

Repertoire Interest of Graduate and Undergraduate Piano Majors  
for Contemporary Art Music

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## **Introduction**

As a doctoral student focusing on Contemporary Music at Bowling Green State University specializing in piano performance, I have heard both graduate and undergraduate piano students express their opinions regarding the performance of New Music. Some students love learning and performing New Music while others hate doing so. I was surprised to find this duality in a music college that goes to great efforts to promote New Music and decided to try and find out the reasons behind this. With this in mind, I propose a study seeking to answer the following question: do BGSU piano students have a preference for New Music or standard repertoire when choosing the pieces they wish to study?

Research in musical preference is not new, having been a topic of research and discussion in numerous articles. By way of organizing a review of the literature available, I will organize the articles in three categories: Music Preference, dealing with articles on musical preference spanning a wide variety of genre, Music Education, focusing on articles related to New Music in the context of Music Education, and Survey Techniques, which will help inform the methodology. In addition, it is important to mention that, due to the ambiguity that might arise from the use of terms such as New Music or Contemporary Music, as perceived during my search for literature on this topic, the term Contemporary Art Music (CAM) will be used heretofore, except when a different term is used in titles of literary works, with the intent of reducing the possibility of ambiguity.

## **Musical Preference**

In “Undergraduate Non-Music Preferences for Western Art Music” Hash (2009) examines preferences of undergraduate non-music majors for Western art music. Ninety-five

college undergraduate non-music majors (77 with previous musical experience and 18 without) listened to 15 pieces from the Renaissance, Baroque, Classical, Romantic and Twentieth Century repertoire. They were asked to rate their preference on a scale from 1-7 and give written comments on the music as well. The pieces selected were instrumental, had active melodies, and were in major keys, in accordance with previous research which had determined preferable musical traits. The results showed that undergraduate non-music majors indicated a preference for music of the Classical period, followed by that of the Baroque and Romantic, then by the Renaissance, and finally Twentieth Century. The results also showed little influence of musical training upon musical preference, along with some influence from timbre and texture. However, there is research showing that musical training can indeed affect musical preference.

One author who found different results regarding musical training and preference was John Ginocchio. In “The Effects of Different Amounts and Types of Music Training on Music Style Preference” (2009), he examined the effect of amount and type of previous musical training on college non-music majors’ preferences for different styles of music. Ginocchio administered a Music Preference Inventory (MPI) to 176 midwestern college students, using a CD containing a variety of musical styles (rock, heavy metal, dance music, rap, country, jazz, and vocal, orchestral and piano classical Romantic music). Students were asked to rate their preference on a scale from 1 (strong dislike) to 7 (strong liking). A questionnaire was also used to gather information regarding the amount and type of musical training the subjects had received. The participants were placed into groups of fewer than two years, two to four years, and five or more years of musical training. The results indicated a preference for pop rock above all other styles. They also indicate that a preference for jazz and classical music increased with years of training. It was also found that the type of musical training (choral, band or piano) may have

an influence on the musical preference. More specifically, subjects with piano training gave higher ratings for dance music than the choir and band groups.

Although the previous musical training received by subjects in Ginocchio's research was not likely to include CAM, one may wonder after reading his article whether studying CAM can also affect musical preference. Such a question is not new and has already been researched by Archibeque in "Developing a Taste for Contemporary Music" (1966). In her research she investigated the effect of CAM on seventh grade students' musical preferences. Two classes, both containing lower middle-class students with I.Q. of 90 and above (with one exception with I.Q. over 130), were divided into a pilot group and a control group. The pilot group attended a weekly seminar on CAM for one semester, while the control group was taught following the guidelines set forth by the *Curriculum Guide for Music (7)* used by the San Diego Unified School District at the time of the research (although Archibeque does not say so, it may be implied from the context that this Guide focused mostly on eighteenth- and nineteenth-century Western music). After one week, a questionnaire was administered to determine if the pilot group displayed a greater preference for CAM, if studying this genre resulted in a greater understanding of it, if previous training, attitude and grades affected preference, and if preference for and understanding of CAM are related. The results revealed a preference for CAM over that of earlier periods (presumably eighteenth- and nineteenth-century) among seventh-graders regardless of study of CAM. They also revealed that those who had studied CAM preferred it to a greater degree than those in the control group. However, no evidence was found that previous musical training had an effect on the students' preference.

The connection between training and musical preference is the focus of Gregory's study "Analysis of Listening Preferences of High School and College Musicians" (1994). The purpose

of her research was to identify whether training broadens or narrows listening preferences. She selected three groups of musicians from sixth grade, high school juniors and seniors, and college juniors and seniors. The subjects were divided into groups according to their performance activities: keyboard, chorus, band, and orchestra. All subjects listened to 13 musical selections from Hindemith, Stravinsky, Mozart, Beethoven, as well as from David Sanborn, Herbie Hancock, Larry Carlton, and Spyro Gyra (jazz). Subjects had access to two dials. One controlled preference and the other the level of knowledge. Results revealed that previous performance experience has a strong influence on the preference for classical music. They also revealed instrumental biases among the music majors. They suggest that musical training makes one more receptive to unfamiliar genres, as the college students displayed higher preference for unfamiliar music than the high school students.

