

Learning to Listen: Types of Musical Knowledge and Genre Preferences

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ABSTRACT

How does musical knowledge relate to genre preferences? Analysis of the 2012 Survey of Public Participation in the Arts shows that people with musical knowledge (operationalized as music lessons, music appreciation classes, and musicianship) like to listen to more genres. This is consistent with previous work on education and cultural consumption. However, we find differences between the types of musical knowledge: music lessons and musicianship strongly predict listening to almost all genres while music appreciation classes have mixed effects. Drawing on supplemental interviews, we theorize that different types of musical knowledge produce different legibilities. Sonic legibility, or the ability to evaluate intra-musical elements (tone, notes, complexity), is acquired through music lessons or musicianship. Social legibility, or the ability to evaluate extra-musical elements (reputation, history, symbolic associations), is acquired through music appreciation classes or through informal networks. We argue that *legibility* is the key link between musical knowledge and genre preferences, insofar as people report they 'like to listen to' a genre when they feel they have the capacity to engage with it.

KEYWORDS

Music knowledge; listening; legibility; taste; cultural consumption

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INTRODUCTION

Sociologists have long been interested in music and how genre preferences function as symbolic boundaries, or a means of social affiliation and exclusion (e.g. Peterson and Simkus, 1992; Bryson, 1996; Lizardo and Skiles, 2015). The connections between taste, education, and cultural capital have been well explored, including established empirical connections between childhood arts participation and taste formation (Atkinson, 2011; Nault 2021; Rimmer, 2012, ter Bogt et al., 2011; Vanherwegen and Lievens, 2014). However, few studies theorize the role of musical knowledge in genre preference formation, even though expertise has been shown to affect reception in other cultural domains (Bortolussi and Dixon, 1996; Mockros, 1993; Nenadić et al., 2019). Several studies (e.g. Van Eijck, 2001 and Marsh, 2012) have used musicianship as a predictive variable in music taste studies, but the role of *musical knowledge* in relation to genre preferences is underexplored (Brisson, 2019; Marshall, 2011). We, the authors (Michelson and Albrecht), therefore ask, how do *different types* of musical knowledge relate to genre preferences?

This project originated with nine semi-structured interviews conducted by Michelson in 2012. Michelson was initially exploring the prevalence of “cultural omnivorousness” among liberal arts college students.¹ Students were asked to discuss their genre preferences (both likes and dislikes) and describe their music listening history. The interest in musical knowledge emerged from these interviews, as many students described developing new genre preferences after learning more about a genre, either from formal (i.e. music history course) or informal (i.e. roommates) sources.

We understand musical knowledge as a multidimensional concept that includes knowledge of music theory, music history, and/or the general ability to perform music. In other words, a classically trained violinist and an amateur hip-hop historian both have musical knowledge. We use the term musical knowledge instead of music education to avoid an overly narrow association with school-based programs. Musical knowledge may be transmitted through formal education (e.g. private lessons or a school music appreciation class), transmitted informally through friends and family, or self-cultivated (e.g. reading a book about rock history or teaching oneself to play the guitar).

Albrecht, who has an interest in genre studies and expertise in statistical methods, expanded the project by analyzing data from the 2012 Survey of the Public Participation in Arts (SPPA). SPPA is a nationally representative survey often used in sociological taste research, including the original influential omnivore studies (Peterson and Simkus, 1992; Peterson and Kern, 1996; Rossman and Peterson, 2015). In the SPPA we identified three variables associated with musical knowledge: participation in music appreciation classes, music lessons, and musicianship (the ability to perform music). The survey data allows us to establish statistically significant patterns between musical knowledge and genre preferences

¹ The term “cultural omnivore” was coined by Richard A. Peterson (Peterson and Simkus, 1992; Peterson and Kern, 1996; Rossman and Peterson, 2015) to describe consumers who cross traditional highbrow/lowbrow boundaries, displaying eclectic yet discerning taste. While the exact meaning and implications of “the cultural omnivore” remain debated, it has inspired a vibrant area of research (including Atkinson, 2011; Brisson, 2019; Elvers et al, 2015; Johnston and Baumann, 2007; Lizardo and Skiles, 2012; Lopez-Sintas and Katz-Gerro, 2005; Rimmer, 2012; Robette and Roueff, 2014; Sullivan and Katz-Gerro, 2007; Warde and Gayo-Cal, 2008).

while the in-depth interview data allows us theorize *why* and *how* types of musical knowledge predict genre endorsement. We found that music lessons and musicianship are strong positive predictors of listening to all individual genre categories, while music appreciation has more muted effects. Notably, the music lessons variable operates more similarly to musicianship than its sister music *training* variable, music appreciation. This suggests that it is not the experience of formal classes or lessons, but the ability to engage on an intra-musical and sonic level that matters for enabling broad genre consumption. We posit that music lessons and musicianship focus on intra-musical elements (i.e. tone, notes, complexity), imparting *sonic legibility* that can render complex genres accessible and lowbrow genres musically interesting.² Music appreciation classes focus on extra-musical elements (i.e. genre reputation, history, symbolic associations), another kind of musical knowledge that renders certain genres *socially legible*. While music lessons and musicianship are not necessarily limited to intra-musical elements (Jorgenson, 2003; Ellefson, 2014), this analysis assumes that most music lessons focus on the ability to perform music (sonic aspects) while music appreciation classes focus on knowledge about music (social aspects). This is consistent with a common use of the terms in American music education.

The different elements of musical knowledge cannot be wholly separated, as even listeners who primarily evaluate music by sonic elements are influenced by social legibility. For example, this may explain why country music, which is symbolically associated with conservative politics, is an outlier in both models and interviews. Both sonic and social musical knowledge can also be acquired through formal instruction (i.e. music lessons or a music appreciation course) or informally through friends, family, and self-teaching.

We conclude with a brief discussion on the acquisition of musical knowledge before discussing limitations and directions for future research. This attention to sonic and social legibility of music genres responds to calls for more attention to musical knowledge (Brisson, 2019; Marshall, 2011) and listening (Hennion, 2001; Lembo, 2020). It contributes to the sociological study of taste, arts participation, and listening by going beyond “the omnivore debate” to explore types of musical knowledge in relation to genre preferences and taste formation.

TASTE, LISTENING, AND MUSICAL KNOWLEDGE

SOCIOLOGICAL APPROACHES TO MUSIC TASTE

Building from Bourdieu’s, *Distinction* (1984), much of the work on taste has focused on how class and social position relate to preferences for ‘highbrow’ or ‘lowbrow’ cultural forms. Though this work has touched on a number of cultural domains including visual art, literature, fashion, and food, music genres have been a major focus. While Bourdieu emphasized a homology between class status and highbrow taste, research in a number of cultural domains has established that the dominant contemporary meaning of ‘good taste’ involves variety across traditional

² Highbrow genres are often associated with *perceived* musical complexity and lowbrow genres with *perceived* musical simplicity or unsophisticated composition. For example, sonic legibility might facilitate engagement with traditionally highbrow genres such as opera and classical that may be seen as intimidating in their complexity (in the Discussion section, interview respondent Chloe articulates this perspective regarding classical). On the other hand, sonic legibility may also emphasize the musically interesting elements of traditionally lowbrow genres with low social reputation (in the Discussion section, interview respondent Ben articulates this perspective in regards to heavy metal).

highbrow/lowbrow lines (Johnston and Baumann, 2007; Jarness and Friedman, 2017). Omnivorous taste, an eclectic mix of highbrow and lowbrow preferences, has been documented in a number of countries (Peterson and Simkus, 1992; Peterson and Kern, 1996; Katz-Gerro, 2002; Marsh, 2012; van Eijck, 2001; Warde et al., 2008). Although the extent, longevity, and operationalization of omnivorousness has been questioned (Atkinson, 2011; Brisson, 2019; Rossman and Peterson, 2015), it seems there is an impulse to balance ‘democracy’ and ‘distinction’ (Johnston and Baumann, 2007). Nault et al. (2021) identify ‘snobivores’ – consumers who like a variety of genres but demonstrate exclusive taste for consecrated artists within those genres. Those with high cultural and social capital, especially childhood arts participation, demonstrate elite taste in their preferences for particular objects within lowbrow categories (Childress et al., 2021).

