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Assessing Music Listening Habits in a Media Rich Society

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Assessing Music Listening Habits in a Media Rich Society

by:

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A thesis submitted in partial fulfillment
of the requirements for the Honors College of
the College of Agriculture and Life Sciences and the
Department of Community Development & Applied Economics

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University of Vermont,

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Abstract

Today with digital technology revolutionizing, music access is changing and becoming available in new forms. It is important to look at the most common ways it is accessed in order to effectively market new products and services related to this field. This study examined the music listening habits and preferences of University of Vermont (UVM) students as a whole through an online survey. 200 responses were analyzed for the results of this study and respondents consisted of a mix of academic years and majors. Results indicated that rock music was the most popular genre and the top three bands among the sample were Phish, Led Zeppelin, and Alt-J. The most popular streaming service was Spotify, and the highest number of students listen to music through a desktop or laptop computer. Qualitative analysis indicated that friends, family, and music websites have the strongest influences on music tastes, as well as how students discover new music. Attendance to live concerts was also analyzed, with 82.0% of students attending performances regularly, and the majority of respondents (64.0%) said they have seen between 1-9 live concerts in the past year. Nearly 50 percent of students admitted to downloading from file-sharing websites on a regular basis. Results also indicated that college students prefer to buy music online rather than in physical form such as CD or vinyl. UVM students have an individualistic taste in music, with indie artists and jam-rock bands dominating the musical preferences of the college, and many of them find new music from a variety of different sources as opposed to just one.

Introduction

Music is a fundamental element of life and essential to defining who we are as people. It allows for the expression of beliefs, emotions, stories, moods, and feelings. Music gives people a sense of individuality, and gives us a way to bond, communicate, and make new friends. It is unique to geographic locations, taking form in different styles and rhythms around the world. It has also been an outlet for telling stories throughout history, evolving over time and defining our country's generations. Specific tastes and preferences in music help define us as people and also as a community, and this study will explore the individual tastes of University of Vermont (UVM) students with the goal of finding common trends within the university.

Music is an important part of people's everyday lives, and with technology constantly advancing, music is now becoming more readily available in different forms. To gain a better understanding of how the music industry is changing with today's society, the music listening behaviors of UVM students were analyzed through a questionnaire. The purpose of this study is to evaluate how UVM students are listening to music, what channels are most common, and what genres are most popular among the UVM population. Results of this study may apply to college students as a whole, and can therefore be utilized as a marketing tool for targeting this demographic. Through a literature review and online survey, findings will also indicate how to best reach college students and reveal the most common listening habits among the University of Vermont.

There is a need for this study because college students are a unique and significant demographic, different from many other target audiences, and their behaviors should be more closely analyzed. College students are constantly sharing their favorites, whether it is through social media or word of mouth. They are very active online and through personal devices such as cell phones or tablets. They are considered "millenials" and can be targeted in a variety of ways through the modern industry of data and information.

Spotify, one of the most popular music streaming services in the world, has collected data since 2014 from college students around the United States. They determined the top 40 universities in the country who subscribed the most to their student deal. "America's most music loving schools" are consistently researched on a variety of matters such as preferences in genres, artists, tracks, song attributes, sleep schedules and times of day they were listening. Results of their initial study in 2014 indicate that each school had a specific trend about music listening and the "top 40 most musical schools" were classified into categories of their own. For example, New York University was the "hippest" school, University of Colorado Boulder was the "most relaxed," University of Alabama students were the biggest country music lovers, and Cornell University students were "the earliest risers" (Buskirk, 2014). These results are very unique findings and could be expanded into all universities throughout the United States.

Although University of Vermont did not make Spotify's Top 40, this does not mean the university is not "musical." Many of the schools in Spotify's study are larger universities that have large numbers of students specifically subscribing to

Spotify's student deal. The following study will determine the specific characteristics of UVM students' listening habits as well as most popular genre and artist preferences.

Literature Review

History

The first emergence of the "music industry" was during the 1400's in Europe when musicians were paid to provide entertainment at festivities and celebrations. During this time, music was printed and provided an economic basis for composers and music publishers by selling it to amateur music-makers and urban residents. Eventually, hundreds of years later in the 1700's, music publishers, instrument manufacturers, theatre managers, and entrepreneurial musicians became more prominent, providing a solid basis for the music industry. They built Vaudeville style venues for performances and invented recording technology to preserve the music of the time period, (Music Timeline, 2014).

Over time, the mediums in which music was recorded improved and allowed manufacturers to enhance the sound of their products. After Thomas Edison invented the first phonograph in 1877, the nickel jukebox was designed in the 1890's and became very popular. Technology became more advanced during the 20th century and the dominant form of listening to music changed several times, from radio to vinyl records to cassette tapes to CDs, and finally to online music

stores through the Internet. At the turn of the century, the major popularity in music recording brought questions of copyright into play, (Taintor, 2004).

Problems with Piracy Emerge

The major issue of music ownership caused problems at the turn of the century when music transformed into digital format and became easily accessible on the Internet. Before the emergence of digital media, pirating music was difficult and required a high level of hacking skills.

Music piracy became a prominent issue around 1999 when two young college students named Shawn Fanning and Sean Parker debuted the revolutionary peer-to-peer file-sharing network called Napster. Although it was extremely popular among users of the younger generation, Napster was sued in December of 2001 by the Recording Industry association of America (RIAA) for copyright infringement and was eventually forced to shut down service in July of 2001, according to Callie Taintor's *PBS* article "Chronology: Technology and the Music Industry." After this, other file sharing services emerged such as Kazaa, Morpheus, Grokster, and LimeWire, which were also sued by the RIAA and artists shortly after for copyright infringement.

Since the creation of file sharing sites, the music industry has suffered immensely. Music sales in the United States alone have dropped 53%, from $14.6 billion to $7.0 billion in 2013 (RIAA, 2015). Millions of songs are downloaded daily, and approximately 30 billion songs were downloaded on file-sharing networks from 2004 to 2009.

Although numbers have slightly decreased in recent years, the piracy problem is still obvious due to the substantial loss of money and jobs in the music industry. A report by the Institute for Policy Innovation suggested "piracy costs the U.S. economy $12.5 billion annually as well as more than 70,000 jobs and $2 billion in lost wages to American workers" (Siwek, 2007).

Although music piracy is illegal, the majority of college students have downloaded free music online in the past. College students have been notorious for downloading more illegal music than the rest of the population. A possible explanation for the higher numbers of illegal downloading in college students is that they hold negative views about the current music industry. According to a 2012 study on college students' moral evaluations of illegal downloading at the University of Rochester, many believe the recording industry receives "an excess amount of profit at the expense of the musicians who create the music. Therefore, the belief that the music industry treats its own musicians unfairly may have an influence on the way individuals approach illegal music downloading" (Jambon & Smetana, 2012). This same author revealed in their literature review that previous surveys show "college students do not believe musicians receive enough of the profits from the sale of their own music," meaning "illegal downloading was judged to be most wrong when artists were described as receiving the profits and least wrong when the industry was described as doing so (which reflects the current business model in the music industry)" (Jambon & Smetana, 2012). Also, consistent with the stereotype that college students do not have disposable money, "research has

consistently shown that individuals who judge music to be too expensive are more

likely to illegally download songs online" (Jambon & Smetana, 2012).

The Benefits of Online Downloading

Although statistics can be frightening, illegal downloading of music is actually

not all that damaging. The Internet provides a whole new medium in which artists

can market themselves and create their own brand. Before the Internet, there were

very few effective ways that upcoming musicians could promote themselves if they

had not yet made it on the radio: they could make posters or flyers or rely on other

artists to support them. The web provides the opportunity for artists to promote

upcoming concerts and events as well as create a large fan following through social

networks like Facebook and Twitter. These are all ways in which artists can

generate revenue for themselves and create a fan base.

Another upcoming benefit to the music industry is the popularity of online

radio and streaming services. Pandora, an online radio service, offers listeners new

music based on their personal interests and exposes them to new artists. Because

Pandora shows its listeners artists that they have not previously heard, it benefits

the artists because listeners are more likely to purchase their music after they have

heard it (and enjoyed it). It is a win-win situation for both Pandora and the

subscriber because the website makes most of its revenue based on advertisements,

and the remainder of its profits come from users who pay a premium monthly fee.

Spotify, another online streaming service, which was launched in 2008 (but

has become more popular in recent years), offers free listening to its subscribers

and also makes its money on advertisements. It offers a premium membership like Pandora in which listeners pay a monthly fee and do not have to listen to ads. Premium users can also have access to more music. According to Spotify's website, the service has over 60 million users and over 15 million of which (20%) pay the premium fee (Spotify, 2015).