Amount of musical training could be indicative of familiarity with a genre. In fact, in a discussion with Michel Foucault on the public's comprehension of CAM, Boulez states that repeated listening is necessary in order for one to gain familiarity and begin to comprehend a piece of CAM (Foucault, M., Boulez, P., & Rahn, J., 1985, p. 10). This is examined by Hamlen and Shuell (2006) in "The Effects of Familiarity and Audiovisual Stimuli on Preference for Classical Music" they investigate if the familiarity of students with the repertoire and the presence of a visual stimuli affect their preference for classical music. Subjects were 7<sup>th</sup> grade students from a middle school in Western New York. Selection of students was based on the academic classroom teacher's willingness to allow them to leave class to participate in the study. Subjects were divided into two groups and each was presented with 12 audio only excerpts of classical music and 12 audio-visual excerpts. The audio-visual excerpts used related visual stimuli (video and audio are related, such as in recordings of the performers) and non-related

stimuli (video and audio are unrelated, such as orchestral music used as background for a TV commercial). The students were asked to rate the excerpts based on familiarity and like or dislike. The authors found that there was a direct correlation between familiarity and preference. There was also a direct correlation between use of unrelated visual stimuli and preference, possibly due to the fact that most of the times in which the students encountered classical music, it was accompanied by unrelated visual stimuli, such as a commercial or cartoon.

Familiarity can be developed through listening. This was already shown by Bradley (1971) in his article “Repetition as a Factor in the Development of Musical Preferences.” In this article, he tests the null hypothesis that having students repeatedly listen to CAM without the aid of formal instruction would not result in musical preference changes. Students from fourteen seventh grade classes were randomly selected and subjected to a fourteen-week listening regimen. Students spent twenty-eight half-hour sessions listening to three selections from each of the following categories: tonal, polytonal, atonal, and electronic contemporary music. Pretest and posttest preference scores were recorded and compared. This comparison revealed a mean score increase for all categories – 3.164 for tonal music, 3.415 for polytonal, 3.212 for atonal, and 1.439 for electronic music. According to Bradley, these results are corroborated by previous research, which had stressed the importance of familiarity through repetition in music education. He concludes that, even without formal classroom instruction, repeated listening is an effective method for developing a preference for CAM.

Another study investigating familiarity in connection with musical preference was conducted by Ward, Goodman, and Irwin (2014). In their article entitled “The Power of Familiarity in Music Choice” they investigate the strength of familiarity versus that of novelty in influencing musical choice. This was done by way of four studies. The first was a pilot study in

which 386 radio listeners were asked to identify whether a radio station was repetitive, should play more music, or if they look for new songs when listening. Results indicated that novelty was desired. In the second study, 190 undergraduate students were asked to rate their preference for the names of 48 songs that were being played on radio stations. Results revealed that listeners chose familiar music rather than less familiar music. In the third study, 244 undergraduates chose between 16 pairs of songs to listen to. They were then asked to rate their familiarity, liking, expected regret, and coolness of the song chosen. Once again, participants chose to listen to songs that were more familiar. For the final study, 276 students were asked to choose from 5 radio stations to listen to while attempting to memorize between 4 and 20 words. The stations were then rated based on liking, familiarity, and distraction potential. They chose the stations more likely to play familiar music. Comparisons of the four studies showed that familiarity was more important in music choices than liking the music.

It is important to consider, of course, other factors that may influence musical preference besides training and experience. North (2010) investigates the relationship between musical preference and personality in "Individual Differences in Musical Taste." He also investigates the strength of the relationship between musical preference and self-esteem, age, sex, and income. Data were collected from 36,518 participants from the United States (10,223), Europe (24,792), and Australia and New Zealand (1,503). Mean age was 28.13 years, and 22,163 participants were men and 14,355 were women. Participants were contacted via email and asked to answer an online questionnaire designed to obtain information on personality, age, sex, annual income, and self-esteem. They were also asked to rate their liking of 104 musical styles, of which 51 were not recognized and were eliminated from the dataset. The extent to which they liked each style was also measured, as were their described feelings towards the styles (based on past listening

experience) and their reasons to buy music of particular styles. Results showed that musical preference and individual differences are only weakly related, and that aspects such as age, gender, and income were more closely related to preference than personality. Results were also inconsistent with previous studies. For instance, a preference for classical music, which was expected to be related to conservatism, was found to be related to a liberal worldview. It was also found that age was positively related to a preference for more complex musical styles. Men were found to prefer styles such as jazz, dance, rock, and functional metastyles while women preferred styles such as classical, mainstream, folk, and alternative rock. Men preferred listening to music to be creative, create a personal image, and please friends, while women were reported to do so for enjoyment, as a solution to boredom, for coping, tension relief, and expressing emotions. It was also found that income was negatively related to classical music and jazz, considered in North's research to be "high art" of the categories used in the study. That is to say that wealthier subjects did not necessarily prefer "high art" musical styles.

## **Music Education**

As a piano teacher and a performer of CAM, I believe that it is not enough to identify issues that influence musical preference within a society or an education system. It is important to also find solutions. Therefore, it is my duty to not only promote this CAM, but to find ways to help students integrate it into their repertoire. The following articles help establish steps that might be taken even in the university context to help students become acquainted with CAM and hopefully come to enjoy listening to and performing it.



