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A Cross-National Empirical Investigation of Music Streaming Behavior

P. Raj Devasagayam, PH.D.
Director, Center for Undergraduate Research and Creative Activity
Chair and Professor of Marketing, Siena College, Colbeth 113
515 Loudon Road. Loudonville, NY 12020, USA
Email: raj@siean.edu

F. Javier Martinez C.
Nicholas A. Motyl
Siena College

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Abstract

Our research examines the current trends in on-line music consumption across various national markets. The number of outlets that allow an individual to listen to music, both paid and unpaid, are proliferating. Music streaming services (such as Spotify, Pandora or Soundcloud) are becoming the new trend in listening to music, however, the characteristics of consumers and their consumption behavior is still evolving. We collected data on music consumption from several countries (primarily the USA) with a random sample of 462 respondents via an online survey. Since a quarter of respondents were from various countries outside of the US, it allowed us to examine differences between US consumers and international consumers. Our results display interesting trends and help us better understand current music consumer preferences. Our findings may be of interest to marketing strategists and academic researchers.

Introduction

Generation Y and Millennials (born after 1981) have changed the landscape of music consumption and marketing. From LP records to Compact Disks, and then the development of digital downloads on iTunes and streaming online, the rate of change in their music consumption behavior has been rapid. Even as Apple has joined the fray of music streaming industry, marketing managers' understanding of the music streaming behavior has not been able to keep pace with the changes. Prensky (2001) calls these generations "digital natives," they haven't just immigrated to digital consumption, they have actually grown up with it. Technology is an integral part of their lives (Bennett.,Kervin, Maton 2008; Wesner and Miller, 2008). These generations work, play, search, and consume in the digital environment. There

are several studies that have focused on Social Media consumption of these consumers. However, there is a paucity of studies that actually look at a specific dimension of their media consumption – music streaming. Serving a $15 Billion industry, the International Federation of Phonographic Industry (2015) reports that "music industry's global digital revenues increased by 6.9 percent in 2014 to US$ 6.85 billion. For the first time, the industry derived the same proportion of revenues from digital channels (46%) as physical format sales (46%)."

With this backdrop, the focus of the current research is to study the various forms of music consumption, to determine some of the most popular channels of consumption and the associated consumer buying behavior. To examine our research questions, we conducted an on-line primary data based study with a total of 462 respondents from 29 countries. Respondents in our random sample represent the following countries: United States of America, Spain, Argentina, Australia, Austria, Brazil, Canada, Chile, Colombia, Costa Rica, Denmark, France, Germany, India, Ireland, Italy, Japan, Jordan, Malaysia, Mexico, Nicaragua, Paraguay, Peru, Portugal, Russia, South Korea, Sweden, United Kingdom, and Uruguay. Given the location of the research project, 76% of our respondents were from the USA (one must also note that the USA is the leading consumer of music streaming services), and about 24% of our respondents were international. This allowed us to analyze both domestic and international trends. Aside from geographic location, we collected a wide range of demographic and psychographic data and related it to music consumption behavior and music tastes. Our findings make it possible for artists and marketing managers in record labels to better tailor their products and offer the highest number of fans the most effective way to listen to music. We begin with a discussion of the prior research and information in the area, and then present the methodology and our findings. The paper concludes with strategic marketing recommendations based on our findings.

Background

Brosdahl and Carpenter (2011) use the following to categorize generations: Silent Generation (1925-1945), the Baby Boomers (1946-1960), Generation X (1961-1981), and Generation Y (born after 1981). The term Millennials has also gained popularity in describing the present generation, however, it is unclear if these are indeed different from Gen Y. These are broad generalizations that do not account for individual preferences, but serve as good catch-all phrases for our purposes. Gen Y is often seen as digitally savvy due to early exposure to technology, and this has implications for cognitive, affective, and social norms of this generation (Immordino-Yang et. al., 2012) that impact their consumption habits. The consumption habits and patterns revealed in music consumption through online platforms is the focus of this study.

Essentially, streaming music on-line can be viewed as renting access to music, rather than buying albums and MP3s. Wall Street Journal (2015) reports that during pre-iPod era (prior to 1999), Americans spent an average of $80 per year on music, equivalent to $112 today. With the decline of music consumption revenue reaching $52/year for an average American in 2014 (not including physical purchase of albums), music streaming services that charge $120/year are in pursuit of raising the average amount spent on music yearly (see Table 1 for a summary). There is much hesitation to confront, due to the controversial nature of payment to major record labels, but unknown compensation to artists and the commitment to a monthly fee, when many free/ad-supported music services are available (YouTube, Spotify Free, Soundcloud, Radio). However, users are choosing music streaming for

access to exclusive artists, unlimited music selection, curated playlists, social aspects, and connectivity, and expanded music consciousness.