There is robust sociological literature exploring arts participation (DiMaggio and Mukhtar, 2004; Lopez-Sintas and Katz-Gerro, 2005; van Eicjk and Knulst, 2005; Nagel et al., 1997). While much of this work seeks to explain factors that influence arts participation, we use music education and participation indicators as independent variables to predict genre preference patterns. In recent years a ‘new sociology of art’ (de la Fuente, 2007) has sought to rethink cultural preference as less of an expression of class distinction and more of an affective experience, attachment, or obsession (DeNora, 2000; Hennion, 1997, 2001, 2007). For example, many of the opera fans Benzecry (2009) observed were not elites introduced to the genre as children but became fans after an ‘enchantment’ experience with opera music as adults. Acknowledging the affective dimension of music participation, we are specifically interested in *active* participation in activities that connote the acquisition and/or exercise of musical knowledge – taking classes, lessons, or playing music (Nagel et al., 1997; Vanherwegen and Lievens, 2014). Benzecry and Collins (2014) advance a microsociology of cultural consumption, attuned to bodily experience and interaction rituals, including the internal ritual of “talking to oneself, that is, thinking” (p. 311). We are interested in how that internal ‘thinking’ about music is mediated (consciously or unconsciously) by musical knowledge. Thus, as will be described in the Data and Methods section, we supplement a traditional statistical analysis with interview data in order to better understand the affective dimensions of music listening and genre affiliation.

Many scholars have noted that music is comprised of both sonic and social elements (Cook, 1990; DeNora 2000; Green, 2003; Roy and Dowd, 2010). Sociologists might analyze these elements more fruitfully in terms of how listeners experience and draw on them when forming aesthetic judgements. Sonic, or intra-musical elements, are inherent in the sound of the music itself: notes, tone, complexity, rhythm, harmony and voice quality. Social, or extra-musical elements, exist outside of the music itself but are consciously or unconsciously connected to it (reputation, history, lyrical interpretation,³ association with particular audiences or subgenres, etc.). A ‘sociology of listening’ emphasizes an understanding of music consumption as a performance, act, and process (Hennion, 2001; Marshall, 2011; Hudson, 2014). We are interested in how listeners may evaluate the sonic and social elements of music differently depending on their musical knowledge. The same song, let alone

³ While lyrics themselves are a “sonic” element (part of what is heard), assigning meaning to those lyrics is a “social” element. For example, a listener may enjoy the sound of opera vocals but not understand the language.

the breadth of a genre, may be interpreted differently by different people; what is illegible or nonsensical to one listener may be musically complex to another.

MUSICAL KNOWLEDGE AND LEGIBILITY

Expertise has been shown to affect reception in other cultural domains such as visual arts and poetry (Bortolussi and Dixon, 1996; Mockros, 1993; Nenadić et al., 2019), but few studies have explicitly looked at the effect of musical knowledge on genre preferences. Marshall (2011) argues for more sociological attention to musical knowledge, saying “it is important to recognize that listeners create musical meaning through their position within a discursive framework that gives them the tools to make sense of the sounds they hear” (p. 159). More recently, Brisson (2019) critiqued Peterson’s omnivore framework for lack of attention to musical knowledge, namely an inability to discern whether genre endorsements come from connoisseurs or casual listeners. We share this critique and bring in supplementary interviews to begin to build a more detailed understanding of how musical knowledge affects a listeners’ likelihood of reporting they ‘like to listen to’ a genre.

Musical knowledge may be one element of musical habitus formation (Rimmer, 2012). The sociological term habitus refers to embodied traits and behaviors that are *influenced by* conditions of existence and *influence* actions and taste. For example, Atkinson (2011) found that upper-class interviewees often traced their taste for classical music back to childhood music lessons. New tastes may also be acquired later in life through new experiences and new knowledge. Lembo’s (2017) study on cosmopolitan regulars at a honky tonk music night shows how ‘perception develops out of experience’ (p. 69). Her description of the Players’ (musicians) relationship to music (‘closer to it’ and hearing it ‘at a different level’) is consistent with our theory that intra-musical knowledge renders genres *sonically legible*, allowing those listeners to connect with it in a different way.

While studies support the idea that the musically knowledgeable listen differently, there is not consensus on *how* musical knowledge – or different kinds of musical knowledge – affects genre preferences. Following musicologist, Cook (1990), we expect that those with musical training and skills (such as those acquired through formal lessons) are more attuned to sonic elements. Additional evidence suggests that those with musical training listen differently. For example, psychologists Elvers et al. (2015) found that musicology students, considered ‘expert listeners’ because of their high levels of academic and applied musical knowledge, like a greater variety of genres than their non-musicology peers. However, social scientists Bull and Scharff (2017) reported that many young classically trained musicians did not listen to popular genres, such as rap, because they found them ‘illegible’ (p. 295).

Cultural sociologists define legibility as the “capacity for audiences to read the intended meaning of the object” (McDonnell, 2010 p.1807; see also Griswold et al., 2013). Our use of the term implies that objects are not inherently legible or illegible but rather, an object’s legibility varies by audience. The same object may be perfectly legible to one person but illegible to another. Regardless of the “intended meaning,” music is *legible* when a listener has the confidence and competence to engage with it. Music does not have to be perfectly legible for a listener to enjoy it. Opera fanatics, for instance, may be attracted to the sonic qualities of the music and its affective effects before it is fully legible (though they are quick to cultivate genre knowledge) (Benzecry, 2009). We argue that *legibility* is the key link between musical knowledge and genre preferences, insofar as people will report they ‘like to listen to’ a genre when they feel they have the capacity to engage with it. Our

usage of legibility is summed up as the capacity for a consumer to believe themselves capable of engaging with a cultural object. Music, as a cultural object, may be discussed at the level of an individual piece or at the level of genre. This study understands genres as aggregates of individual music pieces. When someone says they like a genre, they are communicating that they have generally liked music pieces they know are categorized that way. Studying genre preferences in the context of musical knowledge helps us better understand factors of taste formation.

DATA AND METHODS

FRAMEWORKS

Nine exploratory interviews were conducted with college students in 2012. These semi-structured interviews asked about genre preferences and dislikes, genre definitions, music training and listening habits. Respondents were recruited via email from a random sample of students at a Midwestern liberal arts college. Demographically, the interview sample consisted of five White women, three White men, and one Black man. We used these exploratory interviews to enrich the analysis by adding qualitative detail to the theory-building around *how* and *why* musical knowledge relates to genre preferences. Interviews revealed a strong pattern of “omnivorous” (eclectic) taste as well musical knowledge themes. Next, we wanted to see if similar patterns were present on the national level by utilizing the 2012 wave of the Survey for the Public Participation in the Arts (SPPA). Though the SPPA has been administered several times since 2012, this wave allows us to use more nuanced genre categorizations and more detailed questions about musical training over the life course. It is also temporally consistent with the interview data, also gathered in 2012.