After stressing the importance of students interacting with CAM and the importance of the music educator's positive participation in this process in order for this genre to survive, Costes (2005) suggests activities to successfully introduce music students to the genre in "New Music: How Music Educators can Save an Endangered Species" (2005). Activities include inviting composers to a class, studying different genre, and commissioning works. She also provides a New Music Glossary of terms, websites to New Music Centers around the world, as well as websites that deal specifically with CAM.

The promotion of CAM is explored also by McGowan (1999) in "Teaching Modern Music." In his article, he proposes a framework to be used for teaching New Music. This framework consists of eight steps, the first of which is for the teacher to develop a love for what he calls Modern Music. He stresses the important difference between appreciating and loving, and states that, unless it is possible to love Modern Music, it is worthless. The second step is acknowledging the variety within the genre. He goes as far as to say that there is greater variety within the twentieth-century music than in all other styles combined. The third step is to stress that twentieth-century music is a continuation and progressions of the preceding styles, rather than an abandonment of the previous rules. The fourth step is introducing students to CAM gradually, starting with a composer that students may be already familiar with and like. For this he suggests the fifth step, which is getting students interested in what he calls bridge composers, such as Bartók and Stravinsky. From these composers one might move on to Ligeti, for instance. The sixth step is to choose good recordings. The seventh is reminding the students to approach this genre as it is rather than judging it based on the parameters of previous eras. The eighth and final step is to highlight the non-pitched elements of Modern Music and how composers have used them creatively. McGowan concludes by restating his belief that Modern Music is to be

loved, not simply appreciated. Once again, it is evident that the teacher plays an important role in the musical preference of students. How have the attitudes of teachers of piano students who like performing CAM shaped their repertoire preference?

Tobias (2013) suggests another framework in “Adapting Music Education to Contemporary Society and Participatory Culture.” In this article, he outlines adaptations to school music curricula so as to incorporate the concepts of participatory culture (music is created with participation of the listener/public) and convergence (older media/genre interpreted through newer media). The author suggests that his framework can be applied to any kind of music, including western art music by integrating musical practice with the classroom via collaboration with classmates and composers to create a piece, participating in contests that promote this type of integration, and expanding the music used for this engagement to include a variety of genre. The author also considers the importance of doing this within the limits of copyright law. He concludes that these practices require expanding the curriculum rather than replacing it, making it a viable practice. The applications of Tobias’s suggestions are not limited to schools. They can be applied at the college level as well and can be a useful method for helping broaden a piano major’s preference pallet and provide an introduction to CAM.

### **Survey Techniques**

In “Enhancing Genre-Based Measures of Music Preference by User-Defined Liking and Social Tags,” Ferrer, Eerola, and Vuoskoski (2012) attempt to show that genre-based survey tests such as the Short Test on Musical Preferences (STOMP) are not the most effective way to determine an audience’s listening preference. Their purpose is also to propose a more efficient measuring tool. The premise was that genres are too broad to accurately describe preferences.

This is shown by the fact that many of the participants in the surveys said that they choose their music based on pieces rather than genres. Others stated that genres are difficult to define. In fact, artists are often capable of making music in various genre. Ferrer et al. postulate that artist-based tests could be more efficient forms of surveys. In order to study this, they conducted two modified STOMP surveys with students from the University of Jyväskylä, Sweden, in which the second contained open-ended questions regarding liked or disliked bands. The verbal answers as well as the likes and dislikes were translated into social tags (as used on social media). This allowed the verbalizations to be compared in a single common format. The authors compared the genre-based STOMP surveys with the verbalizations and concluded that, because the first are based on genre definitions, which can change from one context to another, it is difficult to get accurate results. This in turn led them to suggest an Artist-based Musical Preferences (AMP) survey as a more accurate means of measuring musical preferences.

In researching methods for establishing preference, Brittin and Sheldon sought to identify if there are discrepancies in the use of continuous measurement versus static measurement in studying music majors and non-majors in “Comparing Continuous Versus Static Measurements in Music Listeners’ Preferences” (1995). Two hundred college students were chosen for the research, 100 being music majors and 100 non-music majors. Both groups heard excerpts from keyboard, orchestra, and wind repertoire in Baroque, Romantic, and 20<sup>th</sup> century styles. Half the repertoire was performed at slow tempi and the other half was performed at fast tempi. Half the subjects used a ten-point rating scale to manually input their preference, while the other half used a Continuous Response Digital Interface (CRDI). Results showed that there was no significant difference for music majors between using static measurement and the CRDI. Non-music majors, on the other hand, averaged almost one scale-rating higher using the CRDI than their

counterparts using paper-and-pencil scales. As the present study will be done with music majors, this information will be used as a model for the use of a Likert-type scale for measuring repertoire preference.

It is also important to establish how coding of students' responses will be done. Popping (2012) compares the instrumental and the representational perspectives in coding responses to open-ended questions in "Human or Machine Coding of Open-Ended Questions." He distinguishes the two by saying that in the representational perspective the responses are mapped according to the intended meaning of the terms used, while an instrumental approach analyzes the word usage in the context of a researcher's theory. He states that in choosing which method to employ it is important to consider whether the intent is to analyze the responses from the perspective of the researcher's theory or from the perspective of the intended meaning of the answers given. In this way, each method has its advantages and disadvantages. To compare the two perspectives and the results achieved by them, he conducted a survey during the Dutch election season in 2006. Participants were asked which party they voted for, as well as why. Out of 2,806 respondents, 2,173 answered the open-ended question as well. The responses were divided into categories according to the choices of the respondents. They are: ideologues – rely on abstract concepts for political evaluation; near ideologues – mentioned the liberal dimension without displaying clear understanding of it; - group interest – chose according to the groups represented by the parties; nature of times – no understanding of ideologic distinction of the parties; no issue content – party affiliation without understanding of its policy, relying on qualities of candidates. For representational coding, two human raters operating independently evaluated the responses and decided what category to place them. Parameters were pre-established regarding how to deal with potentially problematic categorizing situations. If there

