Jazz Subgenres and Individual Music Tastes: Increasing Jazz Listening Among Teenagers by Connecting Musical Preferences

Abstract

The declining popularity of jazz music presents a major problem for high-school level jazz ensembles in that teenagers are missing out on a major opportunity to improve their musicianship by not listening to jazz. Far from being entirely complex and unapproachable, jazz is divided into a diverse array of styles that bear many similarities to today's music genres. This research aims to discover correlations between teenagers' preexisting musical tastes and preferences of various jazz styles. A survey was administered to 230 high school music students in which participants were asked to list a song that exemplifies their music tastes and rate thirteen jazz samples of varying musical characteristics on a scale of 1 to 5. Student-reported example songs were analyzed for musical traits like tempo and complexity, and this data was compared with jazz sample ratings to discover correlations. Hopefully, findings from this paper will inform methods of recommending jazz to newcomers; tailoring song recommendations to individual preferences in order to maximize enjoyment could be a viable way to increase jazz listenership among teenagers.

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Jazz Subgenres and Individual Music Tastes: Increasing Jazz Listening Among Teenagers by Connecting Musical Preferences

Jazz music, once the most popular style of music in the nation, is often characterized as the quintessential American art form, having been born exclusively in America. However, since its heyday in the early to mid-20th century, jazz listenership in America has significantly declined. In the first half of 2017, jazz's share of overall album consumption in the U.S. music market was 2%, compared to rock's 14.3% and pop's 13.4%. Furthermore, sales of individual jazz songs made up only .9% of the overall market, making jazz the third least popular genre in America—in front of only new-age and children's music (BuzzAngle, 2017). Many scholars agree that an increase in musical complexity was the reason for jazz's loss of popularity; it is believed that many people stopped listening to jazz as the genre progressed from the big-band swing styles of the 1920s-40s, which were intended for dancing, to the more abstract sounds of bebop that emerged in the late 40s and developed throughout the 50s and 60s. Faster tempos and complex improvisation meant that bebop was less danceable, and therefore less accessible to the average listener, and thus jazz fell out of the realm of popular culture (Blake, 2016). As the popularity of rock music skyrocketed in the mid-1960s, many young individuals began to view jazz as antiquated. Ever since, despite numerous revival efforts, jazz remains to be a niche art form, outside the realm of popular culture.

The implications of jazz's declining popularity are significant. Jazz's listener base for music purchasing and concert attendance is aging, and therefore appealing to a younger generation is required to perpetuate the genre. Separately, in the context of music education, high school level jazz ensembles may suffer if their musicians aren't listening to jazz. Many jazz educators testify that, much as learning a new language requires hearing it, listening to jazz is

one of the greatest ways to improve one's musicianship (Bjerstedt, 2015; Jacobsen, 2016). This is because listening opens the gateway to transcribing, which is the process of writing down a melody or improvised solo note-for-note in order to improve musicianship by studying experienced players (Hinz, 1995). As high school jazz musicians aren't actively listening to jazz, they create a disparity between what they consider "school music" and "their music," thus missing out on an opportunity to improve their musicianship by connecting with the music they are performing (Thomas, 2015). Therefore, the primary aim of this study is to determine factors that might increase jazz listening among teenagers in high school level jazz ensembles. However, conclusions can also be used to increase jazz listening among all adolescents, regardless of jazz ensemble involvement.

Literature Review

Jazz scholarship has a robust community, but little formal research is aimed at expanding the popularity of the genre; much jazz research comes in the form of elaborate analyses of transcriptions and case studies of artists, such as in the work of Rusch, Sally, and Stover (2016). Rather, much of the efforts to revive the popularity of jazz come from the musicians themselves. One notable example is the work of pianist Jon Batiste, who aims to make jazz appeal to urban millennials through his so-called "love riots", where his band puts on spontaneous parades and concerts in streets, subways, parks, and other city environments. Batiste's aim is to give people exposure to jazz while connecting people through live performance. His strategy directly targets the fact that live music and concerts are making up an increasingly high proportion of music industry revenue (Graham, 2014).

Batiste's music itself is a unique blend of early New Orleans-style jazz and modern instrumentations and harmonies. Other prominent jazz musicians such as Robert Glasper, a pianist

from Houston, are working to infuse jazz with modern influences. Glasper blends jazz with genres such as R&B and hip-hop, emphasizing how both share jazz roots (Micallef, 2012). A similar approach is incorporated in the music of trumpeter Roy Hargrove, whose music incorporates soul and funk into jazz. Integrating other genres into jazz music to appeal to young audiences goes back to the 1970s and 80s, when musicians like Miles Davis and Herbie Hancock experimented with electronic, funk, rock, and hip-hop influences. Traditional jazz is still played and widely valued, but artists such as Batiste, Glasper, and Hargrove exemplify the constant efforts made by today's jazz musicians to modernize the genre and appeal to the popular audience.

In the field of music research, many studies exist pertaining to musical preferences and the factors that influence them. In one of the most prolific studies of this nature, Rentfrow, Goldberg, and Levitin (2011) concluded that all music falls within five factors: Mellow, Urban, Sophisticated, Intense, and Campestral. Jazz was categorized under the Sophisticated factor, alongside opera, classical, and world music. Another study by Delsing, Ter Bogt, Engels, and Meeus (2008) measuring the music tastes in Dutch adolescents categorized jazz into "elite" music, along with classical and gospel. An earlier study by Rentfrow and Gosling (2003) categorized jazz into being "reflective and complex". The problem with all of these studies is that they oversimplify jazz into a single categorization. Not all jazz is complex, excitable, or sophisticated; rather, jazz is split into a multitude of sub-genres and styles that range from simple to complex, from soft to loud, and from laid-back to intense. Looking at the study conducted by Rentfrow et al. (2011) as an example, jazz ballads with slow tempos exist that may be considered Mellow, and smooth and acid jazz from the 1980s and 1990s may be considered Urban. Furthermore, certain styles of Brazilian jazz could be considered Campestral, similar to the guitar-heavy singer-songwriter genre.

This research aims to address the gap caused by the overgeneralization of jazz by attempting to determine people's preferences of jazz across the genre's wide array of sub-genres and styles. The purpose of this research, therefore, is to explore the potential connection between teenagers preexisting preferences of music genres and their preferences of jazz subgenres that contain influences of their musical tastes. If correlations do indeed exist, a gateway may be opened into making jazz more accessible, and therefore more appealing, to the average teenage listener. The most similar study to this approach was conducted by Gordon and Gridley (2013), who focused on measuring preferences of samples of jazz songs over a range of complexities. The focus of the experiment was simply to determine how complexity factors into the enjoyment of jazz. The result was that of an inverted-U curve, demonstrating that the average listener prefers jazz songs of medium complexity; the fewest number of students preferred both the least and most complex samples.

Gordon and Gridley's study is similar to this research in that it attempts to gauge preferences of various styles of jazz music among non-jazz listeners. However, this research aims to expand upon Gordon and Gridley's findings by measuring jazz preferences across a variety of musical factors, other than just complexity. These preferences will then be compared with participant-reported pre-existing musical preferences to answer such questions as "do students who enjoy complex music enjoy complex jazz?" and "do students who enjoy predominantly electronic music enjoy jazz with electronic elements?" It is hypothesized that all correlations will exist between preexisting preferences and jazz preferences. Students who prefer soft music will prefer soft jazz, students who prefer complex music will prefer complex jazz, and so on. The following section will describe the methods used in implementing this study.

Methods

An electronic survey was created and administered to 230 students enrolled in music classes at a suburban high school in northern Illinois. Participants were asked to provide an example of a song that represents their music tastes. Then, participants were asked to rate their overall enjoyment of thirteen samples of jazz, selected from a range of sub-genres and styles and chosen based on certain musical characteristics. Student-reported songs were then categorized into genres and analyzed for various musical characteristics. Student music preferences were then analyzed alongside jazz preferences to discover potential correlations.

Song Selection

Thirteen distinct styles of jazz music were chosen based on historical significance and popularity. A song was then chosen to represent each style in consultation with a professional jazz musician. Selection of these songs was guided by several rules. First, an effort was made to select songs from prominent recordings created by influential artists, but that were not likely to have been heard by non-jazz listeners. Songs deemed recognizable by the average person who doesn't listen to jazz music (i.e. "In the Mood" for swing-era jazz) were ruled out, since participants were hypothesized to be more likely to prefer songs they have heard before; eliminating this bias provides more consistent data. Second, songs with vocals were ruled out to avoid the likelihood that participants prefer a song for its lyrics over its musical qualities. As the aim of this research is to connect preferences based on musical qualities alone, the presence of vocals had the potential to skew data. Both eliminating recognizability and omitting vocal music were adapted from the methodology of Rentfrow et. al. (2011).

In addition to popularity and vocals, other music-related factors contributed to the selection of song samples. Overall tempo, defined as the speed of a piece of music, was a key

factor; songs were chosen to represent a broad range of slow tempos to fast ones. The tonality of a song, defined as whether a song is major or minor, was another key factor. Average intensity was a third key factor, and a diverse range of relaxed to intense samples were chosen. Intensity was measured holistically, and ratings were based on the "roughness" of timbre, or tone quality, and the average perceived volume. Fourth, songs from a variety of complexities were chosen, and complexity was also assessed holistically; factors that influenced complexity included the number of chords and complexity of harmonies and rhythms. Finally, the "acousticness" of songs was considered, measuring the presence of electronic elements. This factor was included to address the question of whether participants who prefer electronic music also prefer jazz with electronic elements.

The thirteen samples chosen for use in this experiment in the order played to students are: "Confirmation" by Charlie Parker (1992), "Soul Station" by Hank Mobley (1960), "Don't Be That Way" by Benny Goodman (2007), "When Sunny Gets Blue" by McCoy Tyner (1964), "Miles Ahead" by Miles Davis (1957), "City Kids" by Tom Schuman (1983), "Giant Steps" by John Coltrane (1960), "Blue In Green" by Miles Davis (1959), "Big Dipper" by Thad Jones and Mel Lewis (2004), "Weft n' Warp" by Jamie Odell (2007), "Strasbourg St. Denis" by Roy Hargrove (2008), "Samba Triste" by Stan Getz and Charlie Byrd (2014), and "Too Cool" by Steven Grove (2004). See Appendix A to view each song's ratings according to the aforementioned musical characteristics. Note that the publication dates listed above may not match the year of the original recording listed in Appendix A.

Creation of the Survey

A survey was deemed the best method of collecting data for the sake of maximizing the sample population. Google Forms was chosen because it was free and enabled easy analysis

using Google Sheets. Because Google Forms doesn't have the option to upload and play audio files in surveys, sample clips were linked to the survey via YouTube. Mp3 samples of each song were trimmed using an online tool to lengths averaging around 25 seconds. Selections from each song were taken only from the main melody, and not from any improvisation. Trimmed samples were then converted to mp4 files and assigned a random number ranging from 1 to 13 for identification purposes. Samples were then uploaded to YouTube with no title or album art so that students have no form of identifying the song or artist.

The survey constituted of three parts. The first part asked students to provide an example of a song that represents their musical tastes. Students provided the genre, title, and artist of their song. Optionally, students could list the album title of their song to help the researcher locate the specific recording if multiple versions exist. Then, students were asked to listen to the 13 samples of jazz and rate their overall enjoyment of each on a scale of 1 to 5, with a 1 marked "hated it" and 5 marked "loved it". The decision to limit respondents to a five-point scale was made in order to maintain simplicity for participants. The final question asked students to report any involvement in a jazz band or choir, either inside or outside of school. Answers were completely anonymous, and students could only take the survey once. For a full transcript of the survey and its questions, see Appendix B.

Sample Population

The sample population used for this survey consisted of every student enrolled in a music-related fine arts class—including band, choir, and orchestra—in a medium-sized suburban high-school in northern Illinois. In total, 10 classes were sampled for a total of 230 students. This sample population was chosen for several reasons. Limiting the sample population to only 230 participants reduced the number of student-reported "example songs" that the researcher had to

listen to and analyze. making the research more feasible while still maintaining the high number of participants needed for conclusive data. Furthermore, the ability to take the survey in class is more convenient for the participants; since the survey is lengthy and requires students to listen to audio clips, having an in-class survey means students do not have to take the survey on their own time, guaranteeing a sizable population of respondents. Lastly, the sample population was chosen to reflect the overall purpose of the research. Since the aim is to increase jazz listening in teenagers, only teenagers were sampled; likewise, since this research works to benefit music ensembles, only music students were sampled.