Presented with a plethora of omnivore studies that vary in how ‘cultural omnivorousness’ is operationalized in survey data (see Robette and Roueff, 2014 for an overview), we followed the classic work of Peterson and his collaborators (Peterson and Kern, 1996; Rossman and Peterson, 2015). Peterson’s approach, though not without critiques (Brisson, 2019), provides a well-established procedure for analyzing cultural omnivorousness. Like Peterson, we used data from the Survey of Public Participation in the Arts (SPPA) and were interested in total number of genres liked (Peterson and Simkus, 1992; Peterson and Kern, 1996; Rossman and Peterson, 2015). We measured genre preferences on a continuous count spectrum and did not delineate between ‘omnivores’ and ‘not omnivores’. In other words, while we may say that someone who likes nine genres demonstrates ‘more omnivorous’ taste than someone who likes four genres, there is not a specific genre count threshold at which one is labelled ‘an omnivore.’

Some scholars reject the use of predetermined genre lists or call for a more nuanced look at artist preferences (Vlegels and Lievens, 2017; Nault et al., 2021). However, we still find genre categories useful because of data accessibility, patterns of high-quality data collection, and popular salience. People use genre categories in everyday conversation as symbolic boundaries that signal broader sociocultural affiliations (Peterson and Simkus, 1992; Bryson, 1996). Furthermore, SPPA is one of the few publicly available and nationally representative surveys on cultural preferences and training in the United States. However, we acknowledge that respondents may interpret and use genre terms differently. For example, some may interpret ‘classical music’ to refer specifically to the classical era of Western art

music, while others may use ‘classical music’ as a broad term to include music from multiple periods (i.e. Baroque, Classical, Romantic, etc.) in Western music.

We combined a traditional statistical analysis with supplemental qualitative interviews to remain in conversation with previous work that studies macro-level trends in the relationship between genre preferences and musical knowledge, (e.g. Marsh, 2012; Rossman and Peterson, 2015) while also exploring the micro-level experiences at work in this relationship. Survey data can establish correlations between variables; interview data helps us theorize the mechanisms at work in these correlations. For example, the survey data shows that people who have taken music lessons tend to like more genres overall. Interview data allows respondents to describe their musical training and genre preferences in more detail, revealing a pattern where formal music training such as lessons and school bands exposed students to new genres that they then began to listen to. Interviews also capture the affective dimensions of taste emphasized by microsociologists and the ‘new sociology of art’ (Benzecry and Collins, 2014; de la Fuente, 2007; DeNora, 2000) in a way that the survey does not.

Below, the Findings section details the correlations identified in statistical analysis of the survey data. Then, the Discussion section contextualizes these findings with interview data in order to better theorize *how* and *why* musical knowledge is related to genre preferences.

KEY VARIABLES

We leveraged three predictive musical knowledge variables (music lessons, music appreciation, and musicianship) to capture a range of musical knowledge and musical experiences. Those three predictive variables were broken into two conceptual categories: music training (consisting of music lessons and music appreciation) and musicianship. First, we used two musical training variables, both simple dichotomous counts, which asked if respondents have ever taken music lessons or classes in music appreciation.⁴ These lessons could have taken place at any point in the life course. These two variables comprise our first conceptualization of musical knowledge, which we refer to as music training because the wording of the question (‘lessons’ or ‘classes’) implies formal training. Following usage common in the context of American music education, we infer that ‘music lessons’ refers to instruction in music performance (primarily intra-musical, or sonic) while ‘music appreciation’ refers to instruction in music history and the classical Western canon (primarily extra-musical, or social).

We created the musicianship variable by combining three separate survey questions that asked whether the respondent had played, sang, or performed music in the last 12 months. Responding ‘yes’ to any one or more of these three questions is coded as ‘Yes’ in our musicianship variable. A respondent was included in the ‘No’ category for the musicianship variable if they answered ‘no’ to all three survey questions, indicating they had neither played, sang nor performed music in the past year. The musicianship variable is conceptually distinct from music lessons and music appreciation for several reasons. Firstly, the survey wording for musicianship specifies active participation in the past year, unlike the other two key variables, which may capture participation in music lessons or music appreciation classes

⁴ Yes’ was coded as 1 and ‘No’ was coded as 0.

anytime during the life course. Furthermore, operationalizing musicianship as having played, sang, or performed music in the past year implies a base level of technical competence (the ability to play music) and intra-musical understanding. Thus, the musicianship variable represents a level of *current intra-musical engagement* distinct from a) music appreciation classes, which probably do not involve the technical ability to perform music and b) music lessons, which, per the survey wording, may have occurred many years ago. While sympathetic to conceptualizations of musicianship that are broader than the technical ability to perform music (Jorgenson, 2003; Ellefsen, 2014), given the limitations of the survey questions, we used ‘musicianship’ as shorthand to refer to active participation (in the past year) in playing, singing, or performing music. As elaborated in Ellefsen’s (2014) study of music students, a musicianship identity includes the related concepts: dedication, entrepreneurship, competence, flexibility/usefulness, specialization, and connoisseurship (p. 326). Our musicianship variable is distinct from the two music training variables in that it may or may not involve ‘training,’ but could capture self-taught musicians who acquired musical knowledge outside of formal settings (i.e. may never have identified as ‘music students’). We are interested in the relationship between these elements; for example whether/how the technical competence to perform music affects

connoisseurship and evaluations of authenticity and craftsmanship.

| | Musical Training Module | | | Musicianship Module | | |
|--------------------------------------|-------------------------|-------|--------------|---------------------|-------|--------------|
| | Yes | No | N | Yes | No | N |
| Musical Training | | | | | | |
| Took Music Lessons | 886 | 1,417 | 2,303 | . | . | . |
| Music Appreciation | 326 | 1,977 | 2,303 | . | . | . |
| Musicianship..... | . | . | . | 2,124 | 2,446 | 4,570 |
| Genres Endorsed (<i>listening</i>) | | | % Endorse | | | % Endorse |
| Asian/African ... | 202 | 2,101 | 9.61 | 394 | 4,176 | 8.56 |
| Bluegrass | 451 | 1,852 | 19.58 | 828 | 3,742 | 18.19 |
| Blues | 730 | 1,573 | 31.70 | 1,403 | 3,167 | 30.70 |
| Broadway | 505 | 1,798 | 21.93 | 1,020 | 3,550 | 22.32 |
| Classical | 645 | 1,658 | 28.00 | 1,277 | 3,293 | 27.94 |
| Country | 1,030 | 1,273 | 44.72 | 1,993 | 2,577 | 43.61 |
| Dance..... | 367 | 1,936 | 15.94 | 661 | 3,909 | 14.46 |
| Folk | 431 | 1,872 | 18.71 | 855 | 3,715 | 18.00 |
| Jazz | 631 | 1,672 | 27.40 | 1,281 | 3,289 | 28.03 |
| Latin | 415 | 1,888 | 18.02 | 798 | 3,772 | 17.46 |
| Opera | 205 | 2,098 | 8.90 | 463 | 4,107 | 10.13 |
| Pop | 873 | 1,430 | 37.91 | 1,645 | 2,925 | 36.00 |
| Rap/hip-hop ... | 410 | 1,893 | 17.80 | 900 | 3,670 | 19.69 |
| Religious | 595 | 1,708 | 25.84 | 1,210 | 3,360 | 26.48 |
| Reggae | 395 | 1,908 | 17.15 | 711 | 3,859 | 15.56 |
| Rock | 990 | 1,313 | 42.99 | 2,428 | 2,142 | 53.13 |
| Other | 98 | 2,205 | 4.26 | 191 | 4,379 | 4.18 |
| None | 239 | 2,064 | 10.38 | 511 | 4,059 | 11.18 |

Table 1: Key Descriptives

Survey data shows that over 2,100 participants engaged in musicianship in the past 12 months (see *Table 1*). Using these three different variables allowed us to capture multiple types of musical knowledge.⁵