were multiple possible categories, the highest one was always selected. For the instrumental coding, a computer program was used. A dictionary was developed for evaluating and categorizing the responses, containing possible answers and variants. A comparison of the results revealed that when two arguments were given in responses, the computer was unable to distinguish the most important one. It was also difficult for the program to decipher the intended meaning of the responses. While there were some differences in results among the two human raters, they were not systematic. The author found that if interpretation is desired, representational coding is preferable. He highlights that the methods employed in the comparison can yield drastically different results and stresses the importance of clarity regarding what type of approach to use depending on the goal of the research. Due to high costs of using computer coding and the higher reliability of human coders, the human coding will be used in coding questionnaire responses for the present research.

The articles outlined in this review of literature show that there are multiple factors that can influence preference, ranging from experience, to years of study, teachers' attitudes, and familiarity with a musical genre or style. For instance, Hash (2009) found that Twentieth Century music ranked last in the preference of college undergraduate non-music majors, after Renaissance, Baroque, Classical, and Romantic music. Judging from this information, it can be expected that preference for CAM will be low among undergraduates at BGSU as well. However, Hash focuses on non-musicians and listening preference. Will similar results be found when subjects are piano performance majors?

Contrary to what was found by Hash, Ginocchio (2009) found that musical training may in fact affect musical preference, with piano training having greater influence than choir and band training. It is taken as a given that piano majors at BGSU will have had musical training

prior to entering the university. However, how much and what type of experience have they had? Does this experience bear an influence on their preference for CAM or standard repertoire?

In Archibeque's (1966) research she found that subjects who have had academic training in CAM have a higher preference for CAM than those who have not. Her findings may suggest that one reason why certain BGSU piano students like CAM while others don't may be that some have had greater instruction in this genre than others. Have students who prefer CAM had more training than their peers?

Gregory (1994) researched the relationship between musical training and musical listening preferences and found that musical training makes one more open to unfamiliar genres. Gregory's inclusion of pieces by Hindemith among the listening selections seems to indicate that amount of training may have an influence upon preference for twentieth-century music. However, is that the case with BGSU piano students as well? Are those BGSU piano students who have had the most musical training open to a wider musical variety than their peers with less training?

The effect of familiarity upon listening preference was researched by Hamlen and Shuell (2006). They found a correlation between familiarity and preference. This information begs one to question whether BGSU piano students who like CAM have had experience with listening to music of the genre in the situations described by Hamlen and Shuell and if the lack of this experience can be found among students who do not like the genre.

That familiarity can be developed through listening was found by Bradley (1971). It may be concluded from reading his article that, if the reasons behind repertoire preference are to be investigated, a prior investigation must be made into the listening habits of the subjects. Have

BGSU piano students been repeatedly exposed to CAM? How has this exposure or lack of it shaped their preference?

Ward, Goodman, and Irwin (2014) came to conclusions similar to Bradley's, when they investigated the effect of familiarity on musical choice. They found that subjects were more likely to choose radio stations that played music they were familiar with. Faced with these results, one question that comes to mind is whether piano students who claim to dislike CAM are biased by the limits of their familiarity. Do these piano students limit their search for new repertoire to that which lies within a familiar genre?

Finally, subject's understanding of genres and the effect of this understanding upon musical preference was also questioned. Ferrer et al. (2012) found in their research that genre-based surveys may yield inconclusive results because genre definitions can change depending on the context. The reading of this article makes one wonder whether piano students at BGSU who claim to dislike CAM have been misled by a false conception of what this genre is and if they are aware of the variety within the genre.

It is important to note that, while the articles mentioned above are extremely useful in informing the present research, very few were found dealing with CAM in the context of undergraduate and graduate piano students' repertoire preference. To that end, the purpose of the present research is to identify the preference of undergraduate and graduate piano students at BGSU for CAM in their repertoire choice. My research questions are as follows:

- 1- Do BGSU piano students have a preference for CAM?
- 2- How do subjects define CAM?
- 3- Do subjects display different degrees of preference within the CAM?
- 4- Do years of piano experience or academic training affect their musical preference?

- 5- Is there a correlation between their musical preference and the amount of CAM they listen to?
- 6- Is there a correlation between subjects' musical preference and taking classes which involve CAM?
- 7- Is there a correlation between subject's musical preference and the attitude of their teachers?

## **Method**

In order to answer the research questions, thirteen graduate and undergraduate piano students attending Bowling Green State University were asked to answer a questionnaire. Only twelve subjects completed the questionnaire. The questionnaire contained a combination of open- and close-ended questions as well as three seven-point rating scales. The questionnaire was formulated and analyzed using the guidelines set forth by Price, Jhangiani, and Chiang (2015). Coding of open-ended questions and analysis of data were carried out by myself, and is followed by the results and a conclusion.