Spotify is a commercial music streaming podcast and video service. It allows music listeners access to a very large music library. Spotify was launched in 2008 in Sweden. It quickly grew and expanded to other European countries. In July 2011 it launched in the United States. (Cook J., Tepper F., 2015)) Users of Spotify have the ability to choose from two versions, Spotify (free) and Spotify Premium. Throughout its history, Spotify has played with different combinations of paid, free, and invitation only subscriptions. As currently constituted, the main differences between the free version of Spotify and Spotify Premium are that Spotify premium offers the ability to download music to be listened offline, eliminates advertisements, and better sound quality. Spotify can also be used via a mobile application and is easily linked to social media accounts so users can share their favorite songs with their friends. In Spotify you can search by artist, song, album, playlist, and genre or music label. This program does not create preference based playlists but it does make suggestions and preference based recommendations. Spotify has quickly grown around the world, establishing itself as a reliable option to stream music. (https://www.spotify.com/us/about-us/contact/)

Soundcloud is another Swedish online audio distribution platform based in Berlin, Germany. The platform launched in the summer of 2007. Soundcloud is unique to other music streaming sites because any user can upload their own music to the site. Users also have the ability to repost, favorite, and follow their favorite artist's accounts, as well as any other users' content. It is one of the most effective ways to share and debut new music. Basic membership has a fee and includes only a few hours of recorded time. More serious artists can buy a package that allows them to post more musical content. This platform has a variety of genres, but specializes in electronic music. Many producers and DJs gain their initial popularity through Soundcloud and many artists debut their new material through this platform. Soundcloud currently has around 175 million users, but only 40 million are registered. (Graham, 2013)

Stream On

All-you-can-eat streaming music services may not be as popular as Pandora, but Apple hopes to bring them mainstream.

	Apple Music	Spotify	Rdio	Google Play Music	Tidal
How to find it	apple.com/music	spotify.com	rdio.com	play.google.com/music	tidal.com
Monthly pricing	$10 all-you-can-eat; $15 family plan	$10 all-you-can-eat; student and family discounts	$10 all-you-can-eat and $4 ad-free radio (plus 25 downloads)	$10 all-you-can-eat	$10 all-you-can-eat; $20 for CD-quality streams
Anything free?	3-month trial (then your card gets charged); free ad-supported radio	Free limited ad-supported service; 99-cent Premium 3-month trial	Free ad-supported radio	30-day free trial; also, free ad-supported radio	No, but discounts for paying 6 months up front
Supported platforms	iOS, Mac, PC; support for Android, Sonos and Apple TV coming later	iOS, Android, Mac, PC, Web, Roku, Sonos and more	iOS, Android, Mac, PC, Web, Roku, Sonos and more	Android, iOS, Sonos, Web	iOS, Android, Mac, PC, Web, Sonos and more
Distinguishing traits	Free live radio station hosted by DJs	Social music-sharing; also just got short videos and podcasts	Personalized radio; free and lower-cost options	Users can upload their own music files	CD-quality audio streams; exclusive videos and playlists

Online radio is another option for music listeners. The most popular online radio is Pandora. Other top online radio platforms include I Heart Radio, Apple Radio, Jango, and hundreds of local AM/FM stations that also stream online. This platform is often resented by users because of advertisements, however, services like Pandora have "Ad Free" paid options. There are an estimated 147.8 million users of online radio. Pandora alone has 81.5 million users and appeals to them by creating automatic preference based stations. (Topic: Radio Industry, n.d.)

Collopy and Bahanovich (2009), specifically looked at the music consumption behavior of young consumers and found that although electronic music devices are extremely popular and can stream music for free, ownership over a particular song or collection of music is an important factor. This helps explain how companies that charge fees or sell music are still popular and able to stay profitable. Molteni and Ordanini (2003) related patterns of music consumption online to the overall purchase behavior of digital technology and found that the consumption styles and patters were not similar in these categories. Another narrative of paid versus free options of music downloads (Giletti, 2012) looked at how behavioral norms and attitudes affect preferences in music consumption and arrived at similar results. The insights gathered from these past studies guided our model (see Figure 1) of music streaming inspired by a preexisting model of social media consumption proposed by Bolton et al. (2003).