We leveraged these measures of musical knowledge to predict genre endorsement, in terms of both endorsement of specific musical genres and total counts of genres endorsed. To evaluate the effects of our looser operationalization of omnivorous taste patterns, we replicated the stable set of 10 genres as used in Rossman and Peterson (2015), but also present a fuller set of models with 17 genres. Separate responses are available for 17 genre categories and one category for ‘none.’ These responses indicate whether a respondent answered ‘Yes’ to the question, Do you like to listen to X? (N=6,873). The response options were ‘Yes,’ ‘No,’ or ‘Missing Data/Not In Universe.’ As such, responses were summed into an index from 0-17 where 17 would indicate liking all genres, while a 0 would indicate that the respondent did not endorse any of the categories. The minimum number of endorsed categories was 0, while the maximum was 17 (N=2). The average number of endorsed categories for an individual was 3.98. The set of 10 genres had a mean of 2.81 endorsed genres and ranged from 0-10. These findings are similar to the 1982, 2002, and 2008 means reported in Rossman and Peterson (2015).⁶ The discrepancy between the average number of genres endorsed between the full set (3.98) and the set of ten (2.81) suggests that using a stable set, while allowing for comparisons over time, does not fully capture the contemporary music preferences. We also attempted to predict which specific genre categories are endorsed, so we used each genre type as a dichotomous variable in separate predictive models.

CONTROL VARIABLES

A number of standard control variables were used for comparison with previous work on omnivorous musical taste (see Peterson and Kern, 1996; Rossman and Peterson, 2015), with the addition of controls for ethnicity (see *Appendix Supplementary Table A*).⁷ In general, there was no systematically missing demographic data in the survey. Race categories were limited to Black, White, and Other for power of analysis.⁸ Like Rossman and Peterson, (2015) we treated the categorical income variable as continuous by taking the midpoint of each bin (income range), with the exception of the top bin where we used the lower bound. While not a truly continuous measure of income, this treatment is the most

⁵ Throughout this article we run two sets of models: one for the music training variables and one for the musicianship variable. This is due to the structure of the original data. Two different modules of the survey were given to two different groups, meaning that we do not have responses across all three variables for respondents. We did verify that the two samples were comparable, as was indicated in the SPPA data documentation.

⁶ Based on Figure 1, p. 142 in Rossman and Peterson 2015.

⁷ The addition of an ethnicity (Hispanic or Non-Hispanic) control variable adds specificity compared to previous models (e.g. Peterson and Kern, 1996) that focused on a White or Non-White race variable.

⁸ The number of respondents in the individual race categories that were combined into Other (i.e. Asian, Native American) were too small for robust statistical analysis.

conservative use of the categorical data provided by SPPA. We also included a variable measuring whether or not a respondent had obtained a college degree. Notably, questions about musical training did not include anyone with less than a high school diploma or GED, which may influence the trajectory of these results.

ANALYTIC STRATEGY OF SURVEY DATA

We leveraged a combination of logistic regression and negative binomial regression models to analyze genre preferences and the effects of musical training on highbrow tastes. Logistic regression is a statistical model that predicts the likelihood of an event (such as two variables co-occurring). It is especially well suited to dichotomous (binary) variables, such as whether someone likes to listen to a music genre or has even taken music lessons (measured as yes or no). Most outcome variables in this project are dichotomous, making standard logistic regression an appropriate baseline model selection. Negative binomial regression is a similar predictive model but is better suited to count (non-dichotomous) variables, such as total number of genres liked. The most recent extension of Peterson's research trajectory (Rossman and Peterson, 2015) uses negative binomial regression to better fit distributions of count data. We ran two sets of models, the first to predict the overall number of genres endorsed and the second to predict what specific genres a participant endorsed. Both sets of models include the stable set of ten genres (Rossman and Peterson, 2015) in addition to the full set of genres included in the 2012 wave of SPPA. There are consistent minor fluctuations in N values across models. This is due to different subsets of respondents being asked different questions and small numbers of non-responses to various survey questions. Upon analysis, these gaps in response do not appear to be systematic.

FINDINGS

PREDICTING GENRE COUNT

First, we ran a final negative binomial model to test whether musical knowledge predicts musical taste patterns. The easiest pattern to see in these results is the high number of genres endorsed. We measured musical taste using our genre index of 1 to 17⁹. Table 2 (below) demonstrates that all three musical knowledge variables are strong predictors of the outcome variable ($P < 0.000$). Columns 1 and 3 show results for the stable 10 genres, while columns 2 and 4 show results for the full 17. We found that income and education are positive predictors of genre endorsement. We also found that age appears to predict more genre endorsement only for the stable 10 genres. The full 17 better captures increased genre endorsements by Black respondents, as being Black is no longer a significant predictor of less genre endorsement in the full 17 models.

These findings were consistent across several variations of musical experience. In a series of supplementary analyses we controlled for age of music training (child or adult), whether those experiences occurred inside or outside of school, and whether the respondent had attended a live musical performance in the last 12 months. None of these specified controls change the main finding that musical knowledge, whether measured as music lessons, music appreciation, or musicianship, predicts genre endorsement. This is consistent with previous work that demonstrates that

⁹ We exclude the category 'none' because it is conceptually incompatible with a continuous count metric.

musical knowledge and taste formation can occur at many points in the life course and in both formal and informal transmission settings.

| | Musical Training Module | | Musicianship Module | |
|--------------------|-------------------------|---------------------|---------------------|---------------------|
| | (Stable 10) | (Full 17) | (Stable 10) | (Full 17) |
| Music Appreciation | 0.34*** (-0.05) | 0.34*** (-0.05) | . | . |
| Music Lessons | 0.63*** (-0.04) | 0.63*** (-0.04) | . | . |
| Musicianship | . | . | 0.51*** (-0.04) | 0.50*** (-0.04) |
| Race | | | | |
| Black | -0.06 (-0.06) | 0.06 (-0.06) | -0.14** (-0.05) | -0.06 (-0.05) |
| Other | -0.07 (-0.08) | 0.04 (-0.07) | -0.31*** (-0.06) | -0.18*** (-0.05) |
| Male | -0.12** (-0.04) | -0.13*** (-0.04) | -0.13*** (-0.03) | -0.12*** (-0.03) |
| Hispanic | -0.43*** (-0.07) | -0.16** (-0.06) | -0.49*** (-0.06) | -0.19*** (-0.05) |
| Income | 0 (0) | 0 (0) | 0.00** (0) | 0.00*** (0) |
| College Degree | 0.14** (-0.04) | 0.17*** (-0.04) | 0.35*** (-0.03) | 0.34*** (-0.03) |
| Age | 0.01*** (0) | 0 (0) | 0.01*** (0) | 0 (0) |
| Constant | 0.27*** (-0.07) | 0.92*** (-0.07) | 0.53*** (-0.05) | 1.20*** (-0.05) |
| Constant | -0.95*** (-0.07) | -0.86*** (-0.05) | -0.63*** (-0.04) | -0.53*** (-0.03) |
| Observations | 2303 | 2303 | 4570 | 4570 |
| Pseudo R-squared | 0.056 | 0.048 | 0.029 | 0.019 |

Table 2: Predicting Total Number of Genres Endorsed (S10 and Full17)

PREDICTING THE EFFECTS OF MUSIC TRAINING ON GENRE ENDORSEMENT

Next, we ran a specific genre prediction model to look at the well-studied set of 10 stable genres as predicted by music training (having taken classes in music appreciation or music lessons). We found that musical training has a strong ($p < 0.000$) positive relationship with genre endorsement almost all the time (see Table 3A). Country music seems to be the sole exception to this rule, in that music appreciation does not significantly affect endorsement of the country music genre.