## **Results**

Preference for CAM or standard repertoire can be determined from the subject's rating on Item 14 of the questionnaire, consisting of a seven-point rating scale with the following options: 1 = CAM Only, 2 = Mostly CAM, 3 = More CAM, 4 = I like one as well as the other, 5 = More



Standard Repertoire, 6 = Mostly Standard Repertoire, 7 = Standard Repertoire Only. In order for a preference for CAM to be established among the sample population, the majority of the subjects would have to have rated between 1 and 3, as a rating of 4 would indicate equal preference. Only one subject rated 2 for Item 14, while three subjects rated 4 and the rest of the subjects rated 5 and 6 on Item 14. As can be seen on Table 1, only graduate students rated 4 or below, while undergraduate subjects rated exclusively 5 and 6.

Item 14 Rating	Frequency	Frequency in Graduate Subjects	Frequency in Undergraduate Subjects
6	4	2	2
5	4	2	2
4	3	3	0
3	0	0	0
2	1	1	0

Table 1. Frequency table showing the distribution of scores for preference for CAM or Standard Repertoire. 1 = CAM, 2 = Mostly CAM, 3 = More CAM, 4 = I like one as well as the other, 5 = More Standard Repertoire, 6 = Mostly Standard Repertoire, 7 = Standard Repertoire Only

Although subjects did not display a preference for CAM, eleven out of twelve subjects reported that they would willingly choose to learn a piece of CAM. However, four subjects expressed that they would only do so under certain conditions. For one subject, the condition was liking the piece. For another, the condition was having time to learn a CAM piece along with standard repertoire. For two subjects the condition was that the piece not sound “too crazy”, preferably sounding “closer to Romantic music.” The subject who reported an unwillingness to

choose CAM explained that the reason is a dislike for pieces I in which “it is hard to find the pulse and there isn’t a harmonic structure.” The subject reported feeling lost performing CAM.

Definitions of CAM were found to pertain to three main themes: dates, aesthetics, and instrumental technique. Subjects who defined CAM by date placed it within the twenty and twenty-first century, sometimes restricting it to that written by living composers. There were two interesting aspects to the definitions. The first is that one definition restricted CAM to the late twentieth century. The second is that another definition distinguished between the terms Contemporary Music and New music, with the first being used as an overarching term, encompassing both twentieth and twenty-first centuries, while the latter was used specifically for compositions written after 2000. Subjects who defined CAM based on aesthetics mentioned non-classical, unusual, dissonant, attractive, and different rhythmic and harmonic structures. CAM was said to challenge traditional aesthetics, using experimental elements to venture outside of common-practice-era compositional techniques. An interesting definition was that CAM is that which “sounds like a kid banging on the piano.” Finally, definitions of CAM made mention of extended piano techniques. A combined definition might state that CAM is that which was written within the twentieth and twenty-first centuries and challenges traditional aesthetics by using dissonant harmonies, extended instrumental techniques, and experimental musical elements. Although the definitions varied, the majority remained within reasonable boundaries, as evidenced by the composers named as representative of CAM: Copland, Bolcom, Stockhausen, Babbit, Glass, Gubaidulina, Cage, Crumb, 2<sup>nd</sup> Viennese School, Reich, to name a few. There were only two instances of seeming misunderstanding. One subject defined CAM as “A form of radio-played popular music, started in [the] 1970s maybe including [...] pop, soul, and other.” Another subject named Robert Schumann as a representative composer of CAM.

Data regarding the effect of years of musical studies on the musical preference of the subjects was analyzed by plotting the rating scores on scatterplot graph and comparing the subjects' ratings of their experience learning and playing CAM pieces to the years of musical and instrumental studies. A distinction was made between music and instrument studies to account for possible discrepancies between years studying music and years studying the piano. However, to insure that the results were accurate, a comparison was also done between the mean years of musical studies of each subject and their respective scores for CAM Learning Experience and CAM Preference. It is important to point out that one of the subjects did not report an age, making it impossible to compute his/her data for comparison. In addition, scores had to be inverted in order to be computed. For instance, while a smaller score indicated a strong liking for the experience of learning a CAM piece on the questionnaire, a larger score was used to indicate a strong liking in the scatterplot graphs. Figure 1 shows three graphs, the first showing the positive correlation between years of musical study and CAM Learning Experience scores, the second showing the positive correlation between years of piano study and CAM Learning Experience scores, and the third showing the positive correlation between mean years of musical studies (music plus piano) and CAM Learning Experience scores.

Figure 1

Scatterplot graphs showing the correlation between CAM Learning Experience scores and Years of Music Studies, Years of Piano Studies, and Mean Years of Musical Studies