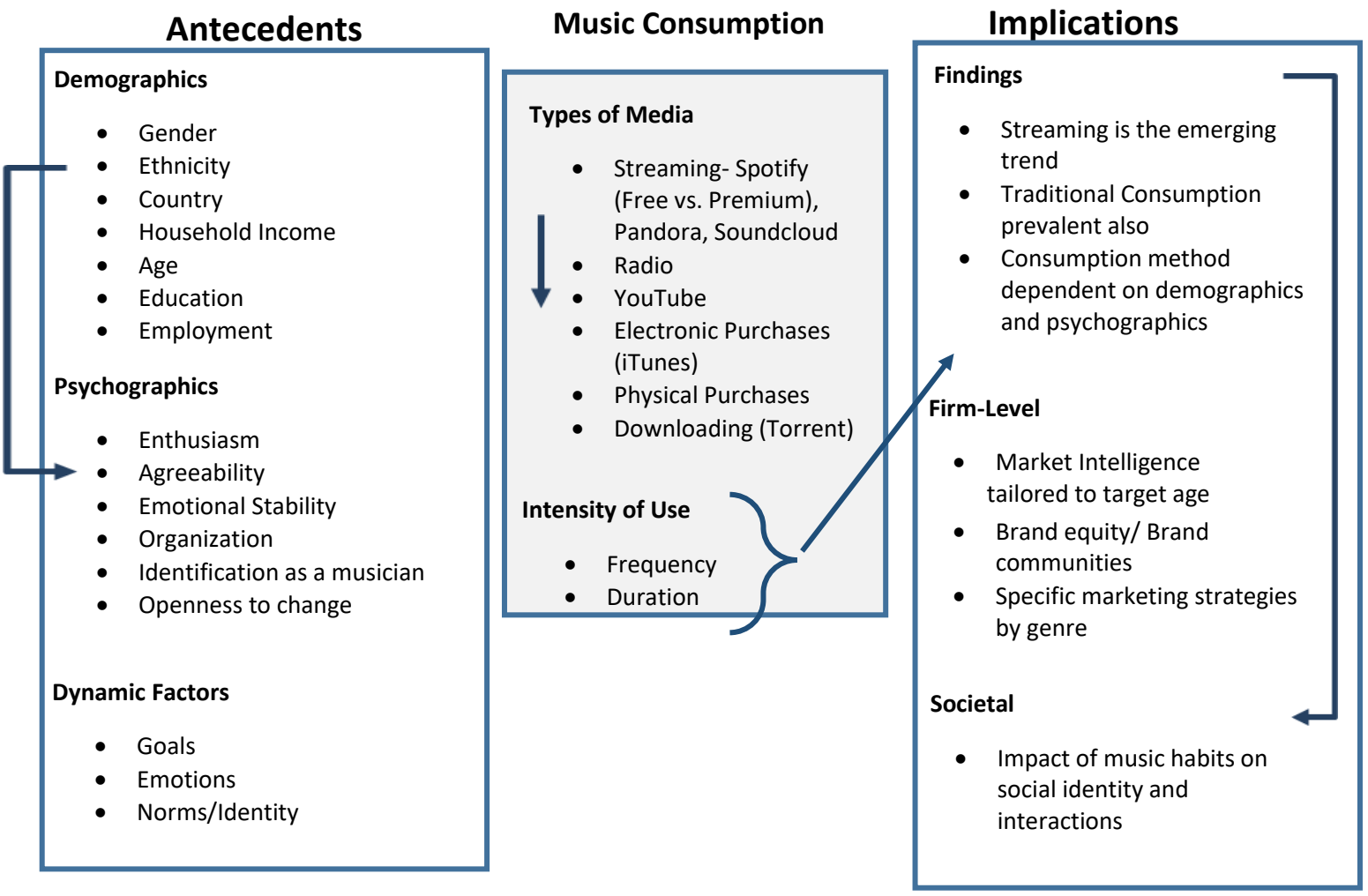

Figure 1: Cross-National Intergeneration Music Consumption Model

Table 2: Sample Profile (n=462)

Gender	
Male	42.40 %
Female	57.60 %
Ethnicity	
White	76.80 %
Hispanic/Latino	16.70 %
African American	2.20%
Native American or Alaskan Native	0.20%
Asian/Pacific Islander	3.00%
Other	1.10%
Country	
US (Domestic)	75.97 %
International	24.03 %
Household Income*	

Age	
18-20	31.20 %
21-25	26.80 %
26-30	3.90%
31-50	24.50 %
51+	13.60 %
Education	
Current Student	37.40 %
High School/GED Degree	1.70%
Some College	12.80 %
College Degree	16.90 %
Graduate Degree	31.20 %
Employment*	
Full Time	33.10 %
Part Time	30.50 %

$1,000-$25,000	22.10 %
$25,001-$50,000	11.70 %
$50,001-$75,000	16.50 %
$75,001+	49.10 %

Internship	8.90%
Unemployed	26.80 %

*Household Income and Employment percentages do not add to 100% because .6% of respondents skipped each question.

Research Design and Sampling

For our research study on music consumption, we used a self-administered online survey. This research is descriptive in nature and our target population consisted of both males and females over the age of eighteen. To reach our targeted number of respondents we used a variety of non-probability samples. The first sampling technique we utilized was convenience sampling. We sent our survey to our friends, teachers, co-workers, families and anyone who we could easily contact. Our second sampling technique was judgment sampling. We used this type of sampling to receive responses internationally. We contacted specific friends and family members who live abroad and could understand the language. Finally, we used snowball sampling. People who received our survey were asked and encouraged to distribute our survey among their contacts. This proved to be very helpful in reaching our targeted response number.

Survey Design and Implementation

We chose to use a descriptive survey by collecting primary quantitative data. We designed our survey to discover how people consumed music, with a focus on streaming music and purchasing CDs. The survey was designed to guide respondents down different question paths depending on specific responses. For example, if a respondent did not use streaming programs then they would not answer questions pertaining to streaming. The questions were geared towards discovering how and why people consume music. The questions used Likert type scales with a balanced neutral point.

When it came to implementing and distributing our survey we chose to use a self-administered online survey. We emailed our survey to close friends and family at first and then we utilized social media and emailed peers, faculty, and student organization groups on campus. From that point on we depended on a non-probability snowball effect created by our friends and family passing the survey to their contacts via email and social media. Sample questions from our survey include:

- On a typical day how many hours do you listen to music?
- How frequently do you use the following [listing platform] to listen to music?
- When streaming music, the program I use the most is?
- How many physical CD's have you purchased in the last 6 months?
- How frequently do you listen to the following genres of music?

Scales and Validation

When determining the scale for our questions, we used both nominal and interval scales. Using a Likert-type scale, we were able to find consumer preferences; typically, the Likert scale is used for ordinal data, but we adapted the scale to be used with interval data.

