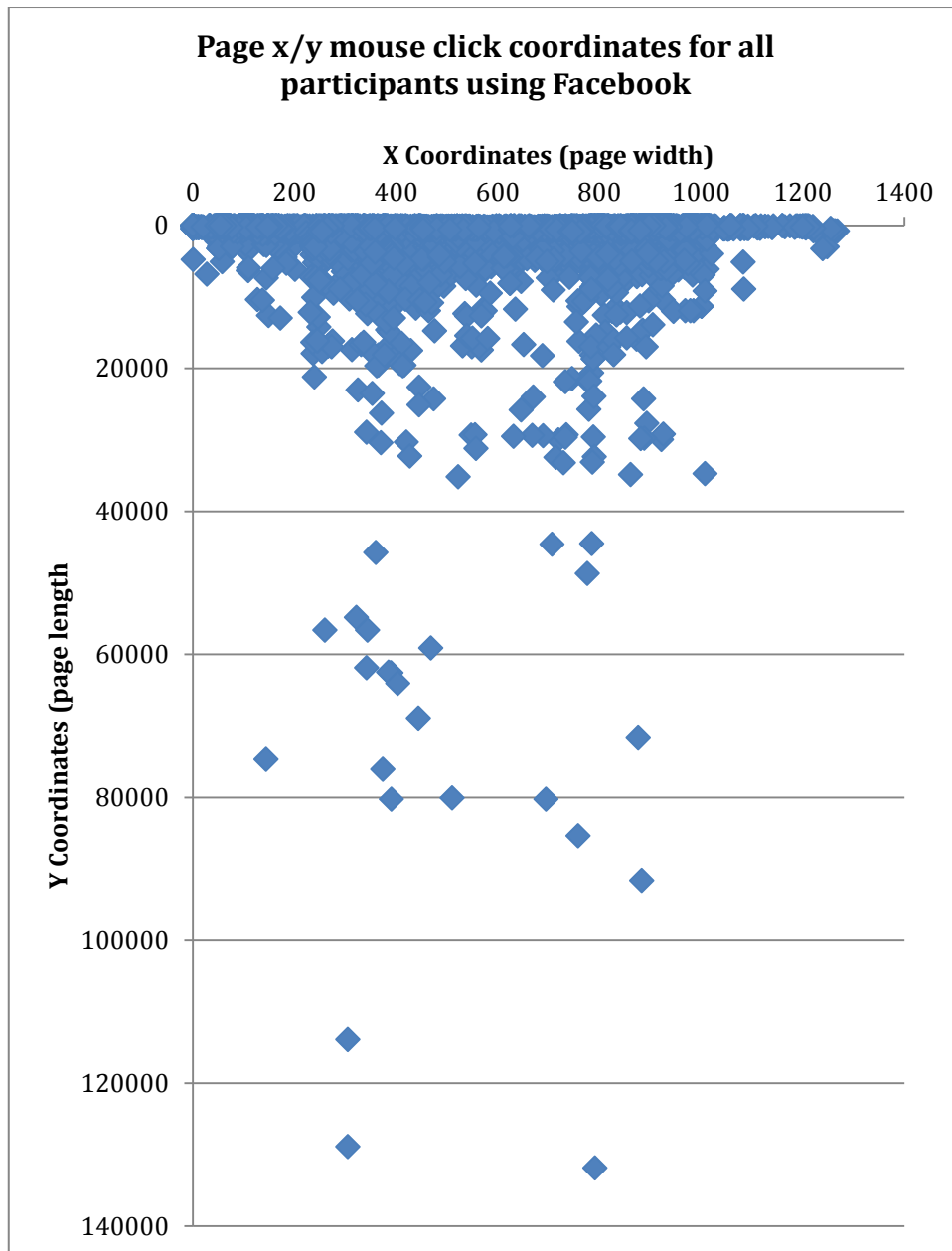
Fig. LXXVIII – Page x/y mouse click coordinates for all participants using Facebook

This scatter graph shows that the mouse clicks on Facebook are heavily concentrated near the top of the page, but fairly evenly distributed across the width. This could suggest that most of the relevant information is situated across the top of the screen, but also that participants are less likely to engage (at least by means of a click) with posts further down their Facebook page. This could be due to a disinterest in scrolling down past a certain point, perhaps through laziness, or maybe a desire to only engage with the most recent and perhaps relevant posts. Given the frequency of which people visit their Facebook page, this may also be due to the participant having already seen the information lower down on the page when it was posted and therefore situated nearer the top.

It is also the case that most of the sponsored and recommended material is situated near the top of the page, most likely because Facebook recognises the tendency for users to focus their attention primarily in this vacinity.

Though there are clicks that suggest some wider screen usage, most clicks lie between 0 and 1000 on the x axis, indicating a standard width for viewing Facebook.

10.7 - Observation Summary

Firstly, it needs to be acknowledged that, whilst the tracking software collected all the data from the participants' online engagement on their laptop or home computer, any additional online activity carried out on a separate device such as a mobie phone, or tablet would not have been recorded. The participants were isntructed to conduct, where possible, all online activity for the observation on the device with the extension installed, but there is every possibility that this was not the case. (see methodology evaluation)

There was a huge variance between the participants in terms of the amount of online engagement, both in terms of mouse clicks and time spent online. The mouse clicks made by the participants, measured over seven days ranged from 59 to 1816.

75% of the observed participants were male (80% if the total number of participants are included) which is disproportionate compared to the overall geneder splits of the demographic. The participants ranged between 21 and 48 with a majority falling between 25 and 34 which does correlate with the Facebook page statistics.

Considering the participants' online behaviour, the collected data indicates that Facebook, YouTube and Google were the most frequently visited sites, receiveing 45%, 18% and 4% of the overall mouse clicks respectively and 15 of the 20 observed participants visited either Facebook or YouTube more than any other site.

Significantly, the data inidcated that there is an overwhelming tendency for the participants to spend a minimal amount of time on a track or a video. On average, 3.4 vidoes are skipped through, before one is watched for more than ten seconds. This, accompanied by an apparent disinclination to scroll very far down the page suggests that perhaps the participant is not satsified with the recommendations but is not willing to expend much effort to look beyond the first few suggested videos. If this is case, the material engaged with by the

participants are likely to be the more closley linked videos, to either the seed video, or to the participant themselves, and videos that are more obscure, more loosley connected are potentially beyond the reach of where the participants are willing to go.

Chapter 11 - Results – Interviews and Playlists

11.1 The submitted playlists.

The playlist task placed the participants in both an influenced and influential position that emulates the position of the recommending algorithms, having to seek out music and suggest it to others, via assumptions based on limited data.

Fig (LXXIX) Table to show genre of songs chosen by the participants.

Participant	rock	total
1	10	11
2	10	10
3	18	18
4	7	10
5	8	12
6	26	26
7	10	10
8	21	21
9	10	10
10	20	20
11	11	11
12	10	10
13	10	10
14	10	10
15	14	16
16	10	11
17	15	15
18	10	10
19	24	56
20	16	15
21	10	10
22	10	10
23	10	10
24	9	10
25	14	16
	323	368

Key	
x	new song
	rock/ indie/ alternative
	r n b /soul
	folk
	acoustic
	Pop
	Classical
	Pop-rock
	electro - alternative
	trip hop
	jazz/fusion
	funk
	Rap/Hiphop
	swing
	reggae
	country

Fig LXXIX represents the songs chosen by the participants for their playlists. Though it can be difficult to accurately categorise, the musical genres of the included tracks have been loosely colour coded by genre or style to draw attention to the apparent homogeneity in the participants' song choices. As can be seen in the key, rock or guitar-based tracks are represented by black squares and a red cross indicates a song that is new to the participant. Of the 368 songs included across the playlists, 323 (88%) could be categorised as rock or alternative. It should be noted at this point that the playlist created by participant 19 differed significantly to the others, in that it included 56 tracks and was considerably more stylistically diverse. (When not including participant 19, 299 of a total 312 tracks (96%) could be categorised as rock or alternative.)

This shows an overwhelming predominance of guitar-based, rock genres, in comparison to other styles of music.

Importantly, it can be seen that, with the exception of just one track, all of the songs included that were new to the participant were of the rock or guitar-based category. This supports the notion that the participants, when searching for new music to recommend, were unlikely to choose songs for the playlist that were dissimilar in musical style to One Day Elliott.

The participant's search brings up a list of related tracks, their habitus or assumed preference of the recipient cause them to flick through several tracks indicating dissatisfaction with some of the recommendations, however, despite this skipping, a disinclination to scroll down the page, lead the participants to pick from only the first handful of tracks, all of which are 'closely related to the current track', meaning that the eventual chosen track is also closely related.

In this sense, it is indicated that a combination of habitus and algorithmic filtering reinforces the propensity towards guitar-based genres, in that the distance from One Day Elliott is limited not only by the recommendations made by social media, but also personal taste or assumed preferences by the participants.

In total, the observed participants indicated that an accumulative 91 tracks were chosen for the playlist that were new to them. The observational software indicates that, of these tracks 57 (63%) were chosen as a result of an online recommendation, in that it can be seen that the participant has engaged with the track on YouTube, Last.fm, Soundcloud or an equivalent source without having typed it into the query box, but has instead, landed on it, after looking at another track.

The five participants for whom observational data was not collected indicated that 18 of the playlist tracks were new to them and described their processes in their follow up interview.

When choosing the songs for the playlist, thirteen of the twenty-five participants included more songs than the minimum requirement of ten. However, eight included *less* than five songs that were new to them, despite five new tracks being stated as the minimum requirement in the instructions. This suggests that, although the participants were, in several cases, willing to recommend more songs and compile larger lists, they were not likely to include new discoveries as part of that recommendation any more than was necessary. This could indicate a disinterest in searching for new material, perhaps having done so begrudgingly for the purposes of the task, it could indicate that they did search but were dissatisfied with the tracks so as to not include them in their lists (a notion that is potentially exemplified by the tendency to skip through videos, made apparent from the observational data) or it could suggest a propensity to override everything else and prioritise personal choices.

Only one participant (participant 2) suggested more than 5 previously unknown tracks. This participant also indicated that he was not worried about how the playlist would reflect on him and was happy to pick the recommendations offered to him by iTunes.

Succeeding the observation and task, the follow up interviews were intended to gain an insight into the online behaviour and choices made for the playlist by the participants, from the participant's perspective.

11.2 Concerned with how it will reflect.

It was clear that several of the participants were concerned with how their choices would reflect on them. It seems that an important factor in presenting the playlist is making choices of which they can be proud or that would show them in a positive light.

"I didn't want to put my name to something that I wasn't happy with" (Participant 13)

This was interesting, considering that the playlist was intended for a complete stranger and, theoretically, there is no way to know what the opinion or musical taste of that stranger might be, save any assumptions made based on the fact that they like One Day Elliott.

There could be a number of possible reasons for this concern.

Despite not knowing for whom, and for what reason, the playlist was intended; the participants did know that I would see their choices (see methodology section 8.4) and inevitably this could have some level of persuasion on the choice of songs. Participants may want to impress, flatter, or avoid offence, contributing to a heightened attempt to choose the 'correct' songs.

It was discussed in the literature review chapter that musical taste is a badge that many wear to project an identity and, because it is common to generalise and cast assertions about people based on that taste, liking certain types of music carries cultural capital in certain circles or fields. As a result of this, it is often the case that we are careful with what music we align ourselves.

"As I have seen and heard One Day Elliott, I knew that a fan of theirs would not be into commercial pop (One Direction) and would more into alternative music and musicianship as opposed to the last winner of The X Factor!" (Participant 17)

For some, it was less about trying to cater for what the recipient wanted, and more about making sure that the playlist gave an accurate representation (or at least what they desire to project) of their identity.

"I've got a fair whack of arrogance about me, so I couldn't care less what people think of me based on my music taste. I just think they're wrong" (Participant 24)

Confidence to assert your own identity carries with it its own cultural capital, and, given the anonymity of the playlist recipient, participants will attempt to project the identity, in keeping with the image they consider to be the right one, in terms of taste and culture.

It is often accepted, sometimes unhelpfully (Nemko 2015), that being open minded is positive and that narrow mindedness is negative. In several cases, the desire to display a broad musical taste and project an omnivorous image led participants to avoid including songs that they felt were too 'obvious' and instead list songs in an attempt to highlight the eclecticism of their taste or tracks that that they deemed to be more obscure.

"I also wanted to pick things which were not the obvious recommendations, so although they may have, say an element of punk, it wasn't a well-known song by a well-known artist." (Participant 11)

"I've attempted to compile some of the lesser known gems of that

particular era that I feel best describe One Day Elliott's sound to me, and will hopefully encourage the stranger/fan of the band to further delve into this past era or beyond" (Participant 3)

Despite this desire however, the playlist choices were still relatively predictable and significantly less broad than the participants' comments would suggest.

There was also a tendency to try and educate or introduce the stranger to different types of music. It seems that not only were assumptions made about what the recipient of the playlist would like, but also about what they might not know. Of the 25 participants, 13 actually stated this as a reason for some of their choices.

"I get a lot of pleasure introducing people to new music, and just think it's really important that people hear things that they've not heard before. I Picked songs that are particular favourites of mine but equally ones that I wanted to introduce the "unknown party" to, presuming they had not heard the artists before. I tried to give a little bit of variety throughout the genre to introduce them to different types of rock" (Participant 10)

"I suppose I probably put the Soundgarden cover in because it's loosely a similar genre (the original, not the cover) and therefore the imaginary fan might have heard it but not done like this." (Participant 12)

The responses given by some of the participants suggest that not only do we like to think of ourselves as broad minded, but also, that we know about aspects of culture that perhaps others don't know, and, even if we don't think this of ourselves, we value the prospect of others thinking of us in this way. It was important for these participants to display a greater width or depth of knowledge so that they, to the recipient of the playlist (or anyone else that might see it), would seem either accepting or well informed.

In nearly all cases, it was apparent that participants wanted to create a playlist consisting of tracks that they themselves enjoy and that they would choose to listen to. 24 of the 25 participants indicated that they were directly led by their own musical tastes and would reject any songs suggested to them that they didn't like personally. There is the possibility that this could be down to the participants losing sight of the fact that they are creating the playlist for someone else or finding it hard to remain objective. This notion was exhibited by several of the participants.

"I wouldn't send someone music that I didn't like myself." (Participant 9)

"I can't share or recommend something I myself don't like" (Participant 17)

When asked about this, one candidate stated, "it was natural to choose songs that I enjoy… because I want to share what I like with others." (Participant 15)

Another said, "I never considered about including something I didn't like." (Participant 22)

It is natural to show bias towards your own musical preferences, especially if there is a chance that those choices are considered representative of your identity.

Not every participant took this stance, and some acknowledged that, over his or her own, the taste of the stranger was a priority.

"It wasn't important for me to include songs I like myself in the playlist as the songs I liked the person in question might not like." (Participant 2)

"I felt somewhat restricted to choosing bands I felt had some kind of likeness to One Day Elliott (similar genre, sound, lyrics etc.). Although having some similarities would not necessarily mean the second party would like my suggestions, you can't be too adventurous." (Participant 21)

In most cases, whether or not the recipient would enjoy the playlist was a primary consideration, possibly due to a potential social currency rewarded from being credited with a well-received recommendation.

Given the anonymity and the extremely limited knowledge of the playlist recipient, the participants had little on which to base their decisions. Another possibility is that the participants use their own associations and opinions as a reference point to make suggestions for others and it can be seen that a number of the participants made their choices, based on elements, stylistic or otherwise, that they identify in the music of One Day Elliott, and used this as a foundation on which to establish what the stranger would probably like. In such circumstances 'going with what you know' or using your own taste as a point of reference is as good a starting point as any.

"If I like it, then I feel that another One Day Elliott fan is likely to like it too" (Participant 8)

We often assume that our own thought processes are natural reactions and because it seems logical that others would react in the same way, we can project these processes onto other individuals; because we assume ourselves to be rational, we see our responses as 'normal' (Jones and Davis 1965) and that our psychological reactions are rule-governed rather than random. (Karniol 2010)

"I cannot but take myself to be rational, so in order to see others as joint deliberators I need to credit them with the same capacity" (Heal 2003 p6)

Applying this logic allows the participant to estimate or assume the potential taste of the intended recipient, which in some ways holds similarities to how the algorithmic suggestions are also founded.

"This style of music used to be my favourite style, and then I branched out into the American indie charts and ended up going soft. I figured the same thing could happen to a One Day Elliott fan, so I mirrored my own natural progression towards bands like Manchester Orchestra and Wintersleep and then picked some bands that are related to those." (Participant 24)

11.3 Personal connections

Amongst the participants, the attitude of '*I like One Day Elliott and enjoy this song; therefore, another fan of the band will probably enjoy it too*' seems to be commonplace and many of them picked songs or rejected suggestions made to them based on this.

"A lot of artists that were recommended or classed as similar to One Day Elliott didn't match my idea of what was similar to One Day Elliott." (Participant 22)

This demonstrates the problematic issues with how music is recommended to us. As an example, in the early years of One Day Elliott, when the online presence of the band was in its infancy, I worked in a girls' grammar school in Kent and, around this time, the band released a single via iTunes. Due to the particular interest and novelty of '*sir being in a band*' the track was downloaded by a considerable percentage of the pupils in the school and the initial recommendations reflected this surge in a female, teenage demographic of 'fans.' The fact that the majority of these downloads were done so based on a personal interest rather than musical taste meant that the 'people who bought this also bought…' algorithm suggested tracks such as Miley Cyrus and Justin Bieber.

The literature review discussed the extreme complexity behind how our tastes are formed and the infinite variables that contribute to our habitus. *Why* we like something is dependent on our unique combination of experiences, thoughts, feelings and exposures, added to the fact that these are all perpetually fluid and ever changing. The participants are all linked by the fact that they have 'liked' One Day Elliott on Facebook and are members of the fan page, but this could be the only thing that links them and what they like about that band or the links that they may have to them could well be unique to them. Therefore, the associations made will be different from person to person, and inferring anything else about them, based on this link alone could, in truth, be considered a futile exercise.

But, as well as being suggested tracks by the algorithms that, as far as the participants were concerned were linked somewhat tenuously, the participants, in being required to provide the playlist to a stranger, were often guilty of making the same assumptions.

At first glance, it would seem that the playlist choices exemplify the individual differences in our tastes in that with the exception of one One Day Elliott track (Never Be Content With Average), there were no single songs that appeared more than once throughout all of the submitted playlists.

However, with closer inspection it can be seen that, although no particular songs made more than one appearance, several bands featured frequently, and the overall genre of the playlists were stylistically similar.

Many of the songs that were new to the participants, recommended by the algorithms and chosen for the playlist were of a similar style and several bands were recommended more than once to different participants.

This illustrates the notion that, although the personalised algorithms do offer individualised material, they are set within stylistic parameters that do little to broaden the tastes of those who receive them. In this case it could suggest that the embedded algorithms offer tracks, via the personalised filters of each participant but still confined by a search relevant to 'One Day Elliott'.

Whilst some of the participants were happy to allow recommendations to guide them when making their choices. Participant 2, for example stated. "I used the recommendations that iTunes found, based on the musical style of One Day Elliott and chose tracks by recommended acts that I hadn't heard before" (Participant 2) Several of the participants indicated that they ignored many of the suggestions made by YouTube and other social media, favouring their own musical knowledge or opinions. The reasons for doing this may be due to a

mistrust of the online recommendations or unfamiliarity with searching for music in this way.

"I trusted my own judgement more than that of a random computer playlister, which may explain the somewhat random nature of some of the songs" (Participant 3)

"I tried YouTube, but that only really offered music from the same artist, which I didn't really need." (Participant 5)

Some would have a listen to the suggested tracks but claimed that ultimately they made their own decisions.

"I linked One Day Elliott on Spotify and looked at their 'related artist' list and went through the process of listening to the top 5 songs of each of those bands too. Sometimes random, really not related bands would get into to the top 5 list which was annoying but I soon skipped through those bands (like after 30 seconds to a min) before I found something suitable." (Participant 25)

"Some recommendations were crap so I moved on to the next one until I heard something that I thought worked." (Participant 18)

This could highlight an inability to remove oneself from the filter of one's own taste. However, it needs to be acknowledged that the material offered on social media, from which the participants can choose has been filtered both according to their own tastes and also according to the collaborative tastes of others who have listened to or watched that material. When discovering new music therefore, the options from which they can choose are, to an extent, pigeonholed and enclosed by predetermined parameters.

In addition to this, as mentioned above, the participants are faced with the added 'pressure' of providing a playlist that will be well received by a fan of One Day Elliott, which could stifle any desire that may have been present to venture outside of these parameters.

The stylistic aspects that the participant personally identifies in One Day Elliott will provide a basis upon which they will recommend tracks, coupled with the attributes identified by the algorithms (using tags, collaborative search history and other information) to channel the options.

This all contributes to a narrowing of options and, as a result, the playlists received are predictably similar in style and genre, with very few obscure or surprising entries.

Participants five, fourteen and nineteen were three of the older participants and could qualify for the classification of digital immigrants (a notion that was discussed earlier in section 9.1). Each of these three indicated in their interview that they had attempted a different approach in compiling the previously unknown songs in their playlist.

Participant five stated that he had unsuccessfully tried to contact other individuals he knew who were fans of One Day Elliott to get an idea of music that they would enjoy, Participant fourteen stated that he relied exclusively on his own knowledge for the most part and asked his son for recommendations, and Participant nineteen picked a mix of tracks from his iPod and listened to the radio for ideas on new tracks.

The fact that for these particular participants, (possibly digital immigrants), the instinctive response was not to engage initially with social media's recommendations but to look elsewhere for inspiration, could signify the transformative shift brought about by social media and the difference it has had on cultural intermediation and musical gatekeeping.

"I was not influenced in my selections by any social media sites…. (I relied on my own knowledge) almost 100% -- with the exception of a couple of bands/songs that I chose because of my son's influence." (Participant 14)

"I chose 5 Facebook friends, who I knew were big fans of ODE and asked them to send me a message including their favourite One Day Elliott song and their respective upbeat non-One Day Elliott track…In hindsight, I could have used the services of Spotify radio, but I didn't realise that existed at the time - that's an element that I've only just been educated on" (Participant 5)

On closer examination of these participants however, we see that social media had more influence than they were aware. Participant fourteen revealed that although his engagement with social media (in terms of making the playlist) was minimal, his son regularly uses Spotify to discover new music, suggesting that his choices were, albeit indirectly, influenced by social media's algorithms.

"We have similar tastes and he's always introducing me to new bands and artists. He's always making playlists for the car etc. that's one of the reasons I asked for his input. " (**How does he make his playlists?) "**Haha, I just asked him and he said he finds many of the bands on Spotify!" (Participant 14)

Generally, there was a level of naivety as to the level of influence social media had on the participants. Keen to assert their identities, (which often

included omnivorousness, individuality and positions of authority) several of the participants were reluctant to acknowledge social media's input.

11.4 Playlist/Interview summary

Overall, the playlists received were analogous and unsurprising in terms of musical genre. Restricted by the filtered recommendations offered by the algorithms and their own notions of what a *typical* fan of One Day Elliott would want, many of the participants were potentially penned by multiple parameters; the algorithms, with their own complex network of variables forming the first layer, followed by the additional layer of their own taste.

Influenced by Bourdieu, the initial section of the current primary research collected survey-data on the chosen demographic and was intended to obtain an insight into similarities or patterns that exist amongst the members of the One Day Elliott Facebook Fan-Page.

The information gathered at this stage made it possible to observe the influence of habitus in the process of forming personal taste, which was also evident in the choices made in making the playlists.

Though some diversity was apparent, there was an overall personal, cultural and educational uniformity throughout much of the demographic. It was clear from the survey data that a predisposition for guitar music and a general dislike for dance-based music existed within the sample. There were also strong patterns in terms of participation in cultural activities, methods of obtaining music and awareness of the influence of social media's algorithmic filtering, all of which suggest that the general taste of the demographic is similar and that perhaps a certain 'type' of person is drawn to being a member of the One Day Elliott Facebook Fan-Page.

The majority of the participants indicated that it was important to include songs that they themselves would enjoy. Several intended the playlist to educate and introduce new music, or were conscious of how the playlist would reflect on them, based, once more on assumptions made about the playlist recipient.

More than half of the participants included more songs overall than had been requested of them, but only one included more songs that were new to them, and eight provided less than five new songs, which was the minimum requested in the task instructions, highlighting either a possible lack of confidence in recommending songs that they are not yet familiar with, or in the recommendations given to them by the algorithms.

However, nearly two thirds of the cumulative ninety-one songs that were claimed to be new to the participants were visibly a result of social media's recommendations.

Combined with data from the observational software, it can be deduced that, given the reluctance of the participants to scroll down the page, and the short time periods spent on many of the videos or tracks, there is a tendency amongst the observed demographic to engage mainly with videos that are closely related, skimming the surface suggestions until something suitable is found.

In choosing the playlists, it seems that a number of factors were in play. The data indicates that at least 63% of the tracks that were new to the participants were chosen as a result of online recommendation. (It is possible that this figure could be even higher due to the fact that some of the participants conducted searches away from the observation software.) It also indicates however, that the participants showed a tendency to skip through several videos on YouTube before watching one for more than ten seconds suggesting that the participants did not entirely trust or agree with the recommendations that they were receiving. The interview process also revealed that the participants, in many cases felt restricted in their choices, having to pick something similar to One Day Elliott, so as to satisfy the taste of the proposed playlist recipient.

These findings indicate a multi-layered influence. The participants relied on the online recommending software, as well as their own habitus to create the playlists. The pool from which they could choose was heavily restricted by the underlying algorithms, and filtered further by their own tastes, and by what they felt was appropriate for a One Day Elliott fan. For many of the participants, Habitus, personal choice and assumed preferences of the audience, were contributing factors to overriding many of the suggestions made by social media, but a disinclination to search further, made apparent by the unwillingness to scroll down a page for example, meant that in many cases, the participants were still choosing from a selection based on those same algorithms.

When looking at the tracks chosen for the playlists (see fig XXXIX) it can be seen that the combination of habitus and the embedded algorithmic recommenders contributes to a particularly homogenous set of results.

To Clarify, online recommending systems were extremely influential in the resultant playlists, and worked in tandem with the habitus of the participants in the completion of the task, strengthening the apparent homogeneity of the songs chosen.

Chapter 12 - Discussion/ Conclusion

12.1 Evaluation of the methodology

On completing the primary research, it is necessary to reflect on the methodology and evaluate the positive and negative aspects of the investigation. Despite careful planning and attention to detail, there are always problematic elements of any investigation or study. Here, I will discuss some of the issues with my own primary research and acknowledge aspects that were successfully executed, should be altered or of which I should be aware if the process were to be repeated.

As is the case with any qualitative research surveys and interviews rely on responses given the participants, and, due to personal biases or potential projected ideas of what the answers *should* be it is essential to acknowledge these responses as subjectivities.

However, this in itself grants valuable insight into how the participants believe they are affected in comparison to what the more quantitative data might suggest.

The current methodology afforded a level of distance from the participants that was particularly important due to my researcher position, but there were elements of the resultant freedoms available to them that necessitated extra consideration.

Remote observation reduced the level of direct researcher influence that comes with a present researcher, but also reduces some of the control that the researcher has over the behaviour of the participants. As a result, several of the participants didn't follow the instructions in an exact manner, using other devices for online activities or not including the correct amount of previously unknown tracks.

Overall though, the effects of this are positive and allowed the research to observe a truer account of their behaviour, and the variances from the exact instructions helped to obtain additional insight.

The changes in policy made by Google, resulted in a disruption to the data collection process (see section 10.1).

For this research methodology to be repeated, it would be necessary to develop an updated version of the software, either as an extension compatible

with, Chrome, Firefox, Safari or Internet Explorer, or designed to function via a different system.

Possibilities for this could include a dedicated application for various devices to be used on computers, tablets or phones.

12.2 Conclusion

Overall, the research conducted for this thesis indicates that the influence of social media on our musical consumption and taste is complex and multifaceted. As our time spent online and our engagement with social media increases, the processes and underlying mechanisms through which they operate become more and more influential on our lives.

The data collected from the current research suggests the existence of One Day Elliott fans as an Idioculture. The survey results indicate a predominance of guitar-based rock genres, and a suggested collective dislike of dance-based, electronic music, which is supported by the participants'' online behaviour, and their choices for the playlists. The decision-making process for many of the participants demonstrated not only personal preferences, but an apparent assumed knowledge of the musical preferences of those receiving the playlists. The homogeneity and similarity between the track lists indicates a shared set of knowledge and parameters amongst One Day Elliott fans, which, according to Fine (1979), would position them as members of an Idioculture, perhaps not in its most pure sense, but an idioculture all the same, in that they form a relatively small group with shared tastes or values.

What is interesting though, is that many of the participants seem unaware, or resistant to the notion of these shared tastes and similarities. This was made most apparent by the comments made by the participants in the post-observation interviews.