Research Environment and Procedure

The survey was taken in either the school band room or the choir room, depending on the class of the participant. Both rooms are large and relatively cluttered and contain music-related posters and decorations. Students were allowed to take the survey either on their phones or school-provided laptops for the sake of convenience. The survey was designed to allow participants to go at their own pace in order to let students take their time deciding on their ratings for each sample, as well as giving students the flexibility to replay samples; therefore, as opposed to playing samples on a loudspeaker, students used headphones. Students provided their own headphones or had the choice of borrowing from school-provided ones, as obtaining over 35 pairs of similar headphones was not feasible. Students in each class took the survey simultaneously to save time on behalf of the teachers and the researcher. The researcher was present in all but two classes to administer the survey and field questions. On average, the survey took about 15 minutes.

Methods of Analysis

After the data was collected and transferred to a spreadsheet, each of the 230 student-reported songs were sorted into genres based on their classifications in Apple Music. The Apple Music database was used to provide a consistent means of tagging songs by genre without introducing bias or human error on behalf of the researcher. In several instances, genre names were generalized into others for consistency; as an example, one "hardcore rap" song was placed into hip-hop/rap, and "musica tropical" was placed into Latin.

Next, each of the 230 songs were listened to and given ratings for tempo, tonality, acousticness, intensity, and complexity, each on the same scale that jazz samples were rated when being chosen for the survey. Gaining this information enabled the data to be analyzed in two separate ways: an analysis by musical characteristics and an analysis by genre. The former allowed for a more specific look into preferences, whereas the latter was more generalized. Both methods hold value in determining correlations between student music preferences and preferences of jazz subgenres. See Appendix C for a full list of student-reported songs, along with their respective genre classifications and data for musical characteristics. The following section discusses the results for both analyses and attempts to explain any correlations that may exist.

Results

Musical Characteristic Analysis

For each of the measured musical characteristics (tempo, tonality, acousticness, intensity, and complexity), a bar graph was created to plot the average ratings of the jazz samples against the range of that characteristic in student-reported songs. The standard error of the mean for each data set was calculated and added to each bar as a method of showing the precision of the data to

aid in making conclusions. In addition to the aforementioned five characteristics, the presence of jazzy elements in student-reported songs and student involvement in jazz band is considered in this section. Lastly, recall that Appendix A contains the tempo, tonality, acousticness, intensity, and complexity values for each of the thirteen jazz samples played in the survey, which are used in the subsequent analyses.

For tonality, respondents who listed songs in major keys significantly preferred the jazz samples that were in also major keys over minor ones. Those who listed minor songs, however, also significantly preferred the major samples, thus eliminating any potential correlation other than that major samples were preferred the most by everyone. Refer to Figure 1 for a graph of tonality preferences.

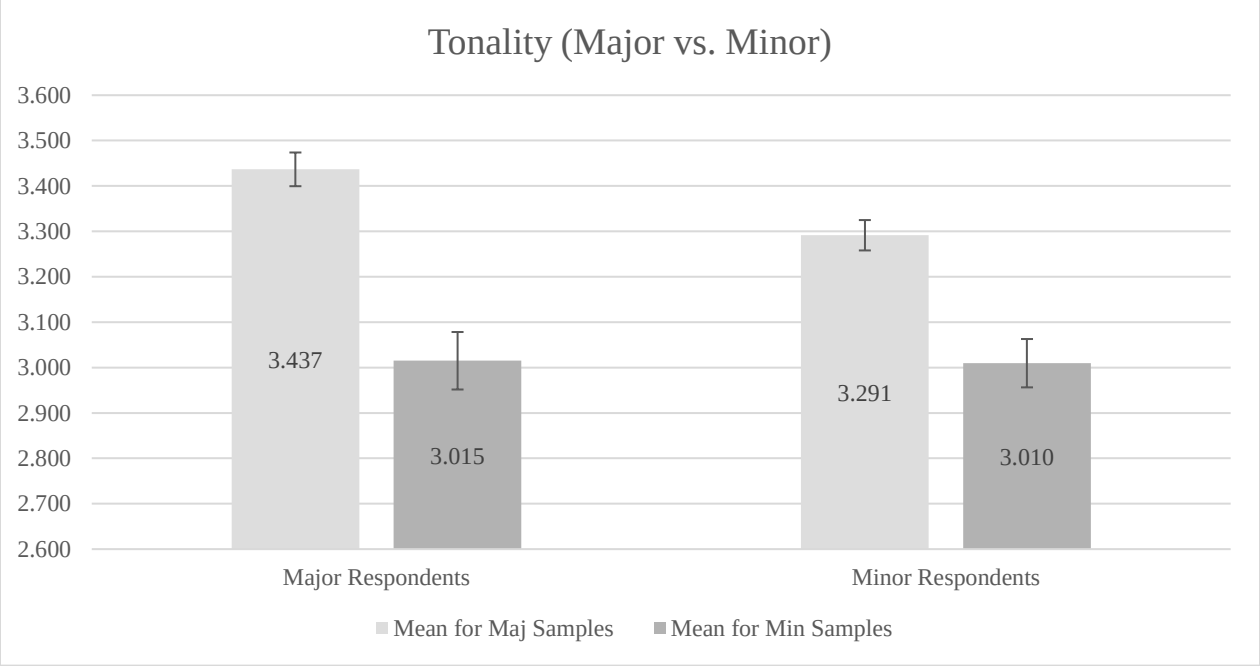

Figure 1. Tonality preferences.

For tempo, respondents who listed slow, medium, and fast songs all enjoyed the medium-tempo samples the highest. Therefore, no correlations exist other than that medium-tempo jazz samples are preferred the most. Refer to Figure 2 for a graph of tempo preferences.

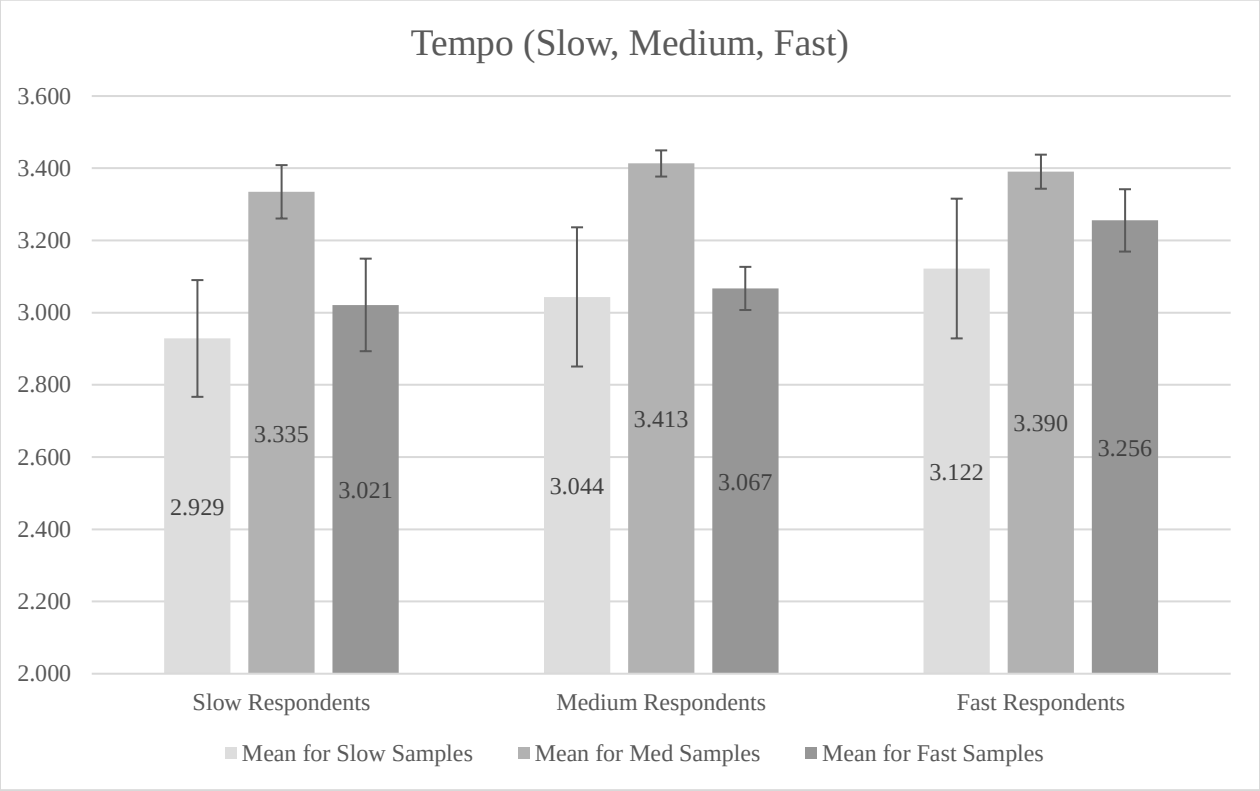

Figure 2. Tempo preferences.

For complexity, regardless of whether the respondent listed a simple, medium, or complex song, all respondents preferred the simplistic samples most on average. However, this trend is less clear for those who listed complex songs, as there was more overlap in the standard error bars. Refer to Figure 3 for a graph of complexity preferences.

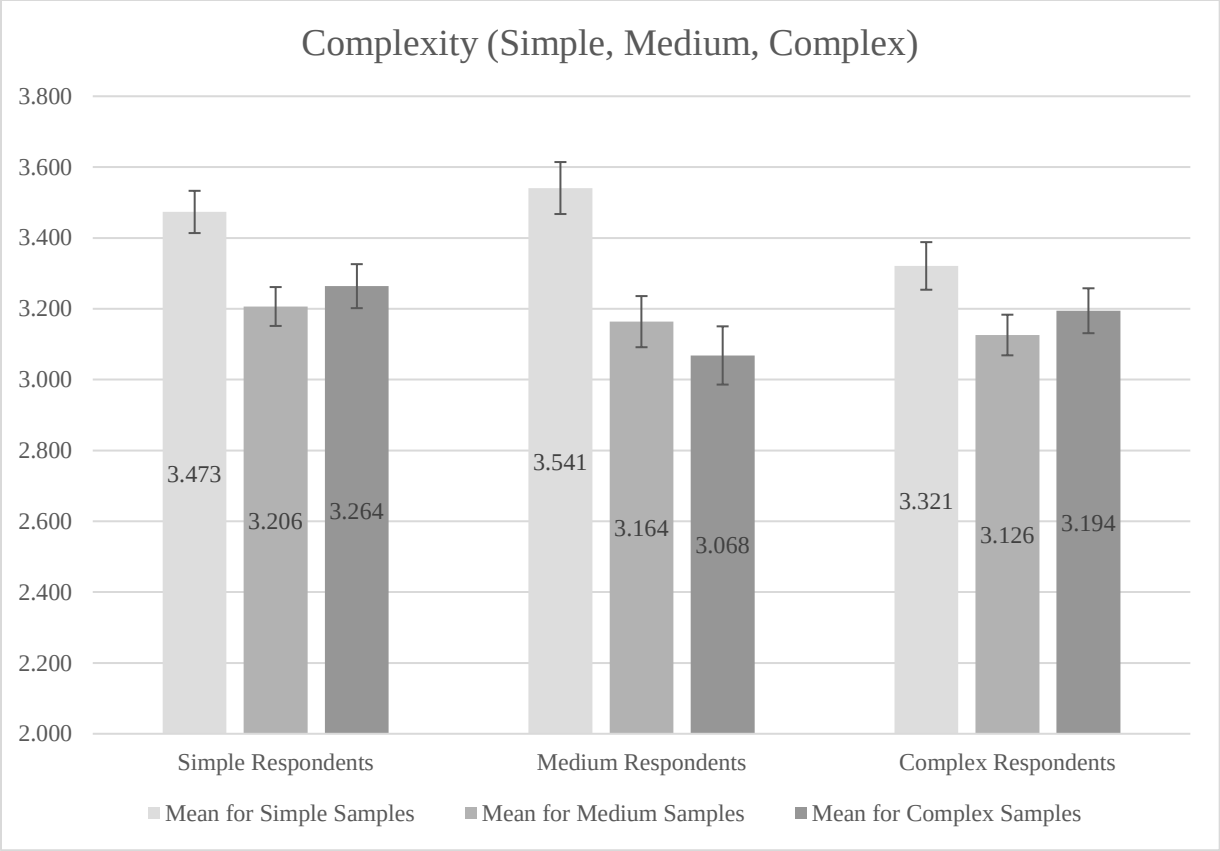

Figure 3. Complexity Preferences.

For acousticness, respondents who preferred solely acoustic samples significantly preferred the acoustic jazz samples. However, those who listed samples with integrated electronic elements, such as electric guitar, or fully electronic samples, preferred the jazz samples with integrated electronic elements over the acoustic samples. For those who listed fully electronic songs, the preference of electronic jazz was extremely narrow; however, it can be concluded that a correlation does exist for acousticness. Refer to Figure 4 for a graph of acousticness preferences.