The Cronbach's Alpha for our psychographic scale is .784. We found this scale in the Handbook of Marketing Scales and used it in our questionnaire because of its reliability. According to the Handbook of Scales, the Cronbach's Alpha for extraversion is 0.68, agreeableness is 0.40, conscientiousness is 0.50, emotional Stability is 0.73 and openness to new experience is 0.45. Our Cronbach's Alpha is similar, in some cases slightly higher, which shows that our scale is just as reliable as Goslings, Rentfrow and Swann's Five-Item Personality Inventory that was created in 2003.

The only other scale with a notable reliability was our scale for the question asking why our respondents chose to stream music. This scale was influenced by a question taken from Luca Molteni and Andrea Ordanini in a survey issued in 2003 called *Consumption Patterns, Digital Technology and Music Downloading*. The question that Molteni and Ordanini used had nine different possible responses, but they were only used to check if respondents were influenced for downloads on "MP3 or P2P sites." We narrowed these questions down to the ones that we found fitting for our survey and changed it to a seven point Likert type scale that applied to music streaming. This new scale we created is called the "Drivers of Music Streaming" scale. When we tested the Cronbach's Alpha for the Drivers of Music Streaming scale we created, it resulted in an extremely reliable value of .839.

Additionally, the Drivers of Music Streaming scale that we have created could be even more reliable by removing one of the four items within it. This scale questioned why the individual streamed music and although the answers "it's convenient", "it's easy to use" and "it's free" worked well together our fourth option "I want to discover new music" took away from our scales reliability. We ran a Chi Square test on just the first three answers and this raised our Cronbach's Alpha to an even more reliable .880.

Findings

When analyzing the data, we first analyzed the results with the entire data set to discover the consumption preferences for the entire sample irrespective of countries. Analysis of Variance (ANOVA) was used to determine statistically significant differences between reported means. When we obtained an idea of how our respondents consumed music as a whole, we split the data and ran statistical tests to compare music consumption patterns in the United States and internationally. We received responses from 29 countries and 24% (111 respondents) of our study's responses came from outside the United States. Some major findings are listed below.

Demographics to Method of Consumption

We started analyzing the data by examining the impact of demographic characteristics on what method people preferred when listening to music. The first characteristic we looked into was age. We discovered that there was a significant relationship between age and streaming, use of YouTube, physical purchases, radio and electronic downloads. ($p = 0.000$, 0.000, 0.000, 0.001, 0.000) Younger people tend to prefer streaming, YouTube and downloads while those who are older would rather listen to the radio or buy a physical copy of an album.

When examining the relationship between gender and favorite method of listening to music, we discovered significant relationships with every option. Females obtained higher mean scores on every category other than downloading songs. This has managerial implications, as females tend to be more involved in how they listen to music.

Table 3: Results

Method	Gender	Mean	F	Sig.
Streaming (Pandora Spotify Soundcloud)	Male	4.041	26.180	0.000
	Female	4.564		
YouTube	Male	3.878	21.027	0.000
	Female	4.222		
Electronic Purchases (ITunes)	Male	2.934	0.662	0.619
	Female	3.887		
Physical Purchases (CDs)	Male	2.495	5.857	0.000
	Female	2.872		
Radio	Male	4.291	4.651	0.001
	Female	4.733		
Downloading (Torrents)	Male	3.449	9.467	0.000
	Female	2.774		

While evaluating relationships between level of employment and preferred way of listening to music, we encountered significant relationships between employment levels and streaming, YouTube, radio and downloading using torrents. (p = 0.000, 0.000, 0.002, 0.001) It is interesting to note that people with internships and part time jobs favor streaming while full time workers like the radio and the unemployed prefer YouTube.

Next we looked at the effect of household income in consumption type. We found significance with YouTube and purchase of physical CDs (p = 0.012, 0.005). We found an inverse relationship between household income and use of YouTube.

When we examined the impact of ethnicity on the preferred way of consuming music we discovered significance on streaming (p = 0.019). This, however, should be examined closer and we recommend further research as our sample profile was predominantly white and Hispanic with a much smaller representation of other ethnic groups.

Finally, we examined the impact of education on favorite method of listening to music. We found that the level of education of our respondents had a very significant relationship with the method they utilized. We found significance for all six methods examined, streaming, YouTube, electronic purchases, physical purchases, radio and downloading. (p = 0.000, 0.000, 0.016, 0.000, 0.033, 0.000) Current students are the most likely to favor streaming and downloading music through torrents. People with an education level of some college had the highest mean use of YouTube, those with a college degree are the most likely to buy their

music electronically and people who have a graduate degree will be the most frequent buyers of physical CD's and radio listeners.

Demographics and Music Streaming

In addition to comparing demographics to favorite way of consuming music, we ran analysis to determine significant differences among programs used to stream music. We started looking at age and found that age has a significant impact on the choice of streaming platform used. Our ANOVA results indicated significant effects across the board: free Spotify, Pandora, Soundcloud and online radio. (p = 0.007, 0.017, 0.002, 0001) It is interesting to note that there is a direct relationship between age and use of online radio. On the other hand, there is an inverse relationship between age and use of Pandora, and younger respondents used Soundcloud more than older respondents. This is an important finding as streaming programs may use this information to better target their customers.

We also found interesting trends when we looked at a gender's impact in choice of streaming program. Once again ANOVA revealed significant values for Spotify Premium, Pandora and Soundcloud. (p = 0.0001, 0.0001, 0.003) While males are more frequent users of Spotify Premium and Soundcloud, females are substantially bigger users of Pandora.