| | Bluegrass | Blues | Broadway | Classical | Country | Folk | Jazz | Opera | Religious | Rock |
|-----------------------|---------------------|--------------------|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|
| Music Appreciation | 0.52*** (-0.15) | 0.66*** (-0.14) | 0.87*** (-0.14) | 0.90*** (-0.14) | 0.10 (-0.14) | 0.74*** (-0.15) | 0.76*** (-0.14) | 0.80*** -0.18 | 0.60*** (-0.14) | 0.64*** (-0.16) |
| Music Lessons | 0.91*** (-0.12) | 1.07*** (-0.11) | 1.07*** (-0.12) | 1.13*** (-0.11) | 0.82*** (-0.10) | 1.12*** (-0.13) | 1.05*** (-0.11) | 1.28*** (-0.18) | 0.93*** (-0.11) | 1.14*** (-0.11) |
| Race | | | | | | | | | | |
| Black | -1.17*** (-0.27) | 1.19*** (-0.16) | -0.43* (-0.22) | -0.23 (-0.20) | 1.16*** (-0.17) | 1.22*** (-0.29) | 1.04*** (-0.16) | 0.22 (-0.27) | 1.13*** (-0.16) | -0.86*** (-0.16) |
| Other | -0.74** (-0.28) | 0.13 (-0.19) | 0.24 (-0.22) | 0.56** (-0.20) | 0.97*** (-0.19) | -0.64* (-0.28) | 0.37 (-0.20) | 0.1 (-0.33) | -0.22 (-0.23) | -0.3 (-0.18) |
| Male | 0.08 (-0.11) | -0.11 (-0.10) | -0.87*** (-0.12) | -0.18 (-0.10) | -0.24** (-0.09) | 0.09 (-0.12) | -0.02 (-0.10) | -0.24 (-0.16) | -0.52*** (-0.10) | 0.06 (-0.09) |
| Hispanic | -0.82*** (-0.25) | -0.56** (-0.19) | -0.31 (-0.22) | -0.09 (-0.19) | 1.00*** (-0.16) | -0.58* (-0.25) | -0.24 (-0.19) | 0.56* (-0.27) | -0.38 (-0.20) | -0.99*** (-0.15) |
| Income | 0 (0) | 0 (0) | 0.00* (0) | 0 (0) | 0 (0) | 0 (0) | 0.00** (0) | 0 (0) | -0.00* (0) | 0.00*** (0) |
| College Degree | 0.14 (-0.13) | 0.28* (-0.11) | 0.40** (-0.13) | 0.90*** (-0.12) | 0.51*** (-0.11) | 0.47*** (-0.13) | 0.36** (-0.12) | 0.60*** (-0.17) | 0.2 (-0.12) | 0.16 (-0.11) |
| Age | 0.02*** (0) | 0.01* (0) | 0.03*** (0) | 0.03*** (0) | 0.01* (0) | 0.03*** (0) | 0.01*** (0) | 0.03*** (0) | 0.02*** (0) | -0.01*** (0) |
| Constant | -2.74*** (-0.23) | 1.78*** (-0.19) | -3.42*** (-0.24) | -3.21*** (-0.22) | -0.37* (-0.17) | 3.45*** (-0.25) | 2.51*** (-0.21) | 4.76*** (-0.35) | -2.51*** (-0.21) | 0.29 (-0.18) |
| N | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 |
| Pseudo R ² | 0.091 | 0.102 | 0.159 | 0.158 | 0.075 | 0.136 | 0.107 | 0.126 | 0.108 | 0.124 |

P<0.1*, P<0.01**, P<0.001***

Table 3A: Predicting Genre Endorsement in Stable 10 (Musical Training Module)

There are significant race and education effects across the model. Notably, Blackness is strongly predictive of genre endorsement for most genres, though it is not predictive of classical or opera endorsement. Education also varies in its explanatory power and does not predict genre endorsement uniformly across categories. Maleness, when significant, is negatively associated with genre

endorsement. Finally, age is significantly positively associated with genre endorsement in all categories except rock music, where the sign changes. This implies that being older predicts more genre endorsement of the stable 10 genres.

We also investigated 7 other categories contained in the 2012 SPPA data. In Table 3B we predict genre endorsement of the less frequently included categories of pop, dance, rap/hip-hop, reggae, Latin, Asian/African, Other and None (signifying that the respondent endorsed no genres). By doing this expanded analysis we found that country music is not the only exception to the predictive power of music appreciation courses. Dance, Rap/hip-hops, and ‘other’ genre endorsements are also not predicted by music appreciation classes.

We found that some consistent trends from the stable 10 do not hold in the full 17. While increasing age seemed to consistently predict genre endorsement in the stable 10, the opposite is true in the full 17. It is also clear the extra genres in the full 17 are disproportionately endorsed by Black and Hispanic participants. This suggests that constraining our analysis to the stable 10 largely captured the preferences of older and whiter generations, excluding the substantial age and race-based variation present in newer genres of music. In other words, the specific genres researchers include or exclude in music preference studies impact the perceived associations between race/ethnicity, age, and breadth of taste.

| | Asian/African | Dance | Latin | Pop | Rap/Hip-hop | Reggae | Other | None |
|--------------------|---------------------|---------------------|---------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
| Music Appreciation | 0.63*** (-0.19) | 0.29 (-0.16) | 0.80*** (-0.16) | 0.53*** (-0.14) | 0.27 (-0.17) | 0.51*** (-0.15) | 0.36 (-0.28) | -1.27* (-0.52) |
| Music Lessons | 0.96*** (-0.18) | 1.04*** (-0.13) | 0.99*** (-0.14) | 0.91*** (-0.10) | 0.86*** (-0.14) | 1.11*** (-0.13) | 0.63** (-0.23) | -2.03*** (-0.28) |
| Race | | | | | | | | |
| Black | 1.22*** (-0.22) | 0.30 (-0.20) | 0.40 (-0.21) | -0.22 (-0.16) | 1.29*** (-0.18) | 0.70*** (-0.19) | -0.09 (-0.41) | -0.15 (-0.24) |
| Other | 1.44*** (-0.24) | 0.25 (-0.22) | 0.03 (-0.25) | 0.02 (-0.18) | 0.32 (-0.22) | 0.3 (-0.22) | 1.12*** (-0.30) | 0.23 (-0.27) |
| Male | -0.04 (-0.16) | -0.30* (-0.12) | -0.38** (-0.12) | -0.30** (-0.09) | -0.29* (-0.12) | -0.21 (-0.12) | 0.33 (-0.21) | 0.18 (-0.14) |
| Hispanic | -0.23 (-0.33) | -0.06 (-0.2) | 2.75*** (-0.17) | -0.36* (-0.16) | -0.04 (-0.19) | 0.15 (-0.20) | 0.37 (-0.32) | 0.37 (-0.20) |
| Income | 0 (0) | 0 (0) | 0 (0) | 0.00* (0) | 0 (0) | 0 (0) | 0 (0) | -0.01** (0) |
| College Degree | 0.89*** (-0.17) | 0.11 (-0.14) | 0.50*** (-0.14) | 0.39*** (-0.11) | 0.04 (-0.15) | 0.50*** (-0.13) | -0.09 (-0.25) | 0.03 (-0.19) |
| Age | 0.01 (0) | -0.02*** (0) | 0 (0) | -0.02*** (0) | -0.06*** (0) | -0.01*** (0) | 0 (0) | 0.01* (0) |
| Constant | -3.80*** (-0.32) | -0.92*** (-0.22) | -2.79*** (-0.25) | 0 (-0.17) | 0.72*** (-0.22) | -1.81*** (-0.22) | -3.83*** (-0.42) | -1.97*** (-0.28) |
| Observations | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 | 2303 |
| Pseudo R-squared | 0.116 | 0.086 | 0.175 | 0.107 | 0.202 | 0.098 | 0.032 | 0.118 |