The benefit of Spotify is that users get what they always wanted in the first place: their favorite music in real time. Because of this service, listeners no longer have a legitimate reason to pirate music. Spotify's chief content officer Ken Parks said in an interview, "We've taken millions of people used to stealing music and gotten them to pay more than their fair share. By historical standards, someone spending $120 a year is spending a lot of money on music," (Patel, 2012).

The IFPI (International Federation of the Phonographic Industry), which represents the recording industry worldwide, also indicated that online streaming services are growing significantly. Subscription services increased revenues up 51.3% in 2013, "exceeding $1 billion for the first time and growing consistently across all major markets" (IFPI, 2013).

Users benefit from the web because it provides many more options for consumers and music enthusiasts. It lets listeners discover more artists and songs of their taste, allowing them to continue supporting online services and generate payments. Also, many online services are luckily free for consumers, letting advertisements make the payments. This "piracy inspired" model could potentially

be the future of the business, and it is currently moving in that direction due to the popularity of online streaming services.

Listening Habits

There have been numerous academic studies looking at the most common music consumption and downloading habits. In addition to Spotify's fascinating research about American colleges' listening habits, major research institutions have also (Nielson Music, 2011) conducted surveys to find the major factors influencing consumption among this demographic. Many studies have revealed the reasons and ethics behind their choices, as well as genre preferences and listening habits. The following studies will highlight major music trends among larger populations, such as other universities, the United States, and the world.

On a global scale, music consumption habits are very diverse. According to a Neilson study conducted for Midem music, there is no single channel being used by even 60% of the global online audience" (Nielson Music, 2011). The study also indicated that there are nine channels of music being used by 20% or more of global online music consumers. This may lead results to be mixed regarding what channels are most common, suggesting a combination of different sources rather than one popular outlet.

An important detail in the Neilson report is that younger demographic in this study, referred to as "the digital natives," spends the most time using online services. Ages 21-34 are considered to be "the 'core' digital music audience," and utilize digital music mediums significantly more than older respondents of the

survey. Results indicated that the younger people "do more of everything than the average: they watch more music videos (on the computer or TV), they download more songs (paid or not), they stream music more. Beyond 35, there is a slight but consistent erosion of music consumption from any of these channels" (Nielson Music, 2011). This will be important to consider when studying the habits of college students, who fit this age demographic and have a stronger online presence.

American music listening habits as a whole were studied for the first time in 2014, on a smaller level. An Edison Research study called "Share of Ear" analyzed daily music journals submitted by nearly 3,000 respondents, giving the music industry "the first consistent measurement of *all* audio consumption" (Webster, 2014). The study evaluated a number of audio usage trends, such as, "location of listening, the devices on which audio is consumed, listening by time of day, the type of audio content (music, news, sports, or talk/personalities), and even across individual brands within the Online Radio space" (Webster, 2014). Results indicated that over 50% (52.1%) of Americans spend their time listening to AM/FM radio (Webster, 2014). The average time spent consuming audio is 4 hours and 5 minutes per day, and newer sources of music such as Internet radio account for nearly one-fourth of all listening (Webster, 2014).

Methods

A quantitative survey was distributed for the purposes of this study, with a combination of open-ended and close-ended questions to determine the most popular habits of students. The questionnaire consisted of 12 questions and was

kept short to encourage participation. The survey was distributed over the course of 2 months to ensure a higher number of responses, and nonprobability sampling was used due to convenience technique.

Survey Software

The survey was conducted entirely online through UVM's Lime Survey software, ensuring it was in fact UVM students responding. Lime Survey is a user-friendly program that allows survey-makers to create different question types and answer options for participants. The program also creates codes for answer options.

After receiving 200 responses, results were exported from Lime Survey in Microsoft Excel. Only completed responses were used in the analysis of this study. Open-ended questions were then coded through qualitative analysis to determine common themes and ideas among responses. After all data was accounted for, the Excel spread sheet was imported into SPSS Software to examine frequencies and distributions.

Sample

The participants of this study consisted of students pursuing higher education at the University of Vermont. 200 completed responses were analyzed in order to find the most common music consumption habits at the University of Vermont. A convenience sampling technique was used to gather data, as the survey was distributed through only social media. More specifically, the survey was posted on each UVM class' group on Facebook and widely marketed on my personal page as

well. Facebook was a very effective way of reaching a large number of UVM students, as data shows that 95% of college students use Facebook on a regular basis and it is the most preferred social media platform (Viner, 2014). Facebook is the most popular social media in the world, with over 890 million daily users since December of 2014 (Facebook, 2015). In today's technologically rich society, college students are among some of the most experienced with social media, checking, communicating and getting their news through Facebook. Therefore, this platform is a very effective way of reaching this particular group.

There were nearly 3,000 users in each graduating class' group, and students of all years were very interested in the topic of study. Although there was an original plan to print out surveys and hand them out around campus, the turnout through Facebook was much higher than expected, and this step was not necessary. In total, 275 students started a survey, but there were only 200 fully completed responses. 75 students started a survey but only partially completed it.

Question Types

Questions were categorized into five main groups when the survey was designed: Music Taste, New Music, Live Music, Preferences & Habits, and Demographics. While completing the survey online, all the questions in each group were displayed together on their own page. Questions asked about a variety of topics including favorite genres and bands, concert attendance, downloading habits, most common mediums, and music streaming services. To find out how students access new music, they were also asked how they find their new music. In order to

find out how often students are exhibiting certain behaviors, a Likert scale was used for a set of questions, giving students the option to choose on a scale of very rarely to always. The set included a variety of sub-questions, such as, "how often do you search for new music, download from file-sharing websites, purchase music, or attend live concerts?" The Likert scale included a variety of answer options such as "Never," "rarely," "sometimes," "often," "very often," and "always."

Results

Description of Participants

The total sample consisted of 200 students at the University of Vermont. Twenty percent were first years, 22.5 percent were sophomores, 21.5 percent were juniors, and 33.0 percent were seniors. Three percent were graduate students or fit into the "other" category. Those who chose this option were returning students or alumni. The highest number of respondents was in the College of Arts and Science, accounting for 43.5 percent of the total sample. The next biggest college represented was the College of Agriculture and Life Sciences with 19.5 percent.
Table 1 and Table 2 on pages 14 and 15 show the demographic results of all 200 respondents, and Figure 1 on page 15 shows the results of students based on the geographic location of their home state.

The majority of participants were from the northeast region of the U.S. (86.4%). Over half of the respondents' permanent homes are in New England (58.8%). Out of this group, 20.0 percent of these students were from Vermont, 22 percent were from Massachusetts, 7.0 percent were from Connecticut, 6.0 percent

were from New Hampshire, 2.5 percent were from Rhode Island and 1.0 percent was from Maine. Locations in the "other" category varied, including Colorado, California, Illinois, Florida, Washington D.C., Maryland, Oregon, and Arizona. There was also one international student from Ontario, Canada. There was no significant relationship between geographic location and preference of music, however chi-square analysis indicated there was a relationship between geographic location (recoded variable) and how students developed their current taste in music (recoded variable).

Table 1. Demographic results by year at UVM

Year	Frequency	Percentage
First Year	40	20.0%
Sophomore	45	22.5%
Junior	43	21.5%
Senior	66	33.0%
Graduate Student	1	0.5%
Other	5	2.5%