In terms of the impact education has on streaming program, we found significant values for free Spotify, Pandora, Soundcloud and online Radio. (p = 0.01, 0.001, 0.001, 0.001) It is interesting to note that there is an inverse relationship between level of education and Soundcloud. At the same time, there is a direct relationship with education level and use of online radio streams. Lastly, Pandora which has the highest reported means seems to be the preferred streaming outlet for current students.

Ethnicity also presented significant p values for Pandora, Soundcloud and online radio. (p = 0.004, 0.011, 0.089) Means for this test were different but as stated above further research must be done to have a more accurate understanding of the impact of ethnicity on music consumption.

The next demographic we looked at was employment. This was the first demographic to yield significant values for all five streaming programs available. We found significant P values for free Spotify, Spotify Premium, Pandora, Soundcloud and use of online radio streams. (p = 0.000, 0.089, 0.007, 0.005, 0.001) The most likely users of Pandora and free Spotify are people who are interning. The most likely users of Spotify Premium as well as On-line radio streams have full-time positions. Finally, the unemployed are the most likely users of Soundcloud.

The last demographic we examined was household income. For this demographic we found significance for Spotify Premium and Pandora. (p = 0.061, 0.002) As was the case for most tests, Pandora reported the highest overall means.

Psychographic and Music Streaming

In order to get a more complete idea of our respondents and how their characteristics affected the way in which they consume music we ran the same tests but with psychographic characteristics as the independent variable. The first characteristic we looked at was enthusiasm. We found significance for, streaming, YouTube and electronic purchases. (p = 0.020, 0.028, 0.024) The next characteristic we looked at was agreeability for which we found significance with electronic purchases and download of music. (p = 0.079, 0.048) For emotional stability we found significance with radio use. (p = 0.004) When we looked at organization, significance was found for radio and downloading. (p = 0.054, 0.003) The fifth

characteristic we looked at was people who consider themselves musicians. For this psychographic we found significance for downloading and both types of purchases, physical and electronic. (0 = 0.074, 0.060, 0.039) Finally we compared openness to new experiences to favorite consumption method and found significance for streaming, downloading and using YouTube. (p = 0.000, 0.052, 0.048)

We then further explored the impact of psychographic characteristics on how people listen to music by finding the impact of these characteristics on preferred streaming program. We did not find as many significant values as we originally expected. The first trait we looked at was organization for this; we found significant values for use of Pandora and Soundcloud. (p = 0.000, 0.042) In the case of emotional stability, the results where similar, the two programs showed significance again. (P = 0.078, 0.042)

When comparing means for agreeability and streaming program we discovered that Pandora was the only mean that presented significance. (p = 0.030) This was also the case for people who considered themselves a musician. (p = 0.042) For the remaining Psychographics we found no significant values and no psychographic characteristic presented significance for Spotify or On-line radio.

Time Compression and Music Streaming

We examined the relationship between daily amounts of time a person listens to music to their favorite way of listening to music. We discovered significance for streaming, YouTube, electronic purchases, radio and downloading. (p = 0.000, 000, 0.017, 0.034, 0.000) In the case of streaming, using YouTube and downloading there is a direct relationship between the hours and the mean use of the method. In the case of streaming, the means were noticeably higher than in any of the other characteristics. People who listen to music for three hours or more seem to prefer to listen to music through one of the various streaming programs.

Since we found strong relationships between the amount of time a person listens to music every day and streaming, we compared the time to favorite streaming program. We found significance for Pandora and Soundcloud. (p = 0.006, 0.000) We also found a direct relationship between use of Soundcloud and daily hours a respondent listens to music. Finally, there was no statistical significance between hours a person listens to music to the number of physical albums they buy.

Genres and Music Streaming

In our study we decided to see how fans of different music genres consume music. The genres we examined included: Rock/Metal, Pop, Alternative, Rap/Hip Hop, Country/Folk, Electronic/EDM, and Jazz. It was not possible to include every genre in this paper so we chose a limited amount that we think could give a good representative idea of different tendencies. We first looked at Alternative music which gave us significant p values for streaming YouTube physical purchases and downloading. (0 = 0.000, 0.014, 0.085, 0.017) When looking at streaming program specifically we could only find significance for both free and premium Spotify. (p = 0.024, 0.042)

The next genre we looked at was Rap/Hip Hop. We found significance for Streaming, YouTube, Physical purchases, electronic purchases and downloading. (0.000, 0.000, 0.081, 0.009, 0.000) Furthermore, we found that there is a direct relationship between listeners of this genre and use of YouTube and an inverse relationship with physical purchases. When taking a closer look at preferred streaming program in relation to Rap music we encountered

significant values for Soundcloud, Pandora and online radio stations. (p = 0.000, 0.037, 0.025) There was a direct relationship between this genre and Sound cloud but Pandora presented the highest means across the board.