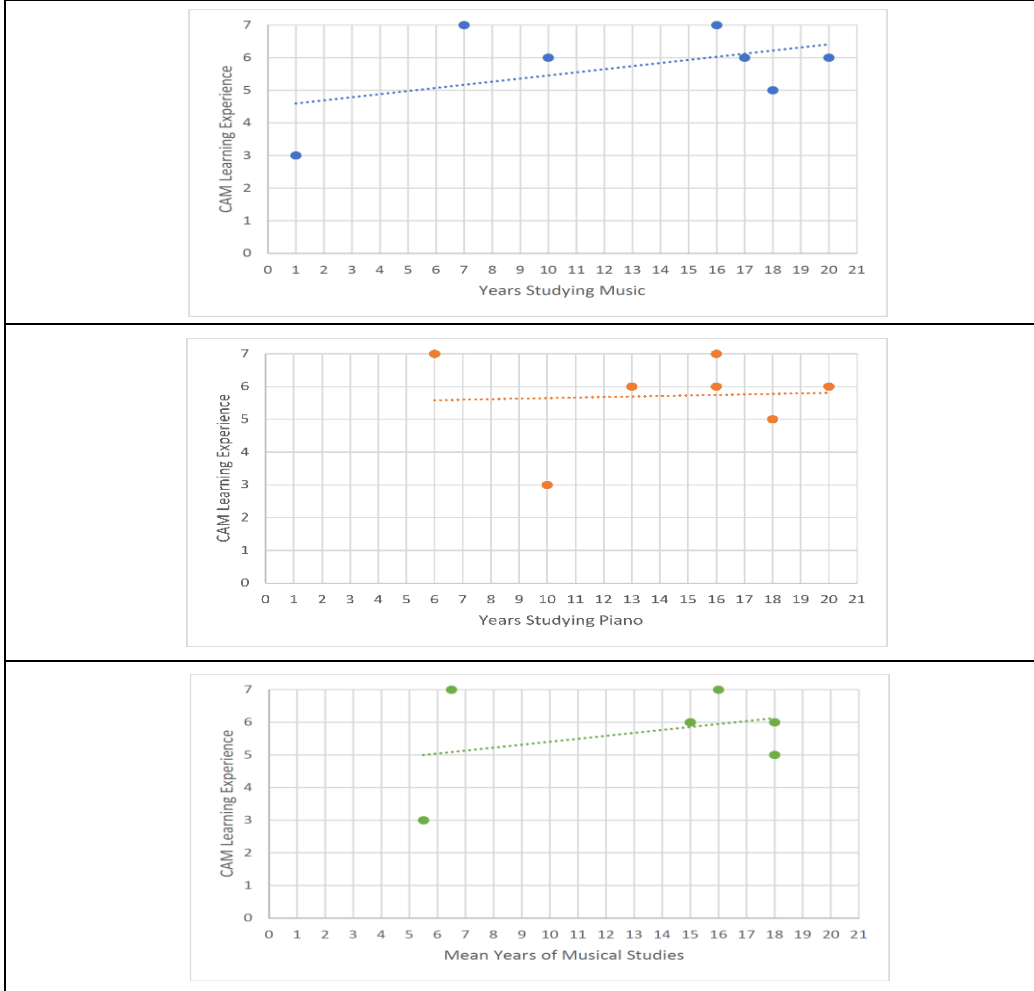
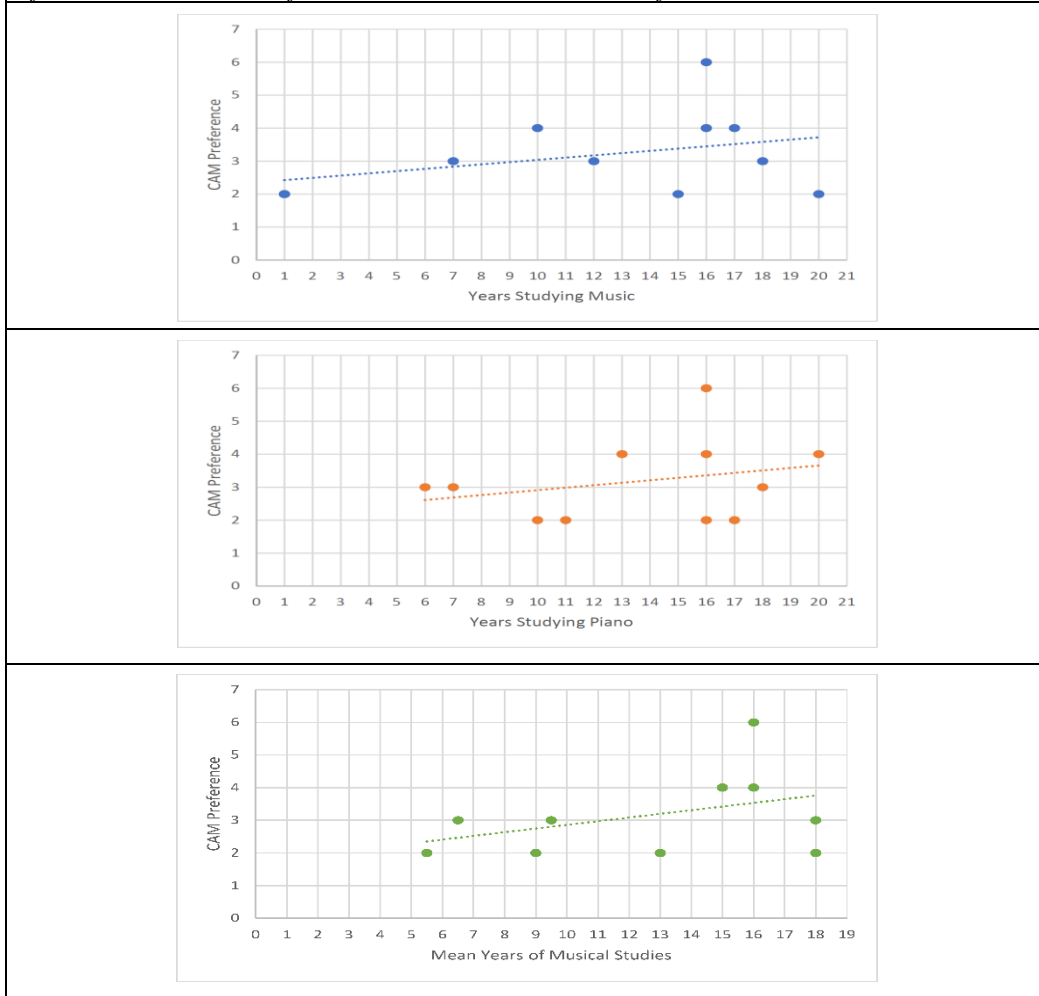