Table 2. Demographic results by College of Major

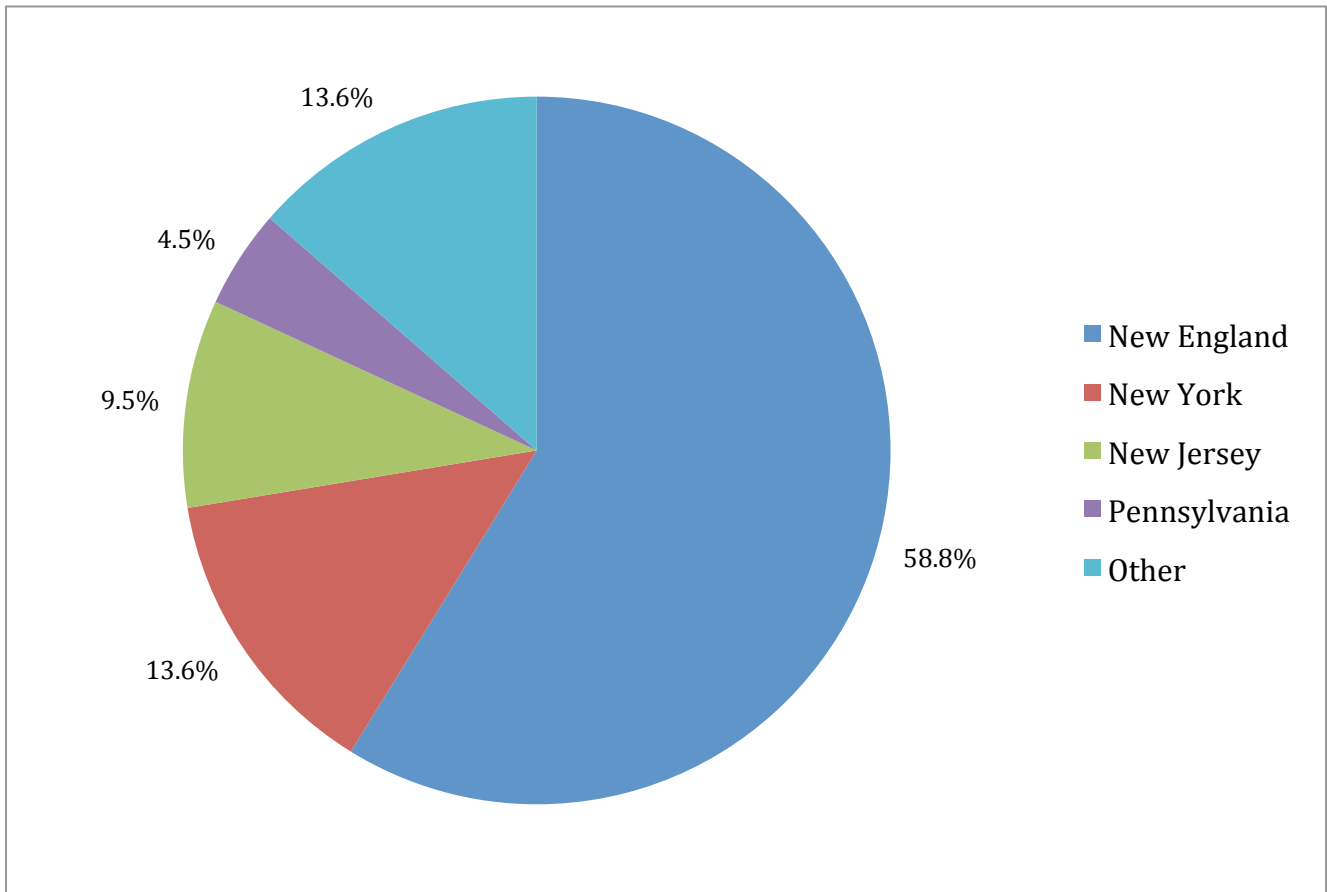| College	Frequency	Percentage
Agriculture and Life Sciences	39	19.6%
Arts and Sciences	86	43.2%
Business Administration	19	9.5%
Education & Social Services	9	4.5%
Engineering & Mathematics	9	4.5%
Environment & Natural Resources	25	12.6%
Nursing & Health Sciences	12	6%

Figure 1. Demographic results by geographic location

Genre & Artist Preferences

Overall, UVM students had a wide variety of tastes and preferences in genre. The most popular was Rock, with 22.5 percent of students choosing it as their favorite. The next most preferred type of music was Indie with 19.5 percent, followed by "Other" with 12.0 percent. Hip Hop was fourth most common genre with 10.5 percent, followed by Country and Electronic, both with 8.0 percent. Figure 2 on page 16 displays the full distribution of students' preferences by genre.

While the survey provided 11 categories of music for students to choose from, many respondents did not feel their favorite type fit of music within the

confined options. In fact, "other" was the third most common response to this question with 12.0 percent of respondents. Many who chose this option provided a more specific answer that was a 'subgenre' of the given options. For example, three students named "Jam," which is a contemporary form of rock that stems from unique, live concerts with lengthy instrumentals. Others combined different genres into one for this question, with answers such as "Indie Folk" and "Folk Punk." Many other respondents also said "Funk" or "Soul," feeling that this did not fit any of the broadly provided genres.

The next question in this group asked students to name their top 3 favorite artists. Hundreds of bands from a variety of genres were named in responses to this question. Favorite bands that were named more than once were put into a list and entered into a word cloud generator (Fig. 3). Figure 3 on page 18 is a word cloud that shows the most commonly named artists and bands, with size corresponding to frequency.

The top bands that came up most frequently were rock bands such as Phish (the most popular band by a landslide with 19 responses) and The Arctic Monkeys, as well as classic rock bands like Led Zeppelin and The Grateful Dead. Other top artists varied among genre, such as Alt-J (Indie-Rock), The Head and the Heart (Indie), Kendrick Lamar (Hip-Hop), Mumford and Sons (Folk), and Vampire Weekend (Indie). Asking for favorite bands and artists gave a better idea of the *specific* types of music that UVM students prefer, as the genre question narrowed down preferences in a broader sense.
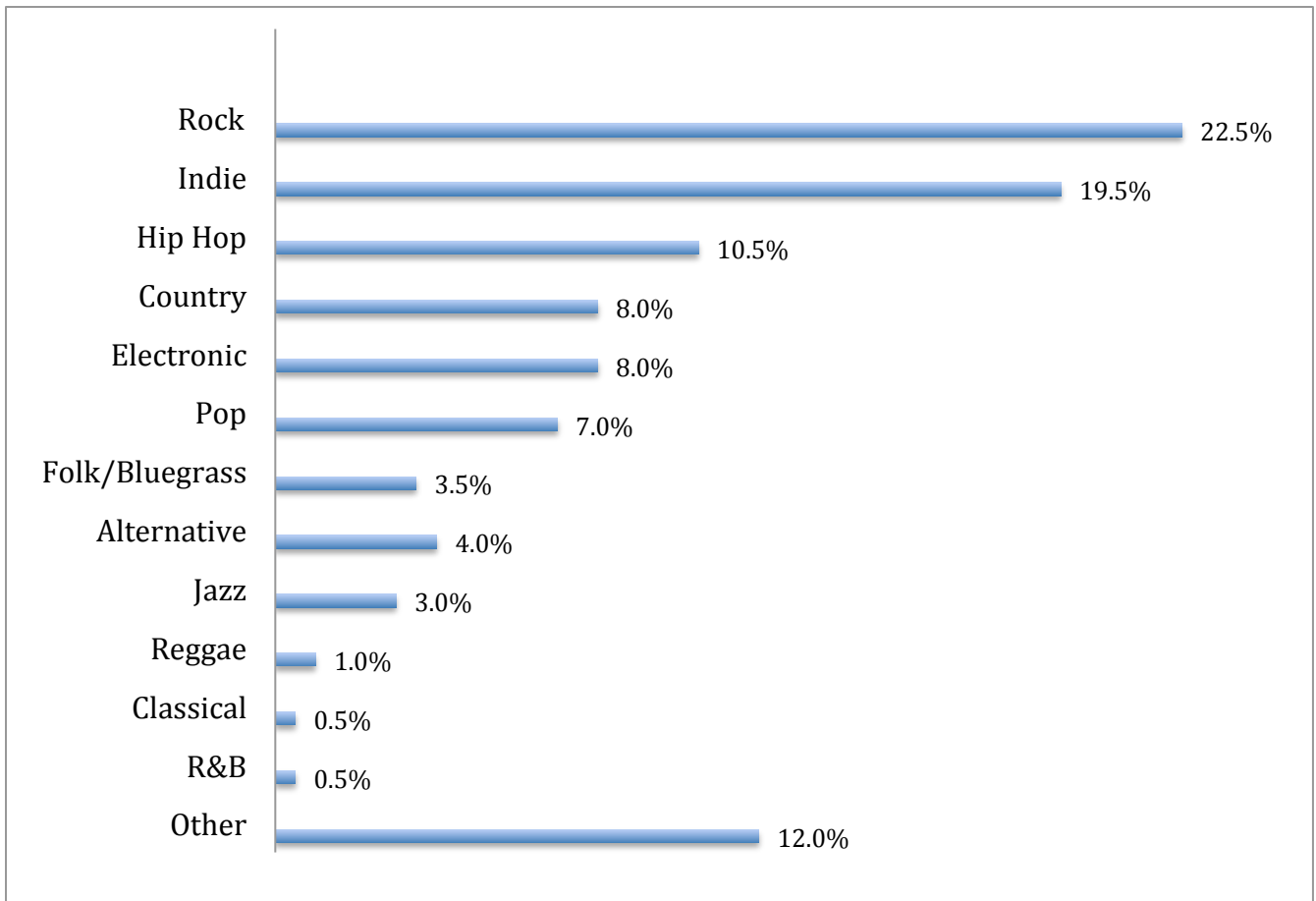
Figure 2. Favorite genre preferences among UVM students

It is important to note that a significant number of respondents who chose "other" for the genre question specifically named "Alternative" as their music of choice. This answer option was not originally part of the survey, but during analysis it became clear that many students felt it was its own category. After incorporating it into the final results, 4.0 percent of students preferred alternative music.