When it comes to Rock and Metal music, we found that there is significance with four of the ways to consume music. We found significant P values for streaming, YouTube, physical purchases and downloading. (p = 0.007, 0.072, 0.071, 0.014) When looking closer at streaming we found significance for free Spotify and Spotify Premium. (p = 0.001, 0.035)

The next genres we examined were Country and Folk. For this question we obtained significant values for streaming, YouTube and radio. (p = 0.000, 0.007, 0.007) We found notably high mean values for radio. When we further looked into preferred streaming program we saw that there was significance in use of free Spotify and Soundcloud but Pandora still showed the highest means. (p = 0.016, 0.000)

Jazz music was another genre that we decided to explore. For this specific type of music, we found significant values for Physical purchases and for use of radio. (p = 0.000, 0.021) The means for radio use were notably high so it may be a good idea to have radio stations that focus on Jazz. Despite there not being significance with streaming in terms of overall method of consumption we still searched to see if there were any significant values for specific streaming programs. When running an analysis of variance between Jazz and streaming program we found statistical significance for three programs; Spotify Premium, Pandora and Online Radio Stations. (p = 0.000, 0.003, 0.002)

Next we decided to see how fans of Pop music preferred to consume music. For this genre we found statistical significance for YouTube, electronic purchases and use of radio. (p = 0.005, 0.008, 0.017) We found streaming not to be significant and when we ran statistical analysis to see if there was significance with specific streaming outlets there was no significance found.

The last music genre that we used was electronic dance music (EDM). This is one of the fastest growing genres in the 21st century and many artists in this segment use different, less conventional ways to distribute their music. In this case, we discovered significance for streaming, YouTube, physical purchases and electronic downloading. (p = 0.000, 0.000, 0.007, 0.000) There was a strong direct relationship between those who listen to this genre of music and stream or listen through YouTube. When assessing streaming more closely, we obtained significant values for the free version of Spotify and Soundcloud. (p = 0.016, 0.000)

Drivers of Music Streaming

In order to discover why people's tendencies in music consumption are increasingly leaning towards streaming, we created questions that could help us explain why a person would choose to stream. The four drivers of streaming we studied were convenience, easiness of use, the opportunity to discover new music and the free available options that this method of music consumption provides. Convenience had significant p values for Pandora, Sound cloud and Online Radio. (p = 0.000, 0.099, 0.047) The more a person streams because of convenience the more they used Pandora; there was a direct relationship with this website. Convenience was the only driver of change that offered significance for the use of Soundcloud. In terms of choosing a program because it is easy to use there was significance for Pandora and online radio. (p = 0.000, 0.089) Similarly people who stream mainly because it is free provided significant relationship with Pandora, on-line radio and Spotify Premium. (p = 0.001, 0.006, 0.066) Spotify premium is not free so as it would have been expected there is an inverse relationship between use of Spotify Premium and choosing to stream mainly

because it is free. Lastly, those who stream predominantly to discover new music provided the highest means for Pandora and significant values for Spotify Premium and free, Pandora and online radio. (p = 0.024, 0.018, 0.008, 0.028)

We also examined other factors that could determine what method a person would pick when listening to music. We looked at the impact of money on the program chosen. We found significance for electronic and physical purchases, radio and downloading torrents. (p = 0.002, 00.044, 0.018, 0.002) We also found four significant values for the relationship with the question stating that music is a big part of your life. The relationships were with Streaming, YouTube, Radio and Downloading torrents. (p= 0.000, 0.000, 0.025, 0.000) In this case the highest means were present for radio. Next we looked for relationships between favorite consumption method and the desire to keep up with the latest trends. In this case, we found significance with streaming, YouTube, physical purchases, electronic purchases and downloading torrents (0.003, 0.024, 0.004, 0.026, 0.001) finally, we looked at the impact of the importance an individual places on legality of an action when choosing a way to listen to music. We found significance for all six available methods, streaming, YouTube, electronic and physical purchases, radio and downloading. (p = 0.018, 0.060, 0.000, 0.000, 0.002, 0.000)

Cross-National Music Streaming

Due to the high level of international responses we had received, we decided to see if some of the major trends we had discovered differ on a US and international level. To do this we split our data into the 111 international responses and remaining 351 US respondents. The following section will begin to look into some of the major differences found between these respondents.

We first examined age and the different ways to listen to music, while many of these outlets were significant in both parties, they didn't have many differences in trends, the one thing which was significant for domestic but not international was downloading/torrenting (p=.000 vs .297). Individuals in the US are more likely to download music, which in many cases involves illegal sharing over the internet and when it comes to age, the younger individuals are the ones downloading.

Next we examined gender, and we were surprised to find that streaming wasn't significant among international respondents and the overall means were lower than domestic (USA) respondents (p=.736). An overall analysis of streaming and demographics in the international section showed to be mainly insignificant except for one area. There was a difference when it came to education and, it was mainly current students who used streaming. We believe this correlates with age, and although individuals in the US of older ages are beginning to use streaming, it is still typically the younger ages that access streaming.

Additionally, radio and again downloading were insignificant for international respondents and significant for domestic. In fact, downloading was the only thing that was not significant for every demographic in our international sample; the leads us to believe that downloading and torrenting is not a widely popular thing outside of the US. Downloading music is a much younger trend and while it is not significant or as popular on an international level, in the US it is widely popular among young males. What we did find significant for international respondents was listening to music through YouTube. This was used more by females, but it showed no significance in genders for the US.

Conclusions

Overall, this study allowed us to examine many of the various drivers of music consumption. It has become obvious that streaming is becoming the new emerging trend in music consumption. One thing to note is that traditional consumption methods such as radio and physical purchases are still prevalent in older ages and certain music genre fans; therefore, they must not be forgotten. Also looking at just our international respondents, streaming is much less influential and used mainly by lower income individuals and younger ages.