P<0.1*, P<0.01**, P<0.001***

Table 3B: Predicting Genre Endorsement in Full 17 (Music Training Model)

PREDICTING THE EFFECTS OF MUSICIANSHIP ON GENRE ENDORSEMENT

Next, we ran an additional set of models using musicianship to predict specific genre endorsement. This heightened level of participation is a highly positive, significant predictor of genre endorsement in every genre category at ($p < 0.000$), excluding country music where musicianship is still a significant predictor, but at a lower level of significance ($p < 0.05$). The most consistent predictive controls are Black race and increased education (see *Tables 4A and 4B*). These tables, in combination, suggest there are some nuanced difference in types of musical knowledge. We explain these differences below, weaving them in amongst findings from a set of exploratory interviews.

| | Bluegrass | Blues | Broadway | Classical | Country | Folk | Jazz | Opera | Religious | Rock |
|-----------------------|---------------------|--------------------|---------------------|---------------------|---------------------|--------------------|--------------------|--------------------|---------------------|--------------------|
| Musicianship | 1.07*** (-0.10) | 1.00*** (-0.10) | 0.99*** (-0.10) | 1.08*** (-0.10) | 0.21* (-0.09) | 1.10*** (-0.10) | 0.91*** (-0.10) | 1.00*** (-0.12) | 1.07*** (-0.10) | 0.80*** (-0.10) |
| Race | | | | | | | | | | |
| Black | -1.94*** (-0.25) | 1.20*** (-0.1) | -0.69*** (-0.15) | -0.74*** (-0.14) | -1.37*** (-0.12) | 1.45*** (-0.21) | 0.85*** (-0.11) | -0.15 (-0.19) | 1.20*** (-0.11) | 1.10*** (-0.11) |
| Other | -0.93*** (-0.19) | -0.22 (-0.14) | -0.37* (-0.16) | -0.12 (-0.14) | -0.80*** (-0.13) | -0.48** (-0.17) | -0.40** (-0.15) | -0.07 (-0.2) | -0.24 (-0.15) | 0.87*** (-0.12) |
| Male | 0.07 (-0.08) | -0.01 (-0.07) | -0.66*** (-0.08) | -0.24*** (-0.07) | -0.25*** (-0.06) | -0.06 (-0.08) | -0.01 (-0.07) | -0.33** (-0.10) | -0.51*** (-0.07) | 0.02 (-0.06) |
| Hispanic | -1.13*** (-0.20) | 0.49*** (-0.13) | -0.72*** (-0.17) | -0.22 (-0.14) | -1.04*** (-0.12) | 0.77*** (-0.18) | -0.32* (-0.14) | 0.07 (-0.20) | -0.67*** (-0.15) | 1.04*** (-0.11) |
| Income | 0 (0) | 0.00** (0) | 0.00** (0) | 0.00** (0) | 0 (0) | 0 (0) | 0.00** (0) | 0 (0) | 0 (0) | 0.00*** (0) |
| College Degree | 0.51*** (-0.09) | 0.58*** (-0.08) | 0.84*** (-0.08) | 1.03*** (-0.08) | -0.13 (-0.07) | 0.74*** (-0.09) | 0.79*** (-0.08) | 1.00*** (-0.11) | 0.20* (-0.08) | 0.47*** (-0.07) |
| Age | 0.02*** (0) | 0 (0) | 0.02*** (0) | 0.02*** (0) | 0.00* (0) | 0.02*** (0) | 0.01*** (0) | 0.02*** (0) | 0.02*** (0) | 0.01*** (0) |
| Constant | -2.44*** (-0.16) | 1.50*** (-0.13) | -2.61*** (-0.15) | -2.47*** (-0.14) | -0.06 (-0.11) | 2.72*** (-0.16) | 1.91*** (-0.13) | 3.58*** (-0.21) | -2.30*** (-0.14) | 0.36** (-0.11) |
| N | 4570 | 4570 | 4570 | 4570 | 4570 | 4570 | 4570 | 4570 | 4570 | 4570 |
| Pseudo R ² | 0.09 | 0.065 | 0.105 | 0.102 | 0.046 | 0.093 | 0.063 | 0.075 | 0.088 | 0.073 |

P<0.1*, P<0.01**, P<0.001***

Table 4A: Predicting Genre Endorsement in Stable 10 (Musicianship Module)

| | Asian/African | Dance | Latin | Pop | Rap/Hip-hop | Reggae | Other | None |
|-----------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|--------------------|---------------------|
| Musicianship | 1.08*** (-0.13) | 0.58*** (-0.11) | 0.92*** (-0.11) | 0.46*** (-0.1) | 0.48*** (-0.12) | 0.84*** (-0.11) | 0.72*** (-0.18) | -1.31*** (-0.25) |
| Race | | | | | | | | |
| Black | 0.38* (-0.18) | -0.52** (-0.16) | -0.02 (-0.15) | -0.57*** (-0.11) | 1.26*** (-0.12) | 0.69*** (-0.12) | -1.16** (-0.42) | -0.23 (-0.17) |
| Other | 1.24*** (-0.17) | 0.07 (-0.17) | -0.06 (-0.17) | -0.40** (-0.17) | -0.07 (-0.17) | -0.12 (-0.17) | 0.72** (-0.22) | 0.34 (-0.17) |
| Hispanic | -0.4 (-0.25) | 0 (-0.14) | 2.39*** (-0.12) | -0.42*** (-0.12) | -0.01 (-0.14) | 0.08 (-0.15) | 0.11 (-0.26) | 0.50*** (-0.14) |
| Income | 0 (0) | 0 (0) | 0 (0) | 0.00*** (0) | 0 (0) | 0.00** (0) | 0 (0) | -0.01*** (0) |
| College Degree | 0.99*** (-0.12) | 0.26** (-0.10) | 0.71*** (-0.1) | 0.53*** (-0.07) | 0.27** (-0.10) | 0.54*** (-0.09) | 0.23 (-0.17) | -0.35** (-0.13) |
| Age | 0 (0) | -0.02*** (0) | 0 (0) | -0.03*** (0) | -0.06*** (0) | -0.02*** (0) | 0 (0) | 0.01*** (0) |
| Constant | -3.20*** (-0.21) | -0.79*** (-0.15) | -2.36*** (-0.16) | 0.47*** (-0.12) | 0.98*** (-0.14) | -1.27*** (-0.15) | 3.61*** (-0.28) | -2.22*** (-0.18) |
| N | 4570 | 4570 | 4570 | 4570 | 4570 | 4570 | 4570 | 4570 |
| Pseudo R ² | 0.085 | 0.042 | 0.125 | 0.069 | 0.182 | 0.059 | 0.027 | 0.043 |

P<0.1*, P<0.01**, P<0.001***

Table 4B: Predicting Genre Endorsement in Full 17 (Musicianship Module)

DISCUSSION

TYPES OF MUSICAL KNOWLEDGE

It is perhaps unsurprising that musical knowledge predicts a higher genre count. However, the statistical analyses reveal interesting differences between types of musical knowledge. Music lessons and musicianship are strong (p<0.001) positive predictors for endorsement in every genre category (except for a weaker association between musicianship and country). Music appreciation, while generally a strong positive predictor of genre endorsement, does not predict endorsing several so-called ‘lowbrow’ genres (country, dance, and rap/hip-hop). We therefore ask, why does the music lessons variable operate more similarly to musicianship than its sister music training variable music appreciation?