These results are consistent with existing research on favorite artists by state, according to Echo Nest, a music intelligence company that works closely with large music streaming companies such as iHeart Radio, Rhapsody, Sirius XM, and Rdio. In a recent interview with USA Today, he said, "People are really engaged in music. They want to talk about it" (Durando, 2014). This may explain the high response rate for the questionnaire and the significant interest in the topic.

Figure 3. Favorite bands among UVM students

Finally, an open-ended question asked students, "How did you develop your current taste in music?" Through qualitative analysis, several clear themes arose. Students mainly acquired their taste through friends, family, live concert experiences, radio, through websites online, or combinations of all the above. Many people claimed their parents or family membered initially shaped their current preferences. For example, many people named, "my dad," or "my sister." Others went into more depth, such as a junior from Vermont who explained, "I grew up listening to country, it is what I am most familiar with. But, through friends and the radio I have broadened my taste. I like a little of everything."

Many other students developed their taste by being surrounded by friends and other young music enthusiasts. One graduate student simply said they developed their current taste in music, "from going to UVM," which implies that the school has significant and distinctive community. Another sophomore simply answered, "through listening to music with friends and getting inspired by their music tastes." This answer embodied one of the main themes, and there were many similar answers to this regarding the role of friends.

Some students indicated that seeing live music plays a significant role in their preferences of music. A sophomore majoring in Community Entrepreneurship went into great detail and said, "I've always loved punk rock/ rock music. Since I was a pre-teen, I've enjoyed going to concerts. The energy I got at concerts was an indescribable rush. So I've been continuously listening to the music that makes me feel awesome." A senior from New Jersey also had a unique response, explaining their taste came about, "by experiencing incredible live performances that have me

going to see as many great bands who jam as much as possible." Some also suggested that music festivals are a great way of finding new music.

Some students also gained their preferences from being involved in certain activities or organizations. For example, one sophomore explained their current taste developed "through daily activities. When I began to workout daily, my music preference went from slow indie to techno/dance." On a slightly different note, a senior Latin major explained that they acquired their preference through, "singing in the UVM Latin Jazz Band and attending concerts, and going to see live music even if I'm not familiar with the band." Daily surroundings can also greatly influence a person's actions or preferences.

Many could not narrow down one way in which they developed their taste, so they said a combination of all previous answers, not naming one specific reason. Individuals seemed to gain their taste in music through a blend of experiences, exposure, and people in their life. For example, a first year Psychology major said, "My parents definitely shaped things initially, but then friends and the Internet helped me branch out."

Responses to the question, "how did you develop your current taste in music?" were unique and one-of-a kind. Some answers did not fall into any of the previous specific categories, and were unique to the respondent, such as those who play in a band or work at a music venue. However, the final coded categories (friends, family, the Internet, live concerts, or a combination of all the above) largely summed up how college students at UVM came to like the music they do.

Ways of Listening

Another goal with the survey was to determine the most common devices students use to listen to music. They were asked, "What is your most common way of listening to music?" and given 5 mediums as well as an "other" option to choose from. The majority of respondents said they use their computer or tablet. Nearly half of the sample (49.0%) preferred this medium. The next most common method of listening was on cell phones, with 29.5 percent of students using them to store and play music. Twelve percent of students preferred personal devices such as iPods and mp3 players. Radio and home audio systems (such as CD players or vinyl records) were the least common mediums, accounting for 3.5 and 5.5 percent, respectively. Figure 4 below visually displays the distribution of the most common mediums with percentages.
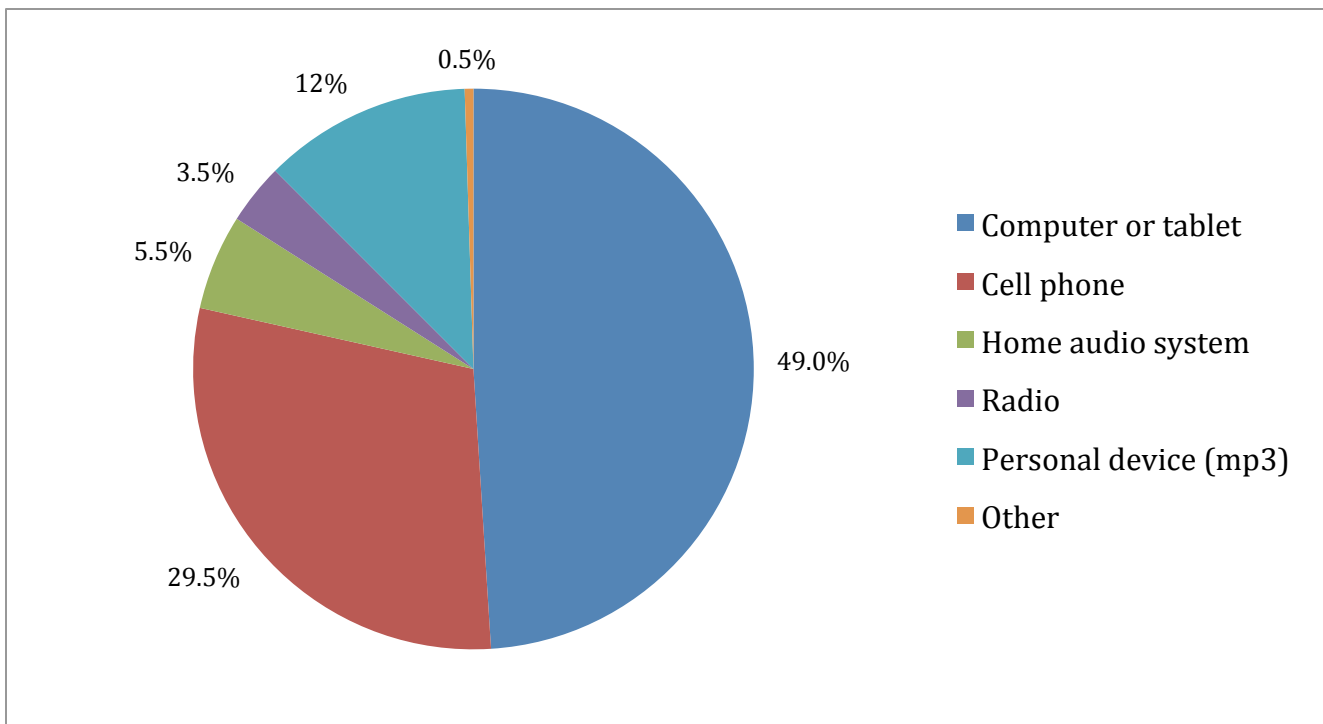

Figure 4. Preferred mediums of music listening

On average, UVM students are also listening to between one to three hours of music per day. Nearly equal percentages of students said they listen to 1-2 hours (32.5%) or 2-3 hours (31.0%) on a daily basis. Only 7.5 percent of respondents said they listen to under an hour of music per day, and the remaining percentage (29.0%) said they listen to 3-4 hours or more in a day.

Accessing New Music

A significant part of the questionnaire was dedicated to finding the sources of new music for the UVM population. Many questions in the survey were asked to narrow down the places and ways students at UVM find new music. Participants were asked, "How do you discover new music?" (Fig. 5) and "How often do you search for new music?" (Fig. 6) The distributions of results are presented in the figures on the next page and page 25. Overall, students at UVM are very actively seeking out new music to listen to. Only 13.0 percent of respondents said they never or rarely search for new music, meaning 87.0 percent are at least looking for new music "sometimes."

The highest percentage of students (44.5%) said they access their new music through websites online, followed by through friends (32%). Radio was the third most common source of new music (16%), followed by "other," which mostly consisted of responses saying "all of the above." Going to see live music was the least common way of finding new music, with only 3.5 percent of responses.

In today's society, it is safe to say millenials are accessing the majority of their music digitally and through the Internet. The results in Fig. 5 also indicate this.