Baym and Ledbetter's 'Tunes That Bind' (2009) was discussed earlier, which identified the weakness in relationships formed on social media alone, and suggested that for real relationships to develop, communication through other means was necessary. This supports the idea that, although social media allows us to be more connected, the quality or depth of those connections is often compromised. Filtering, recommendations and other forms of algorithm-led personalised online experience, steer us to similar places, meaning that we may be closer together in terms of cultural proximity (taste etc.) but we are perhaps more isolated in terms of social or emotional connections.

In this sense, the filtering of information has contributed significantly to the fragmentation of musical subcultures and the formation of micro-niches or pigeonholes, though the members of these smaller groups are not necessarily aware that they belong to them.

By presenting the participants with a task to create a playlist for a One Day Elliott fan, and part of that task requiring them to include at least five pieces of music that was new to them, they were placed in a position that involved engagement with some aspect of music discovery, and as a result, subjecting themselves to recommendations.

This methodology also placed the participants in a similar position to the algorithmic recommenders, in that they were required to suggest songs to an unknown third party, based on limited knowledge, and they had to take into account the quality of recommendation in terms of how likely the songs will match the taste of the recipient, and how the recommendations will reflect on them in terms of credibility (the exchange of cultural capital.)

For the makers of the algorithms, the same considerations exist; limited knowledge in the form of collected data, (however extensive the amount of data may be, it will still be comparatively limited when considering the complexities of our taste), how effectively the recommendations will satisfy the recipient, (in order to provide the services required of them) and the reflective implications of the recommendations in order to earn the trust of the user bearing in mind the competitive landscape of algorithmic recommendation.

Not only does this allow interesting comparisons between human and non-human recommenders, but also it exemplifies the shift from human cultural intermediaries to their algorithmic counterparts.

To complete the task, the majority of the participants turned to social media, either by directly searching for One Day Elliott and assessing the recommended options, or by accessing the recommendations for bands that they felt were similar. For the participants that conducted these searches on their laptop or computer with the installed tracking software extension, it was easy to see the processes and engagement with various sites by tracking the URLs, along with the times and coordinates of the clicks of the mouse. Facebook and YouTube were the sites visited as an overwhelming majority, receiving 63% of all the recorded mouse clicks, which reflected the data collected on the demographic from the survey.

A number of the participants opted to use other means or devices to create their playlist, but were still observed to have a significant engagement

with social media. These participants in most cases stated that the majority of their listening happens online, through streaming sites such as Spotify or Last.fm, all of which operate with similar algorithmic filtering. When searching for music, Spotify was the website of choice for eight of the participants but it did not appear in the observation, suggesting that, for this sample, those who use Spotify do so on their mobile phones because of the convenient, accessible nature of the service it provides.

Participants 5, 14, and 19 identified in their interviews that their instinct was not to engage with social media, but to adopt other methods of discovering new music, either by asking others or listening to the radio, but in each of these cases, it was discovered that social media was still an influential factor on their decisions, even if it was indirectly. These participants were also three of the eldest to take part, and could be considered as *digital immigrants*. This adds weight to the notion of ubiquitous social media as a transformative force and the shift apparent shift in how we engage with music.

In all cases, the prominence of social media in the lives of the participants either by direct observation, or by inferred from the interviews, is apparent. The personalising algorithms consistently exist throughout these services.

However, the primary research did suggest that, in the opinions of some of the participants, there was a level of resistance to the recommendations made by social media. The observation of those that used social media to create their playlist showed that songs or videos were flicked through and ignored, and often, the participant would sift through a number of tracks before they found one that they felt was appropriate, or they would rely on their own knowledge over that of the recommendations made by social media. Several of the participants also commented that they 'didn't take much notice' of the recommendations.

As discussed in earlier chapters, it would be forgivable to assume that social media would allow access to many new, previously unobtainable genres of music and, as a result, would lead to a wider, more eclectic taste in music. Data collected from the survey on the chosen demographic, and comments from the observed and interviewed participants indicated that many of the individuals (seventeen of the twenty-five) considered themselves to have an eclectic, almost omnivorous musical taste. The survey data also indicated that those participants who regularly welcomed online recommendations liked a larger number of musical genres than those who discovered music via other methods such as the radio or suggestions from friends. (See page 188) In the interviews, it was commonly stated that, in making the playlists, the participants included songs that were 'different' or that were intended to educate and introduce the recipient

to music that they may not have heard before. Yet, despite these claims, the playlists that were submitted were predictably similar in genre and style. Though only one song appeared more than once in the playlists, several bands and artists made more than one appearance, and there were notably few surprising entries. This level of homogeneity in the playlists indicates that although a greater number of musical genres may be 'liked' by participants who engage with social media and the algorithmic recommendations that come alongside, the likelihood to branch out and include them when recommending tracks to others is small. Also, it is not evident from observing the recommendations that the participants received, that these recommendations are of a particularly eclectic nature. 'Unsuitable' recommendations are skipped past and the apparent disinclination to scroll down the web page suggests that even if more 'obscure recommendations are made, potential omnivorousness is stifled.

There appears to be dual actors upon the participants in making the playlist choices, influencing them in tandem. Firstly, by the direct influence upon them: by a combination of their habitus and the online algorithmic personalisation, and secondly, they are influenced by the need to be influential; by the necessity to provide a 'successfully receivable' list of songs for a One Day Elliott fan, (which in itself carries with it a number of considerations.) Both of these factors are potential contributors to the relative homogeneity of the playlists. A prevalence of guitar-based music could be linked to the taste of the participant, the projected taste of the intended recipient, or a mixture of the two.

In terms of the influence of having to influence others, the responses given in the interviews indicated a strong sense amongst many of the participants to ensure that the playlist reflected on them favourably. This in itself is surrounded by conjecture and estimation, as the participants have to make assumptions on the taste of the playlist recipient in order to assess how best to obtain cultural capital from the exercise, balancing pre-empting the recipient's response to the song choices, and confidence to go with their own choices regardless.

Whilst it is true that the majority of the participants, in some way, applied their own musical knowledge and taste in making the decisions for the playlist, this was done via the filtered content received through their previous engagement with social media, and, though the offered content is done so based on personal data, it is also filtered by that data, limiting the choices available.

Analysis of the both the primary and secondary research suggests that there exists a naivety to this influence, and that individuals from the chosen demographic are unaware of the extent to which they are influenced.

It was indicated from the data collected in the survey, that less than 40% of the demographic would consider online recommenders to be a significant influence when being recommended music, but it was also indicated that online streaming is the most popular format on which to listen to music, and that YouTube is a primary format for discovering new material. In contrast, over 80% of the survey responses indicated that they would value music recommendations from a friend over anything else, but only six of the observed participants implied that this was a method used in curating their playlist.

Several of the participants suggested that they were not at all influenced by social media, but evidence from the observation and interviews of these same participants shows that some of their choices came from the recommended lists on YouTube, Spotify and other sites embedded with personalised algorithms.

Drawing on the Bourdieusian theories discussed in this research, and following on from the likes of Pariser (2011), I suggest that, to an extent, we are moving increasingly into a realm where our musical tastes are affected both implicitly by our habitus, and explicitly by means of algorithmic personalisation, in a pincer movement, narrowing our tastes and channelling our musical choices. Additionally, and what makes this an extremely complicated process to analyse, is that these implicit and explicit restrictors are actors upon each other, in a complex network (see Latour 2005) and in a self-perpetuating loop of influence.

We choose music based on our habitus, which is observed by the algorithms, and material is then offered to us and restricted accordingly. This filtering in turn affects the development of our habitus. It surrounds us with like-minded opinion, and 'relevant' information, based statistically on our own likes, and on those of 'similar' people.

Whilst this type of social influence is not a new phenomenon (examination of the existing literature into musical subcultures suggest that the places in which we choose to socialise or visit and the people with who we surround ourselves have often been based on genre or style specificity), a significant difference lies with the restriction of access to the alternatives. Challenging opinions and opposing genres are deemed irrelevant and are filtered away from us.

Substantial importance here lies with the idea that these algorithms are partly driven by our own tastes, encouraging a consideration of the actions we take online.

Small's concept of Musicking is an empowering gerund, highlighting and allowing us to experience the relationships formed through musical activity. According to Small, Musicking enlightens us to our position within a particular environment, as we perceive it to be, in a complex network of connections.

As proposed in Chapter 2, *Tasteing* is the idea that by engaging with aspects of culture based on our tastes, we are not only forming relationships with others, and positioning ourselves in the network of sharing and experiencing information, but also, by these relationships and experiences we are forming relationships, communicating with and influencing the position of our future selves in future environments.

The algorithmic filtering present in social media has amplified the presence of ourselves, and previous experiences, on the present, making more significant our own tastes as actors on the new ones we may develop.

The things we like, now more than ever influence the things we *will* like. When we *taste* we are both experiencing, and contributing to future experiences.

Whilst algorithmic filtering is largely fuelled by our own, personal data, this research also supports theories that acknowledge the importance of an awareness of corporate influence. In some ways, the democratising nature of social media is apparent, bridging gaps between consumers and producers and allowing for a participatory culture, however, the algorithms that underlie social media are often driven by marketing and business-led motivations, and the potential for this to be manipulated has been discussed. As the algorithms' influence grows, the power granted to what, or *who*ever controls it, also increases. Notions of this are potentially exemplified by the changes in policy made by Google that affected the use of the observational extension.

The Internet's seemingly limitless access allows us the potential freedom to explore anything we want, but analysis of the research indicates that, in reality, this opportunity is taken advantage of infrequently. Users of YouTube amongst the participants, for example, tend to not scroll very far down the page and access only the videos that appear near to the top of the list, which are there because they are recommended as being most similar to the current video. The participants were also extremely unlikely to watch a video for more than a matter of seconds, exemplified in the observational section of the research where nearly 60% of the mouse clicks on YouTube were separated by less than ten seconds.

This disinclination to delve deeply, coupled with the limitations imposed by the personalised filters, serves to narrow musical consumption. Whilst

material is being offered with every click, the algorithms, in an attempt to distinguish that material which it deems most 'relevant' (often fuelled by corporate agenda), blinkers our view and restricts us access to the alternatives.

Although it is true that more obscurely related material is potentially available, it lies beyond the reach of where most of us are willing to go. Instead, the tendency is to paddle in the shallow end, and engage only with the most obvious, most likely options.

Regarding musical taste, there exists an apparent homogeneity amongst the members of the One Day Elliott Facebook fan page. Despite insinuations of broad, omnivorous tastes, the survey highlighted a substantial dominance of guitar-based, rock genres and a collective dislike for more electronic, dance-based music. These tastes were reflected in the playlist submissions, where the curated lists were of an equally predictable and homogeneous nature.

A personalised social media signifies a potentially monumental shift in the way we consume, appreciate and engage with music.

Via the theories of Bourdieu, this research has emphasised the importance of music's social connections with identity and the exchange of cultural capital. Such an impact on our relationship with music will undoubtedly also have significant social implications. Music has traditionally been strongly linked with the formation of relationships, but in many ways replacing face-to-face interactions and public real-life congregations, with online communication has altered the way that this works.

In this sense, the personalisation of social media contributes to the fragmentation of the traditional idea of musical subcultures and leads to more acute distinction between individuals and a heightened sense of individualisation. Social media do operate in networks and encourage connections, however disingenuous, with a vast number of other users, prosumer culture has flourished and the number of potential interactions has greatly increased; However, despite this hyper-connectivity made available by social media, certain aspects of what it *is* to be social are discouraged. As the algorithms mine data and personal information, a detailed, specific picture of each individual and the nuances of their musical taste is created, which allows the presentation of customised material. Some of the personal connections, which contribute to forming musical communities, are lost: Traditional forms of cultural intermediaries have shifted from friends and social groups, to become digital, inhuman algorithms based on our own data and statistics. If, as the existing literature suggests, individuals are more likely to behave differently, or display multiple identities online, masked by a level of anonymity afforded to

them by existing within a virtual space, these initial effects are potentially isolating and shepherd us towards insular, personalised micro-niches, despite the apparent increases in the ability to communicate.

However, the overall effects of personalisation are complicated and diverging. It is in the filtering of information that this initial individualising nature of the algorithms is somewhat counteracted. The very aspect that contributes to the distinction of these users is what then begins to unify them, though, not in the same way as perhaps traditional subcultures. The inclusion of collaborative filtering offers material based, not just on our personal information, but also on the information collected from *others like us*. This, coupled with corporate, marketing agendas (whose purpose is to implement financial gain rather than enrich our lives or make us more omnivorous), positions the algorithms as gatekeepers, guiding us instead, towards particular aspects of culture and can prevent a broadening of taste.

This research has recognised the notion that taste is personal and unique to each and every one of us, built on a foundation of complicated processes and infinite variables. I theorise therefore, that in terms of culture, we have always owned (or be owned by) our own habitus, and we have *always* been individuals, and that actually, despite its initial attempts to identify and cater to these individual tastes, personalisation and a customised online experience hinders individualisation.

Not only are our tastes complex, but this research has identified the notion that they are fluid and flexible and our inclinations towards music can be dependent on the current mood or situation. The Algorithms, though constantly gathering and adapting to the data, could struggle to infer or adjust to these traits, especially if they are not acted out online and offer material based on a more consistent version of what it assumes our taste to be.

As discussed in the literature review, aspects of the past are awarded a heightened presence in our consciousness thanks the algorithms being there to remind us, 'you watched this once' and items that perhaps would have been forgotten are kept in view.

What we enjoyed yesterday, we may not be feeling today. Something may have happened to alter our opinion or association with a certain song. We might have listened to a track or watched a video for a particular reason, (as was the case with Eternal Flame – see section 7.6) but still, the algorithms will log this as an engagement and continue to offer connected music, at least, until it learns otherwise.

And the algorithms do 'learn'; collecting data, even at times when we might think that they do not. The more data collected, the wider bases the algorithms have upon which to offer and predict. But, in some ways, every recommendation is a stab in the dark. The inability for technology to accurately extrapolate the particular nuances of human emotion and the irregular, non-fixed nature of our taste is significant to the accuracy of the systems.

But not to their effectiveness; from analysis of the primary data, and the information gathered from the existing literature, it seems that accuracy (in terms of what we truly want or need), is not necessarily the primary objective. For businesses, the algorithms enable acutely targeted marketing. It's easier to target people if they are huddled together. In effect, the algorithms offer more and more material to us, but with a decreased sense of stylistic variety.

It is in this limitation of growth that we are swayed to become individual members of a community where, to some extent, we are unaware of the other members. We stand increasingly close to each other in parallel, individual filter bubbles, exemplified in the primary research by the individuals who felt that they were uninfluenced by social media, and who would consider themselves to have broad, omnivorous tastes, but who submitted predictably similar playlists.

In terms of musical consumption and engagement, algorithmic filtering is making social media less social and more insular, leading to a fragmentation of traditional musical subcultures, and the formation of something different. Communication does exist, and in many ways is heightened, but the parameters and boundaries of cultural musical communities have changed.

The personalisation of social media signifies a very particular type of distinction and acts upon us in a complicated, often dichotic, matrix of influences.

We are encouraged to participate, communicate and congregate online and we are continually suggested friends, music and other material that is deemed to be in line with who we are as individuals. These recommendations though, are based on regimented parameters.

Referring to an earlier discussion in section 5.5, the results support the notion that personalised algorithms have a polarising affect when it comes to structure and agency. Collecting copious data can initially help to individualise and strengthen one's position as an agent, but the filtered content we receive as a result, steers us back towards social and cultural structures.

We have the potential freedom to explore, but the systems, which, for the most part are obscured from view, are set up to prevent us from doing so, and

instead, guided by the data collected by the algorithms about what we would like best, what people like us would like best, and what the businesses would like us to like best, recommend that we stay where we are, with, perhaps, a gentle nudge here and there to prevent us from straying.

As well as this notion, there are several areas in which the current research contributes to this field.

This research has introduced Tasteing; a new term to highlight the complicated loop of engaging with culture based on our taste, but also by doing so, influencing and contributing to our future tastes and experiences, magnified by the personalised algorithms, forming communicative relationships with ourselves. This process is noteworthy as it signifies the increased presence of ourselves as an influence on the evolution of our habitus.

Another area, in which I believe this research contributes significantly, is in its methodology and the means by which the participants have been observed. Although new versions of the software would need to be developed (due mainly to the changes in policy by Google) the method of remote observation by means of a tracking extension allows minimal researcher-participant influence. It carries with it some of the same considerations (participants may behave differently if they know they are being observed) but it is far less intrusive than traditional observation methods. It also allows the researcher to observe by means of collecting data in the same way as the algorithms embedded in social media, theoretically, providing the researcher with the ability to learn about the effects of technology, by using the same technology. This is important as it can give a truer insight into the way data can be collected and analysed.

Acknowledgement of the possible manipulative use of data by corporations and businesses, along with the other associated dangers that accompany the collection of big data, highlights a possible necessity for vigilance. For some, such as Pariser (2011) the low level of awareness of algorithmic influence amongst users of social media, suggested by this research, could indicate an obligation for more transparency in how data is collected, analysed and used for marketing purposes. In contrast, others would say that it signifies successes in subliminal advertising, contributing to an increasingly risk-averse industry preferring us to continue to choose music very similar to the music we liked most recently, than try something new. In terms of industry, and short-term profitability, this would be seen as extremely positive.

The desire to improve the accuracy and influential ability of these systems has been discussed and perhaps this research is an indicator of just how successful those attempts have been.

It needs to be remembered that any improvements that are made to the algorithms embedded in sites such as YouTube and Facebook, are not necessarily to improve the experience of their users in *every* sense. Facebook, YouTube and most other forms of social media are businesses and their primary purpose is to continue to exist and be profitable. The enhancements therefore are more about hooking the users and making the services more and more addictive.

This is one of the reasons that social media are continually looking to adapt and upgrade the algorithms, in an attempt to direct as much as engagement with their sites as possible.

Even if the companies base their algorithms on what users say they want, or adapt the services so that people have more control over what they can see and are able to filter for themselves, it should be acknowledged that it is often the case that we don't always know what is best for us, and there is every likelihood that 'too much of a good thing' could lead to a decreased excitement and, in turn a reduction in traffic. Furthermore, whilst Facebook may currently be the dominant force in Social Media, there are glimpses that suggest this notion could be realised:

Not every social media site sticks rigidly to an exclusively data-driven approach. As mentioned in section 10.3 Instagram, for example, which was launched in October 2010, chronologically shows all photos from all the people you follow, instead of an algorithmically ranked, filtered list. In April 2012 Facebook paid £1bn to buy Instagram, to suppress the threat posed by its rapidly increasing popularity. (BBC News 2012a)

If the personalised algorithms are essential to improve the quality and convenience of our online experience, how is it that a site such as Instagram, which did not rely on such filters could gain enough momentum and popularity to pose a threat to the most dominant social media site in less than two years?

Morally speaking, it could be argued that agendas should be made clear and measures ought to be taken to prevent the personalisation of social media potentially becoming a sophisticated capitalist propaganda tool, but 'better' ethics or morals do not necessarily translate to a better industry and the capitalist benefits are likely to outweigh concerns about cultural breadth.

Furthermore, clarity is an important issue, regardless of capitalist agenda. Personalisation whether considered good or bad, can lead to the algorithm-powered narrowing of taste, and the restriction of information. A lack of awareness, of *being* influenced is likely to further affect the way that we are

influenced, and could prevent measures being taken to counteract or limit that influence.

The positive effects of emotional diversity, (see the work on *emodiveristy* mentioned in section 5 (Quoidbach et al 2014)) has been suggested to include improvements in mental and physical health and that a lack of varied stimuli is potentially detrimental.

For those who consider the narrowing of taste to be a negative development, the choice to safeguard aspects of randomness and exposures to alternative information so that opinions can be challenged, ideas can evolve and tastes can be broadened, is not afforded to them if the algorithmic influences are concealed.

However, irrespective of whether the effects are good or bad, this thesis acknowledges the presence of the hidden impact that personalised social media has on individual members of the demographic.

To take my research further, there are several avenues down which I would like to venture.

Firstly, I'd like to conduct similar research using alternative participant sample groups. Not only would I like to conduct comparable research focussing on fans of different artists and genres, but it would be interesting to analyse and compare the results from a sample of individuals who were not familiar with One Day Elliott to observe the effect that being connected to the subculture, at least by means of being in the Facebook group, has on making the playlist for an unknown One Day Elliott fan. I'd like to assess whether the trends and stylistic propensities would exist amongst individuals who did not share this particular element of taste with the proposed playlist recipient, whether the desire to impress would still exist, and whether having to familiarise themselves with the band first, would affect their decisions and the overall genre specificity of the playlist.

I would also like to focus similar research on a younger group of participants and assess the differences afforded by digital nativity. I would like to assess whether this would affect the tendency of the participants to use their own knowledge and seek inspiration for new music elsewhere, and how it would affect their attitudes or awareness of algorithmic gatekeeping.

Future research would benefit from updated forms of the software to allow the tracking of participants on mobile devices. Even since the start of this research, online musical activity has seen a shift in favour of mobile technology.

It is suggested from the primary research that streaming services such as Spotify encourage a *'listen-any-where-any-time'* behaviour, which advocates listening via phones and tablets. As such, an observation of online musical behaviour via social media on these devices would allow for a deeper sociological insight.

These alternatives would allow for interesting comparisons with the current findings of the demographic.

Whilst the purpose of this research is not necessarily to apply the results directly to the general population, it gives an insight into how connected individuals within a sample group can be affected by the personalisation of social media in terms of musical consumption.

Concentrating briefly though, on a wider scale, I feel that it is important to acknowledge the potential implications on society outside the focus of music alone. The Facebook mood experiment discussed in (section 5.1) illustrates the persuasive nature of a filtered exposure to material. The notion that individuals engage with social media with extreme regularity, and that for many, sites such as Twitter and Facebook provide a primary source of news and information highlights the influential impact that algorithmic personalisation can have. It is not just our musical tastes that may be narrowed; Political persuasions and opinions are likely to be reinforced if the 'friends' with whom you surround yourself are like-minded. If the material presented to you is filtered based on data collected about your current personal attributes, there will be nothing to sway or challenge the views or tastes that you currently possess. A true understanding of anything is reliant on access to all of the information and the more ubiquitous personalised social media becomes, the more information is restricted and censored.

It could be argued that to eliminate the irrelevant or unwanted is to create an unnatural, unbalanced world. Can we truly appreciate what we see and consume, if we are never exposed to the alternatives? In the world of online recommenders and personalised social media, we each contribute to our own censorship.

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Appendices

Appendix A – Participant Interviews and Playlists

1. **Participant 1 – male 23**

Observational Candidate number: 73bda0ee-4231-47f2-8420- 63ca0e293b67

Playlist

Song 1 - The Jungle - Heat
Song 2 - Royal Blood - Out Of The Black (new to me)
Song 2 - Beasty Boys - Sabotage
Song 3 - Placebo - Nancy Boy (new to me)
Song 4 - All Them Witched - When God Comes Back
Song 5 - The Bots - Blinded
Song 6 - Death From Above 1979 - Virgins
Song 7 - Deftones - Be Quiet And Drive (new to me)
Song 8 - Gary Clark Jr. - Bright Lights
Song 9 - Tomahawk - God Hates A Coward (new to me)
Song 10 - The White Stripes - Ball And Biscuit

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
I chose the songs based on how I was feeling on the day. Also, part of my decision-making was probably based on the fact that the songs I was choosing would reflect on me and my taste.

How aware were you of any online recommendations or suggestions being made by Social media?
I made the playlist using Spotify so I was influenced by the programme I was using giving me recommendations. I wouldn't have been affected my Facebook or Twitter.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
To choose songs I hadn't heard before I used the public playlists on Spotify of that were trending in the rock sections.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.

My decisions were affected by Spotify recommendations exclusively and I used my own judgment as to whether I liked it or not/include it in the playlist

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
I have a broad taste in music but I think I tend to swing towards rock so I pick songs that are in that genre.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
I like the band One Day Elliott so I was trying to impress the fan to some extent, by including songs that they'd like or introduce them to something cool.

When creating the playlist, was it important for you to include songs that you like yourself? If so, why?
It was important because I felt like the songs were a reflection of my own taste

So given that the recipient of the playlist was a complete stranger, what made you confident that the choices you had made would reflect you favourably?

I made an assumption that the recipient would reflect positively on my taste, but in reality, I have no idea what said person would think.

2. **Participant 2 - male 31**

Observational Candidate number: 1a9cf737-d476-47e5-ab7e-cb3901ed83e6

Playlist

Song 1 - Hildamay - Changing The Key (new to me)
Song 2 - InMe - Faster The Chase (new to me)
Song 3 - Deaf Havana - Smiles All Round (new to me)
Song 4 - Your Demise - The Kids We Used To Be (new to me)
Song 5 - Light You Up - It's About Time (new to me)
Song 6 - Maven - Let It Go
Song 7 - Lower Than Atlantis - Beech Like The Tree
Song 8 - The Blackout - Higher And Higher
Song 9 - Elliot Minor - The White One Is Evil (new to me)
Song 10 - Young Guns - I Want Out (new to me)

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
The way I choose the tracks was I typed 'One Day Elliott' into the iTunes Store search engine and chose tracks from bands that iTunes said were similar in style.

How aware were you of any online recommendations or suggestions being made by Social media?
Not very as I didn't use social media recommendations to base my playlist choices on.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
I used the recommendations that iTunes found based on the musical style of One Day Elliott and chose tracks by recommended acts that I hadn't heard before.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.
My search was entirely reliant on the recommendations that iTunes gave me. I trusted that they were making suitable recommendations based on the musical style of the target act. I did not use social media recommendations to construct my playlist.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
Not very much as I used the recommendations that iTunes gave me to construct the basis of my playlist.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
As I knew the person in question was a fan of One Day Elliott I solely chose rock acts to form the basis of my playlist as One Day Elliott are a rock act.

When creating the playlist, was it important for you to include songs that you like yourself? If so, why?
No it wasn't important for me to include songs I like myself in the playlist as the songs I liked the person in question might not like.

3. **Participant 3 - male 34**

Observational Candidate number: 2d40a99f-12c8-465c-b270-67dab41cee35

Playlist

SONG 1 - Millencolin - no cigar
SONG 2 - Papa roach-last resort
SONG 3 - Weezer-back to the shack
SONG 4 - lit-no big thing
SONG 5 - red light runner-lucky 13/just might find (new to me)

SONG 6 - hundred reasons - if i could
SONG 7 - the mr t experience-babababababa
SONG 8 - Fenix tx-tearjerker
SONG 9 - frank turner-recovery (new to me)
SONG 10 - damn this desert air-hanger (new to me)
SONG 11 - maven-the forgotten ones (new to me)
SONG 12 - ash-lose control
SONG 13 - van halen-jump
SONG 14 - warrant-cherry pie (new to me)
SONG 15 - green day-2000 light years away
SONG 16 - light you up-it's about time
SONG 17 - story of the year-sidewalks
SONG 18 - green day-redundant (time of your life)

Interview questions.