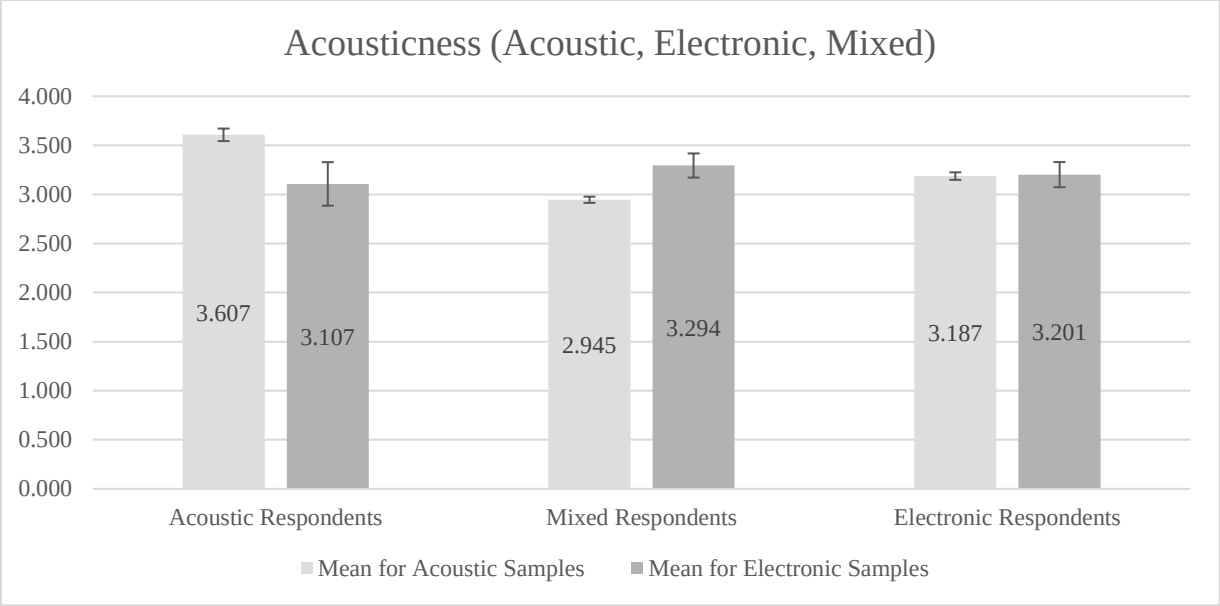

Figure 4. Acousticness preferences.

For intensity, those who listed relaxed, medium, and intense samples all preferred the medium-intensity jazz samples. Therefore, no correlation exists as hypothesized. However, it is interesting to note that the intense samples were enjoyed the most by those who listed intense songs, and the relaxed samples were enjoyed the most by those who listed relaxed songs. Refer to Figure 5 for a graph of intensity preferences.

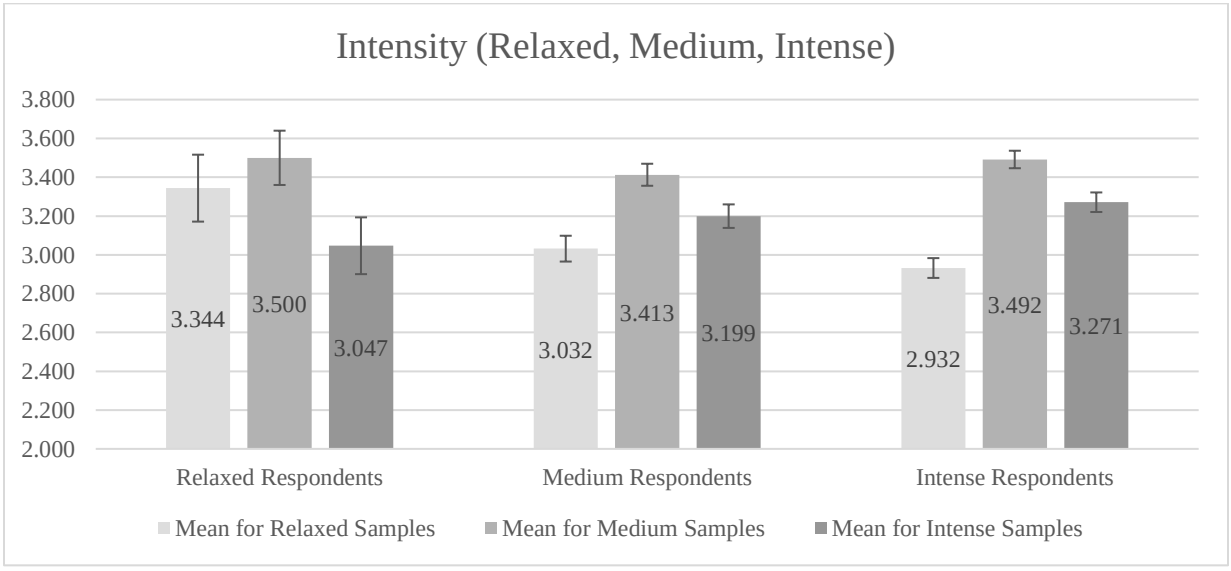

Figure 5. Intensity preferences.

Separately, a factor deemed “jazziness” was analyzed to measure the presence of jazzy elements in student-reported songs. Only 14 out of the 230 songs were considered to have jazz elements, which included factors such as the presence of an improvised saxophone solo, big band arranging, jazz harmonies, and swing. Those who listed samples with jazz elements had a higher average rating for all samples together than those who didn’t. Refer to Figure 6 for a graph of how jazziness influences preferences.

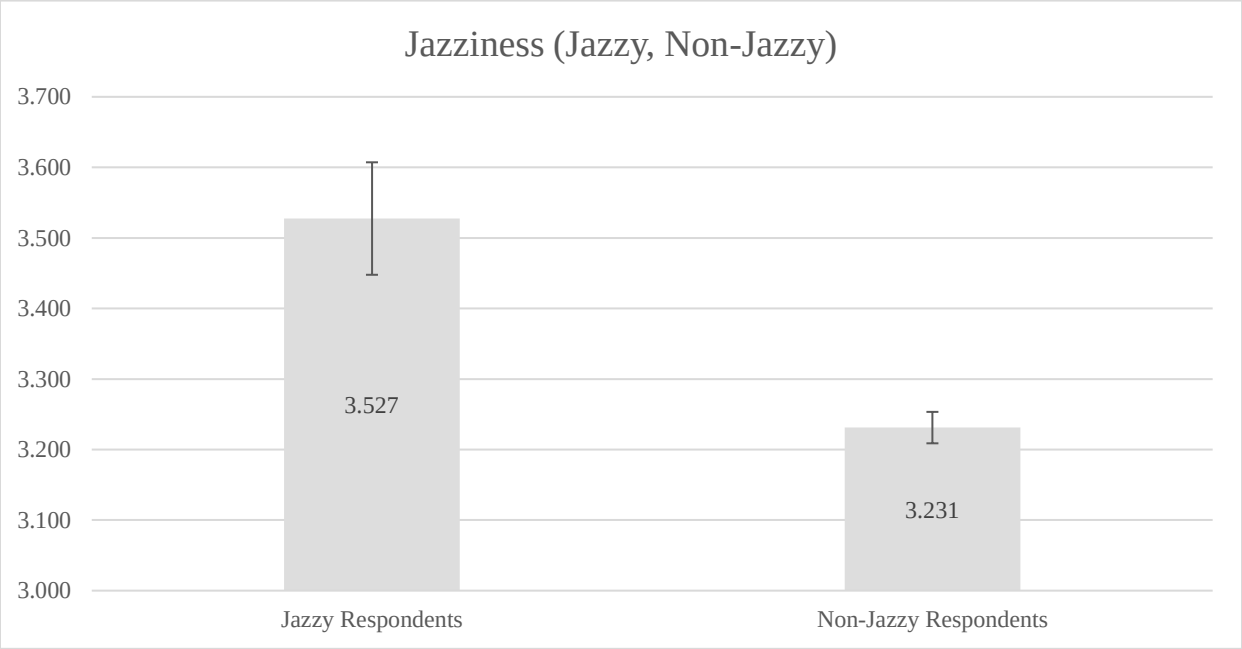

Figure 6. “Jazziness” preferences.

Lastly, although not a musical characteristic, respondents who reported to be involved in a jazz band or jazz choir, either inside or outside of school, had a higher average rating for all samples combined. Refer to Figure 7 for a graph of how student involvement in jazz ensembles influences musical preferences.

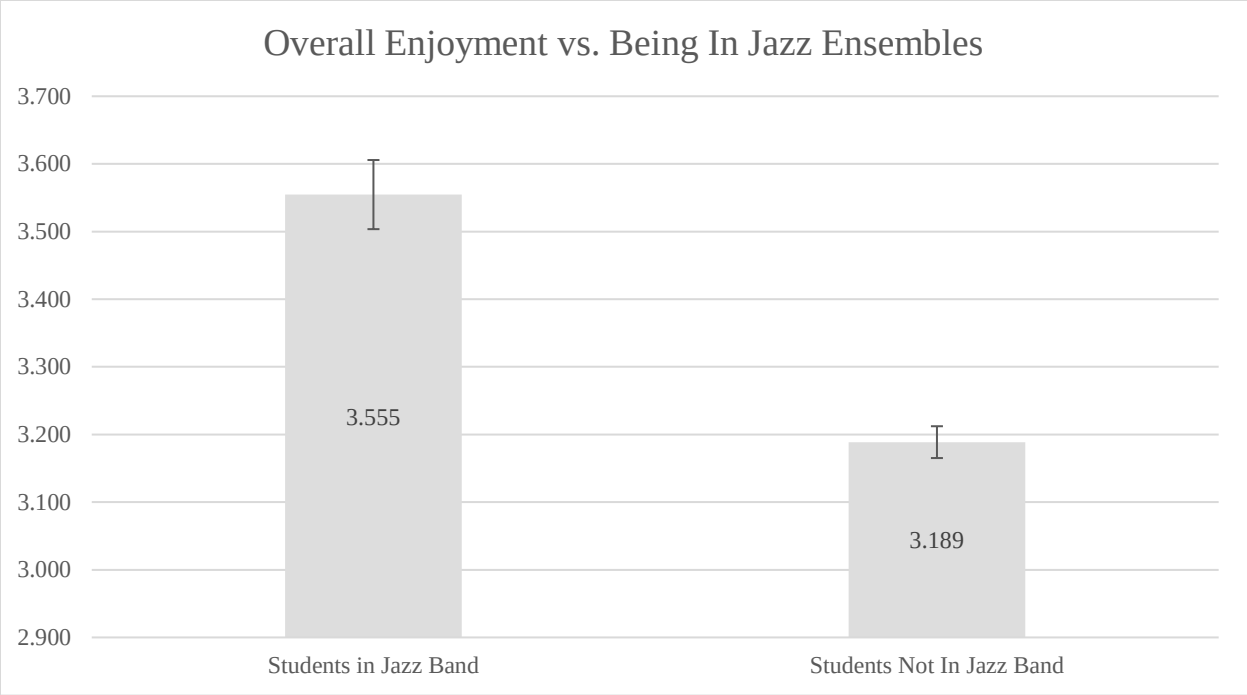

Figure 7. The effect of student involvement in jazz ensembles on preferences.

Genre Analysis

Having split up the 230 student-reported songs into their respective genres based on their Apple Music classifications, a graph was made for each genre to depict preferences of the thirteen jazz samples. Using data collected from the student-reported songs, a description of the typical song in each genre was made, and these traits were compared to the most and least preferred jazz samples in each genre to discover potential correlations. Only genres represented by five or more respondents were included in the analysis because anything smaller was considered too inconclusive**.** Overall, it is worth noting that "Strasbourg St. Denis" was the most preferred sample by a significant margin, and "Blue In Green" and "Giant Steps" were the two least preferred. Below, in Figure 8, a graph is presented with the overall average ratings from 1 to 5 for each sample.