Our findings indicate that the consumption patterns of Americans and those of other countries are not very different. At the end of the day everyone wants a free or inexpensive music platform that is accessible and has a large variety of their favorite music. Understanding this desire is important when seeing the differences. However, there are significant differences in technology, time it takes to adopt one of these innovations, and in availability of the service but not in desire. Though there are some differences that must be understood by marketers for a successful product, streaming seems to be the way in which the musical industry is going and the best way to meet consumer's needs

This research opens up several avenues for continued investigation. This study stops short of examining the intergenerational impact of learning and adoption. The latest generations provide opportunities for generations past to learn innovative ways of consuming media, we suggest that future research focus on how that learning relates to adoption of new consumption behaviors and habits as the streaming technologies evolve. As the cohorts of new generations of music consumption learn and move in a certain direction, one cannot ignore the broader sociological implications diffusion of these behaviors thought the society (Ryder, 1965). Social norms and behaviors evolve at a slow yet steady pace. More studies are needed in the global consumption area, as it relates to streaming music. Facets of music streaming behavior vary across cultures and nations, what is the nature of such variation? Which dimensions of consumption behaviors actually retain currency and relevance in all cultural and national settings? Both similarities and variation in consumption habits require further examination.

Cohorts of consumers rarely exhibit homogeneity of demographics and psychographics. Nielsen (2016) data rarely supports a homogenous group hypothesis; the media consumption behavior of high school students significantly differs from those in college. More attention needs to be directed at the intra-cohort differences within a monolithic generational study. What impact does streaming music consumption habits have upon the social identity and interactions of the subjects? Such questions merit scholarly investigations that will yield concrete strategic directions for marketers that want to capture a share in this emerging marketspace. Studies of this nature could lead to building brand communities (Devasagayam and Buff, 2008) and brand equity with life-time-value implications.

Lastly, a few recommendations for individuals in the music market to help artist, promoters and labels better understand who is using which form of consumption. Looking at the emergence of streaming, which we have determined to be the new trend in music consumption, the younger generations are the ones that access these platforms. If a firm is trying to promote an artist or album that younger generations like more, then they should find the streaming platforms to be the medium to release such music. Older generations may still use radio and purchase CDs but they are transitioning to buying MP3s and are beginning to tap into online streaming resources as well.

Latest trends indicate that with all of the available options of listening to music, selling albums isn't an artist's main goal anymore. The main goal of an artist seems instead to be getting their music in as many headphones as possible. This is how artists are gaining popularity and beginning to generate revenues off live shows. Our findings indicate that females tend to stream more, while males prefer downloads. This has implication for music genres (for instance, Rap/Hip Hop or Electronic Music artists that appeal to males) could release their music for downloads rather than streaming. We also found that income level has an impact on streaming behavior, indeed wealthier individuals prefer to purchase either electronically or physically.

Music labels need to adjust their distribution strategy to fit the most preferred outlets of their target fan base. For example, we found that Hip Hop and Rap fans tend to prefer YouTube. This might explain the preference of Rap artists releasing music videos and singles on YouTube. While Country music fans still prefer the traditional radio outlet. We hope our study will stimulate further research in this important area. We encourage academic researchers to study the various research questions that have emerged from our study. We believe that the results of such research avenues will be of interest to academicians, practitioners, and the public policy decision makers.

References

Bennett, S. J., Maton, K. A. & Kervin, L. K. (2008). The 'digital natives' debate: a critical review of the evidence. *British Journal of Educational Technology, 39 (5), 775-786.*

Bolton, R. N., Parasuraman, A., Hoefnagels, A., Migchels, N., Kabadayi, S., Gruber, T., Solnet, D. (2013). Understanding generation Y and their use of social media: A review and research agenda. *Journal of Service Management, 24*(3), 245-267.

Brosdahl, D. J., & Carpenter, J. M. (2011), "Shopping orientations of US males: A generational cohort comparison". Journal of Retailing and Consumer Services, 18, 548-554.

Cook, J., & Tepper, F. (2015), A brief history of Spotify. *Techcrunch*. Retrieved From http://techcrunch.com/gallery/a-brief-history-of-spotify/slide/31/

Collopy, D., & Bahanovich, D. (2009). Music Experience and Behaviour in Young People 2008

Devasagayam, Raj, and Cheryl Buff (2008), "A Multidimensional Conceptualization of Brand Community: An Empirical Investigation," Sport Marketing Quarterly, 17, pp. 20-29.

Fowler, G. A. (2015). Apple Music Is Here, But Is Streaming Right For You? Retrieved from http://www.wsj.com/articles/apple-music-is-here-but-is-streaming-right-for-you-1435625669

Giletti, Theodore. (2012). Why Pay If It's Free. *Media@LSE.* Print.

Graham, J. (2013, July 17). Who's listening to SoundCloud? 200 million. Retrieved from http://www.usatoday.com/story/tech/columnist/talkingtech/2013/07/17/whos-listening-to-soundcloud-200-million/2521363/

Immordino-Yang, M. H., Christodoulou, J. A., & Singh, V. (2012), "Rest is not Idleness: Implications of the Brain's Default Mode for Human Development and Education". Perspectives on Psychological Science, 7(4), 352-364.