Music lessons and musicianship share a common emphasis on intra-musical elements and the ability to perform music. This suggests that it is not the experience of formal classes or lessons, but *sonic legibility* – the ability to engage with music on a technical or intra-musical level – that is most significant for enabling broad genre consumption. While sonic legibility may well be acquired through formal classes and lessons, it could also be acquired through informally or self-taught musicianship. *Social (il)legibility* may explain some outlier findings, such as the

more muted effects of music appreciation and the weaker association between musicianship and country music. SPPA does not define music appreciation classes, though it is a distinct question from the music lessons question, which asks about “lessons or classes in music – either voice training or playing an instrument.” Thus, we assume that music appreciation classes refer to lessons or classes in music that are *not* primarily about voice training or playing an instrument.

Below we supplement the statistical findings with interview data to add qualitative detail to our discussion of types of musical knowledge and legibility. While the generalizability of the interviews is limited because it is a small sample of college students, the interviews were conducted in 2012 (the same year as the SPPA survey) so temporal effects are held constant.¹⁰ Despite limitations, interview data provides important insight into *how* different types of musical knowledge and legibility relate to genre preferences.

SONIC LEGIBILITY

We maintain that people whose musical knowledge is based in music lessons or musicianship are more likely to evaluate music primarily by its essential sonic elements (notes, harmonies, rhythm, tones, etc.). The two interview respondents affiliated with a music major or minor emphasized sonic elements when describing their listening practices. Ben, a music major also active in a metal band, described his music listening approach: “I try to pretty much focus on the sound that I’m hearing, divorced from any context.” James, who fulfilled most of the requirements for a music minor before dropping it due to scheduling conflicts with his STEM majors, explained how he listens to his favorite genres (classic rock and classical) in sonic terms:

When I listen to the Rolling Stones I’m not really focusing on the words that much, I’m listening to the notes. Same with classical music. I prefer instrumental music to choral music or solo vocal music. I really prefer listening to the note progression rather than the words.

He also explained his main genre dislikes (rap, country, and heavy metal) in sonic terms: “They all have to do with the tonality, both the general progression of notes and the mixture of notes, so the harmonies, and also the vocal style.”

At this juncture, one may ask why music lessons, musicianship, and sonic legibility might promote broad genre consumption. We argue that listeners with knowledge of technique and/or compositional elements may be more likely to appreciate technical skill and virtuosity across genres, even those that ostensibly have negative symbolic associations. Ben, whose favorite genre is the oft-denigrated heavy metal category, said: “I’m primarily interested in experimental-type stuff [...] From a musician’s perspective there’s more going on. They’re not using conventional keys [...] you have all these crazy chords.”

Several participants with less musical knowledge discussed genres that they did *not* listen to in terms of *illegibility*. Abby explained why she did not like listening to opera by saying, “It’s just very dramatic and I don’t know what’s going on.” Chloe

¹⁰ Temporal effects are particularly important as understandings of genre categories change and as music itself changes over time. For that reason, we believe it is important to match the interview period to the survey period.

invoked lack of background knowledge when explaining why she did not listen to classical music.

Chloe: It's [classical music] not something that I sought out, but it's also not something I dislike [...] I guess I feel like I missed the boat. Like I have some friends who are really into classical, and I feel like I don't have background knowledge, like I'd be ten steps behind if I jumped on board.

Interviewer: What kind of background knowledge do you mean?

Chloe: I don't have the musical theory knowledge to talk about it, I suppose [...] I don't feel I have the language to talk about it.

Interviewer: Would your friends expect those things?

Chloe: I think if I would attempt to talk about it with them, yes.

These quotes suggest that intra-musical knowledge can render perceived highbrow genres, like classical and free jazz, legible and this sonic legibility can also make lowbrow genres musically interesting. On the other hand, lack of musical knowledge (or perceived lack of knowledge) can make opera or classical sonically *illegible*.

Listeners with intra-musical knowledge are likely to endorse most genres because they have the skill and interest to focus on sonic elements “divorced from any context,” overriding stigmatized social reputations of genres. However, sonic legibility does not necessarily mean embracing all genres. For example, James dislikes rap, explaining: “Rap I don't even really consider music because it's mostly just talking to a beat without hardly any, sometimes no, tone, which I consider essential in music.” This is reminiscent of the young classically trained musicians who found rap illegible in Bull & Scharff's study (2017), and it suggests that sonic legibility closely associated with one tradition (i.e. classical) is not necessarily transferrable.

SOCIAL LEGIBILITY

Like music lessons and musicianship, music appreciation predicts endorsement for many genres. However, the ‘lowbrow’ genres (country, dance, and rap/hip-hop) are notable exceptions (Table 3A-3B). Why might music lessons and musicianship predict dance and rap/hip-hop while music appreciation does not? (Country, an outlier across models, is further explored below). We maintain that music appreciation classes likely reinforce perceived genre hierarchies by focusing on the history and reputation of the Western classical canon. By emphasizing the *social legibility* of traditionally highbrow genres to the exclusion of others, music appreciation classes reinforce traditional music hierarchies. This explains the decrease of predictive association between extra-musical knowledge and ‘lowbrow’ genres like dance, rap, and hip-hop. Certainly some music appreciation classes include a wide variety of genres, though Green (2003) reports that even some music classrooms that do teach popular music position it as inferior to the Western classical canon.

However, interview data suggests that music appreciation classes *can* have a transformative effect on reception if they explicitly and deeply teach popular genres. Abby, the same respondent who found opera illegible, took a high school course called, ‘History of American Popular Music’. When asked if the class changed how she thought about music, she replied:

Abby: That did affect the way I looked at rap, because it's like not just this thing that came from wanting to get rich [...] it actually came from a social movement, and I think that is really cool.

Similarly, Lucas took a high school course on the origins of hip-hop, leading him to appreciate historically related genres:

Lucas: When I took that music class in high school, I saw the connection between the two [hip-hop and jazz] and that gave me more appreciation for the jazz music [...] When you know that connection is there, you can see it more clearly.

Both had some history of musicianship (high school band or choir) but were not active musicians. Neither dwelled on their musicianship training but focused on popular music history courses as transformative musical knowledge experiences, emphasizing social elements like the historical development of genres.

Social (il)legibility may explain why country is an outlier genre. Country music is one of several lowbrow genres not predicted by music appreciation. It is the sole exception to the strong predictive power of musicianship (there is still a weak positive association), and it is also the only genre (besides Other and None) to have a negative association with a college degree (Tables 3A-4B). This suggests that in some cases the social aspect of music may outweigh sonic evaluation, even among those with the knowledge and intention to focus on sonic elements.

Ben, the music major who said he tried to focus on sound “divorced from any context,” acknowledged the impossibility of excluding social elements: “I feel weird talking about how stuff beyond the music influences my distaste for music, but I know that that’s there.” He went on to describe losing his taste for his former favorite Southern rock band, Lynyrd Skynyrd when he “got some historical context” continuing:

Ben: Growing up in the south as a liberal, I definitely have a reactionary hatred towards anything that is southern and is proud of the south [...] It’s so tied to racism and homophobia, and all the awful -isms. I just can’t deal with it.

A symbolic association with “the awful -isms” may explain why others reject the genre. James, a highly trained musician who primarily described his likes and dislikes in sonic terms, discussed how country music violates his social sensibilities, “I consider myself pretty liberal, and I think of country music as being kind of conservative.” He did not discuss his other main dislikes (rap and heavy metal) in social terms.