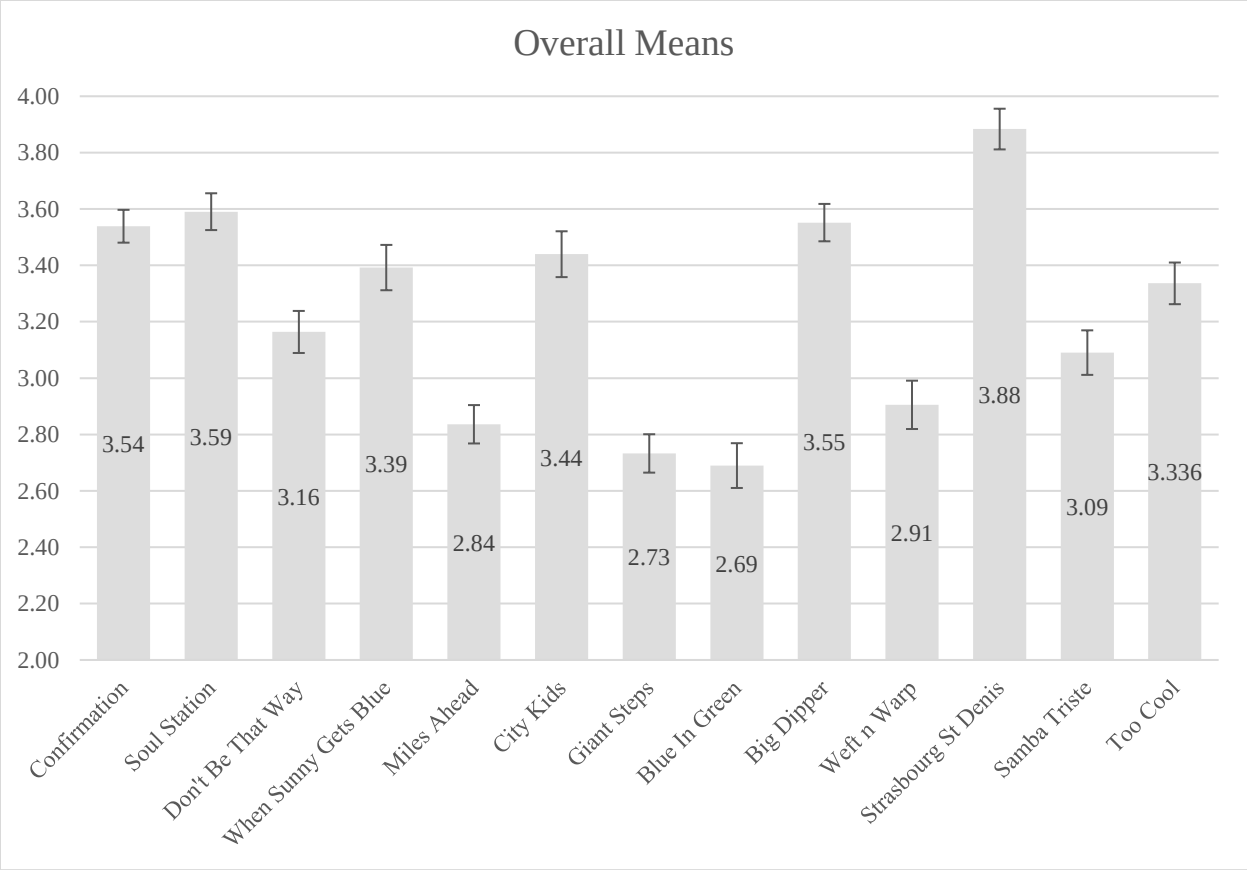

Figure 8. Overall sample preferences for all students.

Rock listeners rated “Strasbourg St. Denis” the highest, followed by “Soul Station” in a close second. These samples connect with the average rock song in that they are major, mainly simple, and of a medium tempo. The two lowest-rated samples were “Giant Steps” and “Miles Ahead”. “Giant Steps” differed from the average rock song in that it is complex and fast, and “Miles Ahead” differed in that is soft and relaxed. See Figure 9 for a graph of rock listeners’ preferences.

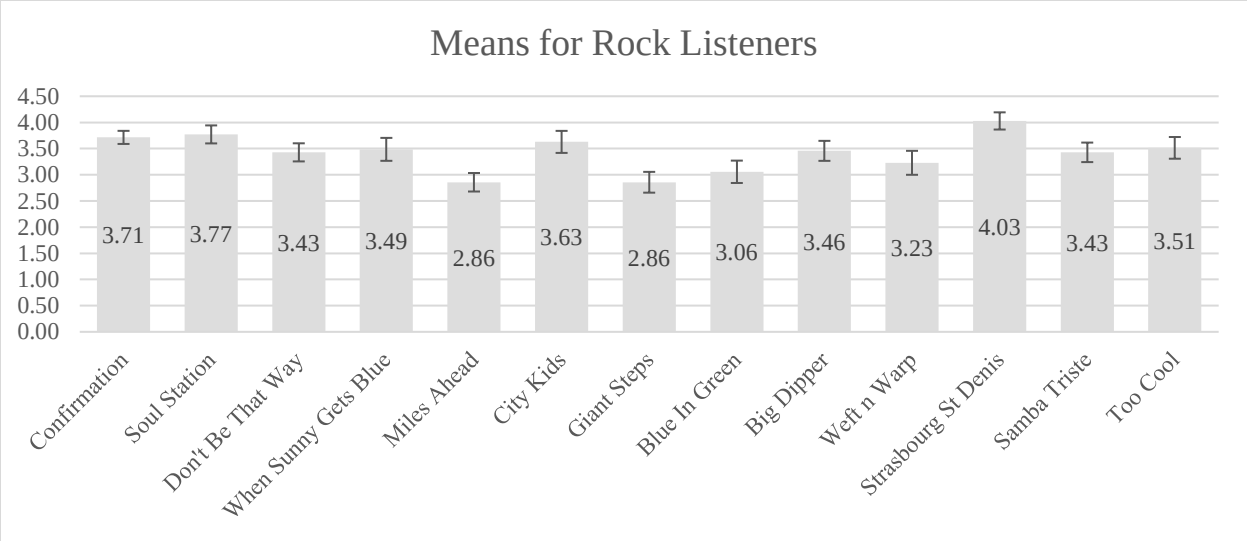

Figure 9. Average preferences for rock listeners.

Pop listeners' ratings experienced much less variation among the most-preferred samples, which reflects on the fact that the pop genre is diverse and includes a broad range of characteristics. "Strasbourg St. Denis" was narrowly the highest rated, likely because of its simplicity. Likewise, "Blue In Green" was the lowest rated, probably because of its low intensity and slow tempo. The average pop song is medium for both intensity and tempo. See Figure 10 for a graph of pop listeners' preferences.

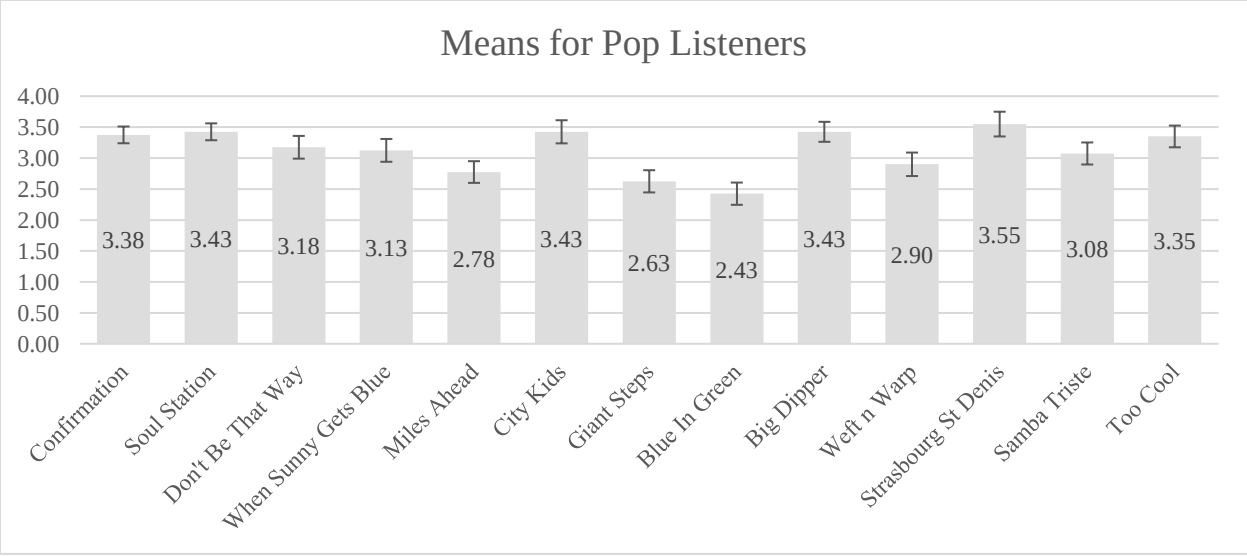

Figure 10. Average preferences for pop listeners.

Alternative respondents' ratings closely resemble the overall trend graph seen in **Figure 8** in that "Strasbourg St. Denis" was enjoyed the most, and "Giant Steps" and "Blue In Green" the least. "Strasbourg St. Denis" connects with the average alternative song by being simple and having a medium tempo. However, there was little variation in preferences. Similar to pop music, the alternative genre varies greatly in intensity, complexity, and tonality. See Figure 11 for a graph of alternative listeners' preferences.

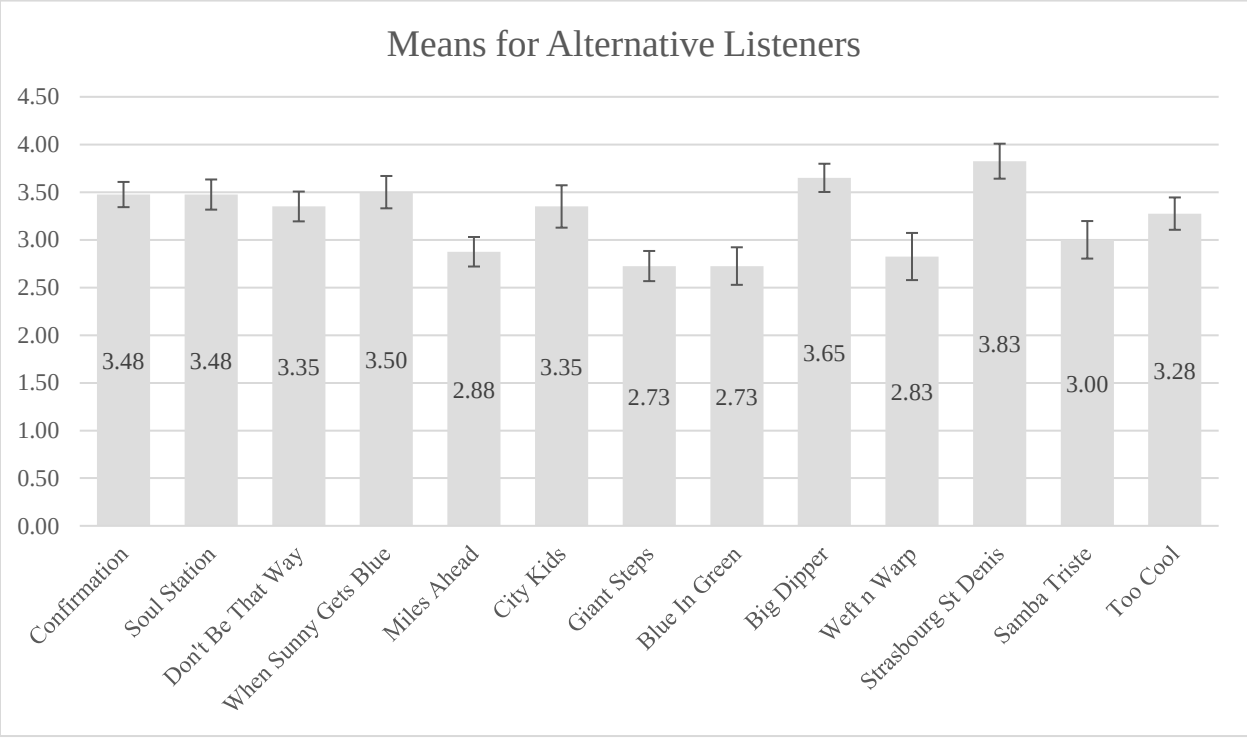

Figure 11. Average preferences for alternative listeners.

Hip-hop/rap respondents' ratings mirrored general trends, as "Strasbourg St. Denis" was enjoyed the most by a significant margin. A medium tempo is the only connecting factor in this preference. Rap respondents enjoyed "Don't Be That Way" the least out of any genre, likely due to its simplicity and major tonality. See Figure 12 for a graph of hip-hop/rap listeners' preferences.