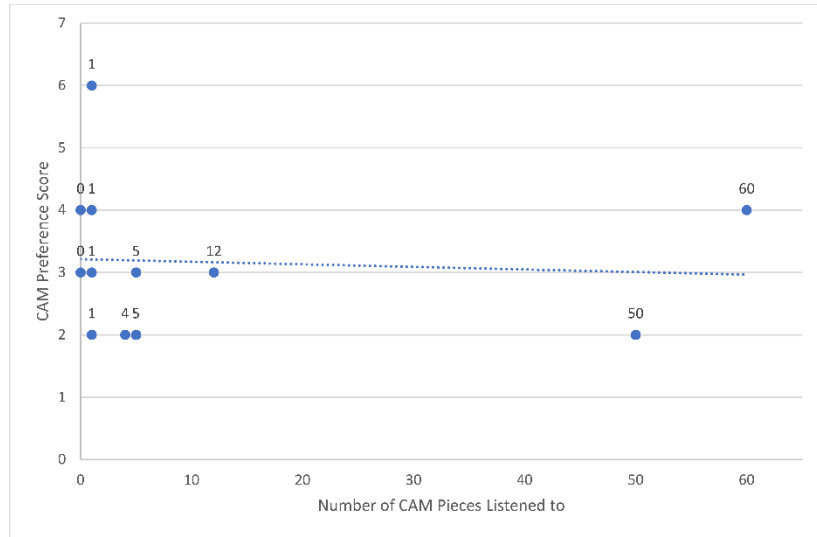
Figure 2 shows three graphs, the first showing the positive correlation between years of musical study and CAM Preference Rating scores, the second showing the positive correlation between years of piano study and CAM Preference Rating scores, and the third showing the positive correlation between mean years of musical studies (music plus piano) and CAM Preference Rating scores.

Figure 2  
 Scatterplot graphs showing the correlation between CAM Preference Rating scores and Years of Music Studies, Years of Piano Studies, and Mean Years of Musical Studies



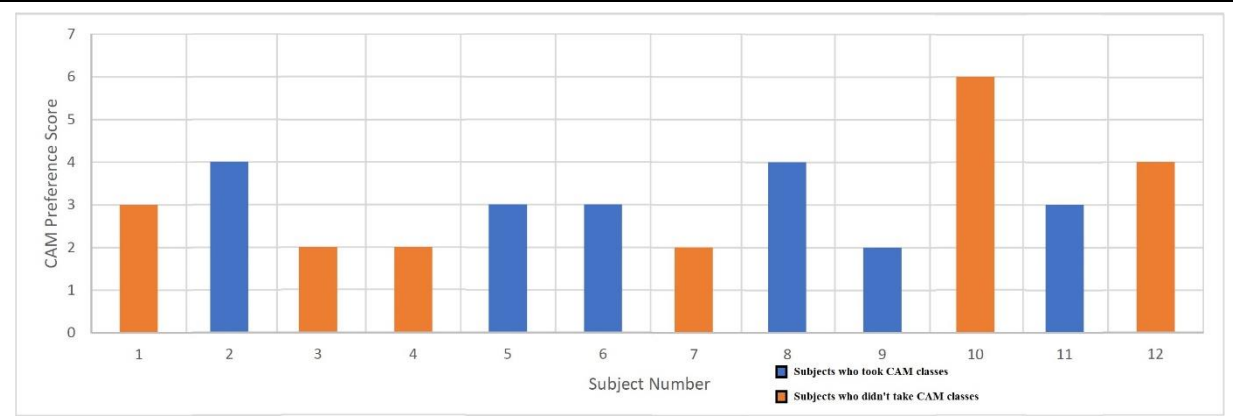
The correlation between preference and the amount of CAM subjects reported listening to was also analyzed. Only 10 subjects reported listening to CAM in the last six months, and only 9 of those subjects used numbers to report the amount of CAM listened to. The tenth subject named a single piece, *Rags*, by Bolcom, in referencing the pieces he/she had listened to. For this reason, this subject’s listening number was counted as 1. When subjects used estimates such as “4 to 5” the lowest number was used for computing. Figure 3 shows the correlation between CAM Preference scores and the amount of CAM students reported listening to. The listening number for subjects who did not report one was computed as being 0.

**Figure 3**  
*Scatterplot graph showing the correlation between CAM Preference Scores and the number of CAM pieces subjects listened to.*



The correlation between subjects' preference for CAM and taking classes involving CAM is shown in Figure 4. Six subjects took classes involving CAM and six subjects did not. However, only two subjects who took classes involving CAM gave a CAM Preference score of 4. The other two subjects who gave CAM Preference scores of 4 or above did not report taking classes involving CAM.