Many interview respondents indicated they dislike country, a trend that is well documented. Rossman and Peterson (2015) note that country music saw the biggest decline in endorsement of all genres from the 1982 to 2008 waves of SPPA, falling by 15.6% raw percentage points (p. 148). Similarly, Lizardo and Skiles (2015) report an increase in “dislike” for country (along with bluegrass, folk, and religious/gospel). This is consistent with the theory that the genre became increasingly politicized around the early 2000s with issues like the 2003 industry blacklist of the Dixie Chicks following their criticism of George W. Bush (Rossman, 2004).¹¹ This symbolic association seems incompatible with a

¹¹ The band changed their name to The Chicks in 2020, ostensibly to distance themselves from Dixie’s associations with the Confederate-era South.

cosmopolitan ethic of openness that is the prevailing model of “good taste” (Ollivier, 2008; Lizardo and Skiles, 2015).

Work on symbolic boundaries (Bryson, 1996; Lamont and Fournier, 1992; Peterson and Simkus, 1992) has long argued that people affiliate with cultural objects to express social inclusion and exclusion. Rejection of country music, then, can be a symbolic rejection of White Southern culture and nationalist conservatism. While knowledge can lead to informed, intentional rejections of some music (i.e. Ben and Lynyrd Skynyrd), some boundary-work might be attributed to social illegibility. Even respondents who had a neutral attitude towards country (neither listened to it nor overtly disliked it) invoked social illegibility by indicating they could not relate to its symbolic associations. Lucas said, “I just don’t identify with the content...like when they’re talking about riding horses and drinking wine and stuff like that, that’s not really my life, so I don’t listen to it.” Abby said:

Abby: I have mixed feelings about country [...] It does have a lot of misogynistic messages, like ‘I got my truck and my woman and my beer.’ It’s almost amusing to me because it’s hard to take it seriously, but then at the same time that is how some parts of the United States are. I kind of take step back and say ‘Wait, wow, that actually is a way that people live.’

Lucas and Abby were quoted at the beginning of this section discussing how music appreciation classes changed how they thought about certain genres. While those classes positively changed how the students felt about rap and jazz, the classes did not have a positive effect on attitudes towards country. While this is a very small sample, it is consistent with our assumption that music appreciation classes impart a form of musical knowledge that privileges the Western canon and *select* popular genres.

Music appreciation classes are not the only way listeners can develop social legibility. Take the case of Chloe, who used to dislike country but now lists it as one of her favorite genres. Before she had much exposure to the genre, Chloe found country distasteful and politically offensive. She was converted when she stayed with her grandparents in rural Missouri for a week and “did nothing but watch soaps and CMT (Country Music Television) all day.” Chloe was quick to distance herself from the negative symbolic associations she used to hold:

Chloe: There’s still some country artists that I find disgusting [...] Like Toby Keith. Like the whole super patriotic, “we’ll kick your ass ‘cause we’re America,” I don’t want to hear it, at all, and that’s what half of his songs are. So I definitely shy away from the über-patriotic, really masculine country. But, otherwise, I like a song about being a farmer or drinking beer.

Thus, Chloe came to like country after she gained the musical knowledge to differentiate between politically offensive and inoffensive strands of the genre, rendering it socially legible to her. This type of musical knowledge is not reflected in the survey data, but it shows another way that genres are made socially legible – through friends and family.

ACQUISITION OF MUSICAL KNOWLEDGE

Cases like Chloe’s demonstrate the variety of ways that musical knowledge may be formally or informally acquired and that the ability to acquire musical knowledge is often related to financial resources. This relationship may be direct, such as the ability to afford private lessons or school music fees, or through a more indirect transmission of class-based cultural capital. In our analysis of the 2012 SPPA data,

we found that income has mixed associations across different genre categories in ways that do not parallel assumptions about income and highbrow taste. A college degree positively predicts endorsement for all genres except country (see Tables 3A-4B).

We also ran supplemental tests of the music training (music lessons and music appreciation) variables by age at time of training (child or adult) and location (in school or out of school) and found no significant correlations. This suggests no major difference between music training obtained in a school setting versus outside of school (presumably more expensive private lessons). However, school-based music participation itself is stratified and can exacerbate existing inequalities (Schmutz, Stearns, and Glennie, 2016; Lehman and Dumais, 2017).

With the supplementary interview data, we can probe respondents' primary music socialization (e.g. family, experiences at home) and secondary music socialization (e.g. peers, media, education) (Rimmer, 2012, pp. 308-309). Cora, who was involved in several campus music groups (including orchestra), neatly traced her interest in classical music back to listening with her parents: "We always listened to classical, usually during dinner and in the mornings." However, parental taste could not explain why other interview respondents "got into" classical music.

Two respondents very involved in classical music come from highly educated homes but their taste for classical music came from secondary music socialization in school. Amy's mother (a teacher) and father (a math professor) were favorable to classical music but she only "got into classical music when I started playing the violin [in school orchestra]." James's mother (a doctor) and father (a scientist with a PhD) did not listen to classical music and he grew up listening almost exclusively to classic rock. However, he now considers both classical music and classic rock as his favorite genres. He explains how he got into classical music:

James: I didn't really get a chance to listen to it too much when I was young because my parents didn't listen to it, but my third grade teacher would always have us listen to it when we took tests, and I realized that I really liked it then. I took up cello in fourth grade, and so I became exposed to a lot through that. Now I attend orchestra relatively frequently.

Formal music education at the college level can continue to shape the musical habitus. In addition to attending live orchestra performances, James played in college orchestra and pursued a music minor: "I learned it [classical] more being a music minor, and I also began to like jazz and opera, which I previously didn't like." Ben (music major) also explained how the formal college music curriculum influenced his taste:

Ben: As a music major I have to listen to a bunch of avant garde classical stuff, and that's made a big impression on me, and how I think about music and art in general. I've developed a taste for free jazz. I've heard people presented with free jazz say, "That's not music." It makes me furious because that's the most pure that exists.

This quote directly connects his music major curriculum with "develop[ing] a taste for free jazz," which has also (negatively) affected his perception of listeners who find it sonically illegible. It is musical knowledge, particularly extra-musical knowledge that makes free jazz sonically legible to Ben as "the most pure that exists" while others declare "that's not music." These cases show how musical knowledge, whether acquired in elementary school or as a young adult in college, contributes to the formation of genre preferences.

CONCLUSION

Our analyses of 2012 SPPA survey data supports assumptions that musical knowledge predicts greater genre endorsement. We identify differences in the types of musical knowledge and draw on interview data to theorize how musical knowledge produces legibilities (sonic and social) that impact genre preferences. This legibility can make perceived complex highbrow genres like classical or opera more accessible, and it can render so-called lowbrow genres more socially and musically interesting than their reputation would suggest.

We acknowledge several limitations to this study. We look at three different facets of musical knowledge, though the comparison of the three is imperfect because the structure of the 2012 survey modules does not allow all three variables to be included in the same model. There is room to further explore other possible varieties of musical knowledge. For example, interview data revealed musical knowledge that may be informally acquired from family and friends, though this type of musical knowledge is not captured in survey variables about music lessons, music appreciation classes, or musicianship. While we demonstrate correlation, we cannot establish cause and effect between musical knowledge and genre preferences. Interview data suggests that people generally find genres more legible *after* studying or playing them, but it is possible some people are naturally enchanted by music which *then* leads them to cultivate musical knowledge.

This article represents a step forward in understanding musical knowledge as a factor in genre preference formation. We draw out the importance of considering multiple *types* of musical knowledge and the sonic and social elements of music. We theorize that *legibility* is the key link between musical knowledge and genre preferences, insofar as people will report they “like to listen to” a genre when they feel they have the capacity to engage with it. More work is needed to explore varieties of musical knowledge and to theorize legibility in relation to cultural consumption.

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