Firstly I youtube'd One Day Elliott, and picked the most viewed video, which in my opinion is often the first base for any music enthusiast on discovering a new/unheard of band/artist. I then picked an older dated video as a feeler for their musical progression & early sound to discover their influences. Visually, I also was able to obtain a clear sense of genre from their fashion and prospective age which aligned heavily with their sound. From this basis I began to develop my own sense of what the stranger in question (being informed they were a fan) was dare I say it 'INTO'. My perception of their music aurally was that it was heavily influenced by 90's heavy rock/new era punk some may say punk pop even though I use the latter genre title loosely, since this has been greatly diluted in recent years. This also fitted my visual judgement of fashion and age and gave me the foundations of where I would go with deciding upon a playlist akin to this person in questions 'TASTE'. Having been of a similar age to the band in question, at a guess, a year or two younger, I could hear and see their influences and began to recollect memories of songs of that genre that I experienced and used that as my 'THEME'. Bands like Green Day were pioneers of this genre at the time, along with Weezer and then slightly later Lit and Papa Roach bridging into NU-Metal genre. Not knowing how old the fan was, I felt I covered both bases with the foundations of my choices being of that era in time, as if the person was of a similar age to me, they would certainly recognise a few of the songs/bands I'd selected or perhaps not heard the odd few and might be encouraged to listen to them further. Alternatively if the stranger, was born in say, late 90's early 00's, then this may educate them on One Day Elliott's "SOUND', or in my opinion, their main influences up to a certain point in history without wanting to musically deviate the stranger too far from what I perceived they would listen to.
I interlinked my own back catalogue memory bank of 90's So-Cal songs/bands with other online recommendations from Youtube/Spotify occasionally, though I hasten to add I trusted my own judgement more than that of a random computer playlister, which may explain the somewhat random nature of some of the songs, for instance I would not link Fenix TX to Frank Turner, however I felt obliged to select the odd recommendation here & there, to give the stranger a broader view

of opinion, but I feel you can see I often ended up reverting back to what I felt the band sounded like. I could also see when researching the band's bio on their website and Facebook page, their Kent based location and certain tours and bands they'd toured with. This led me into a few of the bands listed as I began to delve into the 'LOCAL SCENE' vibe such as Maven & Red Light Runner. Very much UK based but with similar genre influences as One Day Elliott. I also noted from first listen to their current song, the strong musical throwback references of their influences peers, such as Van Halen/Rush/Dinosaur Jnr. This led me to Jump by Van Halen, somewhat still timeless regardless of the stranger's age. Yet once again the recommendation after having youtube'd this let me down, and I was close to not putting in Warrant, wary of musically emigrating the stranger to another genre entirely, however I began to think of the importance of history and post era influence and how the bands/artists we listen to today have been shaped or formed from genres/bands/artists past.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
I feel at least 60% of this playlist will depict the band fairly and keep the listener encouraged, bearing in mind there are many more bands/artists (some obvious of that era) I could have put in, but I've attempted to compile some of the lesser known gems of that particular era that I feel best describe One Day Elliott's sound 'TO ME' and will hopefully encourage the stranger/fan of the band to further delve into this past era or beyond, or become a fan of the new local scene. Furthermore, at 18 songs, I feel this playlist serves a sizeable musical platter without over-elaborating too heavily and risk losing the interest of the listener in question.
If I'd just have chosen the online recommendations alone having first listened to the band, I'm not entirely certain of maintaining the stranger/fans musical interest or indeed my own, as some of them were quite wayward, almost random. I recall around that certain era in time, relying heavily on the website of the record label that the band you were a fan of were signed too. This practically guaranteed you success at finding other similar sounding bands, or failing that, inlay cards in cd's of bands they'd toured with. To some extent I used this formula when researching the local scene of One Day Elliott but as people grow older and their musical influences change or mature, it then can be a very diverse mix which I feel was why the online recommendations were a bit off the mark, as your taste matures/diversifies so do the recommendations and even though they may open up the playlister to an undiscovered gem of that genre era, largely I felt it would musically divert the listener too far from the main focal point of this particular playlist, being for a fan i.e. liking that particular music/sound of the band One Day Elliott.

4.   Participant 4 - female 25

Observational Candidate number: 9c51c40c-67f3-4d70-a2e4-0e11faae6468

Playlist

Song 1 – Queen – Somebody To Love
Song 2 – Foster The People – Call It What You Want (new to me)
Song 3 – Garbage – Sex Is Not The Enemy
Song 4 – Panic! At The Disco – New Perspective
Song 5 – Gaslight Anthem – 59 Sound
Song 6 – Chuck Ragan – Something May Catch Fire (new to me)
Song 7 – Hot Water Music – Drag My Body (new to me)
Song 8 – Mumford and Sons – Lover Of The Light
Song 9 – The Lumineers – Stubborn Love
Song 10 – Bon Iver – Lump Sum

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
To begin with I chose a song that is always good listening and a personal preference of mine. the second song was a suggestion from YouTube itself that after listening to, I really enjoyed. Other choices were suggestions from friends on bands I may like but I never got around to listening too. others are just generally high up songs in my one favourite list.

How aware were you of any online recommendations or suggestions being made by Social media?
 I was rather aware of suggestions online, due to using YouTube, but only a couple of times did I choose the first song suggested.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
For this is asked some people around me for suggestions of new music, and spent some time listening to as much of the new groups as I could before making a final decision on a song.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.
I don't feel like I relied heavily on this as there were only a couple of songs I chose straight from suggestions.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
I feel I relied more on this to make my choices. Though some may seem obscure due to the fact I like a wide range of stuff.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
It affected the process a little, as I was looking for similarities, be it a strong male

voice present or a just a catchy hook I found myself humming. Also instrumentation I tried to keep as a running theme.

5. Participant 5 - male 36

Candidate number: 0b955ea5-f27e-45f5-9056-a07299513447

Playlist

Song 1 - One Day Elliott - Palladio
Song 2 - Power of Love - Huey Lewis and the news
Song 3 - Hall and Oates - You make my dreams come true - Not heard of this
Song 4 - Jimmy Eat World - A praise chorus - not heard of this
Song 5 - Julianne - Ben Folds Five - not heard of this
Song 6 - Nickelback - Burn it to the ground - not heard of this
Song 7 - One Day Elliott - Never be content with average
Song 8 - New Found Glory - My friends over you - not heard of this.
Song 9 - Rupert Holmes - Escape (Pina Colada)
Song 10 - Simon and Garfunkel - Call me Al.
Song 11 - Lionel Richie - Dancing on the ceiling
Song 12 - Pavarotti - Nessun Dorma

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
My playlist was based upon my own choices and those of people whom I knew were interested in One Day Elliott. I decided I would start and end with my own choices. I figured it was important to open with an invigorating crescendo and, perhaps even more importantly, to finish strongly. I had always remembered how powerful One Day Elliott's version of Palladio was, and how it had such an energizing affect. Nessun Dorma to me always evokes a strong emotion, mixed with passion, probably through its footballing links. I decided to choose 3 songs myself, the final one I would leave down to popular demand from some research.

How aware were you of any online recommendations or suggestions being made by Social media?
My first port of call was to ask 5 friends on my Facebook list, who knew the band and liked the music, to give me their favourite upbeat songs that had no connection with One Day Elliott, then I gave them my two favourite, powerful One Day Elliott tracks and asked them to pick which they thought was best. This proved to be a bad idea. I didn't get any response.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
Instead, I choose 5 Facebook friends, who I knew were big fans of ODE and asked them to send me a message including their favourite One Day Elliott song and

their respective upbeat non-One Day Elliott track. This proved far more beneficial. I wanted to try and aim my playlist at around 10 tunes. I figured there may be duplicates and so 2 songs from everyone, plus my 3 would make a reasonable playlist. Perfect perhaps for the gym or for a jogger, as I wanted the tracks to be powerful and evocative. I also knew the diversity of the people I asked would practically guarantee I would get many songs I hadn't heard of before. Which was true.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made?
I tried YouTube, but that only really offered music from the same artist, which I didn't really need. I knew the One Day Elliott songs I wanted, and I figured I could trust the judgement of my Facebook friends to make the final offerings. In hindsight, I could've used the services of Spotify radio, but I didn't realise that existed at the time - that's an element that I've only just been educated on. I think I gained a positive reaction from my Facebook message. Spotify radio may have complicated things - I would have had too many options. I like to keep things simple.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
I know for sure that my first and final song choices were a guarantee before I began this project. My second One Day Elliott track was probably subconsciously already determined, it was just how it fitted in my playlist that I hadn't settle upon yet.

Do you feel that you have a broad taste in music?
I don't think there's a style of music that I don't like really so, yeah I guess so.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
Generally, I'm pleased with the playlist, It's upbeat and full of energy with a strong start and end. It has 2 of One Day Elliott's best and powerful tracks at the start and as a central figure. I think a stranger would approve.

When creating the playlist, was it important for you to include songs that you like yourself? If so, why?
I think it's human nature that you want to please yourself before you please others. Also, I had an idea of it being a playlist for someone active (e.g. a runner, gym goer etc.) so it seemed wise to introduce them to a few tracks that I would want. It wasn't essential, and there was probably an element of selfishness involved in the process, but that's okay, it was my playlist. As it was a playlist for a One Day Elliott fan, and I enjoy One Day Elliott music, I had a strong idea of a couple of songs that would be ideal for the playlist's genre, but also it would link in with the entire idea of the project.

What made you think the playlist was for someone active?
I don't know really, I was making myself a playlist for the gym at that time and so I think that was on my mind.

Did you have any concerns about how the playlist would reflect on you, and if so how did this affect your process?
Not really, that's why I thought it was a good idea to seek help from friends who I knew were not only interested in music, but also had positive personalities, so they would probably have a large selection of upbeat music knowledge. My taste is pretty varied and they were also One Day Elliott fans, so I was covered. That made the whole process fairly easy to be honest.

6. **Participant 6 - male 28**

Observational Candidate number: 9521c1d6-ca43-4470-9f1d-36b8520864ea

Playlist

Song 1 - One Day Elliott - Illegal Ninja Moves From the Government
Song 2 - One Day Elliott - Broken
Song 3 - New Found Glory - Ready and Willing (new to me)
Song 4 - New Found Glory - Vicious Love
Song 5 - Saves The Day - At Your Funeral
Song 6 - Saves The Day Shoulder to the Wheel
Song 7 - Story of the year - Until the Day I Die (new to me)
Song 8 - Young Guns - Crystal Clear
Song 9 - Young Guns - Speaking in Tongues
Song 10 - Letlive – Lemonparty (new to me)
Song 11 - Letlive - Muther
Song 12 - The Classic Crime - Gravedigging
Song 13 - The Classic Crime - The Fight
Song 14 - Deaf Havana - Friends Like These
Song 15 - Deaf Havana - Smiles all Round
Song 16 - Fightstar - The English Way
Song 17 - Funeral For a Friend - Juneau
Song 18 - Heavens Basement - Fire, Fire (new to me)
Song 19 - Last Winter - Night Launch
Song 20 - Last Winter The Northern Lights
Song 21 - Yellowcard - The Deepest Well
Song 22 - Yellowcard - Transmission Home
Song 23 - Breaking Benjamin - Diary of Jane (new to me)
Song 24 - Mallory Knox - Lighthouse
Song 25 - Mallory Knox - Ghost in the Mirror
Song 26 - You Me At Six - Room to Breath

Interview questions.

Could you please talk me through your process of choosing the songs for

your playlist? How did you make your decisions?

I usually make/made a conscious decision of 1 or 2 songs per band I like to keep a good variety and also to keep my attention. Most of the bands are ones I have liked for quite a while and are songs that have big choruses.

How aware were you of any online recommendations or suggestions being made by Social media?

I was very aware. I keep a good track of Rocksound, suggestions on Spotify, Youtube, Pitchfork and listen to Kerrang and other rock Radio Networks regularly.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?

I usually look to see what new albums are out by bands via Rocksound, sometimes via the label websites, radio and Facebook.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.

I usually head to bands I'm fond of and look at the suggested bands given and I will spend a short amount of time (10 to 20 secs) listening to them and then make a decision as to whether I like them or not. I also check out anything certain friends post to do with bands that I may like and give them a listen.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?

I think my own knowledge is quite broad and the outlets I use to source new bands are quite varied. I think my own knowledge is strongly relied on to make decisions as to what to choose for this playlist and the bands I have previously liked which I would listen to with One Day Elliott.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?

It made me think about what I feel are the strengths of One Day Elliott and what stands out when I listen to them. That being 'big' choruses, a dynamic approach to verses and melodic vocals. All the bands I chose I felt represented that.

7. **Participant 7 – female 33**

Observational Candidate number: aa92bc08-bea6-4f02-adb3-ff912032a0b2

Playlist

Song 1 - Phinius Gage - Battered and Bruised (new to me)
Song 2 - +44 - When Your Heart Stops Beating

Song 3 - Panic! At The Disco - This is Gospel (Piano Version) (new to me)
Song 4 - City and Colour - Sleeping Sickness
Song 5 - Yellowcard - Fragile and Dear (new to me)
Song 6 - Alkaline Trio - Calling all Skeletons
Song 7 - Brand New - Sic Transit Gloria
Song 8 - Taking Back Sunday - A Decade Under the Influence
Song 9 - The Front Bottoms - Peach (new to me)
Song 10 - Circa Survive - In Fear and Faith (new to me)

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
The ones I already knew, I just took from my playlists on my computer and the CDs in my car.

How aware were you of any online recommendations or suggestions being made by Social media?
For those ones, not at all really. Although, having said that, +44 was a band that was recommended to me ages ago by my friend in Japan and we usually talk through FB messenger.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
I searched online for One Day Elliott's influences. I think I made up a list based on a couple of interviews and the band website. Then I typed those bands into last.fm. I usually use that site to listen to different music to match my mood. Because it 'scrobbles' (which is a terrible, terrible word), it often pulls up music I've not heard of, and I just skipped through until I heard songs I liked. I don't remember which band brought up which song, but I put the songs I liked into a playlist that I listened to for a couple of days to decide which songs to recommend.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.
I have answered this above really - it was last.fm, and I did ignore quite a lot that popped up!

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
Again, I think I've answered this above in my first answer.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
I like lots of different styles of music so I had to think specifically about what a

One Day Elliott fan would like.

8. Participant 8 – male 32

Observational Candidate number: 3acc95bf-1223-4201-bb51-0ee39fa42cd4

Playlist

song 1 - New Found Glory - Truth Of My Youth
song 2 - The Get Up Kids - Red Letter Day
song 3 - Saves The Day - Shoulder To The Wheel
song 4 - New Found Glory - Don't Let Her Pull You Down (new to me)
song 5 - Queen - Hammer To Fall
song 6 - Foo Fighters - Learn To Fly
song 7 - The Vamps - Wild Heart
song 8 - Jimmy Eat World - My Sundown (new to me)
song 9 - Rixton - Wait On Me
song 10 - Queen - I want To Break Free
song 11 - Jimmy Eat World - I Will Steal You Back (new to me)
song 12 - The Get Up Kids - Mass Pike (new to me)
song 13 - Dashboard Confessional - The Places You Have Come To Fear The Most
song 14 - Midtown - Rock 'n' Roll (new to me)
song 15 - Queen - Hammer To Fall
song 16 - Alkaline Trio - Another Innocent Girl
song 17 - 5 Second Of Summer - Jet Black Heart
song 18 - Saves The Day - Xenophobic Blind Left Hook
song 19 - Aerosmith - My Fist Your Face
song 20 - Good Charlotte - Let The Music Play
song 21 - Foo Fighters - My Hero

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
The majority of the songs mean something to me whether it's just a great song or it may have a memory attached to them.

How aware were you of any online recommendations or suggestions being made by Social media?
Spotify does it constantly as for Facebook etc it doesn't really appear on my feed.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
I used recommendations from Spotify and looked up the charts online to see anyone I felt for pop rock sort of sounds.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For

example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.

Mostly Spotify recommendations to bands I like but didn't know, and googling the top charts.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?

My knowledge was my co-pilot on my decisions.

Do you feel that you have a broad taste in music?

Yeah, definitely more so as I've got older too.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?

I stuck with bands I know One Day Elliott are similar to, ones I like, and bands that I feel influence One Day Elliott

When creating the playlist, was it important for you to include songs that you like yourself? If so, why?

Majority was yes, if I like it then I feel that another ODE fan is likely to like it too.

9. Participant 9 – male 21

Observational Candidate number: c9447bdc-bac9-4cc5-979b-e8796b4d32ff

Playlist

song1 - Foo Fighters - The Pretender
song2 - Mogwai - Hunted by a Freak
song3 -Explosions in the Sky - A song for our fathers
song4 - The Offspring - Self Esteem
song5 - Truckers of Husk - Panther Party (new to me)
song6 - Jeff Buckley – Grace (new to me)
song7 - Radiohead - Creep
song8 - Foo Fighters - Everlong
song9 - Linkin Park - What I've Done (new to me)
song10 - Limp Bizkit - Build a Bridge

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?

My genre preferences are wide and probably different from the strangers, so I was not aware of many bands in this genre. So, I initially searched One Day Elliot, and listen to a few songs, then listen for key parts of the music which the stranger might like, i.e. the tone of the guitars and the riffs and vocals. After I knew this, I used some prior knowledge about bands I knew which had some

similar aspects, such as cool riffs and searched for some songs there. I also relied heavily on using the recommended links provided on YouTube from One Day Elliot, and often clicking through many recommended songs.

How aware were you of any online recommendations or suggestions being made by Social media?
 I was very aware; as I relied heavily on these to find new bands and songs I have not heard of. I mainly used YouTube, as I often do not use other social media platforms to listen to music. The YouTube suggestions mix links related to the videos you are watching and previous watched videos, which meant that it suggested different music genres from previous things I had listened too. I tried to focus on the genre relevant for this stranger.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
 As mentioned before, as I have not got a wide knowledge of this genre of music, I relied heavily on the recommended links from YouTube, and judged based on the number of likes and comments about the popularity of the song. I also listen to One Day Elliot to get an idea of the riffs, guitar style etc. to listen for myself if these attributes were replicated in the new songs I had found.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.
 I was very influenced and relied on the suggestions. I am not sure how I would have found new music without the suggestions, however I was critical, as I was more likely to recommend a song that appealed to both the style of music I like as well as the stranger. So I checked the suggestions and decided on their relevance.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
 After searching for One Day Elliot, I recognised a few of the links to bands from there, this then reminded me of similar bands and music this reminded me of. My only personal preferences of music influenced my choices, as I would choose a song that both appealed to my genre of music and then what I expected the stranger would enjoy.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
Firstly, with this prior knowledge, I searched for one day Elliot to get an idea of the genre of music. Then used the recommend views on YouTube to find related music. I knew it was for a stranger, however I wanted a to make a playlist that I would also like and appreciated, in a good order to make it coherent. So I focussed on finding songs that had similar attributes to what I thought the

stranger might like listening to One Day Elliot. But I also chose songs that I appreciated.

When creating the playlist, was it important for you to include songs that you like yourself? If so, why?
Yes it was important to include songs I liked, by habit I wouldn't send someone music that I didn't like myself? I think that it is hard to choose a song for someone else, if you did not like it yourself too

10. Participant 10 – female 35

Observational Candidate number: 8e763ef1-e0f1-40b5-bc20-bf4aa63d6a2d

Playlist

Song 1 - Placebo - The Bitter End
Song 2 - Alter Bridge - Coeur D'Alene
Song 3 - Biffy Clyro - Living Is A Problem Because Everything Dies
Song 4 - Incubus - Nice To Know You
Song 5 - Finch - Perfection Through Silence
Song 6 - In Case Of Fire - The Cleansing
Song 7 - Green Day - Welcome To Paradise
Song 8 - The Living End - Long Live The Weekend
Song 9 - Jimmy Eat World - Sweetness
Song 10 - Foo Fighters - Times Like These
Song 11 - Them Crooked Vultures - New Fang
Song 12 - Pearl Jam - Corduroy
Song 13 - Soundgarden - Fell On Black Days
Song 14 - Queens Of The Stone Age - The Lost Art Of Keeping A Secret
Song 15 - Shinedown - Second Chance
Song 16 - Deaf Havana - Cassiopeia (new to me)
Song 17 - Lower Than Atlantis - Here We Go (new to me)
Song 18 - We Are The Ocean - Young Heart (new to me)
Song 19 - Escape The Fate – Situations (new to me)
Song 20 - Volbeat - Cape Of Our Hero (new to me)

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
Opened my iTunes and picked one song from my favourite artists. Picked songs that are particular favourites of mine but equally ones that I wanted to introduce the "unknown party" to presuming they had not heard the artists before.

How aware were you of any online recommendations or suggestions being made by Social media?
None that I can remember. I'm signed up to various music news pages

on Facebook such as Kerrang! and band pages so I see various things in my newsfeed that my draw my attention but generally speaking I'm a bit stuck in my ways so don't pay a lot of attention to online recommendations or suggestions.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
I searched for One Day Elliott on the iTunes store and looked at the "Listeners Also Bought" section. Clicked on a couple of artists and looked at the "Listeners Also Bought" sections of those too to get some ideas.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.
I was influenced by the recommendations on the iTunes store for the tracks I'd not heard before. Had a look at the reviews and the tracks with the highest popularity and then made my own decision on how relevant they were and if I felt the band was "cool" enough to put on my playlist! ;o)

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
I massively relied on my own knowledge. As stated earlier I looked at my own music library and picked bands that are important to me. The fact the unknown party was a One Day Elliot fan gave me an idea of what kind of music they'd be in to so that also steered my choices.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
Knowing that the stranger was a One Day Elliott fan gave me a rough idea of the sort of music they would be into so I based most of my selections on a "rock" genre but that's not to say that that's the only type of music the stranger would be in to. I tried to give a little bit of variety throughout that genre to introduce them to different types of rock so you'll find some grunge (Pearl Jam, Soundgarden), post grunge/alternative metal (Alter Bridge), stoner rock (QOTSA), alternative rock (Placebo, Biffy Clyro, Foo Fighters), post-hardcore (Finch), Pop-punk (Green Day, The Living End) etc. etc. I tried to choose bands that are in the forefront of those particular genres as a good introduction. When making a playlist, I personally like to introduce people to bands that are important to me and have played a significant part in my life so that's also behind the decision making process for me.

When creating the playlist, was it important for you to include songs that you like yourself? If so, why?
I get a lot of pleasure introducing people to new music. I like to see people's reactions and I find people's different opinions really interesting. I love how music can stir up different emotions and mean different things to different people. I'm really passionate about my music and just think it's really important

that people hear things that they've not heard before. It's fine if they don't like it, everyone's different but if they do I feel like I've done a good deed and I'm passing on my knowledge. Likewise, I love being introduced to new music. Generally I'm quite stuck in my ways with music but I will take the time to listen to something someone has recommended to me. I think it's important to have an appreciation of talent regardless of whether it's your taste or not.

Do you feel that you have a broad taste in music?
Very much so. I listen to most things.

11. Participant 11 – female 34

Observational Candidate number: c2a8d911-5943-466f-ac8e-8e63bbd8d2fa

Playlist

Song 1 - Sheer Mag - What You Want (new)
Song 2 - The Replacement - Bastards of the Young
Song 3 - The Misfits - Hybrid Moments
Song 4 - Superchunk - Detroit has a Skyline (new)
Song 5 - Lawrence Arms - Are you there Margaret? It's me God.
Song 6 - Tori Amos - Cornflake Girl
Song 7 - Kate Bush - Hounds of Love
Song 8 - Chromatics - Running up that Hill
Song 9 - Christie Front Drive – Fin (new)
Song 10 - Twerps - Through the Day (new)
Song 11 - Kurt Vile - I'm an Outlaw (new)
Song 12 - Elliott Smith - Angeles

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
To create the playlist I chose a few songs which are favourites of mine, Song 2,3 and 12. Then a few which I felt went along with those which I also fitted with the info given (one day elliot fan), Song 5,6,7 and 8. I then chose some new songs to me which I felt work along with all of these, in the play list. Firstly I chose new songs I had not heard but by artists I knew, Song 4 and 11. To finish it off I asked my partner for recommendations which he thought would fit with both the info and with the other songs I have chosen, he gave me 6 or 7 songs and I listened to them in the context of the other songs and chose the 3 I thought fitted best, Song 1,9 and 10.

How aware were you of any online recommendations or suggestions being made by Social media?
I didn't use social media to create the playlist although I do follow some of the bands I chose on twitter and Facebook. I did use YouTube to help me pick which

songs to use from the artists I already knew, I searched the artist name and then picked the song I thought fitted best.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
As covered in the first question. I chose new songs by artists I already like as well as recommendations from my partner.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.
As covered in question 2. I used YouTube to search for artists, but these were songs I already knew. I didn't use suggested songs but used it more as a search engine.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
I relied on it a lot. I knew I wanted to mainly use genres that would fit in within the kind of music One Day Elliot play as that was the only info given about the person. I also listened to all of the songs, plus other options which I dismissed, to decide on the final playlist and the order of the playlist.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
As mentioned above I wanted to choose music that fitted in with the genres I feel One Day Elliott play so that the person would have a good chance of liking them. I also wanted to pick things which were not the obvious recommendations, so although they may have say an element of punk it wasn't a well-known song by a well-known artist, this might introduce them to something new.

12. Participant 12 – male 31

Observational Candidate number: b32626a1-1238-43af-ba48-7761303df5be

Playlist

Song 1 – C Duncan – Say
Song 2 – City and Colour – Little Hell (new to me)
Song 3 - Bon Iver – I can't make you love me
Song 4 – Nouela – Black Hole Sun
Song 5 – One day Elliott – Who am I kidding (new to me)
Song 6 - Aim - Demonique
Song 7 - Bush - Letting the Cables Sleep (new to me)
Song 8 - Elbow - Fly Boy Blue/Lunette
Song 9 - Family of the Year - Hero

Song 10 - Public Service Broadcasting - The Other Side
Song 11 - Vance Joy – Georgia

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
I listened to as much One Day Elliott as I could find on the internet, surprisingly MySpace was probably the best source but also YouTube. And then I tried to think what tracks from my only collection matched their style most closely. And then I think I mostly ignored that and just chose the tracks that I like to listen to at the moment. For the tracks that were new to me I did start following suggestions that websites were making after listening to One Day Elliott, but that didn't really help, so I just started looking for songs I'd heard about (word of mouth, radio) and picked my favourite ones of those really. Apart from the Bon Iver track which was a suggestion that reminded me I'd seen the music video before and liked it. I guess the whole time I did have One Day Elliott in my mind, but in the end I guess most people's music taste is broad and the whole joy of someone else's playlist is hearing what they like.

How aware were you of any online recommendations or suggestions being made by Social media?
Really aware, I think for listening to music I'm really likely to follow youtube's suggestions, I might not always like them or agree with them.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
Word of mouth and radio is probably how I chose the songs, but I did spend a fair bit of time following suggestions mainly made by youtube. More to find my favourite track by that artist than to discover a new artist outright. Apart from the Bon Iver track which as I said before, I was reminded that I liked his cover by a youtube suggestion.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.
I like to think I checked out suggestions but made my own decisions on how relevant they were. Some suggestions I would just ignore because I'd disagree with them, sometimes it suggests something interesting. I think the best suggestions are just more tracks from the artist I was looking at.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
All the tracks new to me were suggestions by other people or songs I'd heard on the radio, so I reckon I relied on other people's knowledge really (to find new songs).

Do you feel that you have a broad taste in music?
I like to think so.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
As I said above, I did listen to loads of One Day Elliott, but in the end, I think I just picked songs that I liked. I guess I had the idea that it was for a One Day Elliott fan in my mind, but like I said I think I just picked what I like and hope someone else might like some of it too. I suppose I probably put the Soundgarden cover in because it's loosely a similar genre (the original, not the cover) and therefore the imaginary fan might have heard it but not done like this. And obviously I put in a One Day Elliott track because I listened to loads and that was my favourite.

When creating the playlist, was it important for you to include songs that you like yourself? If so, why?
Yes it was, For me that's the point of a playlist, showing someone else what music you like, that you think they might like. I guess it's quite a creative thing and so it says a lot about the person making it; it's quite personal.

13. Participant 13 – male 26

Observational Candidate number: 9c263658-964c-4f02-95ee-ae6d47347c38

Playlist

Song 1-Panic at the Disco-Nine in the Afternoon
Song 2-Paramore-Aint it Fun
Song 3-Fall Out Boy-Thanks for the memories
Song 4-The Wombats-Jump into the Fog
Song 5-Of Monsters and Men-Little Talks
Song 6-The Libertines-Gunga Din (new to me)
Song 7-The Kooks-Bad Habit (new to me)
Song 8-Everything Everything-Regret (new to me)
Song 9-Kings of Leon-Use Somebody (new to me)
Song 10-Arctic Monkeys-Do I Wanna Know? (new to me)

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
The first five songs represent some of my favourite music. Panic At The Disco are my favourite band (except their 3rd album!) and Nine in the Afternoon is a good opening track. I love the female lead of Paramore, and Fall Out Boy are also great. Thanks for the memories is a good tune to keep the pace up. I've seen the Wombats live and Jump Into the Fog I thought was a good change of pace tune, followed by Of Monsters and Men, which was the tune I was obsessed with whilst creating my playlist.

I then used YouTube and google to research similar bands. I know some of the Kooks songs and felt Bad Habit was a good fit with the playlist. I'm also familiar with Kings of Leon and Arctic Monkeys but hadn't heard of Everything Everything, or any of The Libertines music before.

How aware were you of any online recommendations or suggestions being made by Social media?
I didn't really use social media (unless you count Youtube?) I was very aware of using Youtube and one similar' band often lead to finding another.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
As described in first answer

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made?
I used YouTube, however only about 50% of the recommendations felt a close enough match, both in band style and also in music I enjoyed listening to for the first time.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
I was led by YouTube but rejected them as a choice if they didn't sound like 'my' kind of music. The 5 songs I knew were only searched to check the official title of each track.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
Having watched One Day Elliott I knew the kind of music this stranger would like. Luckily it's also my style. Perhaps in hindsight I could also have chosen some solo artists, however I feel the bands chosen would be a good fit at an ODE gig.