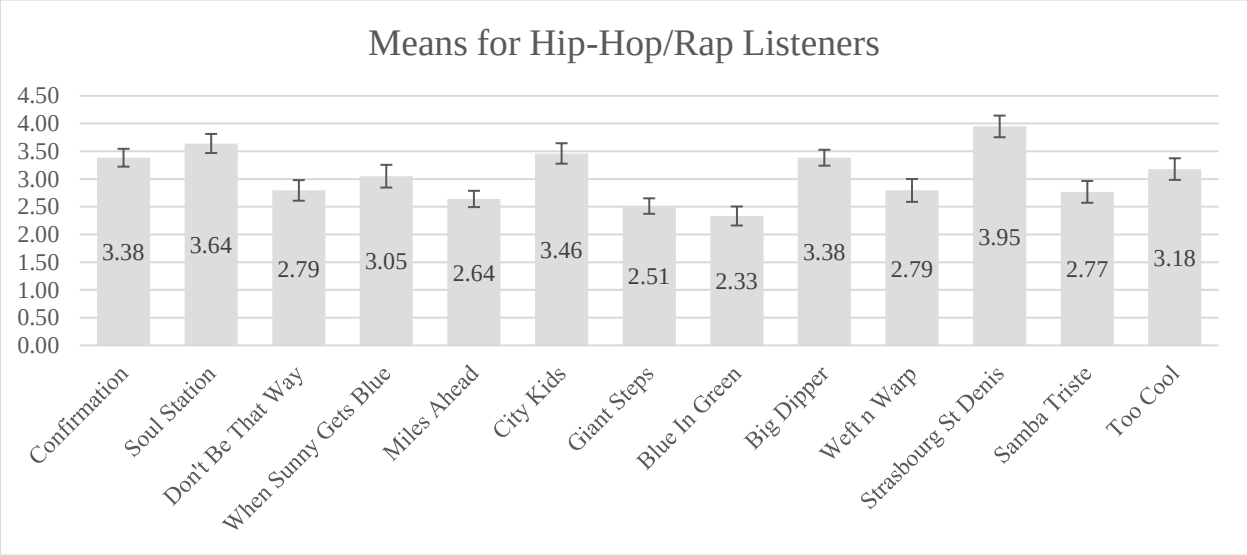

Figure 12. Average preferences for hip-hop/rap listeners.

Country listeners preferred “Strasbourg St. Denis” the most and “Giant Steps” and “Blue In Green” the least, therefore mirroring general trends. “Strasbourg St. Denis” closely matches the average country song, which is major, medium-tempo, simple, and medium-intensity. Of significance is that “Weft n’ Warp” was preferred the least by country listeners, likely due to its high complexity and electronic elements. See Figure 13 for a graph of country listeners’ preferences.

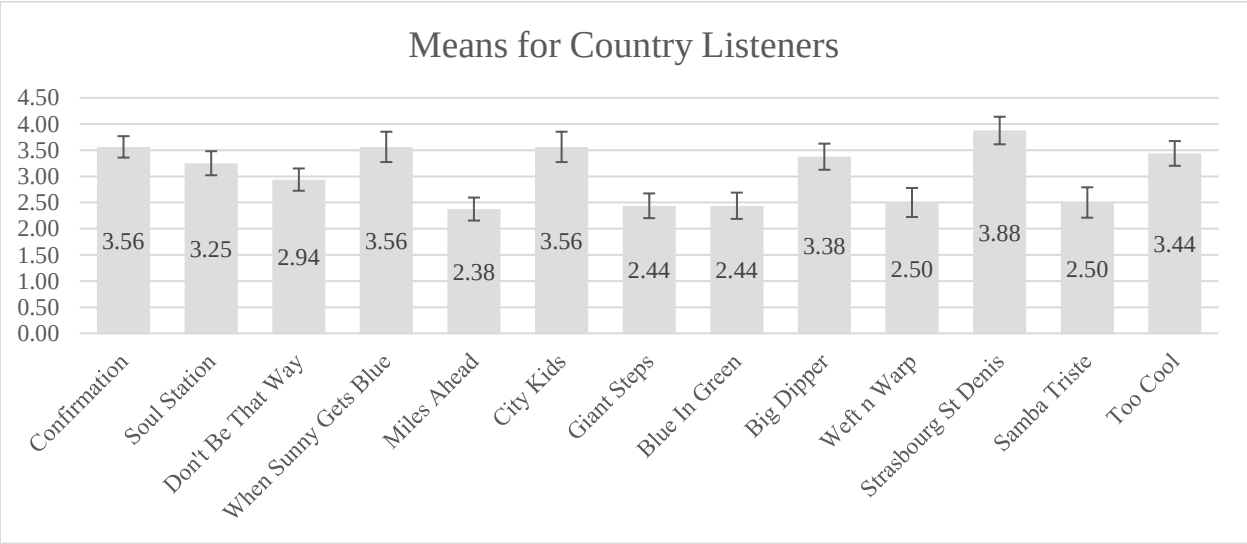

Figure 13. Average preferences for country listeners.

R&B/Soul listeners tied in preferring “Big Dipper” and “Strasbourg St. Denis” the most, with a medium tempo being the only connecting factor, although there was consistent overlap due to its small number of respondents. Of significance is that “Blue In Green” was liked by R&B/Soul listeners more than listeners of any other genre by a wide margin. See Figure 14 for a graph of R&B/Soul listeners’ preferences.

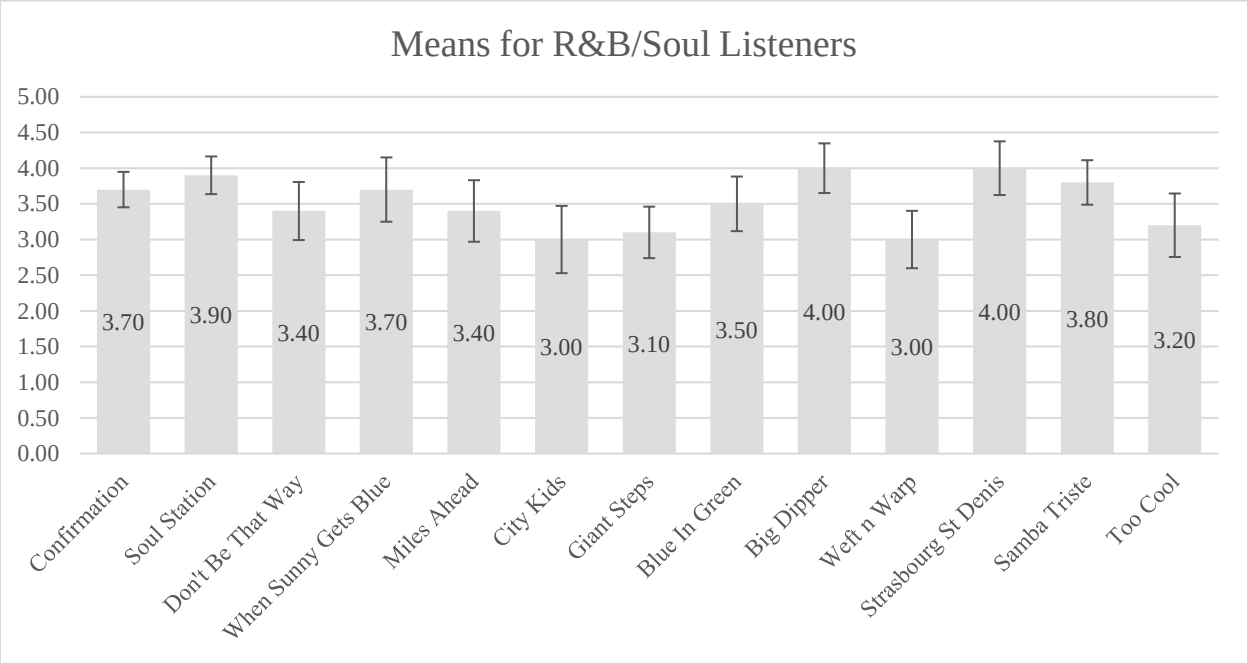

Figure 14. Average preferences for R&B/Soul listeners.

Electronic listeners tied in preferring “City Kids” and “Strasbourg St. Denis” the most, with the only connecting factor to the average electronic song being their major tonalities. “Weft n’ Warp” was rated highest in electronic respondents than any other genre, likely due to the fact that the song is fully electronic and closely resembles songs from the electronic genre. Similarly, Dance and Electronic tied in liking “City Kids” the most. See Figure 15 for a graph of electronic listeners’ preferences.

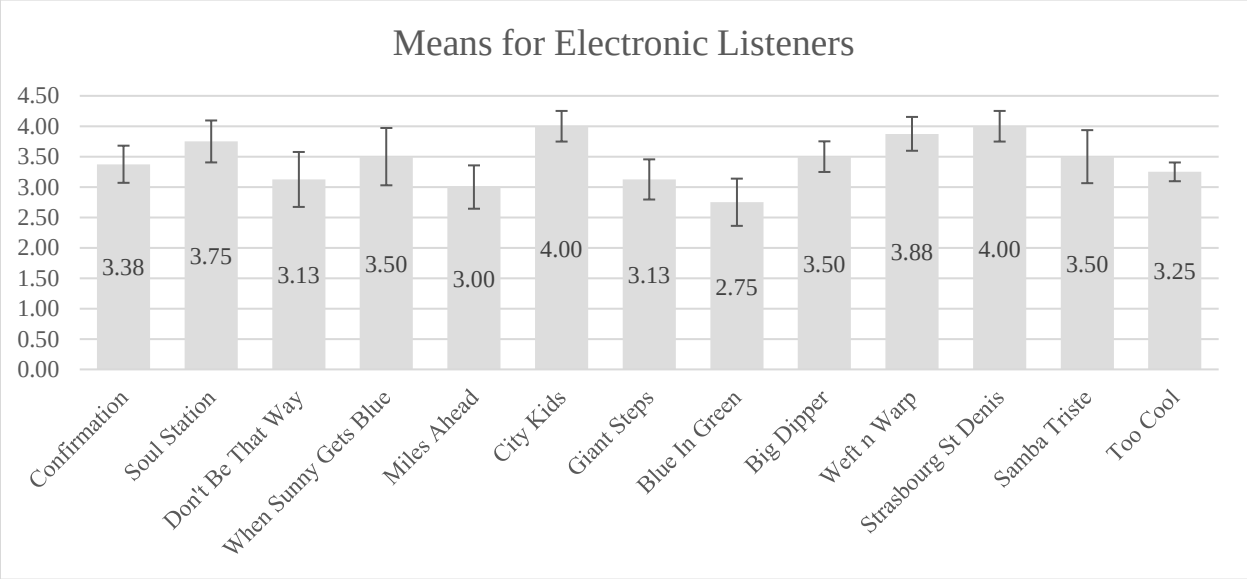

Figure 15. Average preferences for electronic listeners.

Dance listeners followed general trends in preferring “Strasbourg St. Denis” the most and “Blue In Green” the least. “Blue In Green” was liked the least by dance listeners likely because of its slow tempo and low intensity. None of the qualities of the average dance song correlated with “Strasbourg St. Denis”. See Figure 16 for a graph of dance listeners’ preferences.

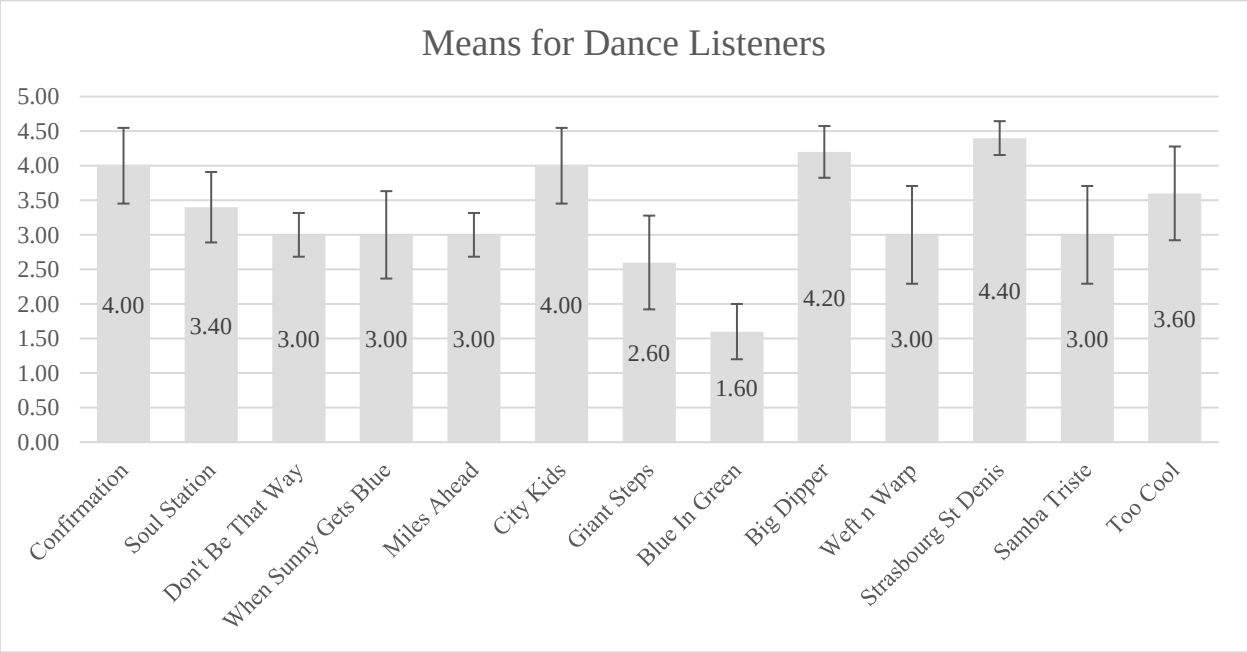

Figure 16. Average preferences for dance listeners.