Since a majority of students are accessing their music through websites, students
were asked to indicate which online services they use most frequently. They were
given 6 popular music websites as well as an "other" option and asked, "Out of the
following streaming services, which would you say you use most frequently?"
Participants were asked to check any options that applied in this question, so each
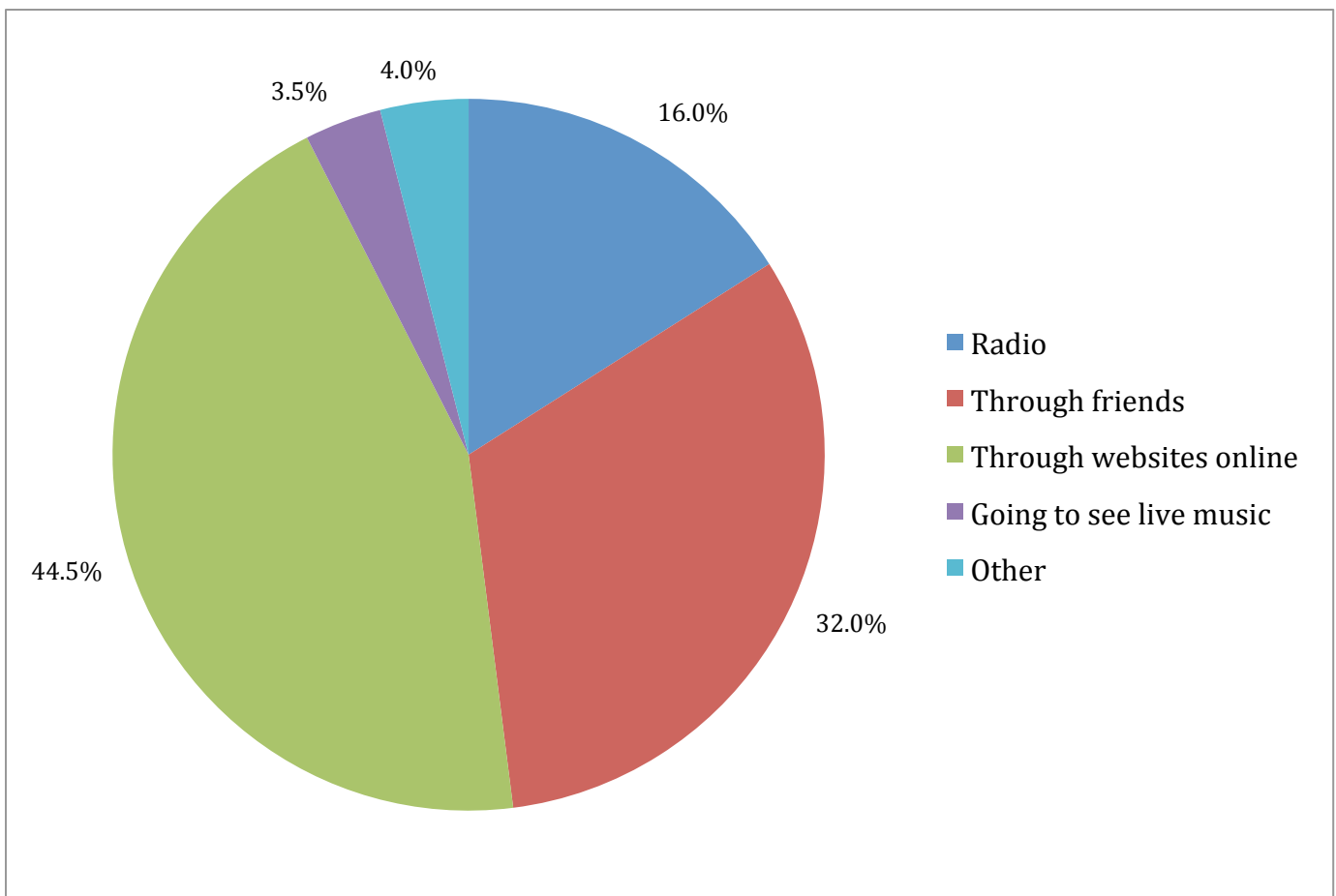result is based on the sample as a whole.

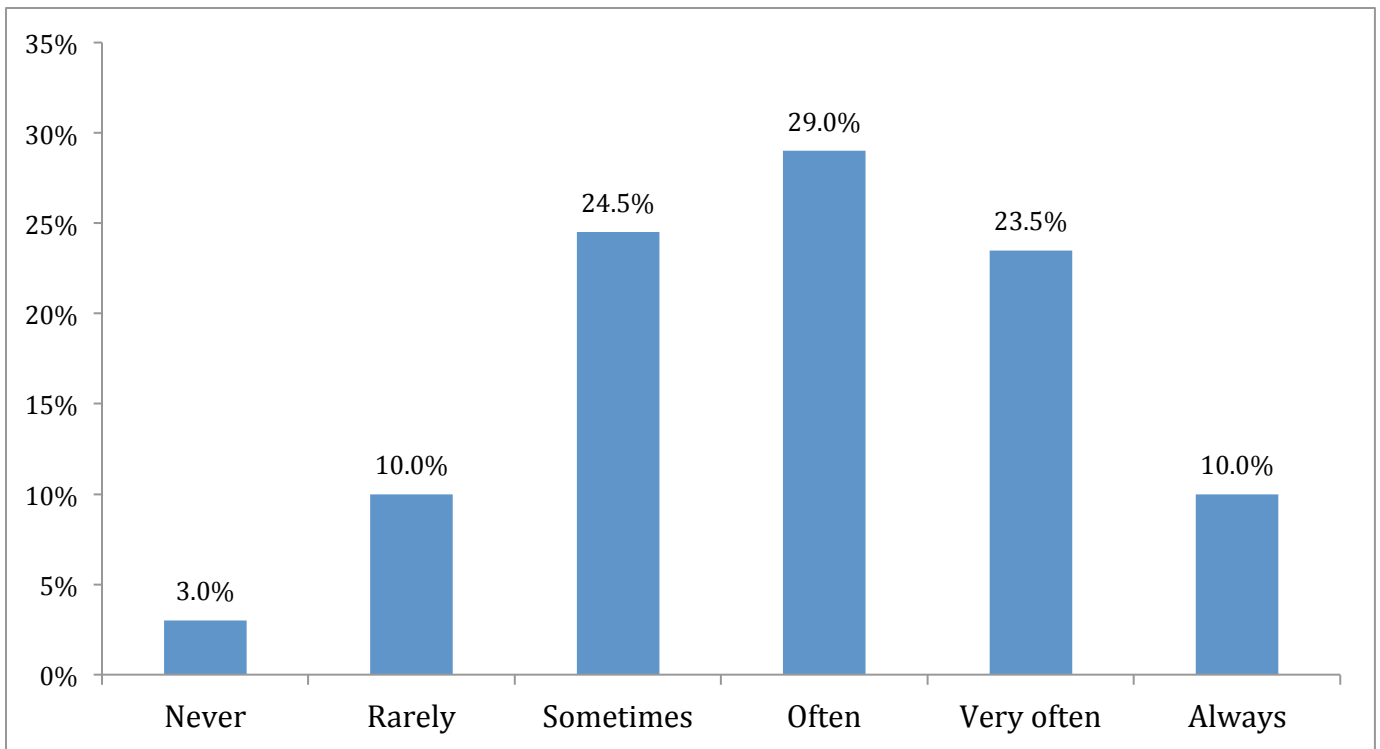*Figure 5*. Responses to the question, "How do you discover new music?"