When creating the playlist, was it important for you to include songs that you like yourself? If so, why?
Yeah, I listened to them before submitting for my list. Was important to get songs I liked from bands that had been suggested for me. I was keen to do this as I didn't want to put my name to something that I wasn't happy with

14. Participant 14 – male 48

Observational Candidate number: c24e0141-27d9-49d9-91e8-4b1a41a9e04f

Playlist

Song 1 – Gentle Giant – Knots
Song 2 – Gentle Giant – On Reflection
Song 3 – Frank Zappa – Peaches En Regalia
Song 4 – Frank Zappa – Cosmik Debris
Song 5 – Jeff Beck – Freeway Jam
Song 6 – Animals as Leaders – On Impulse
Song 7 – August Burns Red – White Washed (new to me)
Song 8 – Dream Theatre – Lost Not Forgotten
Song 9 – Protest The Hero – Bury the Hatchet (new to me)
Song 10 – Avenged Sevenfold – A Little Piece of Heaven (new to me)

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
I chose the songs based upon my personal taste and listening experiences. I like pretty much everything but I tried to list songs that I thought might appeal to someone who liked ODE and who was familiar with One Day Elliott's songbook and performance style. I also wanted to offer something that maybe they hadn't heard before.

How aware were you of any online recommendations or suggestions being made by Social media?
I was completely unaware of any other online recommendations.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
I thought about progressive bands I had heard of but whose music I was unfamiliar with. A couple of these bands/tunes (August Burns Red, Protest The Hero) are favorites of my son, Keith, a 20-year-old progressive rock drummer. When I grow up, I hope to be as good as he is!

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.
I was not influenced in my selections by any social media sites.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
Almost 100% -- with the exception of a couple of bands/songs that I chose (as noted above) because of my son's influence.

It sounds like Keith is an avid music fan too – do you share music with each

other a lot?
Yes, we have similar tastes and he's always introducing me to new bands and artists. He's always making playlists for the car etc. that's one of the reasons I asked for his input.

How does he make his playlists?
Haha, I just asked him and he said he finds many of the bands on Spotify!

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
Quite a bit. In making my list, I tried to think of bands/songs that someone familiar with (and a fan of) One Day Elliott would enjoy.

15. Participant 15 – male 32

Observational Candidate number: 77ff7598-2460-4fff-a270-18b256e2d6a7

Playlist

Song 1 - One Day Elliott - Medicine
Song 2 - Protest The Hero - Skies   (new to me)
Song 3 - Civil Civic - Airspray
Song 4 - Massive Attack - Girl I Love You
Song 5 - Tremonti - Cauterize
Song 6 - Five Iron Frenzy - Blizzards & Bygones
Song 7 - Dustin Kensrue - Gallows
Song 8 - Alkaline Trio - I Found A Way   (new to me)
Song 9 - Jamie T - Don't You Find
Song 10 - The Winery Dogs - Elevate
Song 11 - 3dBs Down - The Greatest Day (new to me)
Song 12 - Incubus - 11am
Song 13 - Thrice - The Weight   (new to me)
Song 14 - Fightstar - Murder All Over   (new to me)
Song 15 - Ashes Divide - The Stone
Song 16 - Moon Hooch - Number 9

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
These songs were ones that I had been listening to quite a lot around the time of making the playlist. I get songs stuck in my head and sing/hum them out loud. These songs made the cut.

How aware were you of any online recommendations or suggestions being made by Social media?
I am aware of ads and links to things suggested by social media because I've

"liked" a page or artist. But I usually respond better and choose to listen to something new when it has been recommended rather than forced upon me.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
I have some friends at work who I share music suggestions with as it helps to keep the slow days going. The ones that I particularly liked the sound of out of those suggestions made the playlist.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.
A few of these tracks were suggested by Spotify in the Discover Weekly lists that they create based around the music you search for and listen to. I sometimes have this playlist on whilst I'm working on something mundane. I'm not one for clicking links on YouTube when it comes to music because I've usually gone on there to find something specific. It also very rare for me to follow a link on Facebook unless it is a song recorded by a friend or someone I've played with in the past.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
I guess I relied pretty heavily on it to be fair. All of the songs in the playlist are songs I would choose to listen to and seek out in order to listen to them (whether that is on something like Spotify or possibly on my iPod). I heard this theory that the music you like and listen to falls within a circle/space in your brain. If you listen to something that mostly overlaps with that circle but has a little outside of your usual taste, then you find it easier to accept it and possibly expand your circle. However, if a new song falls into a circle completely outside of your own then it is likely that you won't get the music, understand the music or even like it. So for me, there has to be a hook or melody that draws me in or catches my attention. Everything on my playlist has something like that so I feel I relied heavily on my own knowledge to make this list.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
For me it meant that I picked my favourite One Day Elliott track at the time. Medicine is one that I like to listen to a lot and my children really like that track too. Other than that, I tried to suggest a few tracks that had a similar melodic rock ilk. However I also like my own musical tastes to be broadened and so I hoped this person would appreciate that idea too, hence some tracks of a very different genre and sound.

Do you feel that you have a broad taste in music?
Yes, as a musician, I appreciate good tunes, whatever the genre.

When creating the playlist, was it important for you to include songs that you like yourself? If so, why?
I wouldn't have said it was important but more that it was natural to choose songs that I like. Music is a big part of my life and evokes so many memories and emotions. Because of that, I hold a lot of music, from all sorts of genres, dear to me because it feels locked into a part of me. I'm guessing that like a lot of other people, I don't enjoy listening to music that I don't like and I don't recommend music to others that I don't like. So for me it seemed obvious to choose songs I enjoy because I want to share what I like with others.

16. Participant 16 - male 31

Observational Candidate number: No Observational data was collected for this participant and so no candidate number was allocated.

Playlist

Song 1 - Therapy? - Screamager
Song 2 - Paramore - Misery Business
Song 3 - The Ataris - San Dimas High School Football Rules (new to me)
Song 4 - Sugarcult - Los Angeles (new to me)
Song 5 - The Lemonheads - The Outdoor Type
Song 6 - Longpigs - She Said
Song 7 - Los Campesinos! - Romance is Boring
Song 8 - Box Car Racer - Letters to God
Song 9 - Kerbdog - Sally
Song 10 - Rufio - In My Eyes (new to me)
Song 11 - 3 Colours Red - Nuclear Holiday (new to me)

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
I started by picking a couple of bands that were similar to ODE in style, and then used them as a basis for picking other ones.

How aware were you of any online recommendations or suggestions being made by Social media?
I used Spotify and was using their related artists to discover new bands which would fit with the tracks I'd already picked.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
As above.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For

example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.

For the new songs, I was quite influenced. The ones I knew already I was picking a bit more on instinct and scrolling through my music collection.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
It was maybe 60/40 in favour of what I already knew.

Do you feel that you have a broad taste in music?
Definitely, I listen to lots of different styles depending on my mood.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
It gave me a slightly anchored starting point to work from and build the other tracks around. I wanted to offer songs I knew they'd like, and one or two that would be new to them.

17. Participant 17 – male 30

Observational Candidate number: No Observational data was collected for this participant and so no candidate number was allocated.

Playlist

Song 1 - Do It Anyway – Ben Folds Five – Ben Folds Live Album
Song 2 - Live Forever – Oasis – Definitely Maybe
Song 3 - Jamie Cook - Gavin Osborn – In The Twee Small Hours
Song 4 - Last Night – The Sherlocks– TBC When debut album is released (new to me)
Song 5 - The Middle – Jimmy Eat World – Bleed America (new to me)
Song 6 - The Girls Don't Care – Eef Barzelay – Lose Big
Song 7 - Riot Radio – The Dead 60s – The Dead 60s
Song 8 – Walking Contradiction – Green Day – Insomniac
Song 9 - Wish You Were Here – Incubus – Morning View (new to me)
Song 10 - Books From Boxes – Maximo Park – Our Earthly Pleasures
Song 11 - State I'm In – Alex James – Alex James Ep
Song 12 - Tom Petty And The Heartbreakers – Running Down A Dream
Song 13 - Everything Sucks – Reel Big Fish – Turn The Radio Off (new to me)
Song 14 - Birdhouse In Your Soul – They Might Be Giants
Song 15 - The Boys Of Summer – The Ataris (new to me)

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?

My playlist was a combination of a few of my all-time favourite songs, songs I have been listening to lately on my IPod and brand new songs that I liked on first listen.

How aware were you of any online recommendations or suggestions being made by Social media?

The Sherlocks song, Last night came up on my Facebook page and so I clicked the link and watched the music video on YouTube.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?

A quick flick through Q magazine and read a few reviews and also watching videos on YouTube of songs I like and then clicking through the other videos you may like thing on the side, giving each song about 30 seconds before I decided if I like it or not and then clicked onto the video.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.

As above, The Sherlocks came up on my Facebook page, so clearly the fact I have posted similar Indie videos in the past or made reference to Indie in status updates has caused that to pop up as something I might like. Also as above, I went on a YouTube trip based solely on what it was recommending to me.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?

The initial point of searching was my taste/knowledge but with the new songs I was very reliant on where the search engine took me.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?

As I have seen and heard One Day Elliott I knew that a fan of theirs would not be into commercial pop (One Direction) and would more into alternative music and musicianship as oppose to the last winner of The X Factor.

Do you feel that you have a broad taste in music?

I think you can see that from the playlist! Even though this is intended for a One Day Elliott fan, I've tried to make it pretty broad.

When creating the playlist, was it important for you to include songs that you like yourself? If so, why?

Yes it was. I can't share or recommend something I myself don't like.

participant 18 – female 32

Observational Candidate number: b115ea6c-5ef8-4431-83a1-a0e9da3416f8

Playlist

Song 1 - Foo fighters - All my life
Song 2 - The Red Jumpsuit - Apparatus Face Down (new)
Song 3 - Rival Schools - Used for Glue (new)
Song 4 - You Me At Six - Stay with me (new)
Song 5 - A Day to Remember - All I Want
Song 6 - Green Day - Hitchin a Ride
Song 7 - Rise Against – Savior (new)
Song 8 - Yellowcard - Ocean Avenue (new)
Song 9 - Foo Fighters - These Days
Song 10 - Glassjaw - Cosmopolitan Blood Loss

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
Half the songs I'd heard before the remaining 5 were YouTube recommendations from looking at songs that I thought were similar to One Day Elliott's genre.

How aware were you of any online recommendations or suggestions being made by Social media?
Very aware, 5 songs I selected via YouTube. I also listened to a few recommendations which I didn't feel fitted in. So scrolled on to the next recommendation. I wanted to help the person find some new songs, as well as songs they'd definitely like, but I needed them to fit.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
All YouTube recommendations.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made?
Yes, some recommendations were crap so I moved on to the next one until I heard something that I thought worked.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
To fair extent, half the tunes I chose were tracks already familiar to me that I thought someone into One Day Elliott might appreciate.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
I listened to some One Day Elliott tracks for an evening and then tried to pick tracks that I felt had elements of One Day Elliott. Even if it was just the vocal style in a track, or on other occasions I selected a track because I felt that the overall sound was reminiscent of One Day Elliott.

19. Participant 19 – male 40

Observational Candidate number: No Observational data was collected for this participant and so no candidate number was allocated.

Playlist

song 1- Bootsy Collins - I'd Rather be with you
song 2- Blackstreet - No Diggity
song 3- Al Green -Let's stay together
song 4- The White Stripes- Seven Nation army
song 5- Guns and Roses- November rain
song 6-Marvin Gaye- What's Going on
song 7-Paul Weller- Broken Bones
song 8-Neil Diamond-Girl, You'll be a woman
song 9-Craig David- 7 days
song 10-Metallica- Enter Sandman
song 11-Fugees-Ready or Not
song 12-Dean Martin-All in a Night's Work
song 13-Phil Collins—In the Air Tonight
song 14-Stereophonics- Dakota
song 15-Blue Swede- Hooked on a feeling
song 16-MacyGray- Sex-o-Matic venus freak
song 17-Bob Dylan- The Times they are a- changing
song 18-Booker T. & the MG's – Green Onions
song 19-Bob Dylan- Lay Lady Lay
song 20-Elton John- Daniel
song 21-The Animals- House of the Rising Sun
song 22-Kings of Leon-California Waiting
song 23-Frank Sinatra- Strangers in the night
song 24-Joe Cocker- Many Rivers to Cross
song 25-Athlete- Wires
song 26-Foo fighters- Skin and Bones
song 27-Oasis- cigarettes and alcohol
song 28-Eminem-lose yourself
song 29-Ice T- new jack hustler
song 30-NWA-Straight Outta Compton
song 31-Ice Cube- It Was A Good Day
song 32-The Rolling Stones- Sympathy for the Devil
song 33-Otis Reading- these arms of mine

song 34-Green Day- American Idiot
song 35-Amy Winehouse-Love is a Losing Game
song 36-Marilyn Manson-Disposable Teens
song 37-Queen-we will rock you
song 38-Otis Reading-I've been loving you too long
song 39-Paolo Nutini- Iron Sky
song 40-Ed Sheeran- Lego House
song 41-Justin Timberlake-cry me a river
song 42-Johny Cash- A boy named Sue
song 43-Rod Stewart- handbags and Gladrags
song 44-Bon Jovi-Blood on Blood
song 45-Bryan Adams- Summer of 69
song 46-Kaiser Chiefs- I Predict a Riot
song 47-Automatic- Monster
song 48-The Killers- when you were young
song 49-Razorlight-America
song 50-4 Non blondes- what's Up?
song 51-Wagner- Ride of the Valkyries
song 52-Vangelis- Chariots of Fire
song 53-Bob Marley-I Shot The Sheriff
song 54-Bruce Springsteen- Born in the USA
song 55-Aswad-Shine
song 56-Usher-You Make Me Wanna...

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
No particular order picking them just tried very hard to stick to one song per artist as I would want the playlist to be played in any occasion, certain Genres can't be danced to and others aren't lyrically amazing, but each serves its purpose and this way there is music for all occasions. dancing, driving, crying, partying, competing, working and loving.

How aware were you of any online recommendations or suggestions being made by Social media?
I'd hate listening to one genre or album all the time, I believe it makes people who do, socially and emotionally limited people.
All songs mean something to different times and moments of my life and reflect me as a person, from the first song my son sung in the car (enter sandman) to my work music (Sinatra and Dean Martin).

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
Keeping in mind that the playlist was for someone who Likes One Day Elliott the playlist genres were all mixed with occasional rock songs so they had the chance to listen to some songs that are familiar to their favourite genre while at the

same time maybe getting the chance to listen to something different. I assumed that they'd want to listen to something different to their usual, as they probably already know and own playlists with their favourite songs and albums.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
The songs I picked than I'd not heard before were songs that were suggested on you tube as I was going through my playlist I played my song choices on you tube and suggested other songs, but mostly they suggested same artist only, I had to move a couple of pages to find other artists.
The suggested music therefore was quite random and popular music which I might have not known the artist and album names but recognised the tune.

When creating the playlist, was it important for you to include songs that you like yourself? If so, why?
Yes the playlist choices had various songs I liked myself, because the person liked One Day Elliott and I assume we'd have something in common in our music tastes, plus also the opportunity to introduce a friend to something new he might not have heard before.

Did you have any concerns about how the playlist would reflect on you, and if so how did this effect your process?
Like my taste in music I don't worry how it reflects on me as I listen to music for entertainment only and not to define me as a person, my type of music over the years has always varied on mood and occasions, thus me picking such a varied choice of styles that may reflect me at different times.

20. Participant 20 – male 37

Observational Candidate number: 831430b8-7f47-4a3e-9d28-3abcc2fc8998

Playlist

1. Foo Fighters - Big Me
2. Radiohead - Black Star
3. Stereophonics - The Bartender And The Thief
4. The Kinks - All Day and All of the Night
5. Kaiser Chiefs - Ruby
6. Thirty Seconds To Mars - The Kill (Bury Me) (new to me)
7. My Chemical Romance - "Teenagers"(new to me)
8. Kasabian - Shoot The Runner
9. Puddle Of Mudd - She Hates Me (new to me)
10. System Of A Down – Toxicity (new to me)
11. Foo Fighters - Monkey Wrench (new to me)
12. Nirvana - Breed
13. The White Stripes - "Fell in Love with a Girl" Sympathy for the Record Industry
14. Red Hot Chili Peppers - Scar Tissue
15. Whole Lotta Sabbath (Led Zeppelin vs Black Sabbath Mashup) by Wax

Audio

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
I started with a plain Google search for One Day Elliott; landed on their SoundCloud page and played a few tunes to get an idea of the sort of music I was after (where I was on the music map!). I then searched for specific songs I knew were of a similar type on YouTube. A lot of related videos were shown on those pages, which is where I got a lot of the ideas. Crucially, I logged out of YouTube before all this and cleared cookies from the browser. I also routed my connection though a proxy server. All of this ensured I was not seeing any recommendations specific to me, but instead recommendations effectively for someone who had never used YouTube before.

A good playlist should be a mixture of liked songs and new discoveries. I listened to chunks of the songs to decide if I liked them, if I had heard them before and if I thought they suitably matched the criteria.

How aware were you of any online recommendations or suggestions being made by Social media?
To be honest, I didn't think direct use of social media made this task much easier (I did use YouTube which is essentially party of Google+, but only after effectively forcing it to show things not related to me). What I really needed was something that gave me music similar to, or music in some way related to one day Elliott. Social media would have only helped in a major way to find other songs my friends or acquaintances liked. That being said, I found the recommendations provided by YouTube very useful, or at least became more useful once it had a good idea of the types of sound / videos I was looking at.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
Recommendations from YouTube (considering the above answers), Google results for very broad searches for generic terms, i.e. "Rock bands", "great rock tunes", etc.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made?
Answered above.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
Less as time went on and the Google YouTube algorithm got the hand of what I

was after.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
That's what I started with. While it can be fun to go off on a tangent when doing this sort of thing (i.e. picking all sorts of music from all sorts of genres) the task was to find music for a stranger, the only piece of info I have about them is the band they like. That has to be where you start!

21. Participant 21 – male 24

Observational Candidate number: 3016a648-7d09-44d7-b42c-ced058f0d3c8

Playlist

Song 1 - Wheatus - Teenage Dirtbag
Song 2 - Bowling for Soup - Girl all the Bad Guys Want
Song 3 - A Day to Remember - All I Want
Song 4 - Frank Turner - Four Simple Words
Song 5 - We Are Harlot - Dancing On Nails (new to me)
Song 6 - America Hi-Fi - Flavour of the Weak (new to me)
Song 7 - Patent Pending - Hey Mario (new to me)
Song 8 - Paramore – Ignorance (new to me)
Song 9 - Jimmy Eat World - The Middle (new to me)
Song 10 - The Protomen - No Easy Way Out

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
 One Day Elliott are a hard band to pin down to a single genre, but primarily looked towards pop-punk bands/songs and considered heavier bands as an accompaniment. I also considered lyrics, as One Day Elliott's songs are crafted around relationships (good and bad), so I tried to choose songs along a similar vein. Finally, as a fan of One Day Elliott myself, I looked to my own musical preferences and what I found compelling about the band.

How aware were you of any online recommendations or suggestions being made by Social media?
 After I had chosen a few songs that I was already aware of, I used three websites to find further songs. The first was ask.fm, which includes details of the bands you search for and offers suggestions to bands similar to them. Through this I was able to discover quite a few bands I wasn't aware of and by using YouTube to listen to these songs I could get a feel for each one. YouTube also allowed me to view artists similar to the one I was currently listening to by offering suggestions based on what other fans also turned to. I also used Amazon to achieve the same results as with ask.fm by searching for a band and viewing

what other albums customers bought when they bought that one.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
I investigated these songs as detailed above. If I found a song I liked, I considered the tone and the content and how similar it was to music by One Day Elliott. I would make a note of it before checking out further songs from the same artist and researching them further in case earlier/later albums could provide songs that were a better fit. I would then move on to another artist, repeating the same process if I liked their music as well. Having been subjected to my friend's taste in music many, many times I decided to seek out new music myself, which allowed for some experimentation.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.
As stated above, I used YouTube and the suggestions found there to help find new artists. I would argue it was the most useful tool I could have used as it offers you more songs by the same artist, songs by similar artists and the opportunity to view playlists which feature the same song you are listening to. I chose not to use Spotify (don't have an account, found the free version annoying) and nor did I use Facebook (although I considered using the latter more than I did). I checked out One Day Elliott's Facebook page in hopes to find details of the bands that influenced and inspired them, however there was no such entry. I was prepared to contact friends on Facebook for their suggestions, however as I knew what their taste of music was like it was unlikely I would hear a new song/artist. I preferred to find music I had never heard or chose to listen to before, rather than be recommended something I will listen to and realise I had heard it before some time ago.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
Pop punk is not a genre I listen to often (I guess ODE was the first that I really got into, I didn't care too much for it in the late 90s - early 00s) and I've picked up a few more bands doing this research! But my musical tastes are quite varied so I considered a wide variety of genres and artists. From my personal collection I chose Frank Turner as he is a folk punk artist with a variety of different sounds and I decided on one of his songs that had a faster tempo and rougher edge. In contrast, A Day To Remember are a metalcore band and I chose one of their "softer" songs to fit in with the aesthetic. The Protomen are probably the most unusual choice as the pick I went with is a cover of Robert Tepper's hit song from Rocky IV. However, its clever use of dynamics (and mariachi trumpets, incredibly) to such melancholy vocals created a sound which I felt fit in quite snugly with the other nine picks.

Do you feel that you have a broad taste in music?
I do, but for this I needed to make sure that the choices were appropriate.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?

On one hand this gave me a lot of freedom as by having no knowledge of the second party's musical tastes I could make any suggestion I wanted. On the other I felt somewhat restricted to choosing bands I felt had some kind of like to One Day Elliott (similar genre, sound, lyrics etc.). Although having some similarities would not necessarily mean the second party would like my suggestions, you can't be too adventurous.

22. participant 22 – male 28

Observational Candidate number: No Observational data was collected for this participant and so no candidate number was allocated.

Playlist

Song 1 - Bedford Drive - Four Years Later
Song 2 - Funeral for a Friend - Juneau
Song 3 - Yellowcard – 23 (new to me)
Song 4 - Taking Back Sunday - A decade Under the Influence
Song 5 - Story of the Year – Sidewalks (new to me)
Song 6 - Emery - The Ponytail Parades (new to me)
Song 7 - Acceptance - In Too Far
Song 8 - Daphne Loves Derby - Hammers and Hearts
Song 9 - Mae - We're So Far Away (new to me)
Song 10 - Boysetsfire - With Every Intention (new to me)

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
Before I started my playlist, I familiarised myself with the one element I had to start from, One Day Elliott. I made myself as familiar as I can with their music, relying on my own extensive music library as well as internet resources such as YouTube and Spotify.
With that in mind, I made a shortlist of artists and songs from my own personal collection based on what I felt fit with the band. Initially, I had one song I knew certainly I wanted to include; Juneau by Funeral For A Friend. From that point, listening randomly through my list and following suggested videos on YouTube, I ended up with a short list of seven or eight songs from my personal library.
This ended up changing as I looked through similar artists on Spotify to those I shortlisted. I ended up with around 10 songs I thought I could include. Next, I needed five songs that were new to me. I used a combination of recommendations from Spotify and YouTube based on artists of songs I put in my list and One Day Elliott. This was somewhat time consuming as a lot of artists

recommended or similar to One Day Elliott didn't match my idea of similar to ODE. I also wanted to include a couple of less obvious songs that might be similar to the genre, but introduce them to something new.

Whilst I had one or two songs, I ended up looking through recommended artists based on the bands I had included previously to find songs that fit my playlist. Most of my recommendations came through Spotify.

How aware were you of any online recommendations or suggestions being made by Social media?

When compiling my playlist, I was solely dependent on recommendations from social media. I was following suggestions willingly and relying on them to help complete my playlist.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?

By following recommendations from Spotify and YouTube. I scoured through several bands to find five songs I was happy to include in my playlist

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made?

I followed suggestions on Spotify and YouTube but made my own decision about what to include.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?

When it came to include songs I was already familiar with, I relied solely on my own knowledge of music and genres. When it came to completing my playlist, suggestions made on YouTube and Spotify affected the songs I completed. At least two songs were influenced by suggestions made on social media.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?

I found myself fitting my song selection around that single criteria. I began picking songs I knew that I felt was similar to music by One Day Elliott

When creating the playlist, was it important for you to include songs that you like yourself? If so, why?

Yes. As it was a playlist I was creating, I never considered about including something I didn't like.

23. Participant 23 - male 27

Observational Candidate number: 4cbd224a-5634-7cad-bd44-4c66a7bdc7cf

Playlist

Song 1 - One Day Elliott - Never Be Content (With Average)
Song 2 - Four Year Strong - I Hold Myself In Contempt
Song 3 - State Champs - All You Are Is History (new)
Song 4 - A Day To Remember - All I want
Song 5 - As It Is - Speak Soft
Song 6 - Neck Deep – Serpents (new)
Song 7 - Roam - Warning Sign (new)
Song 8 - Courage My Love - You Don't Know How
Song 9 - PVRIS - St. Patrick
Song 10 - The Ataris - So Long Astoria

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
I made them based on genre first and foremost. I also wanted to give the listener some emerging bands to listen too. (As It Is & Courage My Love being examples of those). I included an ODE track being that they are the favourite band and also a personal favourite from the past being The Ataris.

How aware were you of any online recommendations or suggestions being made by Social media?
 I found the new songs mainly by looking up bands I knew of but hadn't got round to properly listening to yet. Social media always throws ideas into your head with news feeds being very advert orientated so I knew of a lot of bands that I could check out. Examples being State Champs and Roam.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
I think this is covered in the previous answer! Bands I knew of but hadn't yet listened to properly.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.
I made my own mind up based on bands I'd heard of already. But I have only heard of them via social media, as opposed to being on shows or festivals I attend.

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
Quite a lot! As I mentioned. I knew of all the bands I suggested. Only some of the songs were new to me, either being a new release (Neck Deep) or a band I knew of but hadn't listened to.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?

I like a wide range of things but I stuck with the pop rock/pop punk style throughout. Not knowing more about their taste meant it would be difficult to pick tracks they may like from the heavier end of the rock spectrum, or other genre of music, like pop or hip hop.

24. Participant 24 –male 26

Observational Candidate number: 3c98b291-a4b1-4a60-bdb4-5ade6ff652de

Playlist

Song 1 - She Comes – Lit (new to me)
Song 2 - Losing A Whole Year - Third Eye Blind
Song 3 - The Way – Fastball (new to me)
Song 4 - Santa Monica – Everclear (new to me)
Song 5 - Santa Fe - Wintersleep
Song 6 - Road Eyes - Amusement Parks On Fire
Song 7 - Zoom - Fat Larry's Band
Song 8 - Here To Mars - Coheed and Cambria (new to me)
Song 9 - Every Stone - Manchester Orchestra
Song 10 - Big Trucks - Pedro The Lion (new to me)

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?

I used the brief that this was a One Day Elliott fan to pick some American pop punk I felt was in keeping with their early stuff. This style of music used to be my favourite style, and then I branched out into the American indie charts and ended up going soft. I figured the same thing could happen to a One Day Elliott fan, so I mirrored my own natural progression towards bands like Manchester Orchestra and Wintersleep, then picked some bands that are related to those.

How aware were you of any online recommendations or suggestions being made by Social media?

I've used a website called Music Map (Gnod) for many years to suggest new bands, with plenty of success. Not knowing the person I was making the playlist for, it seemed that the safest bet was to pick bands that are similar to each other, and somewhat similar to ODE.

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?

As mentioned above, I had a little help from Music Map. I also leant on my own knowledge of the late 90s early 00s pop punk scene, picking some tracks from bands I knew, but had stopped following before more recent releases.

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.
Site suggestions made up at least 2-3 of my choices, but I was mostly flying solo

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
I mostly relied on my knowledge of the old(ish) pop punk scene, and then I threw Fat Larry's band in because I thought it would be a fun wildcard. I really like that song.

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
It was the basis for my entire list. I started with bands in the same sort of genre as One Day Elliott, and branched out from there. The songs needed two be related to them in style, but also interesting and hopefully a few of them would be new to the stranger. The only song that wasn't directly related to One Day Elliott was my wildcard choice, Zoom.

Do you feel that you have a broad taste in music?
I do, but I listen to different things depending on my mood.

When creating the playlist, was it important for you to include songs that you like yourself? If so, why?
Yes it was important that I liked the song, because although I realise others will like stuff I don't, I'd find it hard to recommend music that I don't like to someone. I'd have less trouble doing it with movies or TV shows, because I don't feel the same sort of connection to those mediums as I do with music and (strangely) video games

Did you have any concerns about how the playlist would reflect on you, and if so how did this affect your process?
And no I didn't care at all how the playlist made me look, I've got a fair whack of arrogance about me, so I couldn't care less what people think of me based on my music taste. I just think they're wrong

25. Participant 25 – male 40

Observational Candidate number: No Observational data was collected for this participant and so no candidate number was allocated.