Metal listeners defied general trends by preferring "When Sunny Gets Blue" the most by a narrow margin. This is surprising due to the slow tempo and relaxed intensity of the sample, whereas it was expected that metal listeners would prefer more intense songs. However, this isn't conclusive as the standard error bars overlap significantly throughout. See Figure 17 for a graph of metal listeners' preferences.

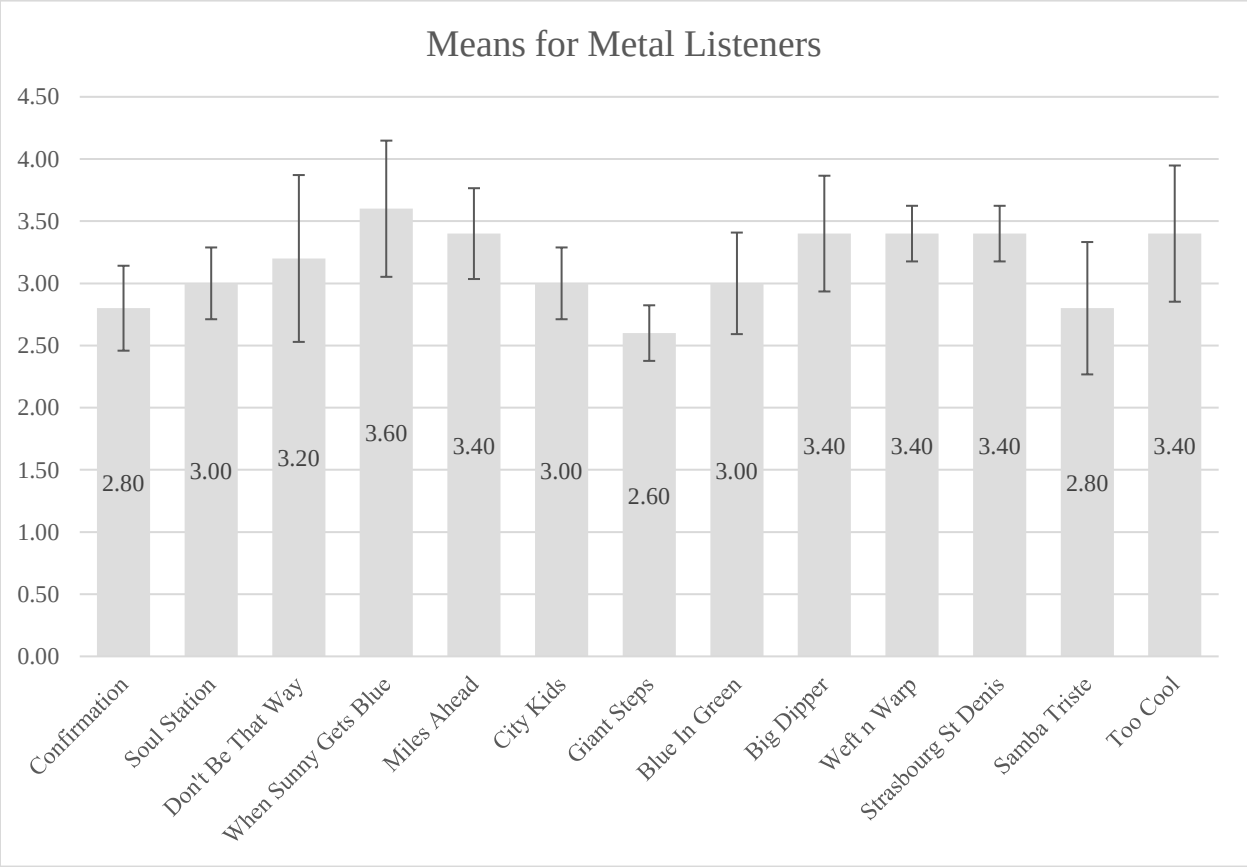

Figure 17. Average preferences for metal listeners.

Lastly, K-pop listeners liked "Big Dipper" the most, which connected with the average K-pop song by being relatively intense and having a medium tempo. Similar to dance and metal, the error bars in the K-pop data overlap frequently, meaning the data isn't very strong and requires further testing. See Figure 18 for a graph of K-pop listeners' preferences.

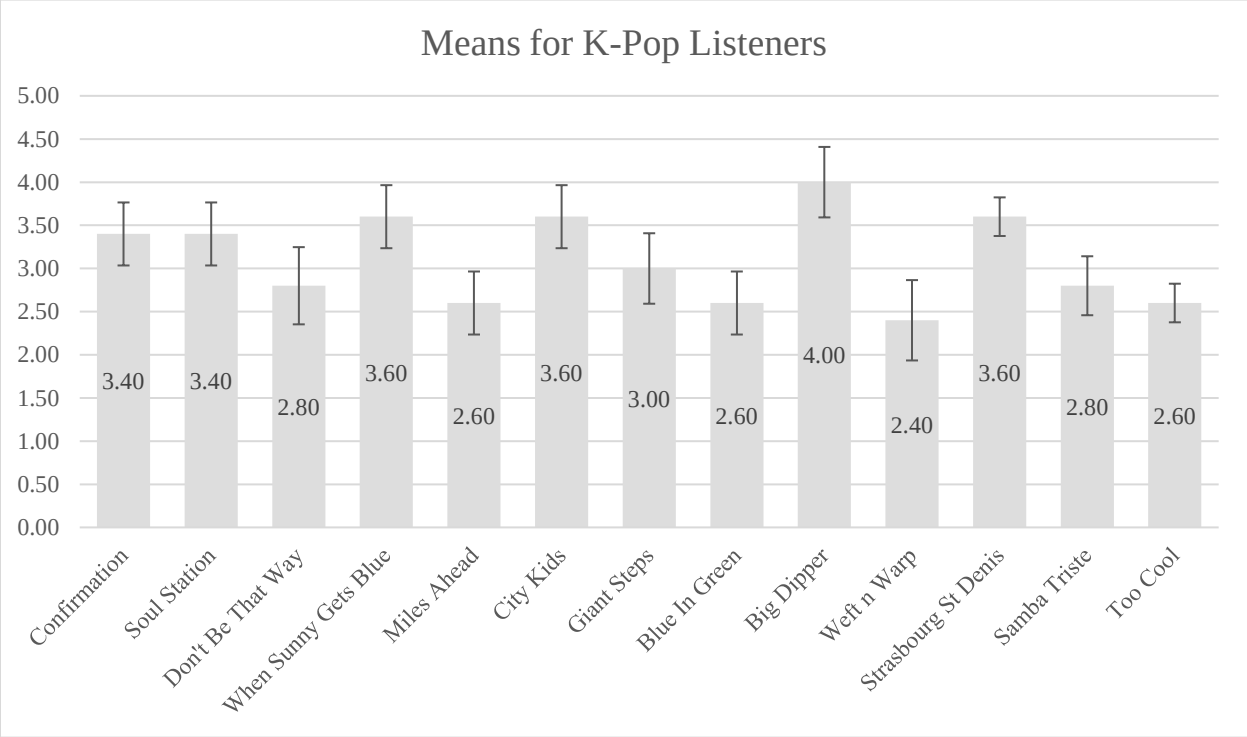

Figure 18. Average preferences for K-pop listeners.

Conclusions

All respondents tended to prefer highest the samples with a major tonality and medium tempo, intensity, and complexity, thus eliminating any potential correlations. However, one initial hypothesis was proven correct in that those who prefer acoustic music prefer acoustic jazz, and those who prefer mixed or fully electronic music prefer jazz with incorporated electronic elements. Furthermore, students who listed songs with jazzy elements as well as students who reported having involvement in a jazz ensemble had a higher cumulative rating for all samples. The genre analysis demonstrated that common trends in sample preference persisted; “Strasbourg St. Denis” and “Blue In Green” were frequently the most and least enjoyed samples, respectively. This both proved and disproved several initial assumptions, which is discussed further in the following section.

Discussion

Firstly, it is worth noting that the assumption which formed the basis of this research was proven correct by the data; this research assumed that jazz listenership is extremely low among teenagers, and only 4 out of 230 total respondents listed a song that qualifies as jazz to represent their music tastes. It is also worth noting that "Strasbourg St. Denis", consistently the highest-rated sample, contains a major key, medium tempo, medium complexity, and medium intensity; all of these factors were enjoyed unanimously in the musical characteristic analysis. The consistent high performance of this song reflects upon Roy Hargrove's intention to make jazz appeal to the modern ear, as discussed in the introduction. The song features a soulful groove, catchy melody, and simple, repetitive chord progression that aligns it with much of today's popular music. While it was hypothesized that such a song would rate highly among listeners of genres such as pop and country, it wasn't expected that it would be the favorite of rap and rock listeners, since such music is typically more complex and hard-driven.

Several significant limitations exist within this study that inherently lower the conclusiveness of this data. One limitation is that several genres within the genre analysis, namely dance, metal, and K-pop, contained too few respondents to make definite conclusions. While genres such as hip-hop/rap and pop had around 40 student-reported songs to analyze, each of the aforementioned three only had 5. Furthermore, several genres such as classical and singer-songwriter were exempted completely from genre analysis for having less than five student-reported songs. One hindrance to using Apple Music to label genres is the presence of the soundtrack genre; although there were enough songs under soundtrack to make good conclusions, the internal variance of the genre was too great—ranging from rap songs in the *Black Panther* soundtrack to classic Broadway selections—and so a genre analysis for

soundtrack songs was neglected. Due to these issues, the conclusions made from the musical characteristic analysis hold much more merit in making jazz recommendations. That analysis was not limited by low sample sizes or outlier genres, since all songs were able to be analyzed outside of the boundaries of genres.

Other miscellaneous limitations existed to further hinder the conclusions. Due to the nature of Google Forms, the samples in the survey weren't able to be randomized, and as such, participants may have judged samples based on their impressions of previous ones. This may explain why "Blue In Green" and "When Sunny Gets Blue", two very similar songs, were rated so differently. In analyzing jazz samples and student-reported songs, complexity and intensity were both reviewed holistically, introducing bias and the probability for human error; further research should determine a more detailed and precise scale for determining a song's complexity and intensity. Lastly, inconsistency in the headphones used by participants could have altered data; students were allowed to bring and use their own headphones, and differing audio quality may have affected preferences.

Further research should take place in a more formal setting, and participants should take the survey with the same headphones, or otherwise the songs should be played aloud. In replicating this methodology, song samples should be randomized and chosen from a broader range of selections and artists. Further research also needs to be done into each musical characteristic, changing only one variable at a time, to strengthen any conclusions. For instance, a separate study should be done solely on intensity, keeping all aspects of samples the same except for their intensity. This is similar the approach of Gordon and Gridley (2013), except conclusions would be measured against pre-existing music preferences in respondents.

Using this research as a starting point, once correlations are further tested and confirmed, an algorithm can be created to recommend jazz music to newcomers, tailoring recommendations to individual music preferences. Similar to how streaming services like Pandora work, the algorithm would learn what musical characteristics listeners value in music and recommend jazz songs accordingly; conversely, it would also know which styles to avoid recommending. For example, people who enjoy acoustic music would be recommended acoustic jazz, and people who enjoy intense music wouldn't be suggested to listen to simpler jazz. The ultimate goal of such an algorithm is to maximize the chances that a listener would enjoy a given recommendation, leading the listener to desire more in order to develop a newfound interest in jazz. It is the researcher's hope that the conclusions in this study will lead to such further developments that will increase jazz listening not only among high-school jazz musicians, but to young people everywhere.