International Federation of Phonographic Information (2015), IFPI Digital Music Report 2015 Retrieved from www.ifpi.org/

Molteni, L., & Ordanini, A. (2003). Consumption Patterns, Digital Technology And Music Downloading. *Long Range Planning,* 389-406.

Nielsen Media and Entertainment (2016), The Total Audience Report: Q4-2015, Retrieved from http://www.nielsen.com/us/en/insights/reports/2016/the-total-audience-report-q4-2015.html

Prensky, M. (2001), Digital Natives, Digital Immigrants *On the Horizon* (NCB University Press, Vol. 9 No. 5

Spotify About Us (n.d.) Retrieved from https://www.spotify.com/us/about-us/contact/

Ryder, N. B. (1965). The Cohort as a Concept in the Study of Social Change. American Sociological Review, 30(6), 843-861.

Topic: Radio Industry. (n.d.). Retrieved from http://www.statista.com/topics/1330/radio/

Wesner, M. S., & Tammy, M. (2008). Boomers and Millennials Have Much in Common. Organization Development Journal, 26(3), fall 2008, 89.

Helpful Resources

Andersen, B., & Frenz, M. (2010). Don't blame the P2P file-sharers: The impact of free music downloads on the purchase of music CDs in canada. *Journal of Evolutionary*

Bearden, W., & Netemeyer, R. (1999). Interpersonal Orientation: CAD Scale. In *Handbook of marketing scales: Multi-item measures for marketing and consumer behavior research* (2nd ed.). Thousand Oaks, Calif.: Sage Publications.

Borja, K., Dieringer, S., & Daw, J. (2015). The effect of music streaming services on music piracy among college students. *Computers in Human Behavior, 45*, 69-76.

Bonner, S., & O'Higgins, E. (2010). Music piracy: Ethical perspectives. *Management Decision, 48*(9), 1341-1354.

Coleman, J. T., & Castleberry, S. B. (2012). Should I give grandma an iPod for Christmas? music consumption behavior in the digital age. *Journal of Business Case Studies (Online), 8*(3), 335.

Dou, W., Wang, G., & Zhou, N. (2006). GENERATIONAL AND REGIONAL DIFFERENCES IN MEDIA CONSUMPTION PATTERNS OF CHINESE GENERATION X CONSUMERS. *Journal of Advertising, 35*(2), 101-110.

Favaro, D., & Frateschi, C. (2007). A discrete choice model of consumption of cultural goods: The case of music. *Journal of Cultural Economics, 31*(3), 205-234.

Fowler, G. (2015). Apple Music Is Here, But Is Streaming Right For You?

Guerzoni, M., & Nuccio, M. (2014). Music consumption at the dawn of the music industry: The rise of a cultural fad. *Journal of Cultural Economics, 38*(2), 145-171. doi:http://dx.doi.org/10.1007/s10824-013-9205-y

Harrison, J., & RYAN, J. (2010). Musical taste and ageing. *Ageing and Society, 30*(4), 649-669. doi:http://dx.doi.org/10.1017/S0144686X09990778

Martin, B. A. S., & McCracken, C. A. (2001). Music marketing: Music consumption imagery in the UK and new zealand. *The Journal of Consumer Marketing, 18*(4), 426-436

Meyer, T., Donohue, T., & Ortiz, R. (2009). The challenges presented by the mobile phone market. *International Journal of Technology, Knowledge and Society, 5*(6), 19-28. Retrieved from

http://ezproxy.siena.edu:2048/login?url=http://search.proquest.com/docview/868012475?accountid=13858

Montoro-pons, J., & Cuadrado-garcía, M. (2011). Live and prerecorded popular music consumption. *Journal of Cultural Economics, 35*(1), 19-48.

Plowman, S., & Goode, S. (2009). FACTORS AFFECTING THE INTENTION TO DOWNLOAD MUSIC: QUALITY PERCEPTIONS AND DOWNLOADING INTENSITY. *The Journal of Computer Information Systems, 49*(4), 84-97. Retrieved from

Prieto-Rodriguez, J., & Fernandez-Blanco, V. (2000). Are popular and classical music listeners the same people? *Journal of Cultural Economics, 24*(2), 147-164.

Review of the death and life of the music industry in the digital age. (2014). *European Journal of Communication*
, 29(5), 645.

Shankar, A. (2000). Lost in music? subjective personal introspection and popular music consumption. *Qualitative Market Research, 3*(1), 27-37

Styvén, M. (2007). The intangibility of music in the internet age. *Popular Music and Society, 30*(1), 53-74,133.

Thompson, B. (2015). LIVE STREAMING FROM THE 2015 MUSIC LIBRARY ASSOCIATION ANNUAL MEETING. *Music Reference Services Quarterly, 18*(2), 120.

Weijters, B., & Goedertier, F. (2015). Understanding today's music acquisition mix: A latent class analysis of consumers' combined use of music platforms. *Marketing Letters,*

Weijters, B., Goedertier, F., & Verstreken, S. (2014). Online music consumption in today's technological context: Putting the influence of ethics in perspective. *Journal of Business Ethics, 124*(4), 537-550.

Wlömert, N., & Eggers, F. (2014). Predicting new service adoption with conjoint analysis: External validity of bdm-based incentive-aligned and dual-response choice designs. *Marketing Letters,*

Zaman, B. (2008). Introducing contextual laddering to evaluate the likeability of games with children. *Cognition, Technology & Work, 10*(2), 107-117.