**Figure 4**  
*Bar graph showing the subjects who took classes involving CAM and those who didn't, as well as their CAM Preference scores*



Finally, of the eight subjects who reported having played CAM pieces, five reported that the repertoire was chosen by a teacher, one reported that it was chosen by a festival faculty, one reported that the choice was made by a piano duo partner, and two reported choosing the CAM piece themselves. The general comments on the teachers' attitudes was that they were supportive, loved CAM, and that the teacher knew the CAM piece very well.

## **Discussion**

In analyzing the data regarding subjects' preference for CAM or standard repertoire, it can be seen that the general of the sample population was for standard repertoire. Although only one subject, a graduate student, reported preferring CAM over standard repertoire while eight subjects, four of them undergraduates, reported a preference for standard repertoire, it is interesting to note that no subjects rated their preference with a score of 7, which would have indicated a preference for standard repertoire to the exclusion of all CAM. This was the case in spite of one subject having reported that they would not willingly choose to play a CAM piece. Perhaps this indicates an openness to the experience of playing CAM even if the subject would only do so if the teacher were to choose the piece. It is also important to note that several of the subjects who reported being willing to learn a CAM piece said that they would only do so if they liked the piece, which in general seems to mean sounding Romantic. Except for one subject, all subjects seemed to understand CAM as art music written in the twenty and twenty-first centuries that deviates from previous Western aesthetics.

A slight positive correlation was found between musical preference and years of musical studies. All subjects who rated their preference for CAM as "I like one as well as the other" or "Mostly Contemporary Art Music" were graduate students, each having studied music and piano

for at least 15 years. This positive correlation between CAM Preference and years of musical studies was not reflected in the amount of CAM pieces listened to, showing that subjects who gave higher scores in the CAM Preference rating did not necessarily listen to more CAM than their peers. Although it cannot be said that a correlation was found between CAM Preference ratings and attending classes involving CAM, two out of three subjects who rated CAM Preference as “I like one as well as the other” attended classes involving CAM. The only subject who reported preferring CAM over standard repertoire did not report having taken classes involving CAM.

### **Limitations**

There were several limitations that may have hindered the results of this study. The first is the size of the sample population. Subjects were chosen from only one of four piano studios at BGSU. In order to get more accurate results, subjects would have to be selected from each of the four studios. Another limitation was the construction of the rating scales. Greater preference and greater liking were placed on the left of the scales in an attempt to keep subjects from subconsciously viewing CAM as a strange or more different style. However, this seemed to confuse subjects, as evidenced by correction markings on their questionnaires. One subject even added a superscript in an instance where there was none, to make his/her rating choice clear. It would have been simpler then to arrange the rating scales so that higher rating scores reflected higher preference for CAM and a greater “like” score, as subjects seemed to expect. Such an alteration would also have made computing easier, as it would not have been necessary to invert the values before imputing the data to the graphs. It would also have been useful to provide subjects with a scale on which they could rate the likelihood that they would willingly choose a



CAM piece to learn. This would provide insight to their openness to CAM repertoire. Finally, using a 6-point rating scale for measuring subjects' preference for CAM of standard repertoire would have forced subjects to choose between the two rather than choose the middle ground. This would have made it easier to determine where their "allegiances" ultimately lie.

## **Conclusion**

The results of this study show that years of musical experience affect musical preference. All undergraduate students who participated in this study gave CAM low rating scores. This indicated that undergraduate's preferences were for standard repertoire, even though most of them were open to the possibility of learning a CAM piece. This is encouraging information. One hopes that this openness will grow and mature into a love for music as a whole. In fact, one of the undergraduates went to great lengths to attend one of the EAR/EYE concerts (an all-CAM concert series) which took place during the weeks that I was writing this paper. The fact that three graduate students reported that they "like one as well as the other" is also encouraging. It shows that they have found their past experiences with CAM enjoyable and perhaps look forward to further experiences.

Transcribing the questionnaires and organizing the data for analysis was an interesting process. Both subjects who reported a preference for standard repertoire and those who were "standing on the wall" mentioned not being "too crazy" and "sounding Romantic" as a condition for choosing to learn CAM. Further efforts ought to be employed to provide these subjects with opportunities to accustom themselves to some of the "crazy" CAM sounds. Some actions that might be taken can be for DMA students and for faculty artists to program pieces by "bridge

composers” (McGowan, 1999) in recitals featuring CAM pieces as a means of preparing listeners’ ears for any “crazy” sounds that may be to come in the recital.

Regarding their willingness to learn CAM pieces, many subjects mentioned time and their “other pieces” as being influential in their choice to play CAM. It seems from some of the subjects’ comments that they view CAM as something to be learned after standard repertoire has been mastered. This view seems to follow a chronological order: first one must learn Baroque, Classical, and Romantic music, and only then Contemporary Art Music. The problem with this view is that students take a long time to gain some familiarity with CAM. One way to provide students with this familiarity early in their academic careers would be to encourage them to learn CAM pieces alongside standard repertoire. Including CAM in pianists’ repertoire even before college could help them view CAM as a style that is as important and fundamental as Baroque, Classical, or Romantic music, not simply an “optional add-on” to their repertoire. Future studies could focus on the piano repertoire used for undergraduate students and high-school piano students to determine if CAM is included in what students have to learn. This would help determine what steps should be taken by CAM musicians to encourage the “gate-keepers” of high school and college education to include the study of CAM in the syllabi.

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