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Appendix A

Songs used, alongside artist(s), year of original recording, and ratings for musical characteristics

Song Title	Artist	Year	Tonality	Tempo	Acousticness	Complexity	Intensity
Big Dipper	Jones, Lewis	1969	Major	Med	Acoustic	Medium	Medium
Blue In Green	Miles Davis	1959	Minor	Slow	Acoustic	Medium	Relaxed
City Kids	Spyro Gyra	1983	Major	Med	Electronic	Complex	Intense
Confirmation	Charlie Parker	1946	Major	Fast	Acoustic	Complex	Intense
Don't Be That Way	Benny Goodman	1936	Major	Fast	Acoustic	Simple	Intense
Giant Steps	John Coltrane	1960	Major	Fast	Acoustic	Complex	Intense
Miles Ahead	Miles Davis	1957	Major	Med	Acoustic	Medium	Relaxed
Samba Triste	Getz, Byrd	1962	Minor	Med	Acoustic	Simple	Relaxed
Soul Station	Hank Mobley	1960	Major	Med	Acoustic	Simple	Medium
Strasbourg St. Denis	Roy Hargrove	1008	Major	Med	Acoustic	Simple	Medium
Too Cool	Euge Groove	2004	Minor	Med	Electronic	Medium	Medium
Weft 'n' Warp	Jimpster	1999	Minor	Fast	Electronic	Complex	Medium
When Sunny Gets Blue	McCoy Tyner	1963	Major	Slow	Acoustic	Medium	Relaxed

Appendix B

Below is a full, reformatted transcript of the questions asked on the survey.

Jazz Preferences Survey

Hello, and thanks for taking my survey! It should take around 15 minutes to complete, and it will require the use of headphones.

1. Check the box below if your parent/guardian gives consent for you to participate in this survey.
    a. By checking this box, I agree that my parent is okay with me taking a student survey, which includes questions regarding musical preferences. I am aware that data may be shared with [high school name omitted] students, faculty and the College Board. I understand that answers are anonymous and that they will have no impact on student grades or teacher evaluation.

What are your music preferences?

2. Think about your favorite genre or style of music. Please pick one example of a song you might have listened to recently that represents your overall taste in music. Feel free to use your phone to look up song titles and artists.
    a. What's your favorite genre/style of music? (Please limit to one.)
    b. Title of example song:
    c. Artist of example song:
    d. Album title of example song (optional, only if there's more than one version of your song):

Jazz Samples *(This section was repeated 13 times, each for a different sample.)*

3. Please rate your overall enjoyment of the following sample: *(followed by the embedded YouTube video containing the 15-30 second sample*)*
    a. How did you like this sample? *(Students rated samples from 1 to 5 with 1 marked "Hated it" and 5 marked "Loved it")*

Final Question

4. Are you a part of a jazz ensemble (i.e. jazz band or jazz choir) either inside or outside of [high school name omitted]?
    a. *(students marked "yes" or "no")*

**Although students could not view song titles or artist names, both were placed in the description of each video for copyright and identification purposes.*

Appendix C

Below is the complete table including student-reported songs that exemplify preexisting music tastes, alongside Apple Music genre classifications and musical characteristic ratings. Songs are ordered by their Apple Music genres.

Song Title	Artist	Apple Music Genre	Tonality	Tempo	Complexity	Acousticness	Intensity	Jazziness
Way maker	sinach	Christian/Gospel	Major	Medium	Simple	Electronic	Medium	No
I can see the loght	Travis Greene	Christian/Gospel	Major	Medium	Simple	Mixed	Medium	No
La Vie En Rose	Édith Piaf	Classical	Major	Medium	Complex	Acoustic	Relaxed	No
Serenade for strings in c major	Tchaikovsky	Classical	Major	Medium	Complex	Acoustic	Relaxed	No
Let my Love be heard	Jake Runestad	Classical	Major	Slow	Complex	Acoustic	Medium	No
Cold Duck Time	Eddie Harris	Jazz	Major	Medium	Simple	Acoustic	Medium	Yes
Sing sing sing	Benny Goodman	Jazz	Minor	Fast	Simple	Acoustic	Intense	Yes
So what	Miles Davis	Jazz	Minor	Medium	Complex	Acoustic	Medium	Yes
Seven Nation Army	Post Modern Jukebox	Jazz	Minor	Medium	Medium	Acoustic	Intense	Yes
Sayonara Homutaun	SOAP	J-Pop	Major	Fast	Medium	Mixed	Intense	Yes
Simple and clean	Utada hikaru	J-Pop	Major	Medium	Medium	Mixed	Medium	No
cancioncitas de amor	Romeo Santos	Latin	Major	Medium	Simple	Mixed	Medium	No
El perdón	Enrique Iglesias,	Latin	Minor	Medium	Simple	Electronic	Medium	No
Lose my mind	Dean Lewis	Singer/Songwriter	Major	Fast	Simple	Acoustic	Intense	No
“I Do” Susie Suh	Susie Suh	Singer/Songwriter	Major	Medium	Simple	Acoustic	Relaxed	No
Ride	Twenty One Pilots	Alternative	Major	Fast	Complex	Mixed	Intense	No
Expectation	Tame impala	Alternative	Major	Fast	Complex	Mixed	Intense	No
Dead on Arrival	Fall Out Boy	Alternative	Major	Fast	Complex	Mixed	Intense	No
Welcome to paradise	Green Day	Alternative	Major	Fast	Simple	Mixed	Intense	No
This December	Ricky Montgomery	Alternative	Major	Fast	Simple	Mixed	Medium	No
Not Warriors	Waterparks	Alternative	Major	Medium	Medium	Mixed	Intense	No
Pain	The War on Drugs	Alternative	Major	Medium	Medium	Mixed	Medium	No
Cabin By The Sea	Dirty Heads	Alternative	Major	Medium	Simple	Acoustic	Medium	No
Thunder	Imagine dragons	Alternative	Major	Medium	Simple	Mixed	Intense	No
Oceans Away	A R I Z O N A	Alternative	Major	Medium	Simple	Mixed	Medium	No
Next To Me	Imagine Dragons	Alternative	Major	Medium	Simple	Mixed	Medium	No
Nothing's Gonna Hurt You Baby	Cigarettes After S*x	Alternative	Major	Medium	Simple	Mixed	Relaxed	No
skinny love	birdy	Alternative	Major	Slow	Simple	Acoustic	Relaxed	No
This is Gospel	Panic! at the Dicso	Alternative	Major	Slow	Simple	Mixed	Medium	No
Let it go	James Bay	Alternative	Major	Slow	Simple	Mixed	Relaxed	No
in the end	linkin park	Alternative	Minor	Fast	Complex	Mixed	Intense	No
Stay Frosty Royal Milk Tea	Fall Out Boy	Alternative	Minor	Fast	Complex	Mixed	Intense	No
Spy Dolphin	Delta Sleep	Alternative	Minor	Fast	Complex	Mixed	Intense	No
Space Dementia	Muse	Alternative	Minor	Fast	Complex	Mixed	Intense	No
Numb	Linkin Park	Alternative	Minor	Fast	Medium	Mixed	Intense	No
take a slice	glass animals	Alternative	Minor	Medium	Complex	Electronic	Intense	No
Best Friends	grandson	Alternative	Minor	Medium	Complex	Mixed	Intense	No
Emperor’s New Clothes	Panic! At the Disco	Alternative	Minor	Medium	Complex	Mixed	Intense	No
Kangaroo Court	Capital Cities	Alternative	Minor	Medium	Medium	Electronic	Medium	No
believer	imagine dragons	Alternative	Minor	Medium	Medium	Mixed	Intense	No

Mona Lisa	Panic! At the disco	Alternative	Minor	Medium	Medium	Mixed	Intense	No
Boulevard of Broken Dreams	Green Day	Alternative	Minor	Medium	Medium	Mixed	Intense	No
Gold	Imagine Dragons	Alternative	Minor	Medium	Medium	Mixed	Medium	No
The Other Side of Paradise	Glass Animals	Alternative	Minor	Medium	Simple	Electronic	Medium	No
Californiacation	Red Hot Chili Pepper	Alternative	Minor	Medium	Simple	Mixed	Intense	No
Hate Me	Blue October	Alternative	Minor	Medium	Simple	Mixed	Intense	No
No roots	alice merton	Alternative	Minor	Medium	Simple	Mixed	Medium	No
Wait a minute	Willow	Alternative	Minor	Medium	Simple	Mixed	Medium	No
Wires	The Neighbourhood	Alternative	Minor	Slow	Medium	Electronic	Medium	No
Mama's Gun	Glass Animals	Alternative	Minor	Slow	Medium	Electronic	Relaxed	No
Believer	Imagine Dragons	Alternative	Minor	Slow	Medium	Mixed	Intense	No
Coyotes	Modest Mouse	Alternative	Minor	Slow	Medium	Mixed	Relaxed	No
Radioactive	Imagine Dragons	Alternative	Minor	Slow	Simple	Mixed	Intense	No
Radioactive	Imagine Dragons	Alternative	Minor	Slow	Simple	Mixed	Intense	No
Take me to church	Hozier	Alternative	Minor	Slow	Simple	Mixed	Medium	No
Up Down	Morgan Wallen	Country	Major	Medium	Simple	Mixed	Intense	No
5 more minutes	scotty McCreery	Country	Major	Medium	Simple	Mixed	Intense	No
Turn it on	Eli Young Band	Country	Major	Medium	Simple	Mixed	Intense	No
mind reader	Dustin Lynch	Country	Major	Medium	Simple	Mixed	Intense	No
When it rains it pours	Luke combs	Country	Major	Medium	Simple	Mixed	Intense	No
Back to us	Rascal flatts	Country	Major	Medium	Simple	Mixed	Medium	No
Loosing sleep	Chris young	Country	Major	Medium	Simple	Mixed	Medium	No
Jesus take the wheel	Carrie Underwood	Country	Major	Medium	Simple	Mixed	Medium	No
Homegrown	Zac Brown Band	Country	Major	Medium	Simple	Mixed	Medium	No
Tequila	Dan+shay	Country	Major	Medium	Simple	Mixed	Medium	No
God, your momma, and me	Florida Georgia Line	Country	Major	Medium	Simple	Mixed	Medium	No
Unforgettable	Thomas Rhett	Country	Major	Medium	Simple	Mixed	Medium	No
Your man	Josh Turner	Country	Major	Medium	Simple	Mixed	Medium	No
Marry Me	Thomas Rhett	Country	Major	Medium	Simple	Mixed	Relaxed	No
You make it easy	Jason Aldean	Country	Major	Slow	Simple	Mixed	Medium	No
“Yours”	Russell Dickerson	Country	Major	Slow	Simple	Mixed	Medium	No
Middle	Zedd	Dance	Major	Medium	Medium	Electronic	Intense	No
don't you worry child	Swedish House Mafia	Dance	Major	Medium	Simple	Electronic	Intense	No
Goodbye	Colbreakz	Dance	Minor	Fast	Complex	Electronic	Intense	No
Tongue Twister (nightcored)	Cash Cash	Dance	Minor	Fast	Medium	Electronic	Intense	No
Everything time we touch	Cascada	Dance	Minor	Fast	Simple	Electronic	Intense	No
Such Great Heights	The Postal Service	Electronic	Major	Fast	Complex	Electronic	Medium	No
genesis	grimes	Electronic	Major	Fast	Complex	Electronic	Medium	No
anomaly	subtact	Electronic	Major	Fast	Medium	Electronic	Intense	No
Say it	Flume ft. Tove Lo	Electronic	Major	Medium	Medium	Electronic	Intense	No
Indian steps	Antony	Electronic	Major	Slow	Complex	Electronic	Medium	No
kamacase	owl city	Electronic	Minor	Medium	Complex	Electronic	Intense	No
One Million Views	Goldfish	Electronic	Minor	Medium	Simple	Electronic	Intense	Yes
Revenant	Vacant	Electronic	Minor	Slow	Complex	Electronic	Relaxed	No
Wedding Crashers	Aminé	Hip-Hop/Rap	Major	Medium	Complex	Electronic	Medium	No
The Ways	Khalid, Swae Lee	Hip-Hop/Rap	Major	Medium	Medium	Electronic	Medium	No
Her	Eery	Hip-Hop/Rap	Major	Medium	Simple	Mixed	Medium	Yes
King's Dead	Kendrick Lamar	Hip-Hop/Rap	Minor	Fast	Complex	Electronic	Intense	No
Plain Jane	ASAP ferg	Hip-Hop/Rap	Minor	Fast	Complex	Electronic	Intense	No
Bounce back	Big Sean	Hip-Hop/Rap	Minor	Fast	Complex	Electronic	Intense	No

