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LOOKING INTO THE PROFILE OF MUSIC AUDIENCES

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Abstract:
The main aims of this chapter are to identify different groups of music consumers and to analyse the relation between the observed diversity of musical consumption and the socio-economic characteristics of the audiences. This information is essential for producers' and cultural practitioners' as well as for public agencies for the purpose of encouraging cultural consumption and the promotion of certain types of music. Using cluster analysis with the 2011 Survey on Spanish Habits and Cultural Practices (SHCP-2011), we have identified 12 distinct clusters of music listeners and obtained a detailed classification of music consumers. As expected, education and age are the main determinants of music consumption. Hence, education and childhood exposure to music could prove to be important instruments for improving music demand especially if they are focused on personal enjoyment and satisfaction rather than on the more formal aspects of music.

Keywords*: music demand, consumers' profile, cluster analysis*

JEL*: D12, L82, Z11*

Music is the melody whose text is the world
Arthur Schopenhauer.

1. Introduction

The main aim of this chapter is to analyze two different but connected issues. First, the relationship between the observed diversity of musical consumption and the socio-economic characteristics of audiences. Obviously, this question is closely linked with the concept and definition of cultural omnivores. Second, we wish to identify different groups of music consumers and use variables, mainly age and education, to define their members. In cultural industries, as in any other industry, identifying the profile of potential consumers is essential for producers' and cultural practitioners' decision-making. This information may also be important for public agencies to the extent that they may be interested in encouraging cultural consumption among particular groups of citizens or alternatively, the promotion of certain types of cultural goods. The intervention of public authorities in the provision of cultural goods is justified on the grounds that these goods often possess public-goods characteristics and their consumption may result in positive externalities. Also, cultural goods are often considered as merit goods, i.e. goods with an intrinsic value to society as a whole for which individual consumers possess either incorrect or incomplete information regarding their advantages. This in itself offers another rationale for public support.

Within the cultural sector, and starting with the work of Baumol and Bowen (1966), there is great concern among economists about the characteristics of performing arts audiences. And, among performing arts, there is an increasing interest in the analysis of music consumption as a special case of a cultural good that introduces numerous collateral effects.

The acknowledgment of the importance of music, both for individuals and society as a whole, dates back to early civilizations. Ancient Greeks and Chinese recognized both the harmful and beneficial effects of music.[1] For instance, in *The Republic*, Plato argued that

[1] See, for instance, Wang (2004) for a comparison between ancient Chinese and Greek understanding of the power of music.

proper education in music helps individuals to build a noble personality and he claimed that "*musical training is a more potent instrument than any other, because rhythm and harmony find their way into the inward places of the soul".* Furthermore, he also observed that *"musical innovation is full of danger to the State, for when modes of music change, the laws of the State always change with them*"; hence he was aware of the effect that music had on society and warned about the necessity of ruling out certain types of music because of their potentially harmful effects.

Research in many disciplines has sought to prove the beneficial effects of music on various aspects of an individual's life. In neuroscience, it has been found that music may benefit both mental and physical health.[2] In a review of research papers regarding the neurochemistry of music, Chanda and Levitin (2013) conclude that although the evidence is still very weak, amongst other effects, music can improve the immune system and reduce levels of stress. Similarly, several studies in psychology have pointed to the possibility that listening to music has a positive effect on other cognitive abilities, known as the Mozart effect (Rauscher et al, 1993). Although much subsequent research has failed to find a specific link between music listening and cognitive performance, Schellenberg (2012) claims that listening to music can change listeners' feelings, which, in turn, may affect their cognitive performance. Also, sociologists have argued that participation in the arts, including music, helps to build social capital, which can then serve as a tool for combating social exclusion and promoting community cohesion. As Putnam et al. (1993) suggest, cultural events can bring together diverse social groups, and even improve the efficiency of institutions.

Hence, music seems to have beneficial effects in many domains converting it into a distinctive cultural good which probably deserves greater attention when defining educational and cultural policies. Following this strand of literature, the present chapter focuses on music consumption in Spain. In particular, we investigate the characteristics of audiences associated with different types of musical choice in order to extract policy recommendations that will serve to foster individuals' appreciation of music consumption.

[2] See, for instance, Nozaradan (2015) in this volume.