Playlist

Song 1 – The Glorious Sons, Heavy
Song 2 – Asking Alexandria, I won't give in (new to me)

Song 3 – Ghost Town, You're so creepy
Song 4 - The Dead Formats, Again and again (new to me)
Song 5 – Young Guns, Speaking in tongues (new to me)
Song 6 – The Whitest Boy Alive, 1517
Song 7 – 999, Homicide
Song 8 – Highly Suspect, Bath Salts
Song 9 - Highly Suspect, Lydia
Song 10 - Highly Suspect, Vanity
Song 11 - The Streets, Going through hell
Song 12 - RX Bandits, Penguin Marlin Brando
Song 13 – RX Bandits, Meow, Meow, Space Tiger
Song 14 - RX Bandits, Stargazer
Song 15 - Wolf Am I, The good life (new to me)
Song 16 - Biffy Clyro, Fingerhut

Interview questions.

Could you please talk me through your process of choosing the songs for your playlist? How did you make your decisions?
Initially I used Spotify's 'related artist' suggestion to find bands that were related to the type of music I thought One Day Elliott played. I Picked the top 5 songs played by each 'related artist and created a playlist to listen to throughout the day. Any songs I liked I added to another playlist to listen to again to make my final choices.

Then I asked people at work and friends about songs and bands they liked in the punk era, did the same as above using Spotify to listen to those bands

I also have links with others friends on Spotify so I did look at people who I knew were fans or friends with One Day Elliott and looked at what they were listening to recently (there is an ability to see what people have been listening too)

How aware were you of any online recommendations or suggestions being made by Social media?
Only used Spotify, yes, it makes recommendations of bands that are similar to what you are listening to ATM

As part of the brief, you were asked to include songs that were new to you or music that you had not heard before. How did you go about doing this?
As above in first paragraph but really only listen to new bands that were suggested based on what I did in question 1

To what extent do you feel you were influenced by any recommendations made for you by social media (YouTube, Facebook, Spotify etc.) (For example, did you follow suggestions made by the sites? Did you check out the suggestions but make your own decisions on how relevant they were, or did you ignore any suggestions that might have been made.

Because I used Spotify suggestions, both from bands I liked and from friends and colleagues, I stuck to 'related artist'

So quite a lot (90%) and only the bands that were recommended by friends and colleagues were outside of this. To be honest, the stuff recommended by friends and colleagues (apart from those linked with on Spotify) only one song made the entire list

To what extent do you feel you relied on your own knowledge of music and musical genres to make your choices?
Only initially to put in a couple bands that I thought were One Day Elliott related artists). From there, I let Spotify do all the work. For instance, if I saw a band that kept popping up in the Spotify suggestions time and again, they would usually make the cut to top 5 playlist for further listening

The playlist was intended for a stranger, about whom the only prior knowledge given, was that they were a fan of the band 'One Day Elliott.' How did this affect your process?
I suppose knowing the band's influences and types of songs they sing, it was definitely only open to similar artists. I even linked on One Day Elliott on Spotify and looked at their 'related artist' too and went through the process of listening to the top 5 songs of each of those bands too. Sometimes random, really not related bands would get into to the top 5 list which was annoying but I soon skipped through those bands (like after 30 seconds to a min) before I found something suitable.

When creating the playlist, was it important for you to include songs that you like yourself? If so, why?
The way I set out finding new music was one to listen new bands most popular tracks and add them to another playlist to listen to again before making my final choice. So, thinking about it now, they did not make the second list if I didn't like it in the first place... so yeah, and in the end, definitely maybe the single most important thing to making the final cut..... If I liked it and based on the criteria, in it went. In addition, there were a few songs that I thought, oh, my friend who is also a fan of One Day Elliott would like that song but I didn't really so it wasn't added.

Appendix B – Survey Questions

Thank you for agreeing to complete this survey. Please be assured that the information you enter will not be passed on to any third parties.

1. Name

[   ]

2. Gender

[   ]

3. Date of Birth

	DD	MM	YYYY
D.O.B	[ ]	/ [ ]	/ [ ]

4. Marital Status

⚪ Single
⚪ Widowed
⚪ In a relationship
⚪ Married
⚪ Divorced

5. Number of Children

[▢]

6. Number of siblings (brothers or sisters) (Include half or step brothers or sisters.)

[▢]

7. Type of Accomodation

	Type	Bedrooms
House/Bedrooms	[▢]	[▢]

Other (please specify)

[   ]

8. With how many people do you share accomodation?

[▢]

9. Current place of residence

City/Town	[ ]
County	[ ]

10. How long have you lived there?

⚪ 0-5 years
⚪ 6-10 years
⚪ more than 10 years

11. Highest educational qualification

[   ]

12. Educational institutions - if more than one, please state the most recent.

secondary	[ ]
college/university	[ ]

13. Occupation (please be precise as possible)

[   ]

14. Occupation/last occupation and highest educational qualification of father

Occupation/last occupation	[ ]
Highest educational qualification	[ ]

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15. Occupation/last occupation and highest educational qualification of mother

Occupation/last occupation   [   ]

Highest educational qualification   [   ]

16. What is your approximate average income?

○ £0-£19,999

○ £20,000-£39,999

○ £40,000-£59,999

○ £60,000-£79,999

○ £80,000-£99,999

○ £100,000 and up

17. Which of the following do you own? (tick all that apply)

☐ Car

☐ Kindle

☐ Lap-top

☐ Home-Computer

☐ iPod

☐ Games Console

☐ Mobile Phone

☐ Tablet

18. For each of the following activities, please indicate which you do often, which you do sometimes, which you do rarely and which you never do.

	Often	Sometimes	Rarely	Never
Painting or sculpture	○	○	○	○
Eating out	○	○	○	○
D.I.Y	○	○	○	○
Sport	○	○	○	○
Playing a musical instrument	○	○	○	○
Camping	○	○	○	○
Watching TV	○	○	○	○
Outdoor Pursuits	○	○	○	○
Gardening	○	○	○	○
Walking	○	○	○	○
Reading	○	○	○	○

19. How often do you attend each of the following?

	Often	Sometimes	Rarely	Never
Museums	○	○	○	○
Music Festivals	○	○	○	○
Opera	○	○	○	○
Musicals	○	○	○	○
Theatre	○	○	○	○
Cinema	○	○	○	○
Galleries	○	○	○	○
Ballet	○	○	○	○
Sports Events	○	○	○	○
Live Gigs (in venues)	○	○	○	○
Classical Concerts	○	○	○	○

20. Which of the following film genres do you enjoy?

- ☐ Action and Adventure
- ☐ Animation
- ☐ Biopics
- ☐ Bollywood
- ☐ Comedy
- ☐ Crime
- ☐ Documentary
- ☐ Drama
- ☐ Family
- ☐ Horror
- ☐ Musicals
- ☐ Period/Historical
- ☐ Romance
- ☐ Science Fiction and Fantasy
- ☐ Short Films
- ☐ Sport
- ☐ Thriller
- ☐ War Films
- ☐ Westerns
- ☐ World Cinema
- ☐ Other (please specify)

[   ]

21. Which of those film genres are your three favourites?

	Genre
Favourite	[⇕]
Second Favourite	[⇕]
Third Favourite	[⇕]

22. Please list the countries you have visited for leisure

[   ]

23. Please list the countries you have visited for work/business

[   ]

24. How often do you log into social media networks (e.g. Facebook, Google+, etc.)?

- ○ Less than a few times a month
- ○ A few times a month
- ○ A few times a week
- ○ About once a day
- ○ More than once a day

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25. Please indicate which of these social media and networking sites you often, sometimes, rarely or never use.

	Often	Sometimes	Rarely	Never
Facebook	○	○	○	○
Twitter	○	○	○	○
LinkedIn	○	○	○	○
Pinterest	○	○	○	○
Google Plus	○	○	○	○
Tumblr	○	○	○	○
Instagram	○	○	○	○
VK	○	○	○	○
Flickr	○	○	○	○
Myspace	○	○	○	○
Meetup	○	○	○	○
Tagged	○	○	○	○
Ask.fm	○	○	○	○
MeetMe	○	○	○	○
YouTube	○	○	○	○

26. How did you discover One Day Elliott?

○ Saw them live
○ Know one or more of the band members
○ Heard them on the radio
○ Internet
○ A friend's recommendation
○ Was given the CD as a gift
○ Other (please specify)

[   ]

28. Of those genres, to which 5 do you listen the most?

	Genre
1	[▾]
2	[▾]
3	[▾]
4	[▾]
5	[▾]

29. Please specify 5 genres you dislike.

	Genre
1	[▾]
2	[▾]
3	[▾]
4	[▾]
5	[▾]

30. State how frequently you do the following

	Often	Sometimes	Rarely	Never
Purchase music physically (Vinyl/CD/Cassette etc)	○	○	○	○
Download music (paid)	○	○	○	○
Download music (for free)	○	○	○	○
Stream music (spotify etc)	○	○	○	○

31. How often do you listen to music on the following formats?

	Often	Sometimes	Rarely	Never
Cassette	○	○	○	○
Cd	○	○	○	○
Vinyl	○	○	○	○
Radio	○	○	○	○
Music Television Channel	○	○	○	○
Phone	○	○	○	○
iPod	○	○	○	○
Computer/laptop	○	○	○	○
Tablet	○	○	○	○
Streaming site (Spotify etc)	○	○	○	○
YouTube	○	○	○	○

32. How do you usually discover new music? (Select the three most likely from the following:)

- ☐ Radio
- ☐ Suggestion from friend
- ☐ Heard in a club
- ☐ Recommended online
- ☐ Read about it in a magazine/blog
- ☐ Compilation album
- ☐ Other (please specify)

[_____]

33. When looking for music, how likely are you to follow the advice of an online recommender?

No chance - they always get it wrong.	Unlikely	50/50	Likely	Always - It's like they know me!
○	○	○	○	○

34. Which of the following music streaming websites is best at recommending music you like?

- ○ Rhapsody
- ○ MOG
- ○ Napster
- ○ Jango
- ○ Pandora
- ○ Playlist
- ○ Turntable.fm
- ○ Grooveshark
- ○ Songza
- ○ Lastfm
- ○ Slacker
- ○ Finetune
- ○ Rdio
- ○ Deezer
- ○ Spotify
- ○ Zune
- ○ Other (please specify)

[_____]

35. Which of the following music streaming websites is worst at recommending music you like?

- ○ Rhapsody
- ○ MOG
- ○ Napster
- ○ Jango
- ○ Pandora
- ○ Playlist
- ○ Turntable.fm
- ○ Grooveshark
- ○ Songza
- ○ Lastfm
- ○ Slacker
- ○ Finetune
- ○ Rdio
- ○ Deezer
- ○ Spotify
- ○ Zune
- ○ Other (please specify)

  [   ]

36. How many times have you attended the following music festivals?

	How many times?
Reading/Leeds	⊕
Glastonbury	⊕
V Festival	⊕
Sonisphere	⊕
Download	⊕
Bestival	⊕
Isle of Wight	⊕
Creamfileds	⊕
Global Gathering	⊕
Party in the Park	⊕
Slam Dunk	⊕

37. What is the main reason you would attend a music festival?

- ○ Particular bands on the bill
- ○ Overall genre of the festival
- ○ It's local to where I live
- ○ The people I know who are going.
- ○ Other (please specify)

  [   ]

Thank you so much for taking the time to complete this survey.

38. Email address

[   ]

Appendix C – Additional Charts, Figures and Graphs

C.1 Survey Responses

Q4 Marital Status

329
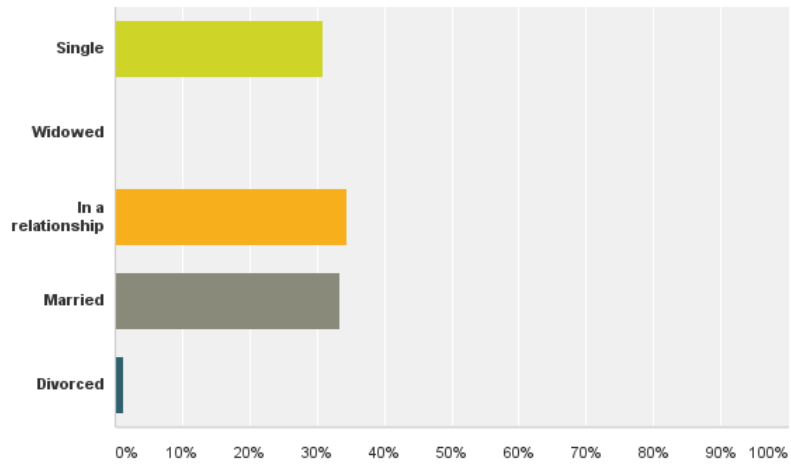
Q5 Number of Children

Answered: 87   Skipped: 0
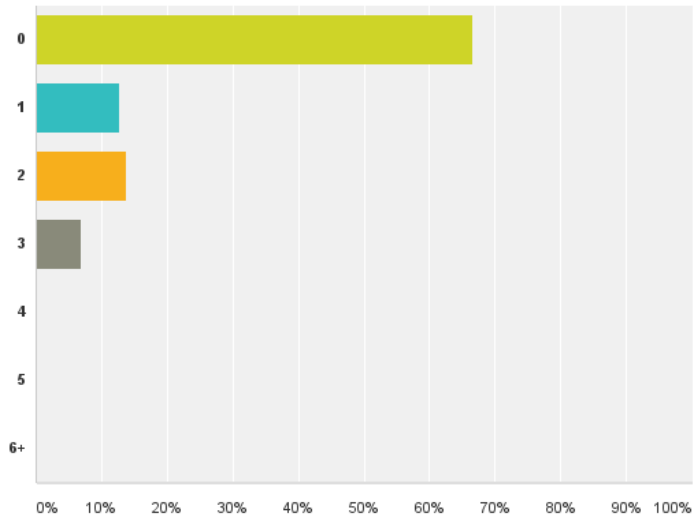
Q6 Number of siblings (brothers or sisters)
(Include half or step brothers or sisters.)

Answered: 86   Skipped: 1

330

Q7 Type of Accomodation

Answered: 86   Skipped: 1

Type

House/Bedrooms

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
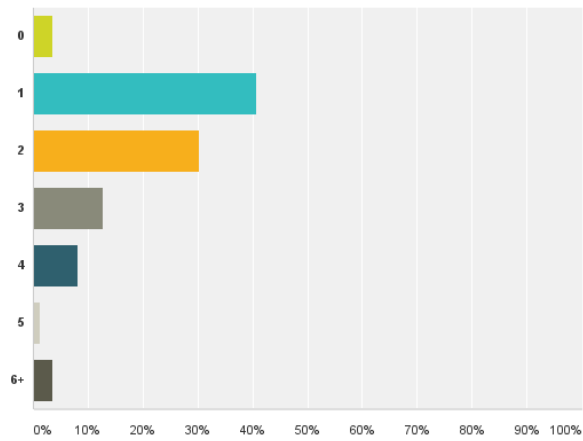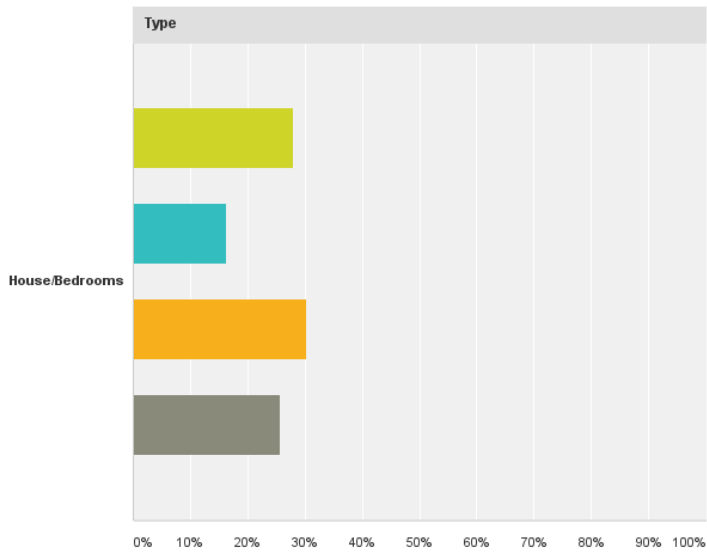
Flat   Detached   Semi- Detached   Terraced

Bedrooms

House/Bedrooms

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

1   2   3   4   5   6+

331
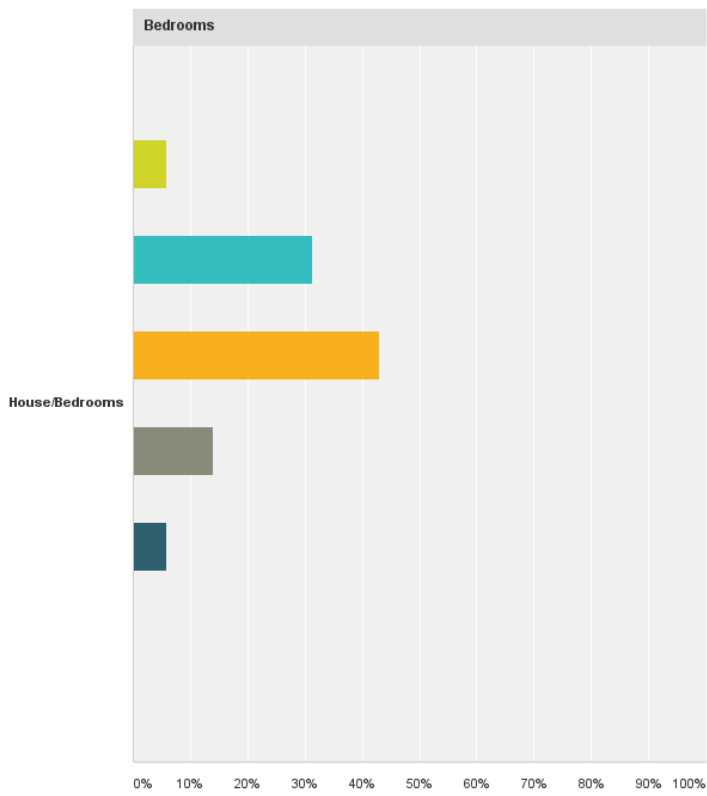
Q8 With how many people do you share accomodation?

Answered: 86   Skipped: 1
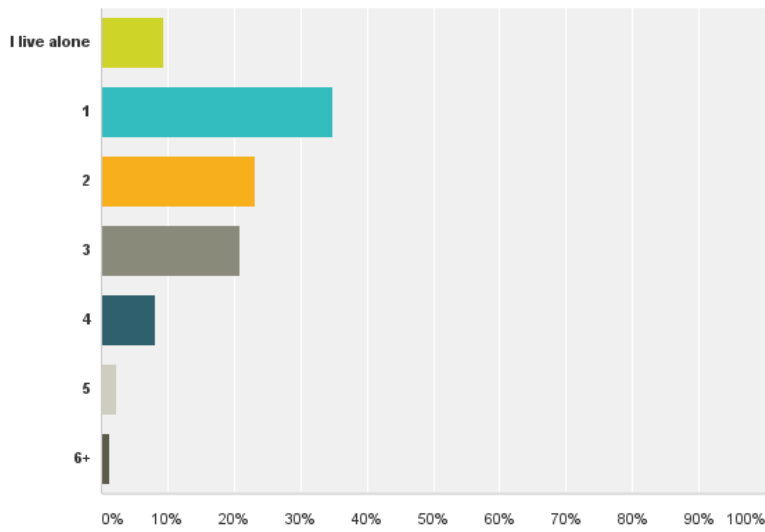
Q10 How long have you lived there?

Answered: 86   Skipped: 1
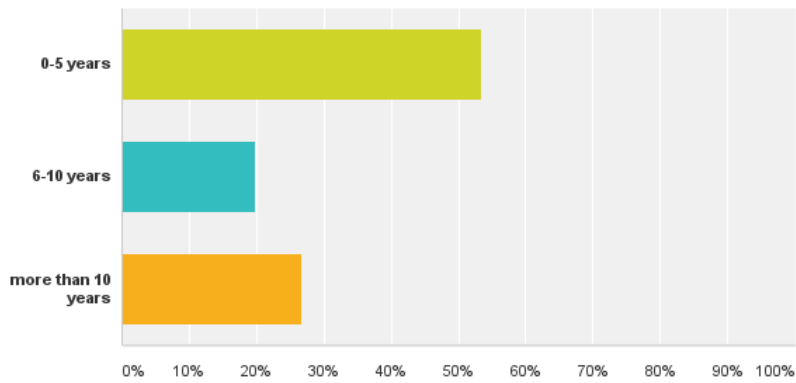
Q16 What is your approximate average income?

Answered: 86   Skipped: 1
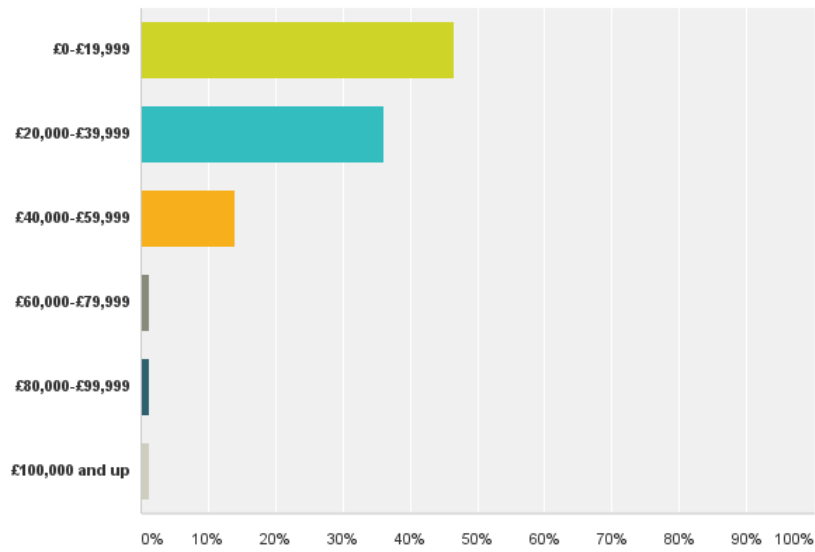
Q17 Which of the following do you own? (tick all that apply)

Answered: 87   Skipped: 0

333
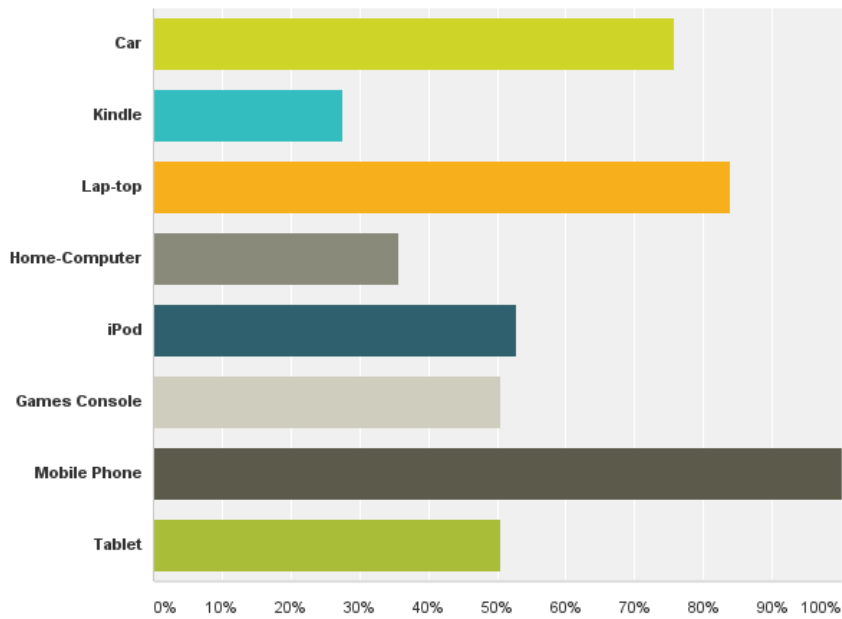
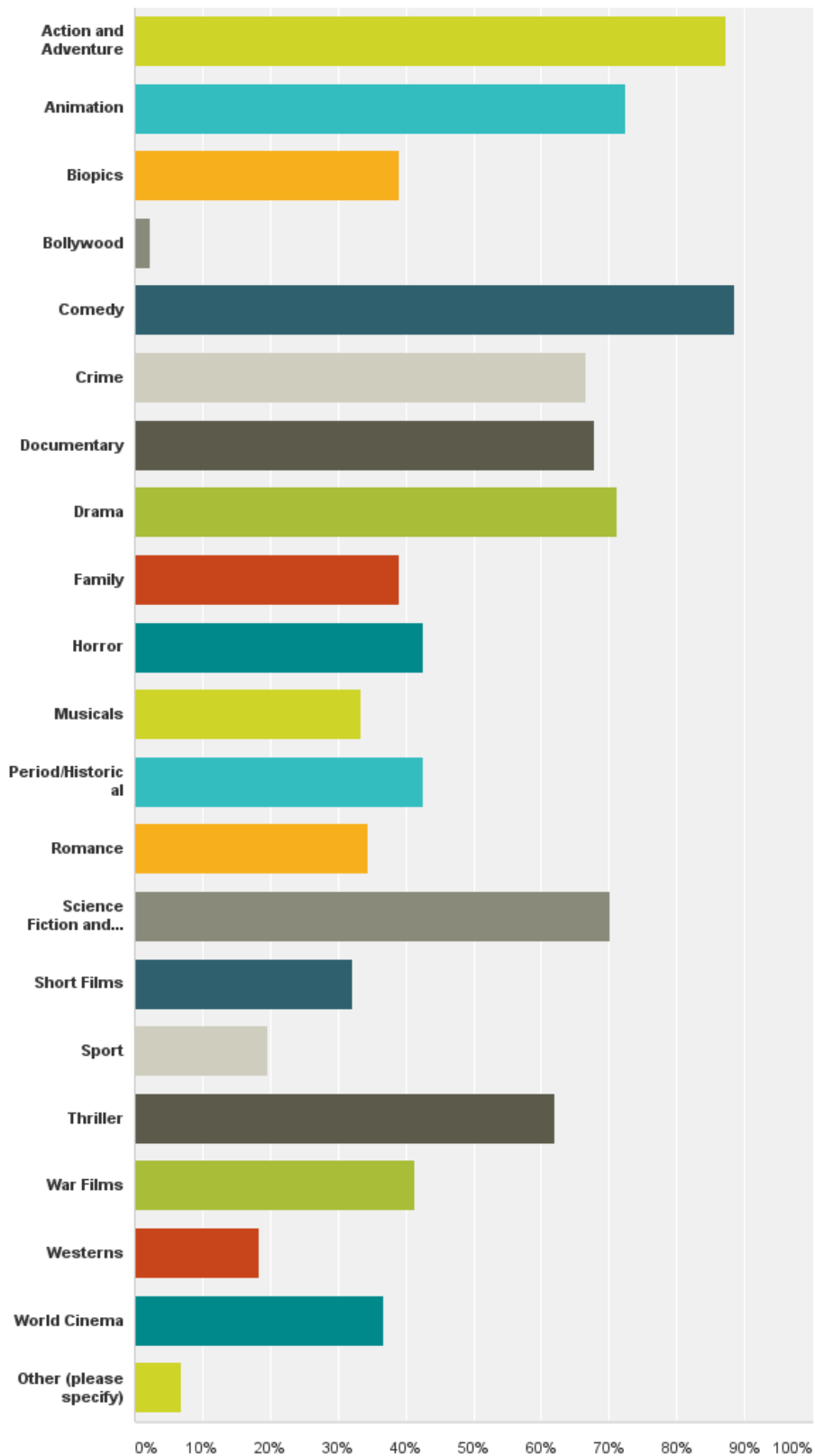Q18 For each of the following activities, please indicate which you do often, which you do sometimes, which you do rarely and which you never do.

Answered: 87   Skipped: 0

Painting or sculpture
Eating out
D.I.Y
Sport
Playing a musical...

Camping
Watching TV
Outdoor Pursuits
Gardening
Walking
Reading

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Often   Sometimes   Rarely   Never

334

Q19 How often do you attend each of the following?