Figure 6. Responses to the question, "How often do you search for new music?"
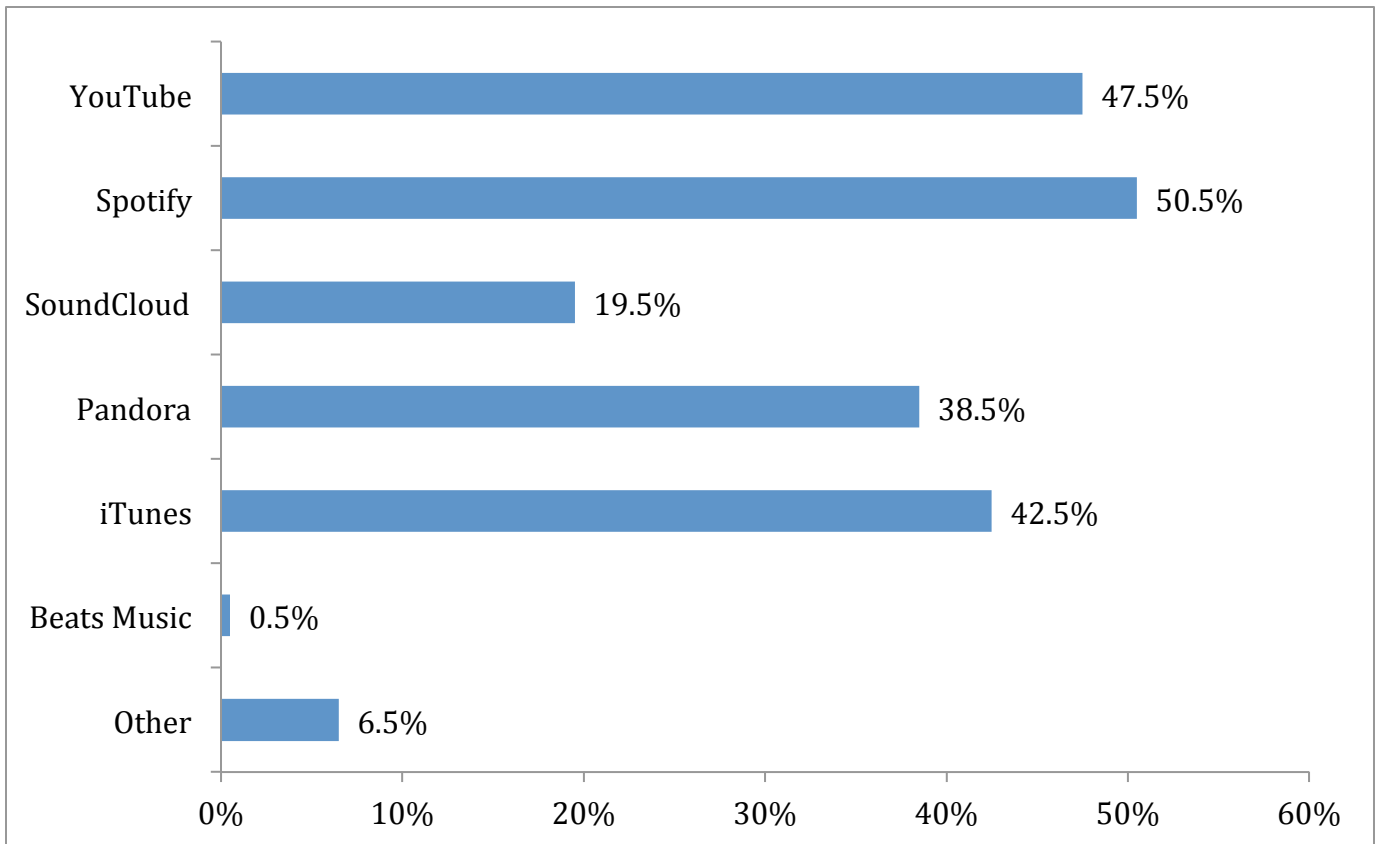

Figure 7. Most popular streaming services among UVM students

Responses indicated that many of the given options were popular among the UVM community. As indicated by the literature review, over half of students (50.5%) and the largest number in the sample use Spotify as their main listening service. YouTube (47.5%) and iTunes (42.5%) were also very popular, with nearly half of respondents using them as well. Pandora, the personalized Internet radio service, was also closely behind with 38.5 percent of responses. Figure 6 below shows the total distribution of answers.

A small number of students (6.5%) answered "other" when asked about what streaming services they use. Those who indicated which other services are popular recommended 8tracks, Archive, Bandcamp, Google Play Music, Grooveshark, Lastfm, and Songza.

Purchasing Music vs. Illegal Downloading

With music piracy becoming a more evident problem in today's society, it was important to analyze how often students are illegally downloading music. Respondents were given a Likert scale and asked, "How often do you download from file-sharing websites?" to determine the regularity of music piracy. This question was worded carefully to encourage honest answers and steer away from the negative connotation of illegal downloading. Results for this question were distributed evenly among the given categories (never, rarely, sometimes, often, very often, always). The highest percentage of students said "sometimes," accounting for 21.5 percent of the sample. However, cumulatively, almost half of the sample, 43.0 percent, said they download free music from the Internet "often," "very often," or

"always." Adding this to the number students who said "sometimes" reveals 64.5 percent of UVM students admitted to illegally downloading music on a regular basis. The vagueness of this question, however, brings up many more questions that could be used for future research.

To get an idea about music purchasing and downloading habits, respondents of the survey were also asked how often they buy music. In general, UVM students do not purchase music very often. The majority of respondents said they "never" or "rarely" purchase music, both online and physically. Responses to both of these questions were nearly equal, with 38.0 percent claiming they never buy music
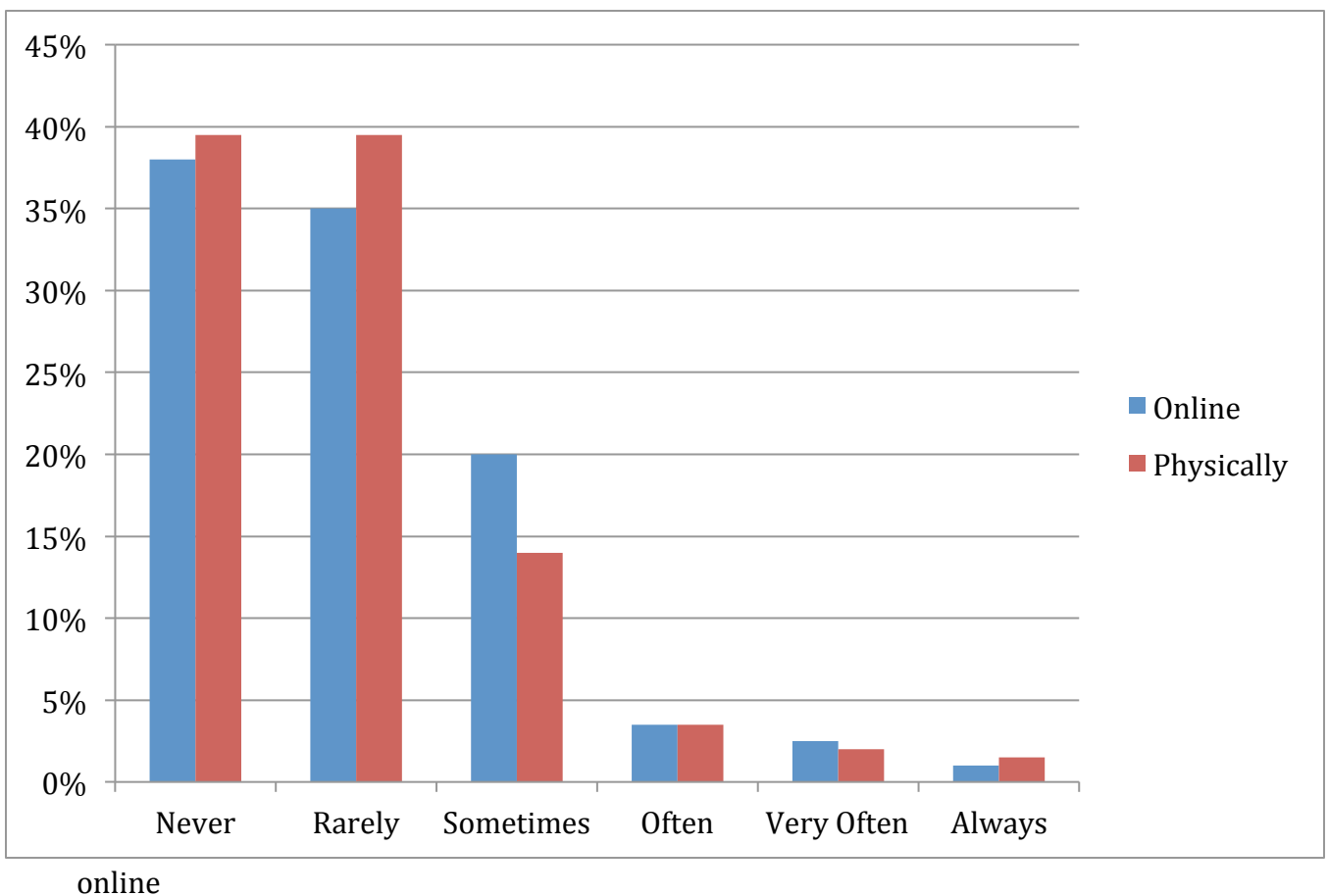
online

Figure 8. Responses to the question, "How often do you purchase music online and how often do you purchase music physically?"

and 39.5 percent claiming they never buy physical music. Figure 8 below compares

the results of the two questions and reveals the purchasing habits of UVM students.

Overall, students purchase slightly less physical music (i.e. CDs or vinyl) than they

do online, which is to be expected in today's digitally-rich society.

Live Concerts

Concert attendance was also a significant topic for the purposes of this study.

Two questions in the survey were dedicated to asking how often students go to

concerts. First, they were asked, "How often do you go to live concerts?" and given

the Likert scale of choices. Overall, more students seem to be seeing concerts than

not, with only 17.5 percent who say they "never" or "rarely" go to shows. Answers to

this question greatly varied, with 3.5 percent of people who never see concerts

ranging to people who see several a week, but the majority of students said

"sometimes" (39.0%). Figure 9 on the next page shows the complete set of results to

this question.

Respondents were also asked to estimate the number of concerts they have

seen within the past year (365 days). Students' responses were read and recoded

into 9 categories with intervals of 9, starting with zero. Results varied for this

question, but the vast majority of students (64.0%) were seeing between 1-9

concerts per year, which averages out to one or less show per month. Table 3 on the

next page shows the entire sample's response to this concert attendance question.