The chapter is organised as follows. First, we present a brief discussion on the cultivation of music tastes. Second, we summarize the main empirical findings regarding music audiences. The available data and main results are presented in the next two sections. Our conclusions are provided in the final section.

2. Cultivation of Taste

Prior to any analysis of how to influence the consumption of music, it is fundamental to understand the behaviour of potential listeners. Beyond the simple inert process that may explain current and future consumption as a consequence of past consumption, as proposed by Pollak (1970), two main theories have been put forward to explain how tastes for music (arts) are formed. First, the rational addiction model (Stigler and Becker, 1977; Becker and Murphy, 1988), assumes that all individuals have similar preferences and that differences in constraints explain differences in observed behaviour. Under this approach, the taste for music is generated by a so-called music-specific capital that raises musical appreciation in the future, with each previous musical experience raising this specific capital. Second, the learning by consuming approach (Lévy-Garboua and Montmarquette, 1996) establishes that underlying tastes are given but are unknown to the individual. The consumer then discovers his/her taste through a sequential process of repeated experiences that incorporates unexpected positive or negative increment in taste.

Both models yield the following common key points which are essential to our discussion: (i) current consumption of music depends on past consumption and (ii) taste for music is developed through repeated exposure and consumption throughout an individual's life.

However, appropriate cultural policies can be quite different depending on the taste formation process. If tastes depend on music-specific capital and education is the major force available to enhance human capital, then musical education should play a central role in cultural policy. In this context it would certainly make sense for governments to subsidize and promote musical education. If tastes can be improved by exposure to music and consumption, cultural policy may prove more effective if it is directed towards subsidizing musical production and consumption via prices.

In any case, whatever the underlying process of taste formation, it is likely that as exposure to music increases, individuals become fonder of music and the positive effects discussed in the previous section will be disseminated throughout society.

3. Characteristics of music audiences

In this section, a brief summary of the main empirical findings regarding music audiences is presented, which at the same time tries to emphasize the more important stylized factors linked to music consumption.

The analysis of music audiences has traditionally made a clear distinction between two types of consumers: individuals who consume mainly "highbrow" musical genres, such as opera and classical music, and those who listen to "lowbrow" genres, like popular or rock music (Bourdieu, 1984). Along these lines, many attempts have been made to identify the characteristics of both types of audiences in several countries, and we can identify several common results among them. Highbrows are usually associated with higher education and higher occupational status, while lowbrows typically exhibit lower educational levels and lower occupational status (Baumol and Bowen, 1966; Throsby and Withers, 1979; Abbé-Decarroux and Grin, 1992; Towse, 1994; O'Hagan 1996; Fisher and Preece, 2003; Gray, 2003; Favaro and Frateschi, 2007; Montoro-Pons and Cuadrado-Garcia, 2011). Also, the audience of classical music is basically composed of middle-aged individuals (Seaman 2005, 2006), while younger people are more inclined towards popular music (Baumol and Bowen, 1966; Abbé-Decarroux and Grin, 1992; Favaro and Frateschi, 2007; Montoro-Pons and Cuadrado-Garcia, 2011).

Interestingly, while females are more likely to consume classical music than males (Kurabayashi and Ito, 1992; van Eijck, 2001; Fisher and Preece, 2003; Gray, 2003; Favaro and Frateschi, 2007), having family responsibilities has a negative effect on attendance to concerts of any type of music (Favaro and Frateschi, 2007; Montoro-Pons and Cuadrado-Garcia, 2011). Active participation in music-related activities increases the probability of listening to music (Abbé-Decarroux and Grin, 1992; van Eijck, 2001; Gray, 2003; Favaro and Frateschi, 2007; Montoro-Pons and Cuadrado-Garcia, 2011), but attending a music school does not contribute towards popular music consumption (Favaro & Frateschi, 2007). Geographical and other social differences have also been found.

Music consumption is more common in more developed regions (Fisher and Preece, 2003; Favaro and Frateschi, 2007) and in urban areas (Gray, 2003; Lewis and Seaman, 2004; Favaro and Frateschi, 2007). Finally, while ethnical minorities have a lower probability to consume classical music (Gray, 2003; Lewis and Seaman, 2004), gays, lesbian and bisexual people have a higher probability of attending classical music events (Lewis and Seaman, 2004).