Answered: 87   Skipped: 0

Museums

Music Festivals

Opera

Musicals

Theatre

Cinema

Galleries

Ballet

Sports Events

Live Gigs (in venues)

Classical Concerts

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Often   Sometimes   Rarely   Never
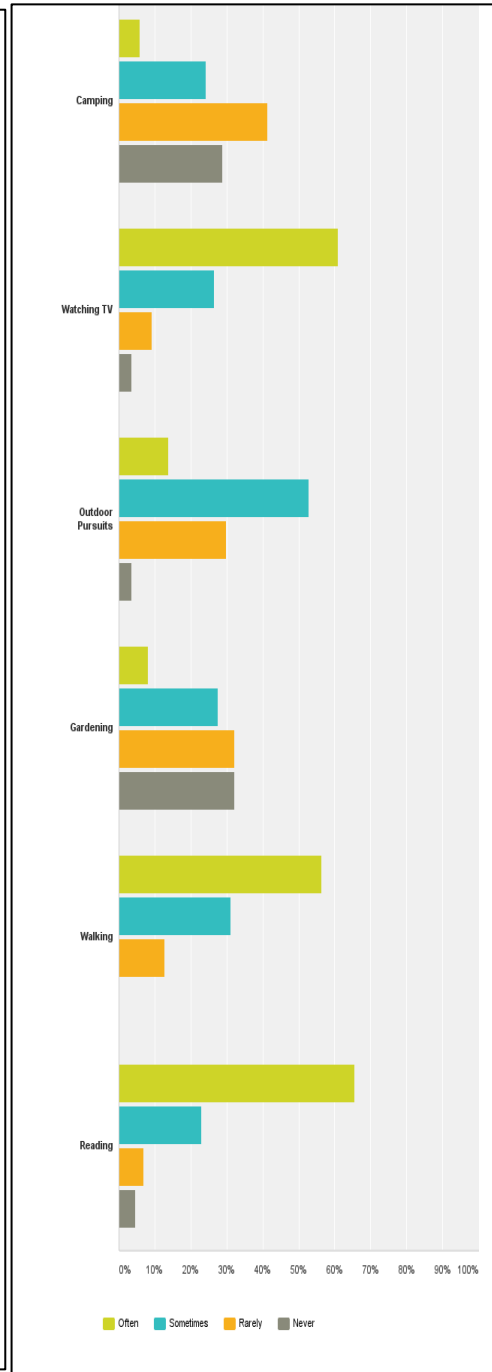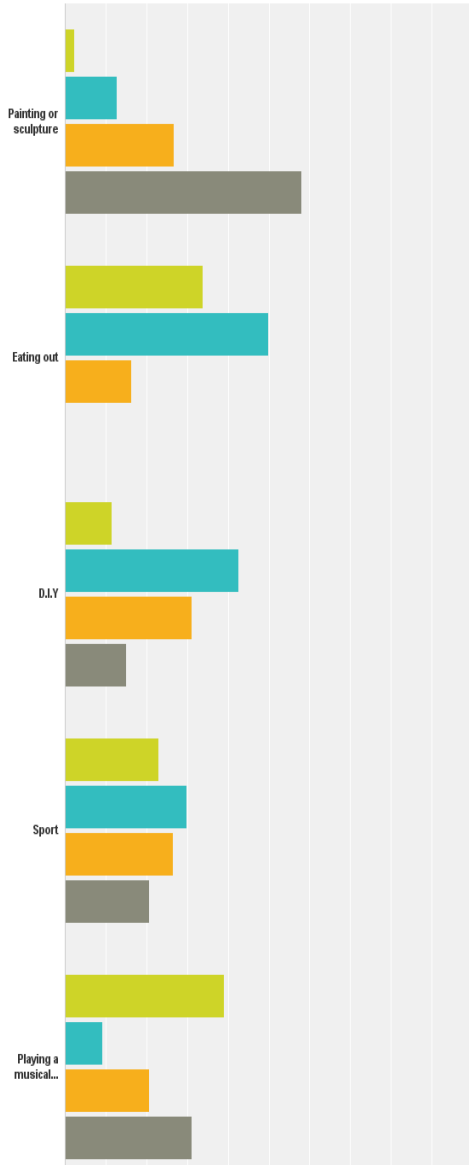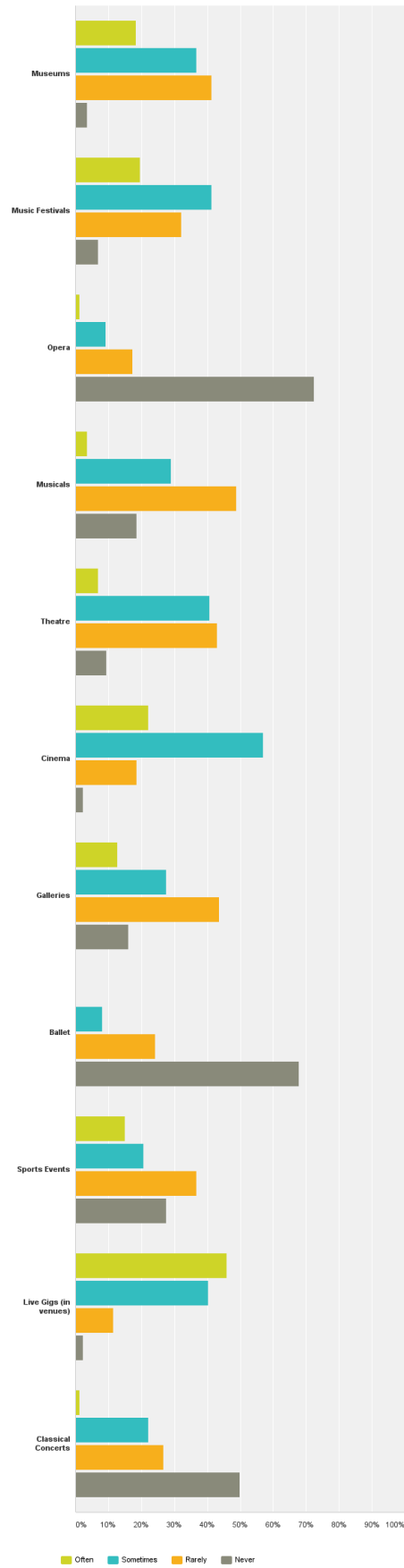
Q20 Which of the following film genres do you enjoy?

Answered: 87   Skipped: 0

Q21 Which of those film genres are your three favourites?
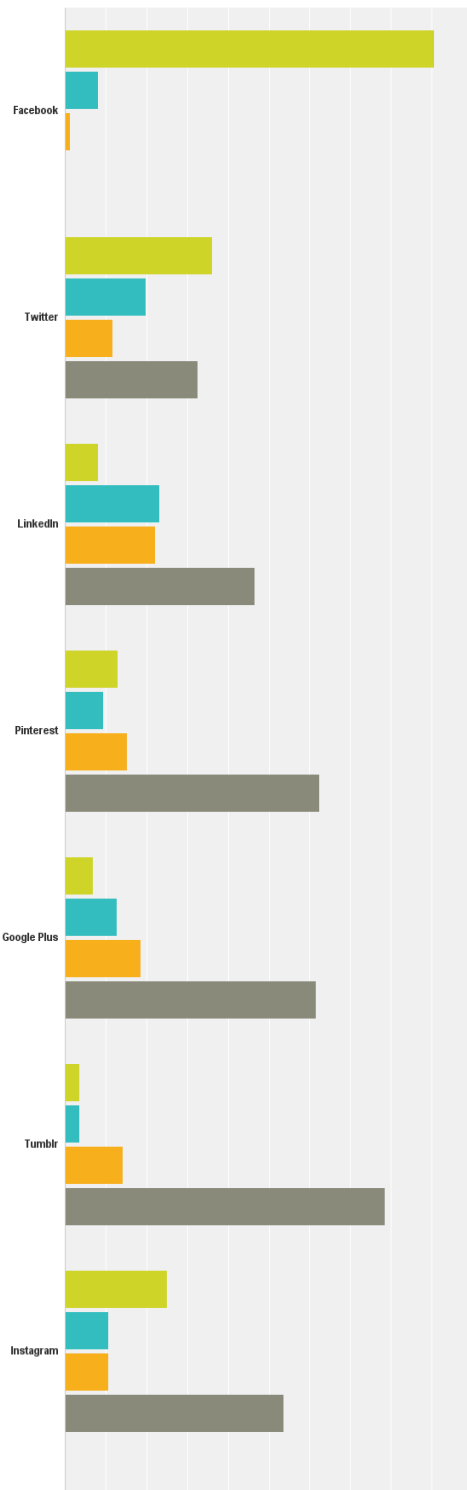
Answered: 87 Skipped: 0
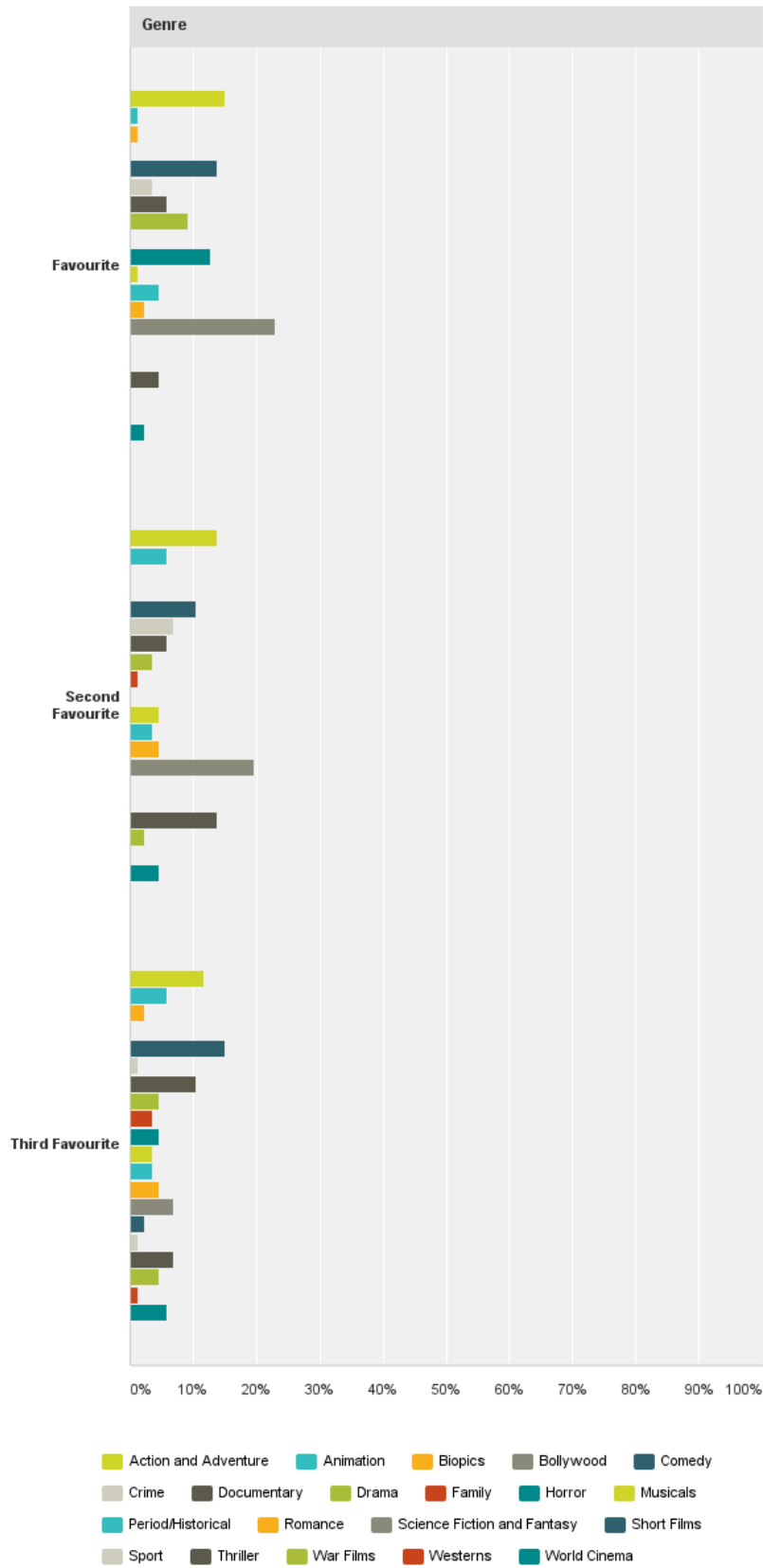
Legend:
Action and Adventure, Animation, Biopics, Bollywood, Comedy, Crime, Documentary, Drama, Family, Horror, Musicals, Period/Historical, Romance, Science Fiction and Fantasy, Short Films, Sport, Thriller, War Films, Westerns, World Cinema

337

Q24 How often do you log into social media networks (e.g. Facebook, Google+, etc.)?
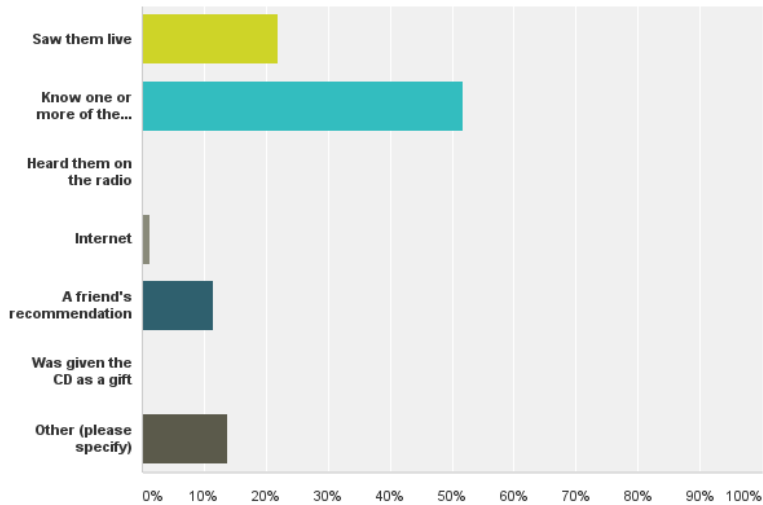
Answered: 86   Skipped: 1

338
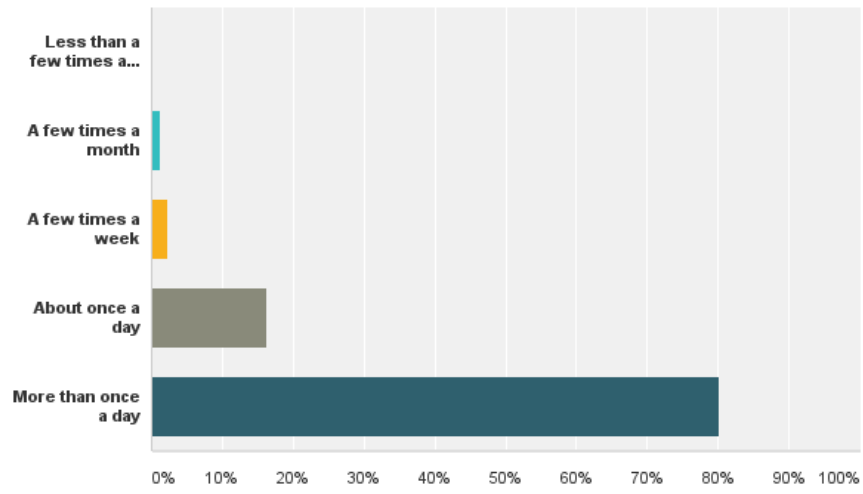
Q25 Please indicate which of these social media and networking sites you often, sometimes, rarely or never use.

Answered: 87   Skipped: 0

Often   Sometimes   Rarely   Never

339
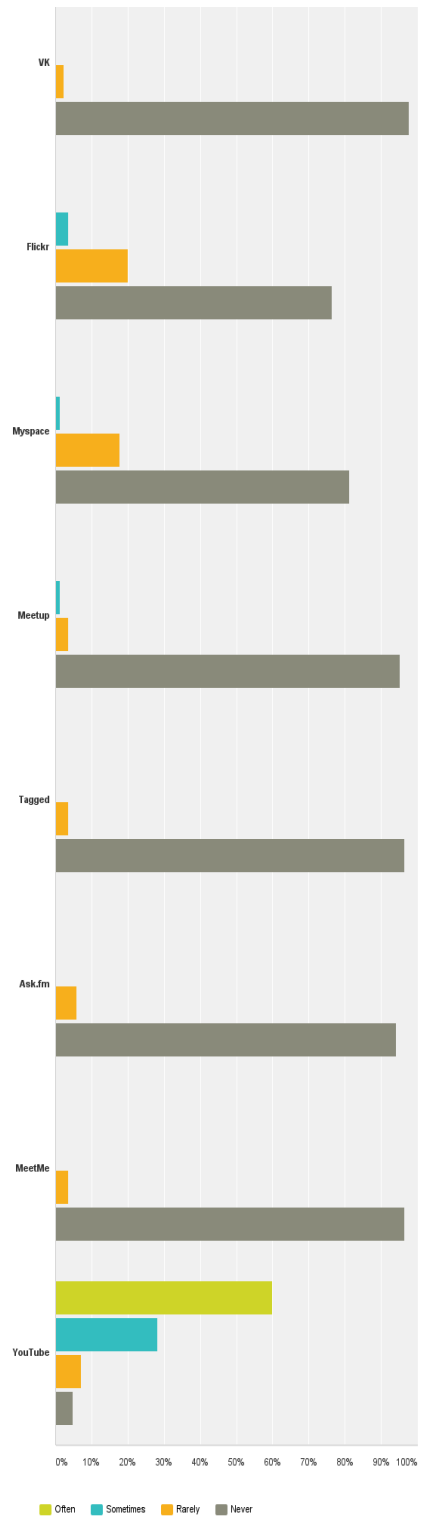
Q26 How did you discover One Day Elliott?

Answered: 87   Skipped: 0

Q.27

Which musical genres do you enjoy?		
Answer Options	Response Percent	Response Count
Acid Jazz	12.6%	11
Acoustic Blues	44.8%	39
Acoustic Folk	52.9%	46
Acoustic Rock	73.6%	64
Alt Power Pop	19.5%	17
Alternative	65.5%	57
Ambient	24.1%	21
Americana	21.8%	19
Avant Rock	16.1%	14
Baroque	11.5%	10
Battles/Disses	3.4%	3
Beats	12.6%	11
Bebop	12.6%	11
Big Beat	12.6%	11
Bluegrass	18.4%	16
Blues	57.5%	50
Blues Rock	50.6%	44
Bossa Nova	10.3%	9
Breakbeat	11.5%	10
Brit Pop	49.4%	43
Cajun/Zydeco	4.6%	4
Chamber Music	16.1%	14
Choral	20.7%	18
Christian Country	4.6%	4
Christian Rap	1.1%	1
Christian Rock	8.0%	7
Christmas/Seasonal	18.4%	16
Classic Rock	71.3%	62

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Classical	47.1%	41
Club Bangas	3.4%	3
Contemporary	18.4%	16
Contemporary Christian	4.6%	4
Contemporary Gospel	12.6%	11
Country and Western	19.5%	17
Country Blues	21.8%	19
Country-Pop	18.4%	16
Country-Rock	36.8%	32
Crunk	2.3%	2
Cuban	11.5%	10
Dance	28.7%	25
Dance & Electronic	29.9%	26
Dance-Punk	25.3%	22
Dancehall	6.9%	6
Death/Black Metal	20.7%	18
Dirty South	9.2%	8
Dixieland	3.4%	3
Doom Metal	9.2%	8
Drum n Bass	23.0%	20
Dub	16.1%	14
Dubstep	25.3%	22
Electric Blues	24.1%	21
Electro	16.1%	14
Electro-hop	5.7%	5
Electronica	19.5%	17
Emo	33.3%	29
Ensembles	5.7%	5
Euro	1.1%	1
Euro Pop	3.4%	3
Experimental	12.6%	11
Experimental Sounds	8.0%	7
Film Music	48.3%	42
Flamenco	10.3%	9
Folk	41.4%	36
Folk Rock	49.4%	43
Free Jazz	16.1%	14
Freestyle	8.0%	7
Funk	33.3%	29
Funk	17.2%	15
Funky R&B	23.0%	20
Game & Soundtrack	13.8%	12
Games Soundtrack	11.5%	10
Gangsta	6.9%	6
Garage Rock	31.0%	27
General Latin	8.0%	7
Gospel	19.5%	17
Goth	14.9%	13
Goth Metal	16.1%	14
Goth Rock	19.5%	17
Grime	10.3%	9
Grunge	44.8%	39
Guitar Rock	57.5%	50
Happy Hardcore	16.1%	14
Hard Rock	49.4%	43
Hardcore	21.8%	19
Hardcore Rap	10.3%	9
Heavy Metal	47.1%	41

Hip Hop	37.9%	33
Honky-Tonk	10.3%	9
House	14.9%	13
Hyphy	0.0%	0
Indie	62.1%	54
Indietronic	6.9%	6
Industrial	9.2%	8
Industrial Metal	14.9%	13
Instrumental Rock	23.0%	20
J-Pop	3.4%	3
Jazz Fusion	24.1%	21
Jazz	47.1%	41
Jump Blues	6.9%	6
Jungle	11.5%	10
Latin	13.8%	12
Latin Jazz	14.9%	13
Lounge	11.5%	10
Mariachi	5.7%	5
Medieval	12.6%	11
Mellow	10.3%	9
Merengue	1.1%	1
Miami Bass	2.3%	2
Minimalism	3.4%	3
Minimal Techno	3.4%	3
Modern Jazz	21.8%	19
Musical	23.0%	20
Native American	8.0%	7
Neo-Soul	6.9%	6
Nerdcore	4.6%	4
New Age	8.0%	7
New School	3.4%	3
New School	4.6%	4
Noise	3.4%	3
Nu Jazz	8.0%	7
Nu Metal	20.7%	18
Old School	24.1%	21
Opera	10.3%	9
Pop	44.8%	39
Pop General	35.6%	31
Pop Punk	41.4%	36
Pop Rock	49.4%	43
Pop/Balada	4.6%	4
Positive Vibes	0.0%	0
Post Punk	24.1%	21
Power Metal	17.2%	15
Power Pop	12.6%	11
Progressive Metal	24.1%	21
Progressive Rock	36.8%	32
Psychedelic Rock	25.3%	22
Punk	46.0%	40
R&B	41.4%	36
R&B/Soul/Pop	35.6%	31
Rap-Metal	21.8%	19
Reggae	46.0%	40
Reggae Beats	11.5%	10
Reggaeton	8.0%	7
Renaissance	5.7%	5
Rock	74.7%	65

Rock n Roll	55.2%	48
Rockabilly	25.3%	22
Romantic Classical	12.6%	11
Salsa	16.1%	14
Samba	12.6%	11
Scratch	4.6%	4
Shoegaze	8.0%	7
Ska	36.8%	32
Smooth	13.8%	12
Smooth Jazz	35.6%	31
Smooth R&B	21.8%	19
Soul	42.5%	37
Southern Rock	19.5%	17
Surf Rock	25.3%	22
Swing	26.4%	23
Symphonic	5.7%	5
Tango	5.7%	5
Techno	5.7%	5
Techno Hardcore	0.0%	0
Thrash Metal	17.2%	15
Trance	10.3%	9
Trap	0.0%	0
Tribal	5.7%	5
Trip Hop	19.5%	17
West Coast	12.6%	11
World Fusion	11.5%	10
World General/Traditional	12.6%	11
Other (please specify)	10.3%	9
answered question	*87*	87
skipped question	*0*	0

Q30 State how frequently you do the following

Answered: 87   Skipped: 0

Legend: Often, Sometimes, Rarely, Never

Categories: Purchase music physically..., Download music (paid), Download music (for free), Stream music (spotify etc)

344
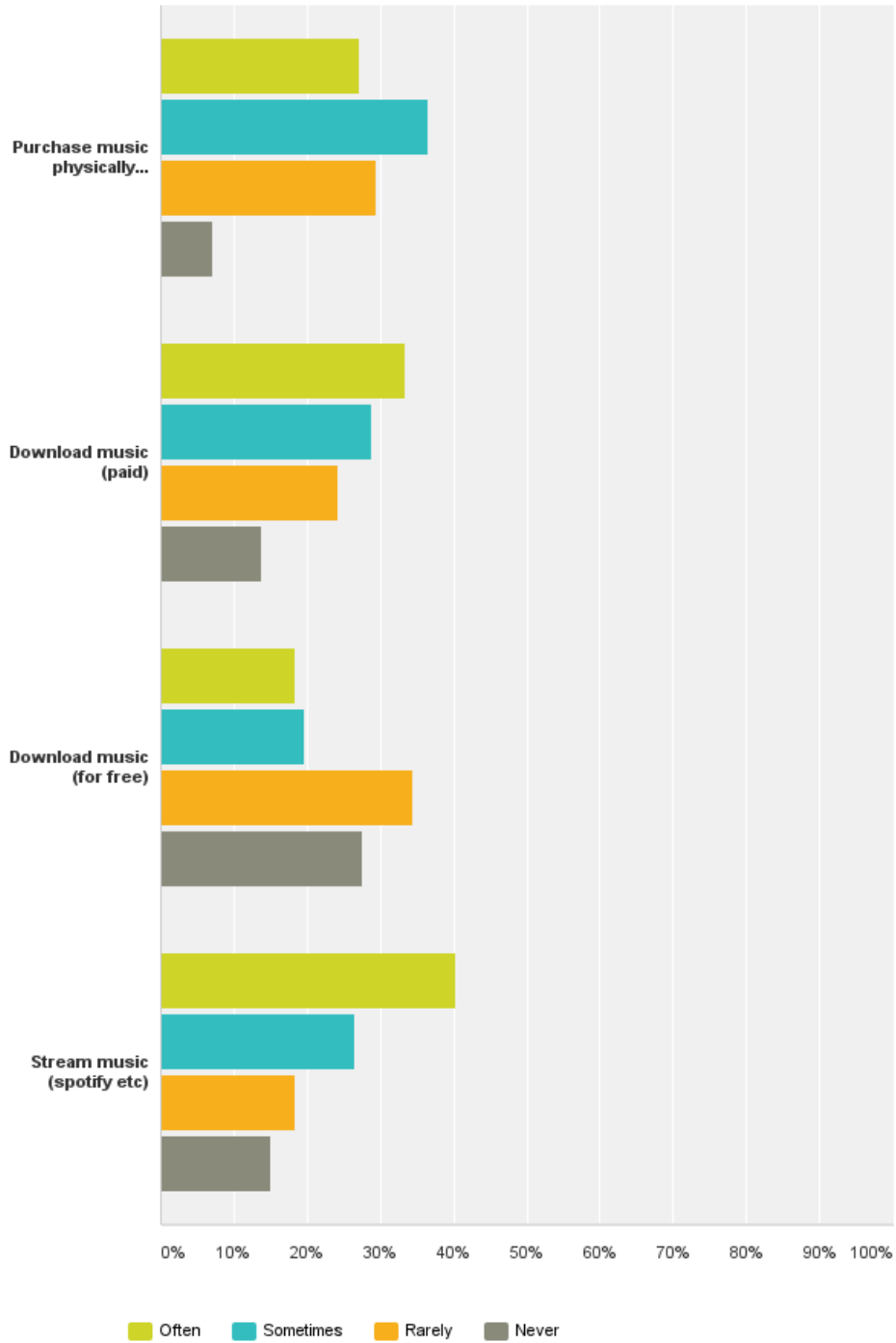
Q31 How often do you listen to music on
the following formats?

Answered: 87   Skipped: 0

Cassette

Cd

Vinyl

Radio

Music
Television...

Phone

iPod

Computer/laptop

Tablet

Streaming site
(Spotify etc)

YouTube

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

■ Often   ■ Sometimes   ■ Rarely   ■ Never

345
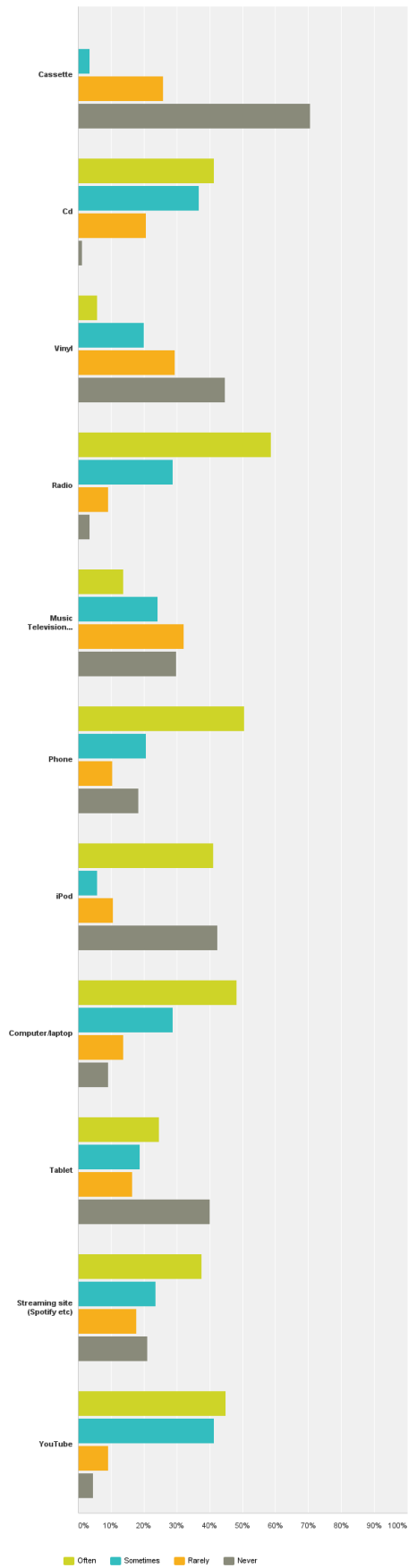
Q32 How do you usually discover new music? (Select the three most likely from the following:)

Answered: 87   Skipped: 0
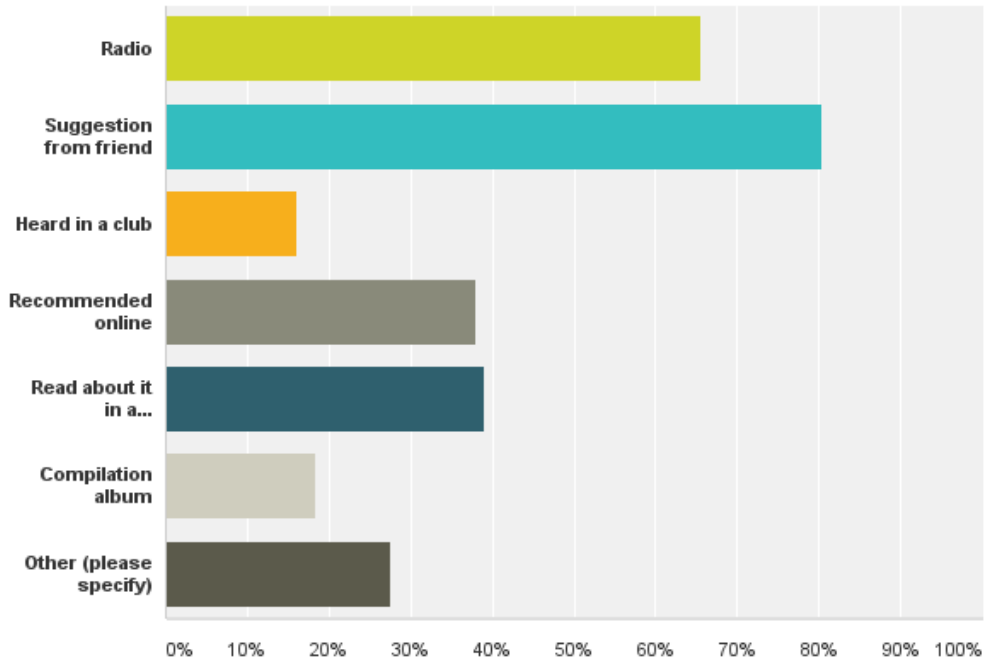
Q34 Which of the following music streaming websites is best at recommending music you like?