Crosstab and chi square analysis also indicated that there was a strong

relationship between year of graduation and how often students attend concerts.

This is a reasonable outcome because there is a strong chance that students attend more concerts as they get older. As students get old enough to go to downtown bars and see concerts for guests 21 or older, they may attend them more frequently.

Number of Concerts	Frequency	Percentage
0	8	4.1%
1-9	126	64%
10-19	32	16.2%
20-29	11	5.6%
30-39	7	3.6%
40-49	3	1.5%
50-59	5	2.5%
60-69	1	0.5%
70+	4	2%

Table 3. Responses to the question, "Approximately how many concerts have you attended in the past year?"
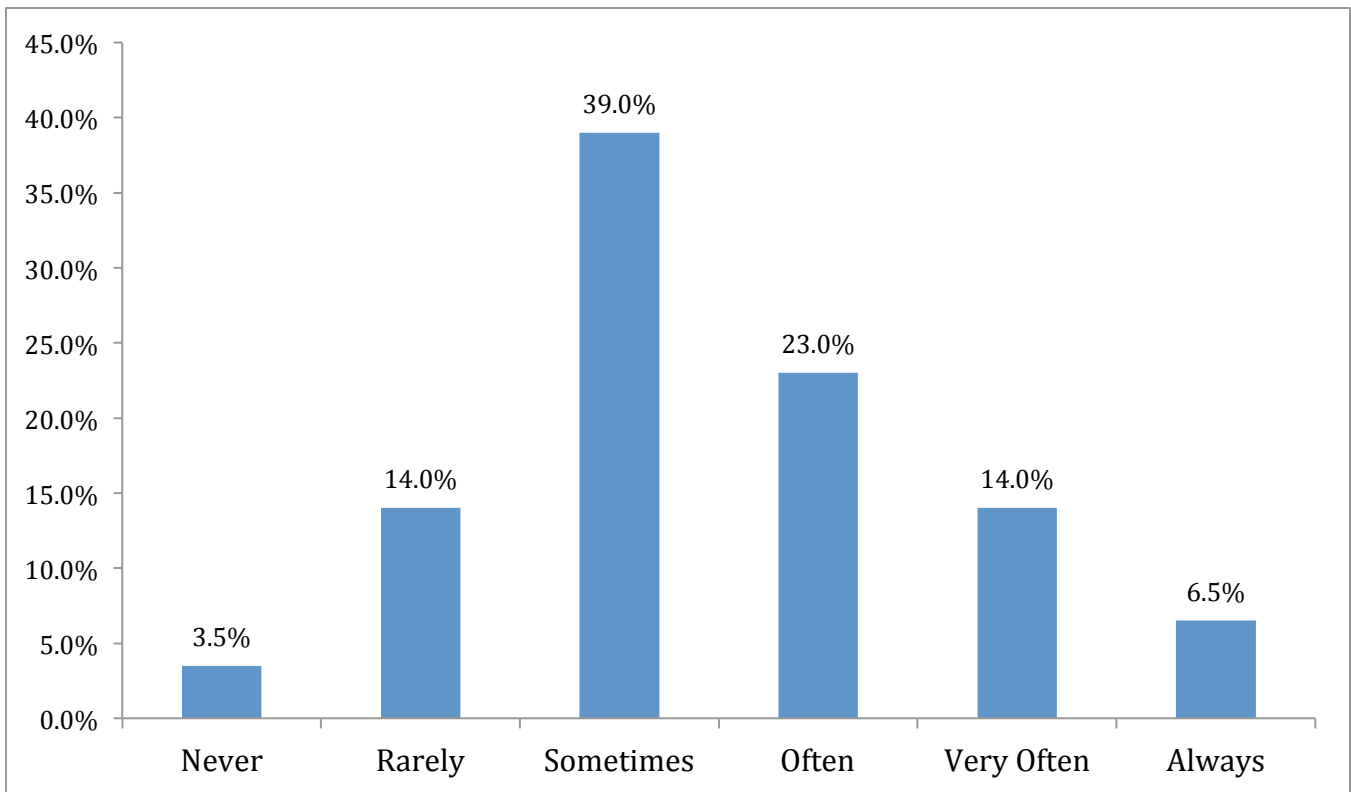

Figure 9. Responses to the question, "How often do you attend live concerts?"

Discussion & Implications

Many themes and important questions surfaced while conducting quantitative and qualitative analysis and studying survey responses. College-students and young adults are constantly using services provided by technology and the Internet, and they can be more easily targeted for marketing purposes if their listening and purchasing habits are studied. It is important for the music industry to analyze how this demographic is utilizing new technology and websites to their advantage, as they are, in essence, the future of the industry, and they can guide where it is going.

Results Applied to the UVM Population

Overall, genre and band results could be distinctive to the UVM "culture" and community, and say something about the lifestyles of students. Many stereotypes exist based on interest in different musical styles, however some evidence suggests that there are numerous associations between musical preference and lifestyle choices, such as media usage, leisure time and music listening (North & Hargreaves, 2007). These results could be generalized to the UVM population as a whole, with a large sample size that is diverse in classes and majors.

There was strong popularity among rock bands, specifically classic rock and jam bands. Indie was also the second most popular genre among UVM students. These results may have been predictable, not just based on stereotypes but also on actual studies that have shown most popular musical preferences by geographic area. In 2014, the director of developer platform at Echo Nest, (a leading music

intelligence company who leads major streaming services) determined the most "distinctive" musical artist to fans in each state, and indicated that Phish was the most unique to Vermont. This is a reasonable conclusion because the band here originated at UVM. The study also indicated that New England's taste as a whole "run[s] to jam bands, indie and classic rock" (Lamere, Exploring regional listening preferences, 2014), based on listening behavior of a quarter of a million music listeners.

Not only did Paul Lamere conduct a study that looked at the most loved bands for each state in the U.S., but he also did a separate analysis on the actual most streamed artists by state. Many large regions of the country were dedicated to single artists, such as Jay-Z and Drake. However, results of this data confirmed Alt-J was the most played artist in Vermont (Lamere, Favorite Artists vs. Distinctive Artists by State, 2014), which was similar to UVM's survey responses, where Alt-J was the third most popular artist behind Phish and Led Zeppelin.

One of the most interesting results during survey analysis was how many students selected the "other" option when asked about their favorite genre. Although the highest percentage of respondents chose rock music as their first choice, this result may be a significant outcome regarding the culture and community of UVM. Many people want to have a distinctive and individual set of answers to stand out from the crowd. The genre choices on this question were kept broad to be inclusive and un-biased, however, many students enjoy more specific subgenres that derive from the wider varieties.

Asking students to name their favorite bands, in conjunction with their genre preference, was not the easiest task for some. With results varying from recognized classic rock bands to newer underground artists, every respondent had a unique, individual set of answers. In a way, asking some students to describe their musical taste seemed to "pressure" them to come up with a unique set of answers to stand out from the rest of the crowd. Some students wanted to exert a sense of individuality and wanted to name a set of three artists that fell into one cohesive theme. This seemed to be a reason why the percentage of "other" responses to the genre question was so high, with subgenres provided to clarify their answers, and some unique bands named that were only mentioned once. This result also goes hand in hand with the "Indie" music popularity among UVM students, because there are many newer, contemporary bands that fall within this genre.

Also, it is very important to note that an unexpected result that came about when studying genre was the popularity among Alternative music. Although it was not an original answer option on the first question, many students considered it its own genre and put it in the "other" category. If it had been provided in the original answer options, it most likely would have accounted for a significantly higher percentage in genre responses.

Friends' Roles in Music Preference

Many students identified their friends as one of the main sources for their music in multiple questions. Over 10 percent of respondents said that friends were their biggest influence on their current taste in music, and 32 percent (nearly one-

third) said that they discover their new music through friends. This outcome indicates that word of mouth is a strong method of marketing for upcoming artists and bands among college-aged people. This also suggests that UVM as a community has a strong sense of community, and that groups of friends have strong influences on individual behavior. Friends can have very strong influences on each other, especially when it comes to listening to music. Music listening creates bonds between people and can build relationships, as "music preferences can be cues for similar or dissimilar values...with similarity in values then contributing to social attraction" (Boer, 2011).

Status on Music Piracy

Another goal of the survey was to find out how often students at our university download illegal music. However, it is difficult to find a definitive answer on such a sensitive topic. Music piracy is against the law, and although the survey was kept anonymous, many people still did not honestly admit that they engage in the illegal activity. Many students answered "sometimes" for the Likert scale question regarding illegal music downloading. However, this does not narrow down exactly how often "sometimes" is. This word could mean different things to different people, and could be chosen to tone down the degree of how often students download pirated music.