So long	Cdot Honcho	Hip-Hop/Rap	Minor	Fast	Complex	Electronic	Intense	No
So long	Cdot Honcho	Hip-Hop/Rap	Minor	Fast	Complex	Electronic	Intense	No
BBO	Migos	Hip-Hop/Rap	Minor	Fast	Complex	Electronic	Intense	No
King's Dead	Future	Hip-Hop/Rap	Minor	Fast	Complex	Electronic	Intense	No
roll in peace	Kodak Black	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
Yonkers	Tyler, the creator	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
Pray for me	The weekend	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
Flexicution	Logic	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
Pray for me	The Weeknd	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
First day out	Tee grizzley	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
Hannah Montana	Migos	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
Ric Flair Drip	Offset and Metroboomin	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
Leanin’	Meek Mill	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
Ric Flair Drip	21 Savage	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
Opps	Kendrick Lamar	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
drop the world	lil wayne	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
Motorsport	Migos	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
no handz	Waka Flocka	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
Tortuga	Xavier Wulf	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
Fight Back	Neffex	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Intense	No
bank account	21 savage	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Medium	No
Liquor Locker	Vic Mensa	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Medium	No
Bodak yellow	Cardi b	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Medium	No
God's Plan	Drake	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Medium	No
God’s Plan	Drake	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Medium	No
Gods Plan	Drake	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Medium	No
Psycho	Post Malone	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Medium	No
1-800	Logic	Hip-Hop/Rap	Minor	Medium	Complex	Electronic	Medium	No
X	21 Savage	Hip-Hop/Rap	Minor	Medium	Medium	Electronic	Intense	No
Famous	French Montana	Hip-Hop/Rap	Minor	Medium	Medium	Electronic	Medium	No
River	Ed Sheeran	Hip-Hop/Rap	Minor	Medium	Medium	Mixed	Medium	No
Black Beatles	Idk	Hip-Hop/Rap	Minor	Slow	Complex	Electronic	Medium	No
Poetic Justice	Kendrick Lamar	Hip-Hop/Rap	Minor	Slow	Complex	Mixed	Medium	Yes
Micdrop	BTS	K-Pop	Minor	Fast	Complex	Electronic	Intense	No
Thanks	Seventeen	K-Pop	Minor	Fast	Medium	Electronic	Intense	No
Cypher 4	BTS	K-Pop	Minor	Medium	Complex	Electronic	Intense	No
Whistle	Black Pink	K-Pop	Minor	Medium	Complex	Electronic	Intense	No
The boots	Gugudan	K-Pop	Minor	Medium	Complex	Electronic	Intense	Yes
Murder at midnight	Powerwolf	Metal	Minor	Fast	Complex	Mixed	Intense	No
Smoked	Suicide Silence	Metal	Minor	Fast	Complex	Mixed	Intense	No
River Of Fire	In This Moment	Metal	Minor	Fast	Medium	Mixed	Intense	No
Crazy train	Ozzy Osborne	Metal	Minor	Fast	Medium	Mixed	Intense	No
One	Metallica	Metal	Minor	Medium	Complex	Mixed	Intense	No
Crazy	Kat Dhalia	Pop	Major	Fast	Complex	Mixed	Medium	No
Your Song	Rita Ora	Pop	Major	Medium	Medium	Electronic	Medium	No
Jet Black Heart	Five Seconds Of Summer	Pop	Major	Medium	Medium	Mixed	Intense	No
This Town	Niall Horan	Pop	Major	Medium	Simple	Acoustic	Relaxed	No
The Doctor Said	Chloe Adams	Pop	Major	Medium	Simple	Acoustic	Relaxed	No
Born this way	Lady gaga	Pop	Major	Medium	Simple	Electronic	Intense	No
Wait	Maroon 5	Pop	Major	Medium	Simple	Electronic	Medium	No

Let me go	Florida Georgia Line	Pop	Major	Medium	Simple	Electronic	Medium	No
push	matchbox 20	Pop	Major	Medium	Simple	Mixed	Medium	No
3 AM	Matchbox 20	Pop	Major	Medium	Simple	Mixed	Medium	No
Never Be The Same	Camila Cabello	Pop	Major	Slow	Medium	Electronic	Intense	No
never be the same	camila cabello	Pop	Major	Slow	Medium	Electronic	Intense	No
I was made for loving you	Tori Kelly	Pop	Major	Slow	Simple	Acoustic	Medium	No
Supermarket flowers	Ed Sheeran	Pop	Major	Slow	Simple	Acoustic	Relaxed	No
Weak	AJR	Pop	Major	Slow	Simple	Electronic	Intense	No
"Meant to Be"	Florida Georgia Line	Pop	Major	Slow	Simple	Mixed	Medium	No
Dive	Ed Sheeran	Pop	Major	Slow	Simple	Mixed	Medium	No
Human	Christina Perry	Pop	Major	Slow	Simple	Mixed	Medium	No
F.F.F	Bebe Rexa	Pop	Minor	Fast	Complex	Electronic	Intense	No
Are you ready for it?	Taylor Swift	Pop	Minor	Fast	Complex	Electronic	Intense	No
Tip Toe	Jason Derulo	Pop	Minor	Medium	Complex	Electronic	Medium	No
come hang out	AJR	Pop	Minor	Medium	Medium	Electronic	Medium	No
Rude Boy	Rihanna	Pop	Minor	Medium	Medium	Electronic	Medium	No
Tell Me You Love Me	Demi Lovato	Pop	Minor	Medium	Medium	Electronic	Intense	No
Mine	Bazzi	Pop	Minor	Medium	Medium	Electronic	Medium	No
Mine	Bazzi	Pop	Minor	Medium	Medium	Electronic	Medium	No
Shape of you	Ed sheeran	Pop	Minor	Medium	Simple	Acoustic	Medium	No
Shape of you	Ed sheren	Pop	Minor	Medium	Simple	Acoustic	Medium	No
Wolves	Selena Gomez	Pop	Minor	Medium	Simple	Electronic	Medium	No
Wolves	Selena Gomez	Pop	Minor	Medium	Simple	Electronic	Medium	No
By by by	Backstreet Boys	Pop	Minor	Medium	Simple	Electronic	Intense	No
New rules	Dua lipa	Pop	Minor	Medium	Simple	Electronic	Intense	No
New Rules	Day Lila	Pop	Minor	Medium	Simple	Electronic	Intense	No
Havana	Camilla Cabello	Pop	Minor	Medium	Simple	Mixed	Medium	No
Havana	Camila Cabello	Pop	Minor	Medium	Simple	Mixed	Medium	No
Havana	Camilla Cabello	Pop	Minor	Medium	Simple	Mixed	Medium	No
Counting Stars	One Republic	Pop	Minor	Medium	Simple	Mixed	Medium	No
Feeling good	Michael Buble	Pop	Minor	Slow	Complex	Acoustic	Intense	Yes
collide	Rachel Platten	Pop	Minor	Slow	Medium	Electronic	Medium	No
atmosphere	bebe Rexha	Pop	Minor	Slow	Medium	Electronic	Medium	No
What's Going On	Marvin Gaye	R&B/Soul	Major	Medium	Medium	Mixed	Medium	No
Young dumb and broke.	Kahlid	R&B/Soul	Major	Medium	Simple	Electronic	Medium	No
under the boardwalk	the drifters	R&B/Soul	Major	Medium	Simple	Mixed	Medium	No
Shot Down	Khalid	R&B/Soul	Major	Slow	Simple	Electronic	Medium	No
Love lies	Khalid	R&B/Soul	Minor	Medium	Complex	Electronic	Medium	No
Already won	Kehlani	R&B/Soul	Minor	Medium	Complex	Electronic	Medium	No
Broken Clocks	SZA	R&B/Soul	Minor	Medium	Complex	Electronic	Medium	No
The Truth	India Arie	R&B/Soul	Minor	Medium	Complex	Mixed	Medium	No
Too fast	Sonder	R&B/Soul	Minor	Medium	Medium	Electronic	Medium	No
Me like yuh	Jay Park	R&B/Soul	Minor	Medium	Simple	Electronic	Intense	No
Every time I look for you	Blink 182	Rock	Major	Fast	Medium	Mixed	Intense	No
Headstrong	Trapt	Rock	Major	Fast	Medium	Mixed	Intense	No
Hungry Freaks, Daddy	Frank Zappa and the Mothers of Invention	Rock	Major	Fast	Medium	Mixed	Medium	No
Bohemian Rhapsody	Queen	Rock	Major	Medium	Medium	Mixed	Medium	No
Bohemian Rhapsody	Queen	Rock	Major	Medium	Complex	Mixed	Intense	No
Thank you	Led Zeppelin	Rock	Major	Medium	Complex	Mixed	Medium	No
Fool in the rain	Led Zeppelin	Rock	Major	Medium	Complex	Mixed	Medium	No

Fool in the rain	Led Zeppelin	Rock	Major	Medium	Complex	Mixed	Medium	No
Africa	Toto	Rock	Major	Medium	Medium	Mixed	Medium	No
piano man	billy joel	Rock	Major	Medium	Simple	Acoustic	Medium	Yes
Back in Black	AC/DC	Rock	Major	Medium	Simple	Mixed	Intense	No
Highway to Hell	AC/DC	Rock	Major	Medium	Simple	Mixed	Intense	No
Thunderstruck	AC/DC	Rock	Major	Medium	Simple	Mixed	Intense	No
Back in Black	AC DC	Rock	Major	Medium	Simple	Mixed	Intense	No
Perry Mason	AC/DC	Rock	Major	Medium	Simple	Mixed	Intense	No
Sweat child of mine	Guns and roses	Rock	Major	Medium	Simple	Mixed	Medium	No
Sweet child o' mine	Guns and Roses	Rock	Major	Medium	Simple	Mixed	Medium	No
sweet child of mine	guns'n'roses	Rock	Major	Medium	Simple	Mixed	Medium	No
old time rock and roll	Bob Segar	Rock	Major	Medium	Simple	Mixed	Medium	Yes
Mother of Millions	Avion Roe	Rock	Major	Slow	Simple	Acoustic	Relaxed	No
Run	Foo Fighters	Rock	Minor	Fast	Complex	Mixed	Intense	No
Hands like houses	The sewer	Rock	Minor	Fast	Complex	Mixed	Intense	No
Soul Addiction	Sylar	Rock	Minor	Fast	Complex	Mixed	Intense	No
Chaos	I prevail	Rock	Minor	Fast	Medium	Mixed	Intense	No
Riot	Three days grace	Rock	Minor	Fast	Medium	Mixed	Intense	No
Can you feel my heart	Bring me the horizon	Rock	Minor	Medium	Complex	Mixed	Intense	No
Carry on wayward son	Kansas	Rock	Minor	Medium	Medium	Mixed	Intense	No
Take Me Out	Franz Ferdinand	Rock	Minor	Medium	Medium	Mixed	Intense	No
Brictom	Eluveitie	Rock	Minor	Medium	Medium	Mixed	Intense	No
wayward son	Kansas	Rock	Minor	Medium	Medium	Mixed	Intense	No
Another One Bites the Dust	Queen	Rock	Minor	Medium	Simple	Mixed	Intense	No
Livin on a prayer	Bon Jovi	Rock	Minor	Medium	Simple	Mixed	Intense	No
Adams Song	Blink-182	Rock	Minor	Medium	Simple	Mixed	Intense	No
Dazed and Confused	Led Zepplin	Rock	Minor	Slow	Complex	Mixed	Intense	No
Black Cadillac	Shinedown	Rock	Minor	Slow	Simple	Mixed	Intense	No
Not giving up today	Anna Kendrick	Soundtrack	Major	Fast	Simple	Mixed	Intense	No
Don't rain on my parade	Barbra Streisand	Soundtrack	Major	Medium	Medium	Acoustic	Intense	Yes
a million dreams	people who wrote the greatest showman	Soundtrack	Major	Medium	Simple	Acoustic	Intense	No
From Now On	Hugh Jackman	Soundtrack	Major	Medium	Simple	Acoustic	Intense	No
Astonishing	Various	Soundtrack	Major	Slow	Simple	Acoustic	Intense	No
Mary-go-round of life	Joe Hisaishi	Soundtrack	Major	Slow	Simple	Acoustic	Relaxed	No
Friend Like Me	Aladdin	Soundtrack	Minor	Fast	Medium	Acoustic	Intense	Yes
Heart of courage	Two steps from hell	Soundtrack	Minor	Medium	Complex	Acoustic	Intense	No
Broken people	Logic	Soundtrack	Minor	Medium	Complex	Electronic	Intense	No
Guns and ships	Lin minuel-miranda	Soundtrack	Minor	Medium	Medium	Mixed	Intense	No
My Shot	Lin Manuel Miranda	Soundtrack	Minor	Medium	Medium	Mixed	Intense	No
Binary sunset	John Williams	Soundtrack	Minor	Slow	Medium	Acoustic	Relaxed	No