Answered: 73   Skipped: 14
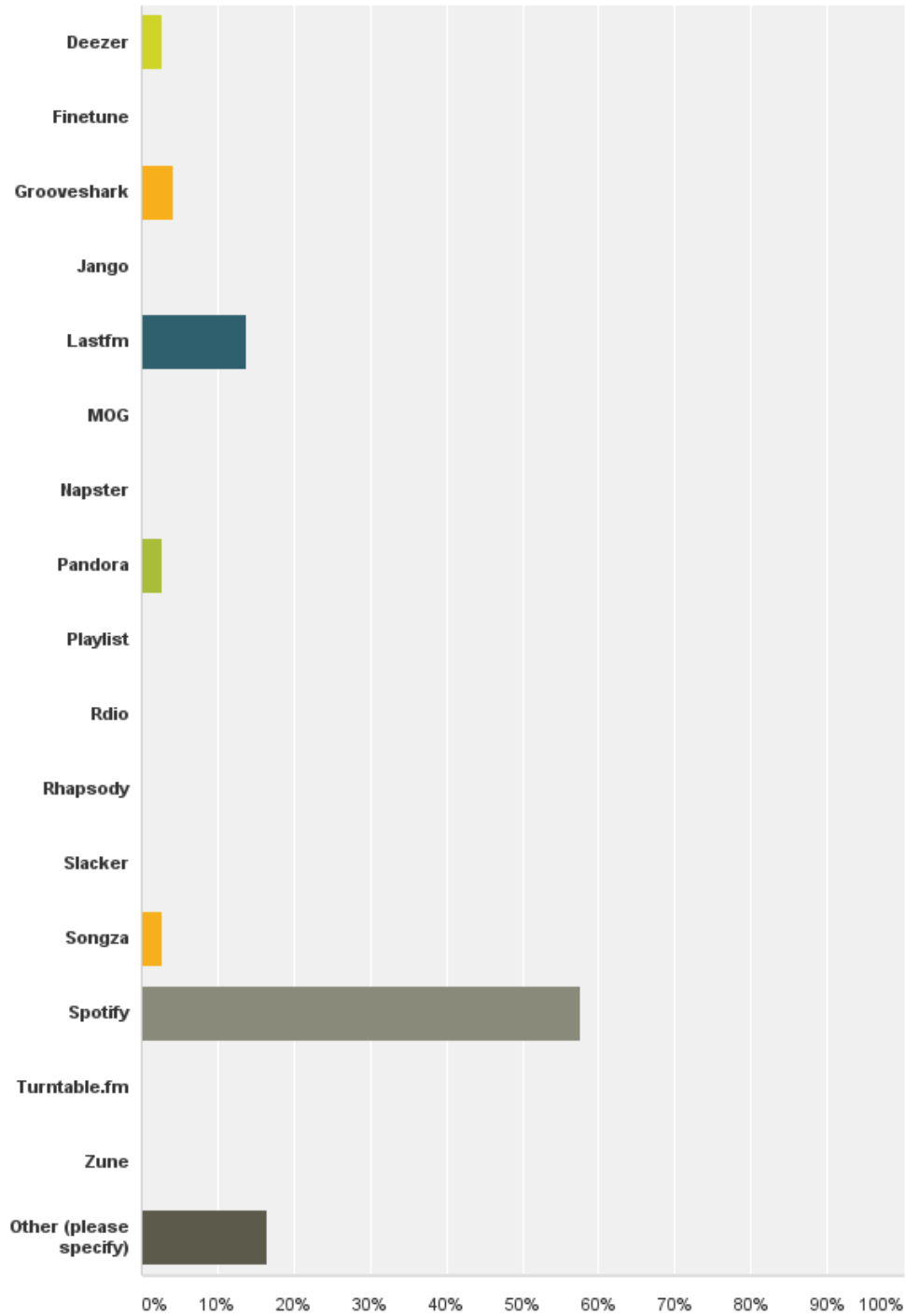
Q35 Which of the following music streaming websites is worst at recommending music you like?

Answered: 59   Skipped: 28
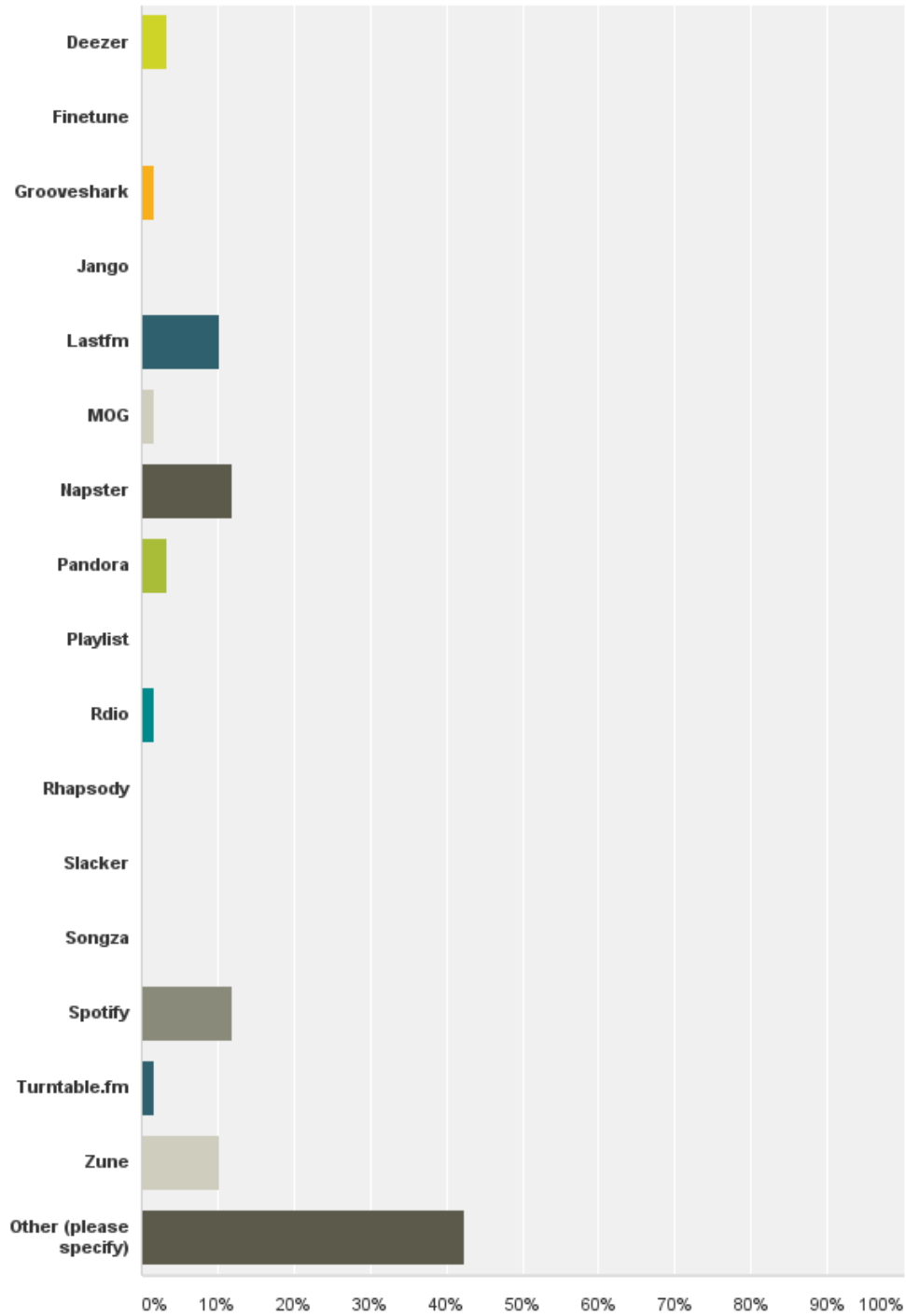
Q36 How many times have you attended the following music festivals?

Answered: 86   Skipped: 1

How many times?

Festivals listed: Reading/Leeds, Glastonbury, V Festival, Sonisphere, Download, Bestival, Isle of Wight, Creamfileds, Global Gathering, Party in the Park, Slam Dunk

Legend: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10+
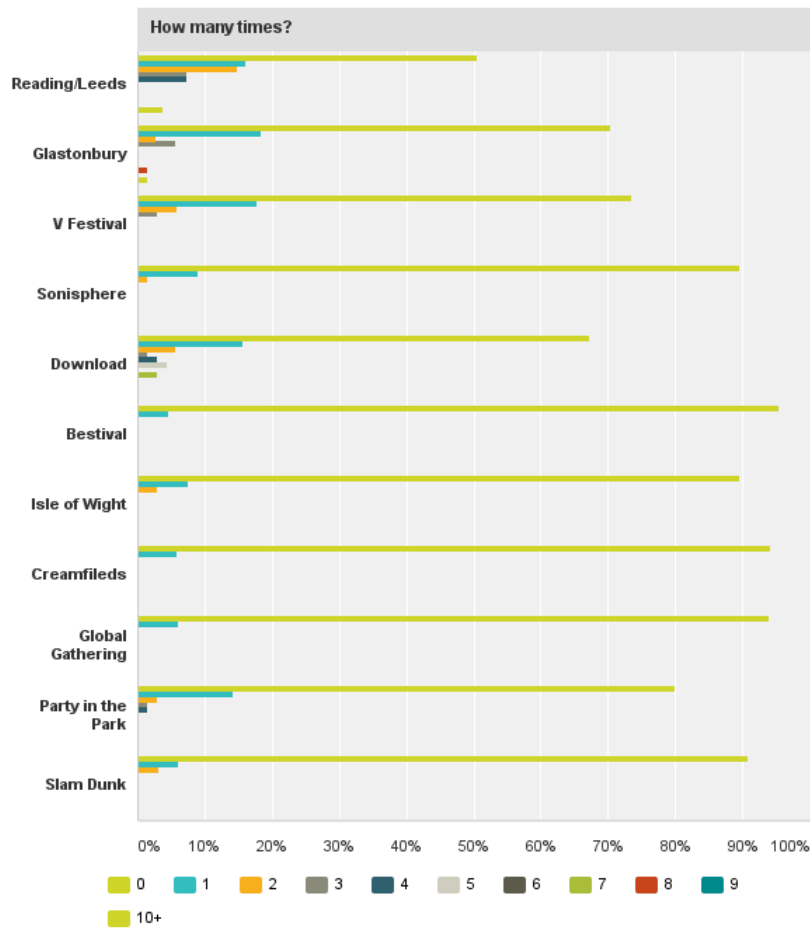
Q37 What is the main reason you would attend a music festival?

Answered: 85   Skipped: 2

Categories: Particular bands on the..., Overall genre of the festival, It's local to where I live, The people I know who are..., Other (please specify)
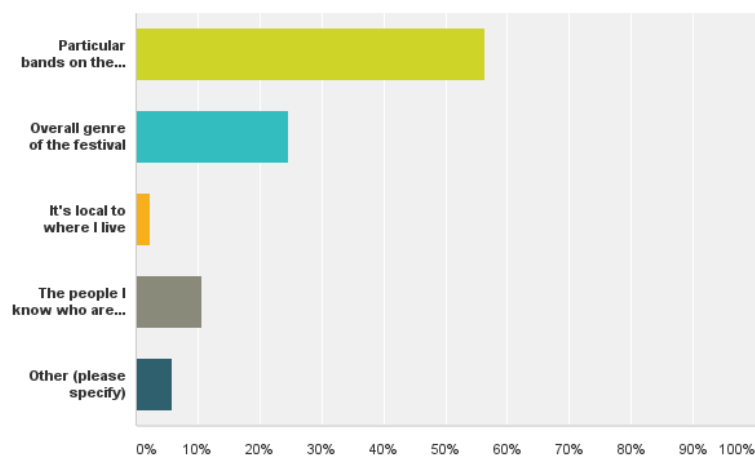
C.2 Additional Observational Data

Average genres for Terraced = 27.82
Average genres for Semi Detached = 34.73

349

Average genres for Flat = 43.83
Average genres for Detached = 28.64

Correlation between type of accomodation and average number of genres liked.

Correlation between cultural score and the number of people with whom you share accommodation

Correlation between number of genres liked and number of people with whom you share accommodation
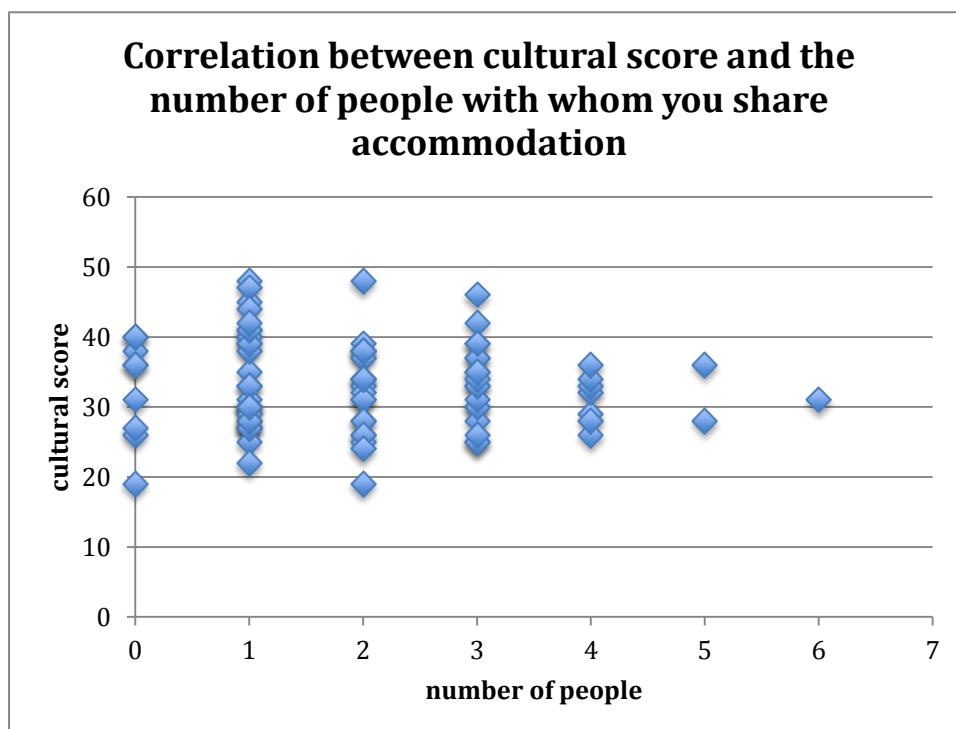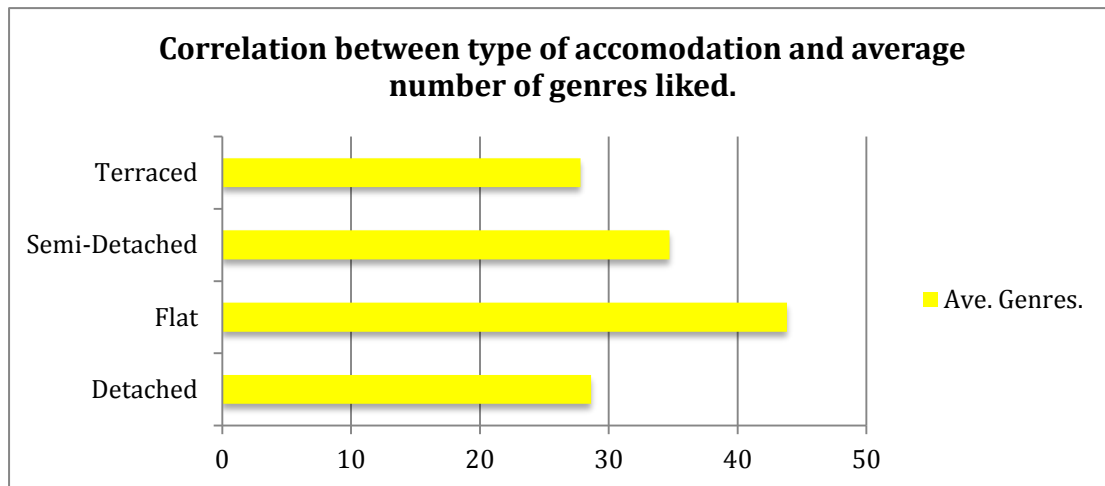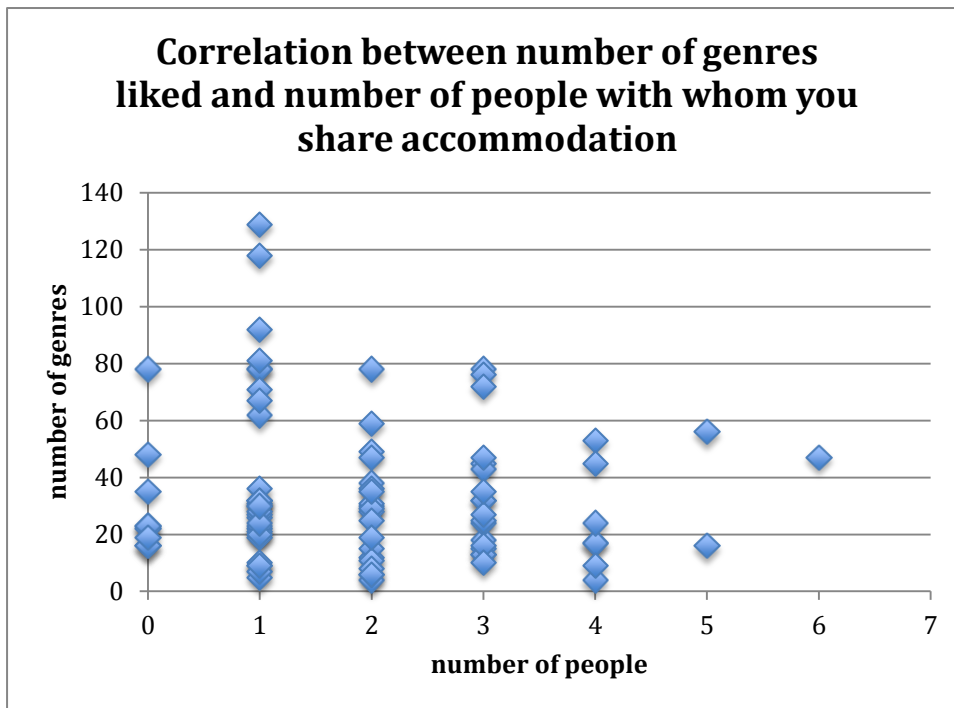
C.3 Individual mouse click distribution for participants.

Participant 1
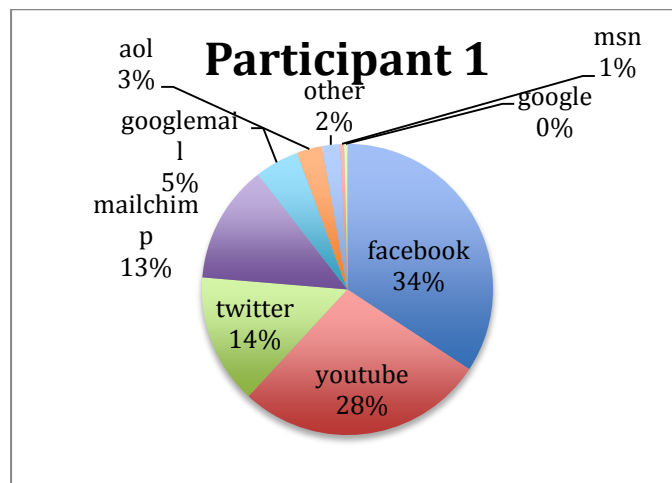
Facebook	292
YouTube	236
Twitter	123
Mailchimp	112
Googlemail	42
Aol	24
Other	17
Msn	4
Google	3

Participant 2
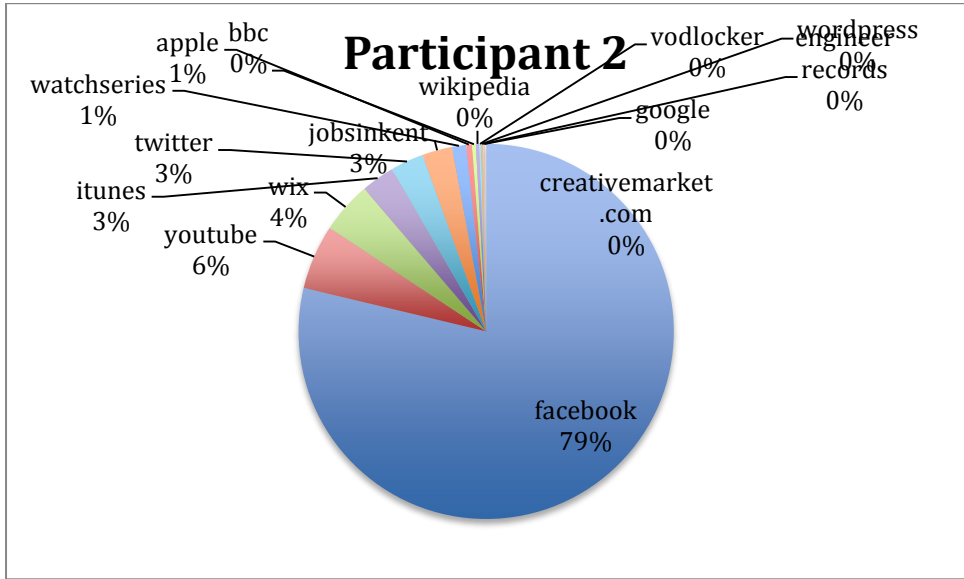
Participant 2

Facebook	1429
YouTube	101
Wix	81
iTunes	52
Twitter	52
Jobsinkent	47
Watchseries	22
Apple	9
BBC	6
Wikipedia	5
Vodlocker	3
Wordpress	3
Engineer Records	2
Google	2
Creativemarket.com	1

Participant 3
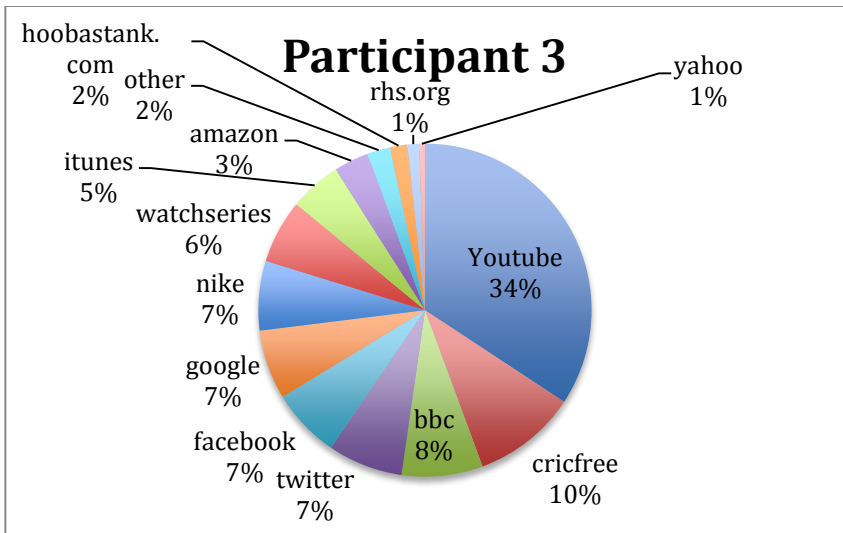
Youtube	61
Cricfree	18
bbc	14
Twitter	13
Facebook	12
Google	12
Nike	12
Watchseries	11
iTunes	9
Amazon	6
other	4
hoobastank.com	3
rhs.org	2
Yahoo	1

Participant 4

Participant 4

kidsmovies.tv 2%
google 3%
disney 7%
youtube 12%
facebook 73%
watchfree 1%
putlocker 1%
channel4 1%
gorillavid 0%
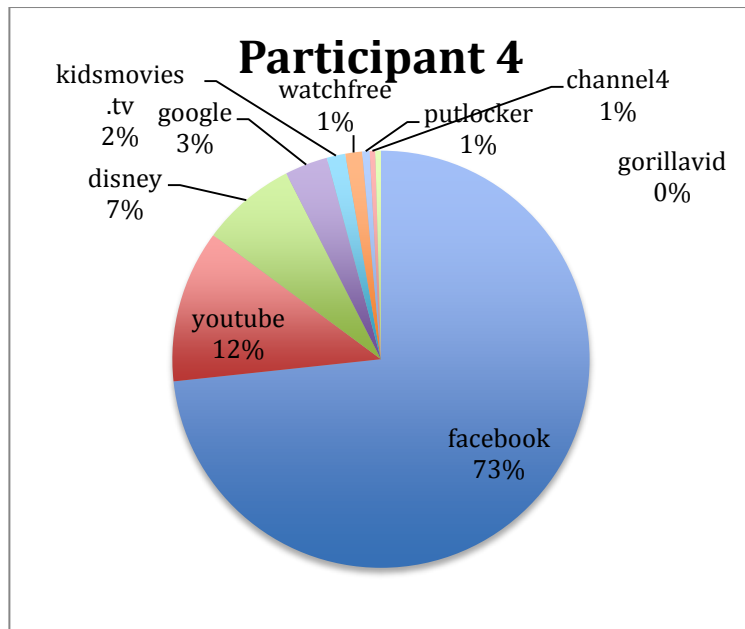
Facebook	508
Youtube	82
Disney	51
Google	23
kidsmovies.tv	10
Watchfree	9
Putlocker	4
Channel4	3
Gorillavid	3

Participant 5
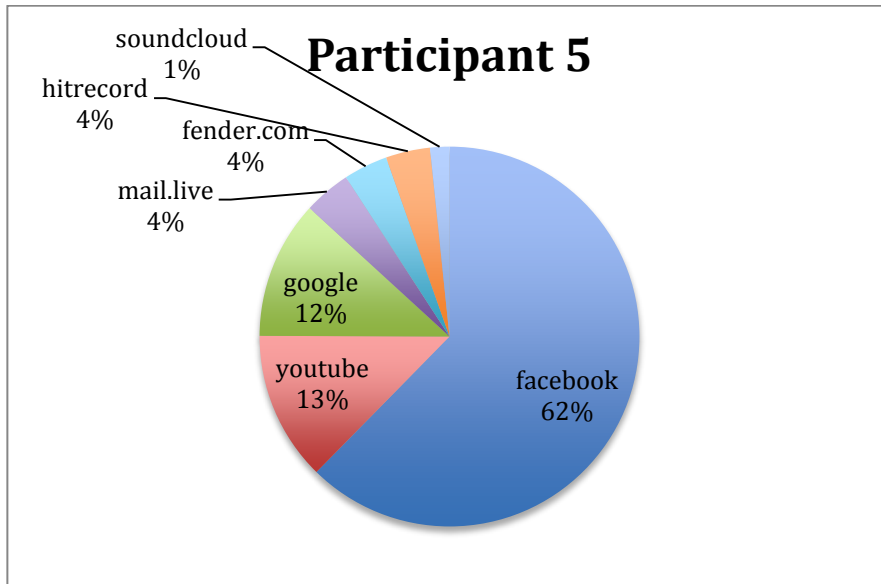
Participant 5

Facebook	265
Youtube	54
Google	50
Mail.live	17
Fender.com	16
Hitrecord	16
Soundcloud	7