Although a portion of some did not hide that they "always" download from file-sharing websites (12%), many could still be dishonest on the illegal file-sharing issue. The reasoning behind this is that results indicated a high percentage of

students who seem to be actively seeking new music on a regular basis, but many respondents also said they say they "never" or "rarely" buy it. If students are habitually searching for and listening to new music, but never purchasing it, there could be two reasons for this. The first is that they are streaming all of the music for free using ad-based services such as Spotify, Pandora, etc. The only other way they would be getting their music is by downloading it for free through file-sharing websites, which is against the law. Although it is not certain that students are downloading illegal music on UVM's campus, this is something the administration should consider enforcing about their file-sharing policy.

Limitations

Although there was a significant amount of data collected through the survey, there were still some shortcomings. No survey is perfect; questions can always be worded differently and answer options can sometimes be limited. Many questions could have also allowed for multiple answers as opposed to just one, or more "all of the above" options. I left a comments section at the end of the survey for students to let me know their thoughts or questions, which brought about many suggestions.

Many students felt limited on the question regarding genre, explaining that was difficult to choose just one. A method of studying genre that may have been more effective for this report would have been a ranking order, allowing them to choose their top three or top five types of music, or perhaps a "check all that apply" option.

One question that was left out of the survey was about gender, which may have been useful to finding trends among preferences. Many experiments indicate that there are differences in music preferences between males and females (Christenson & Peterson, 1988), however this study intended to find the overarching preferences among the whole university. It would be very interesting to conduct a separate study looking at the relationships between gender differences and music tastes among UVM students.

Another drawback of the surveying method was a small chance of a sampling bias due to the fact that it was conducted entirely online and on social media. There is a small percentage of college students do not use Facebook, or do not use social media at all, which should also be considered, because these students were not accounted for in this study.

Further Research

This study aimed to get an overall idea of how UVM students are listening to music and asked a broad set of questions regarding different subjects. However, it would be interesting to conduct further research and develop more detailed questions about each of these specific topics. For example, it would be interesting to look closer into how much of college students' total music collection is illegally downloaded, and how many times per week or month they download illegally. Although it is difficult to receive honest answers on touchy subjects, these types of questions may explain the reasonings of music piracy. It would also be interesting to

study students' current feelings and perceptions on the current music industry by asking for their opinions on certain statements.

Many studies that were relevant to the literature review examined music listening habits of large samples of people. Thousands were studied in these investigations, with a range of ages from under 20 to over 65. Different ages of people generally have different music listening habits. Instead of larger samples with all age types, it would be more effective to break down these age groups and study each one in more detail, such as teens, college students, young adults, and so on.

Conclusion

Music has been a part of people's everyday lives for hundreds of years, serving as a source of entertainment, relaxation, and inspiration. It can be heard anywhere, whether that is inadvertent listening or selected music being played on a device. The ways music has changed over the past several decades is remarkable, not just in genre but also in the methods of listening. Music mediums have shifted significantly, from record players and CDs to an entirely new digital archive of music on the Internet. Today's music industry has struggled to keep up with rates of illegal music downloading, and college students have been known to intensify the problem. Although most UVM students said they only download illegal music "sometimes," there may be some fabrication about how often this happens. College students do not have expendable money, and research has shown that "individuals who judge music to be too expensive are more likely to illegally download songs online,"

(Jambon & Smetana, 2012). This may further explain why the college demographic has exacerbated the problem.

Everyone has their own personal tastes and preferences in music that they enjoy talking about, which gives people a way to communicate and bond over a mutual interest. It is said that many people "reinvent themselves" when coming to college, and it is interesting to see the influences that friends and environment have on individuals' tastes in music. Results of this study indicated that many people's views on music changed as they came to college and learned about more new artists. Friends, family, live concerts, and the Internet all have influences on individuals' music tastes, and also serve as sources for new music, in addition to radio.

The University of Vermont has a unique and individualistic taste in music, with indie artists and jam-rock bands dominating the musical preferences of the college. This study helped us gain a comprehensive view of UVM's music listening preferences, as well as its students' favorite genres and bands. The survey also helped answer a variety of questions regarding listening habits, concert attendance, music piracy, and other important topics in today's technologically dense society. An important takeaway is that there is not one particular source for college students' music, but rather a combination of many different sources and channels.

References

Boer, D. e. (2011). How Shared Preferences in Music Create Bonds Between People: Values as the Missing Link. *Personality and Social Psychology Bulletin , 37* (9), 1159.

Buskirk, E. V. (2014, September 16). *Top 40 Musical Universities in America: How Students Listen.* Retrieved March 2015, from Spotify.com: https://insights.spotify.com/us/2014/09/16/how-students-listen/

Christenson, P. G., & Peterson, J. B. (1988, June). *Genre and Gender in the Structure of Music Preferences.* Retrieved April 11, 2015, from Sage Journals: Communication Research: http://crx.sagepub.com.ezproxy.uvm.edu/content/15/3/282.full.pdf+html

Durando, J. (2014, February 26). *View distinctive musical artists of 50 states.* (U. Today, Producer) Retrieved February 2015, from USAToday.com: http://www.usatoday.com/story/news/nation-now/2014/02/26/favorite-band-united-states/5830667/

Facebook. (2015). *Stats.* (Facebook, Producer) Retrieved March 2015, from Newsroom.Facebook.com: http://newsroom.fb.com/company-info/

IFPI. (2013). *Digital Music in Figures.* Retrieved March 2015, from IFPI.org: http://www.ifpi.org/facts-and-stats.php

Jambon, M., & Smetana, J. (2012). College students moral evaluations of ilegal downloading. *Journal of Applied Developmental Psychology , 33* (1), 33-39.

Lamere, P. (2014, February 24). *Exploring regional listening preferences.* (E. Nest, Producer) Retrieved April 2015, from MusicMachinery.com: http://musicmachinery.com/2014/02/25/exploring-regional-listening-preferences/

Lamere, P. (2014, February 27). *Favorite Artists vs. Distinctive Artists by State.* (E. Nest, Producer) Retrieved April 2015, from MusicMachinery.com: http://musicmachinery.com/2014/02/27/favorite-artists-vs-distinctive-artists-by-state/

Music Timeline. (2014). (Pearson Education) Retrieved January 2015, from Infoplease: http://www.infoplease.com/ipea/A0151192.html

Nielson Music. (2011, January). *Digital music consumption and digital music access.* (Midem) Retrieved February 2015, from http://www.midem.com/RM/RM_Midem_v2/pdf/whitepapers/midem-nielsen-music-digital-music-consumption-digital-music-access.pdf

North, A., & Hargreaves, D. (2007). Lifestyle correlates of musical preference: 2. Media, leisure time and musi. *Psychology of Music , 35* (2), 179.

Patel, N. (2012, March 13). *Spotify on the future of streaming music: 'We want to cannibalize piracy'.* Retrieved March 2015, from TheVerge.com: http://www.theverge.com/2012/3/13/2868876/spotify-streaming-music-ken-parks-sxsw-2012

RIAA. (2015). *Scope of the Problem.* Retrieved February 18, 2015, from RIAA.com: http://www.riaa.com/physicalpiracy.php?content_selector=piracy-online-scope-of-the-problem

RIAA. (2015). *Who Music Theft Hurts.* Retrieved February 18, 2015, from RIAA.com: http://www.riaa.com/physicalpiracy.php?content_selector=piracy_details_online

Siwek, S. E. (2007, August 21). *The True Cost of Sound Recording Piracy to the U.S. Economy.* Retrieved February 2015, from IPI.org: http://www.ipi.org/ipi_issues/detail/the-true-cost-of-sound-recording-piracy-to-the-us-economy

Spotify. (2015, March). *Information.* (S. Ltd., Producer) Retrieved March 2014, from Spotify.com: https://press.spotify.com/us/information/

Taintor, C. (2004, May 27). *Chronology: Technology and the Music Industry.* Retrieved February 2015, from PBS.org: http://www.pbs.org/wgbh/pages/frontline/shows/music/inside/cron.html

Viner, S. (2014, February 7). *Social Media Statistics: How College Students Are Using Social Networking.* Retrieved February 24, 2015, from Study Breaks College Media: http://studybreakscollegemedia.com/2014/social-media-statistics-how-college-students-are-using-social-networking/

Webster, T. (2014, June 18). *Edison research conducts first ever share of ear℠ measurement for all forms of online and offline audio.* Retrieved January 20, 2015, from Edisonresearch.com: http://www.edisonresearch.com/edison-research-conducts-first-ever-share-of-ear-measurement-for-all-forms-of-online-and-offline-audio/