Participant 6
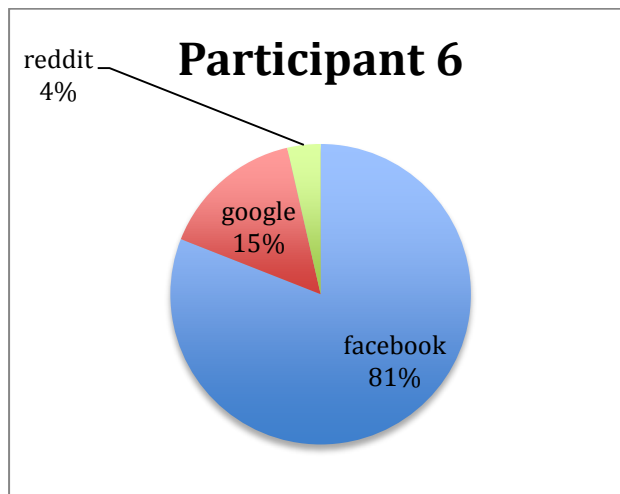
Participant 6

Facebook	430
Google	82
Reddit	19

Participant 7
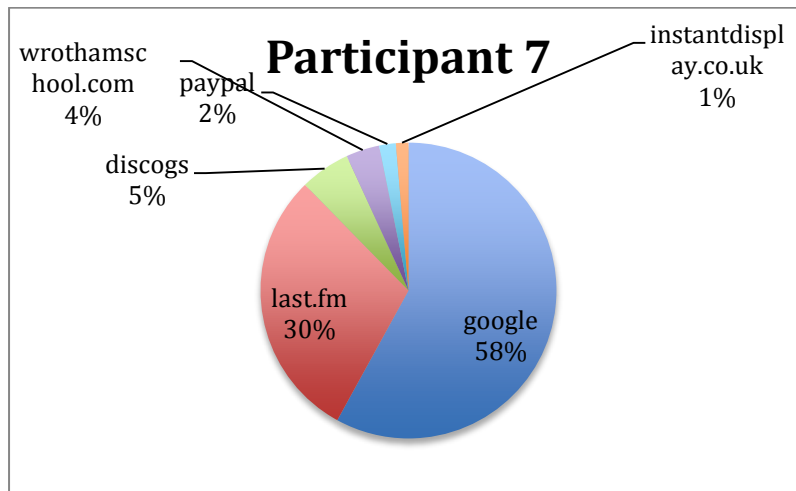
Participant 7

Google	127
Last.fm	65
Discogs	12
Wrothamschool.com	8
Paypal	4
Instantdisplay.co.uk	3

Participant 8

Messenger	375

Participant 9

Participant 9
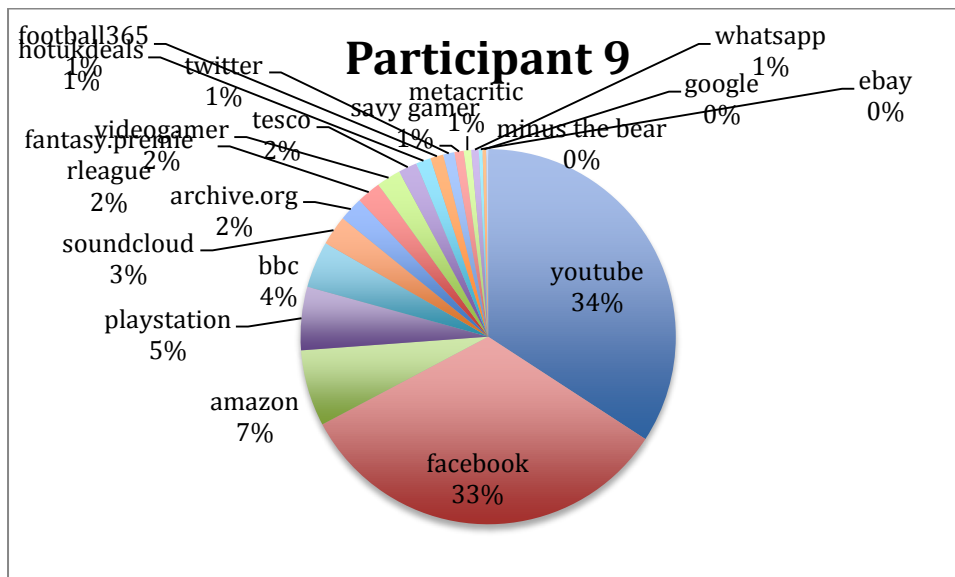
Youtube	213
Facebook	206
Amazon	41
Playstation	34

BBC	25
Soundcloud	16
Frchive.org	13
fantasy.premierleague	13
Videogamer	13
Tesco	10
Hotukdeals	8
Football365	7
Twitter	6
Savy gamer	5
Metacritic	4
Whatsapp	4
Ebay	2
Google	2
Minus the bear	1

Participant 10
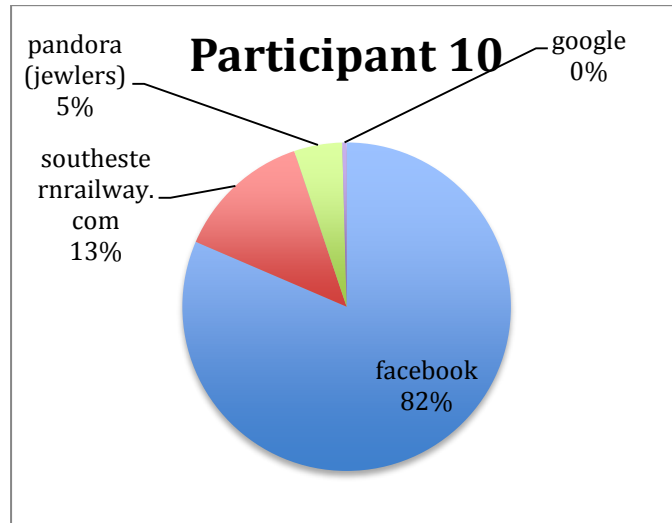
Facebook	189
Southesternrailway.com	31
Pandora (jewlers)	11
Google	1

Participant 11
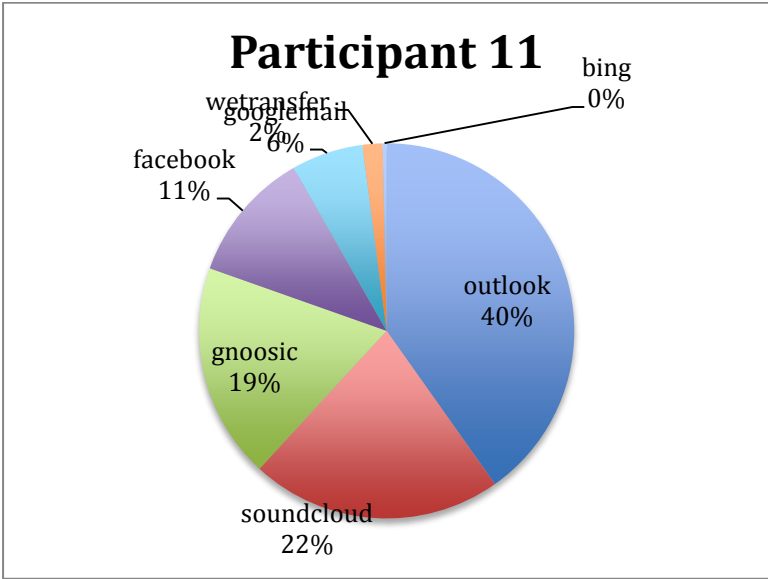
Participant 11

Outlook	117
Soundcloud	63
Gnoosic	54
Facebook	33
Googlemail	18
Wetransfer	5
Bing	1

Participant 12
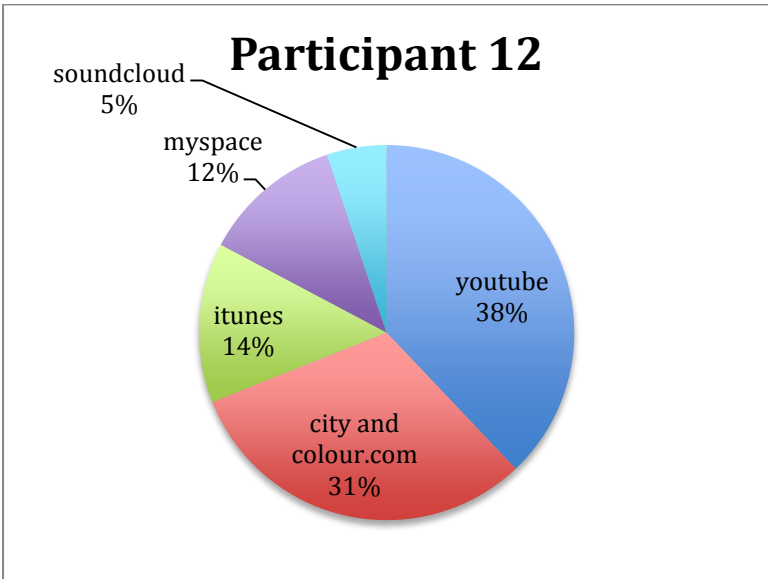
Participant 12

Youtube	22
City and colour.com	18
iTunes	8
Myspace	7
Soundcloud	3

Participant 13

Participant 13
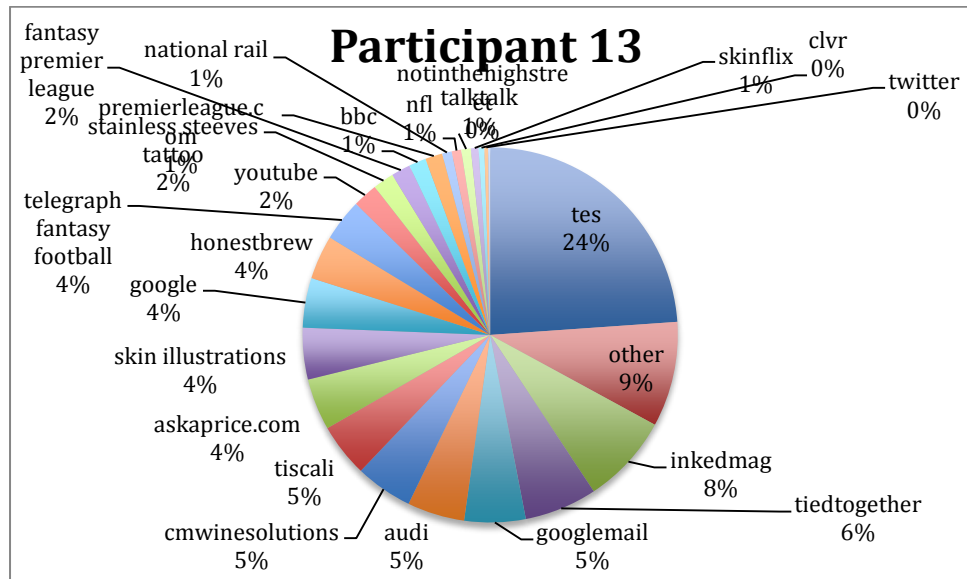
Tes	145
Other	55
Inkedmag	47
Tiedtogether	38
Googlemail	32
Audi	30
Cmwinesolutions	30
Tiscali	28
Askaprice.com	27
Skin Illustrations	27
Google	26
Honestbrew	23
Telegraph fantasy football	22
Youtube	13
Stainless steeves tattoo	11
Fantasy premier league	10
bbc	9
Premierleague.com	9
National rail	5
Nfl	5
Talktalk	5
Skinflix	4
clvr	3
Twitter	2
notinthehighstreet	1

Participant 14
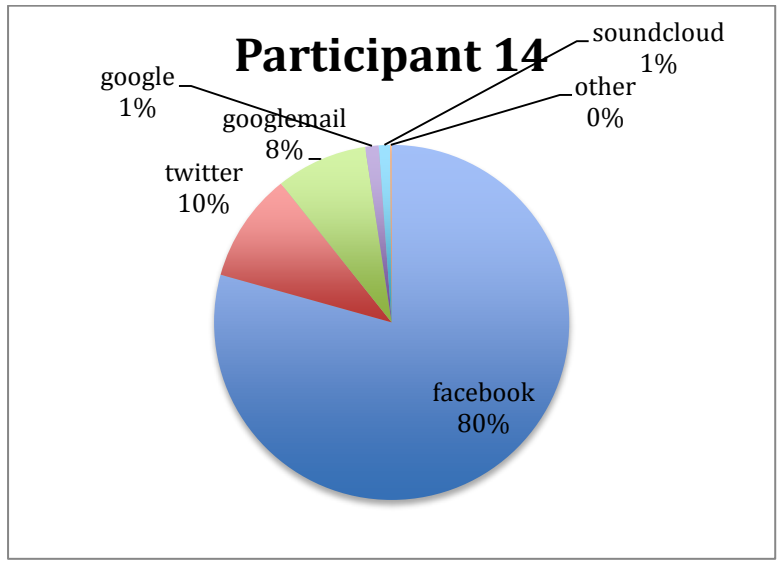
Participant 14

Facebook	1163
Twitter	146
Googlemail	122
Google	18
Soundcloud	15
Other	2

Participant 15

Participant 15
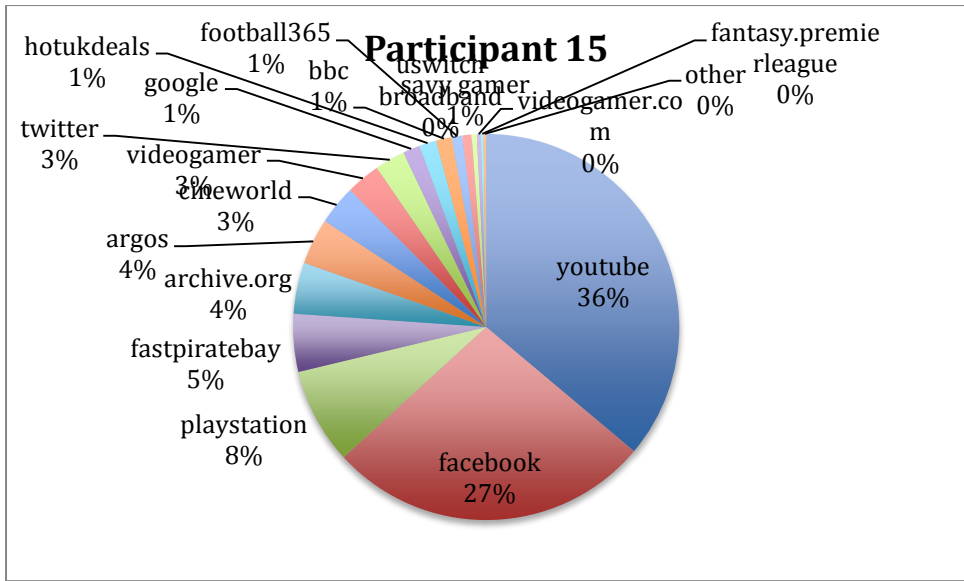
Youtube	328
Facebook	246
playstation	73
fastpiratebay	44
archive.org	39
argos	35
cineworld	30
videogamer	26

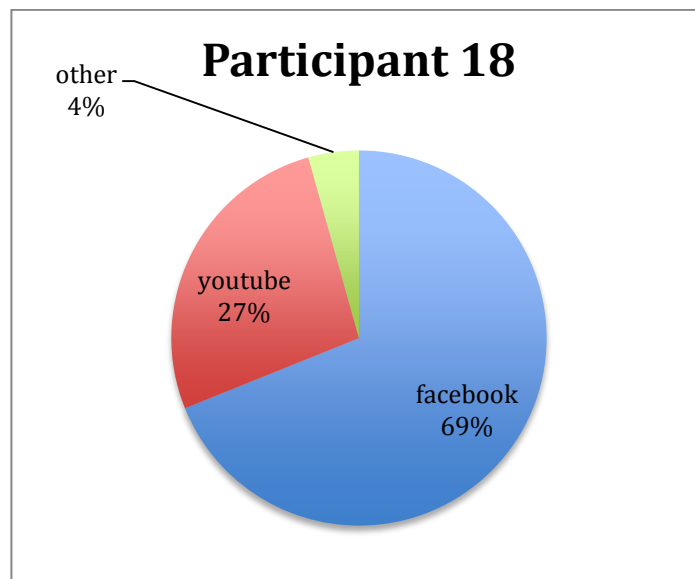|	
twitter	23
google	13
hotukdeals	13
bbc	12
football365	8
savy gamer	7
uswitch broadband	4
videogamer.com	3
fantasy.premierleague	2
other	2

Participant 16

No data was collected for Participant 16

Participant 17
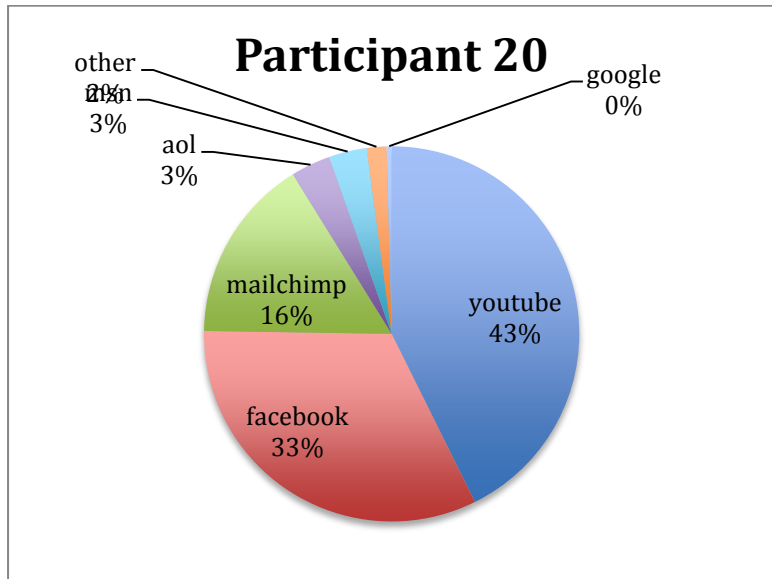
No data was collected forParticipant 17

Participant 18

Facebook	237
Youtube	92
Other	15

Participant 19

No data was collected for Participant 19

Participant 20

Participant 20

youtube	300
facebook	229
mailchimp	112
aol	24
msn	23
other	12
google	3

Participant 21
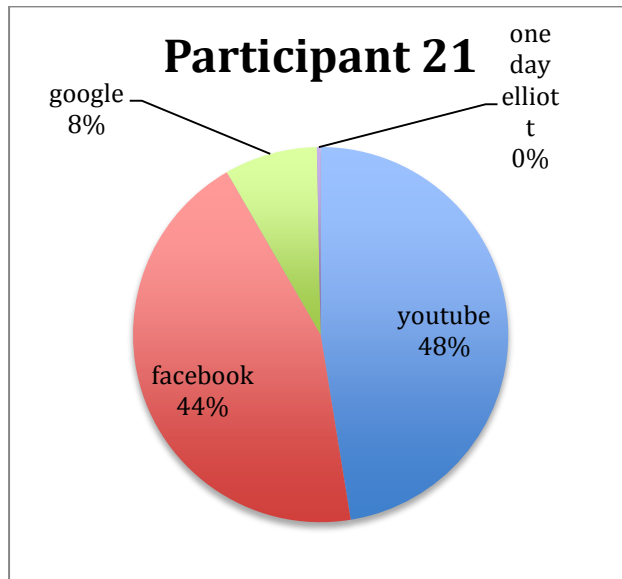
Youtube	148
Facebook	138
Google	25
One Day Elliott	1

Participant 22

No data was collected for Participant 22

Participant 23
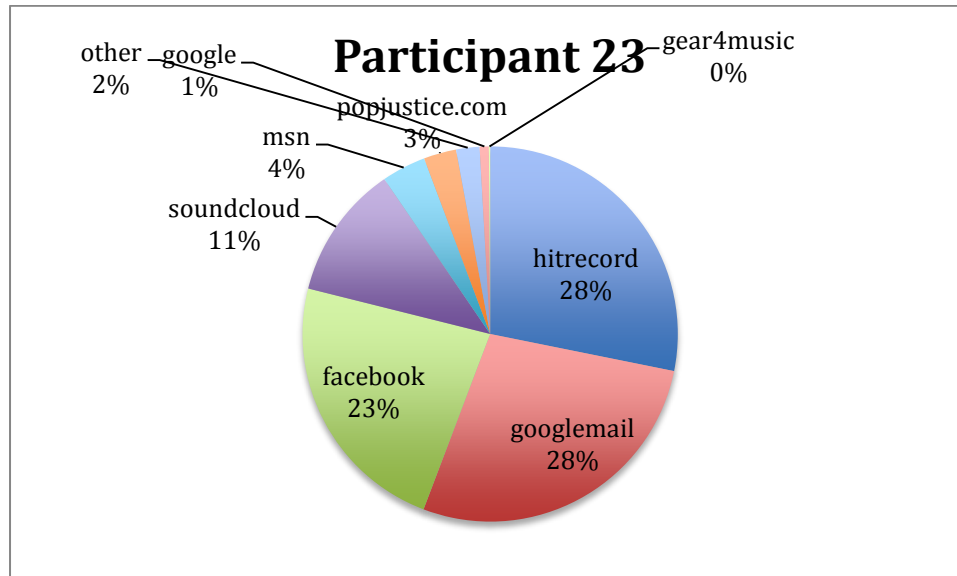
hitrecord	251
googlemail	246
facebook	206
soundcloud	103
msn	34
popjustice.com	25
other	18
google	7
gear4music	1

Participant 24
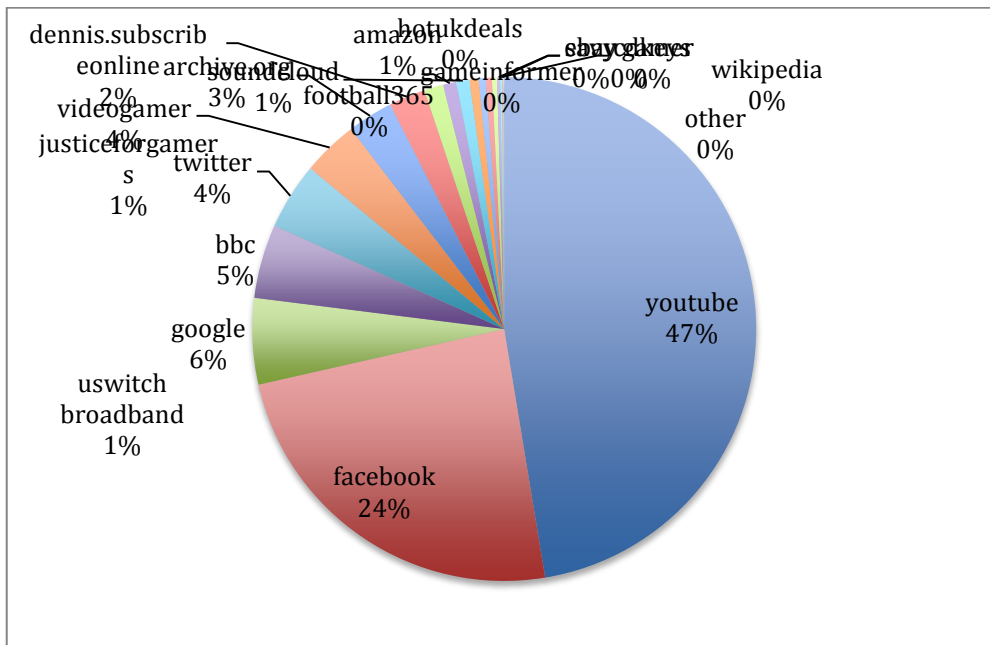
youtube	729
facebook	370
google	85
bbc	73
twitter	66
videogamer	55
archive.org	45
dennis.subscribeonline	36
justiceforgamers	19
amazon	13
soundcloud	13
uswitch broadband	9
football365	7
hotukdeals	6
gameinformer	5
ebay	3
cdkeys	2
savy gamer	1
wikipedia	1
other	0

Participant 25

No data was collected for Participant 25

Appendix D – Documental Proof of Ethical Approval.

Ethics application VRE1415-0981
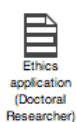
Title	Ethics application VRE1415-0981
Ethics application ID	VRE1415-0981
Project	Facebook Idio-culture: How Personalisation Puts the Me in Social Media
Researcher	Mr Paul Richards
Supervisor	
Director of studies	Dr Chris Kennett
Second (i)	Dr Chris Christodoulou
Date	31 Mar 2015
Academic year	2014 - 2015

STATUS
Signed off by faculty as not requiring full ethics approval

APPLICATION
Ethics application Part A
Attachments
Checklist
Submission
Print application

Tasks

Ethics application (complete)

Paul Richards created the application.	31 Mar 2015, 16:39
Paul Richards submitted the application for approval	31 Mar 2015, 16:45
Chris Kennett added a note:	02 Apr 2015, 16:07
I support this application	
Chris Kennett forwarded the application to the PhD Coordinator	02 Apr 2015, 16:07
Anthony Mcnicholas added a note:	21 Apr 2015, 14:15
i have seen this. this looks fine to me. i have also discussed it with Paul	
Anthony Mcnicholas marked the application as not requiring application approval	21 Apr 2015, 14:15

Ethics application VRE1415-0981:

Ethics application Part A

Researcher	Mr Paul Richards
Type	Doctoral researcher
Faculty	Media, Arts and Design
Department	Communication and Media Research Institute
Supervisor	Dr Chris Kennett
Project	Facebook Idio-culture: How Personalisation Puts the Me in Social Media

1. Will any pain or more than mild discomfort result from the study?
No

2. Could the study induce any psychological stress or anxiety or cause harm or negative consequences beyond the risks encountered in normal life?
No

3. Will the study involve prolonged or repetitive physical or psychological testing of human participants that may put someone at risk, e.g. use of treadmill?
No

4. Will the study involve raising sensitive topics (e.g. sexual activity, drug use, revelation of medical history, bereavement, illegal activities, etc.)?
No

5. Does your work involve any "relevant material" containing human cells (e.g. blood, urine, saliva, body tissues but NOT established cell-lines) from living or deceased persons (Such work must take account of the Human Tissue Act)?
No

6. Will DNA samples be taken from human participants (Such work must take account of the Human Tissue Act)?
No

7. Does your study raise any issues of personal safety for you or other researchers or participants involved in the project (especially relevant if taking place outside working hours or off University premises)?
No

8. Does your study involve deliberately misleading the participants (e.g. deception, covert observation)?
No

9. Does your work involve administration of a food or non-food substance of a different type from or in abnormally higher or lower amounts than normal or one that is known to cause allergic reaction(s) or potential psychological stress?
No

10. Does your study involve issues relating to personal and/or sensitive data?
No

11. Human participants in a health and/or social care setting (e.g. patients, those attending day centres, community care, rehabilitation centres, etc., including in the NHS, other public, private and/or voluntary sectors)?
No

12. Human participants who may be deemed vulnerable (e.g. children, people in poverty and/or with physiological or psychological impairments, persons attending rehabilitation centres, persons in easily identifiable positions that could be subject to victimisation, etc.)?
No

13. Expectant or new mothers?
No

14. Refugees/Asylum seekers?
No

15. Minors (under the age of 18 years old)?
No

16. Participants in custody (e.g. prisoners or arrestees)?
No

17. Participants with impaired mental capacity (e.g. severe mental illness, brain damage, sectioned under Mental Health Act, lowered or reduced sense of consciousness)?
No

18. Animals (or animal tissue)?
No

19. Will you provide participants with a Participant Information Sheet prior to obtaining informed consent which can be taken away by the participant?
Yes

20. Will you describe the procedures to participants in advance, so that they are informed about what to expect?
Yes

21. Will you obtain informed consent for participation (normally written)? OR in the case of using personal data previously acquired was consent given for the reuse of the data for other research purposes?
Yes

22. Will you tell participants that they may withdraw from the research at any time and for any reason without any impact on their care, service provision etc.?
Yes

23. Will you give participants the option of omitting questions they do not want to answer?
Yes

24. Will you tell participants that their data will be treated as confidential and that, if published, it will not be identifiable as theirs?
Yes

25. Will you offer feedback to participants at the end of their participation, upon request (e.g. give them a brief explanation of the study and its outcomes)?
Yes

26. Has external funding or collaboration been applied for/received, which requires institutional ethical consideration or approval?
No

27. Is external ethical approval required? (If yes, please ensure a copy of the application, approval letter, and any supporting documents have been uploaded
No

28. Is University ethical approval required for an external body/collaborator?
No