In contrast with this traditional view, subsequent research (Peterson and Simkus, 1992; Peterson and Kern, 1996) found that in the USA this dichotomy was fading, as highbrow consumers were becoming increasingly omnivorous over time, appreciating a wider range of musical genres. This change in music consumption patterns has been found in other countries, such as Canada (Fisher and Preece, 2003), the Netherlands (van Eijck, 2001) or Italy (Favaro and Frateschi, 2007). Although the studies differ substantially in terms of methodology and variables considered, a common result is that this class of consumers with a taste for diverse types of music tends to be relatively young and highly educated.

In the case of Spain, there has been little research regarding music audiences. To the best of our knowledge, Prieto-Rodríguez and Fernández-Blanco (2000) were the first to analyse the differences in the consumption of classical and popular music in Spain. To do so they use data from the 1991 Survey on Structure, Conscience and Biography of Class(ECBC-91), where individuals were asked how often they listened to classical and popular music, without distinguishing between different music genres or alternative ways of listening to music. After controlling for socio-economic and demographic characteristics, the authors find that classical and popular music fans do not belong to completely independent groups. In particular, there is a positive and significant correlation between the consumption of both types of music. They interpret this result as evidence of a "common background between both groups that can be associated with the presence of an "innate" taste for music" (p. 159). With regard to the effects of the other socio-economic variables, results do not differ substantially from the evidence found in other countries. In the main, findings for Spain do not defer from those resulting from other international studies. This being the case we strongly believe that most of the results for Spain presented in this chapter could be generalized.

4. The data

To carry out our empirical analysis, we have used data from the 2011 Survey on Habits and Cultural Practices (SHCP-2011), which was conducted by the Spanish Ministry of Culture. The survey, collected in four waves between March 2010 and February 2011, is focused on cultural consumption and provides information on 16,000 individuals over 15 years of age living in Spain. Apart from socio-economic characteristics, the data covers information on individuals' interest, frequency and intensity in the consumption of cultural commodities, including music. Interestingly, it pays attention to different modes of acquisition of certain cultural products that are subject to intellectual property rights.

We have excluded those observations with missing values in any of the variables of interest. This leaves us with a final sample of 14,486 individuals, 48% of whom are males, with an average age of 44 years, and around ten years of formal schooling. Descriptive statistics are shown in Table 1.

Table 1. Descriptive Statistics

	Mean (%)	**Standard deviation**
Male	47.99	0.50
Age	44.22	19.10
Education	10.02	3.90
Music genres	3.11	2.67
Music genres		
Songwriters	28.64	0.45
Melodic music	32.11	0.47
Flamenco	20.04	0.40
New flamenco	12.72	0.33
Other Spanish folk music	12.72	0.33
Spanish pop/rock	50.61	0.50
Latin pop/rock	30.21	0.46
Foreign pop/rock	33.34	0.47
Blues, Soul	7.90	0.27
Jazz	6.53	0.25
World folk music, ethnic	4.39	0.20
Reggae	6.24	0.24
Rap, hip hop	7.18	0.26
Electronic, techno	7.48	0.26
Hard rock, metal, punk	4.86	0.22
Dance, house	9.38	0.29
Classical music	14.79	0.36
Lyrical music	3.42	0.18
Opera	4.11	0.20
Zarzuela	3.69	0.19
Other music genres	11.03	0.31

In order to analyse how some observed socio-economic characteristics (mainly age, education and sex) are linked with the diversity of music consumption and how they can help us to identify different groups of music consumers, we focus on one specific question of the survey regarding the type of music individuals had listened to, in the previous quarter. The list of possible answers covers over 20 music genres from opera to flamenco, as shown in Table 1. Individuals in the sample declare that they listen, on average, to over three different music genres. Some popular music styles, as the term seems to indicate, are crowd-pleasing such as pop and rock (the most frequently consumed types of music), especially Spanish pop rock, as over 50% of the individuals declared having listened to it. Songwriter and melodic music are also quite popular, consumed by 32% and 28.6% of the sample, respectively. However, among popular genres, we also observe some niche styles consumed by a very restricted audience. This is the case of ethnic music or hard rock both consumed by less than 5% of the sample. A less marked distinction can be found among classical music genres. The proportion of individuals who consume classical music is nearly 15%, while only roughly 4% state that they listen to lyrical music including opera and zarzuela.

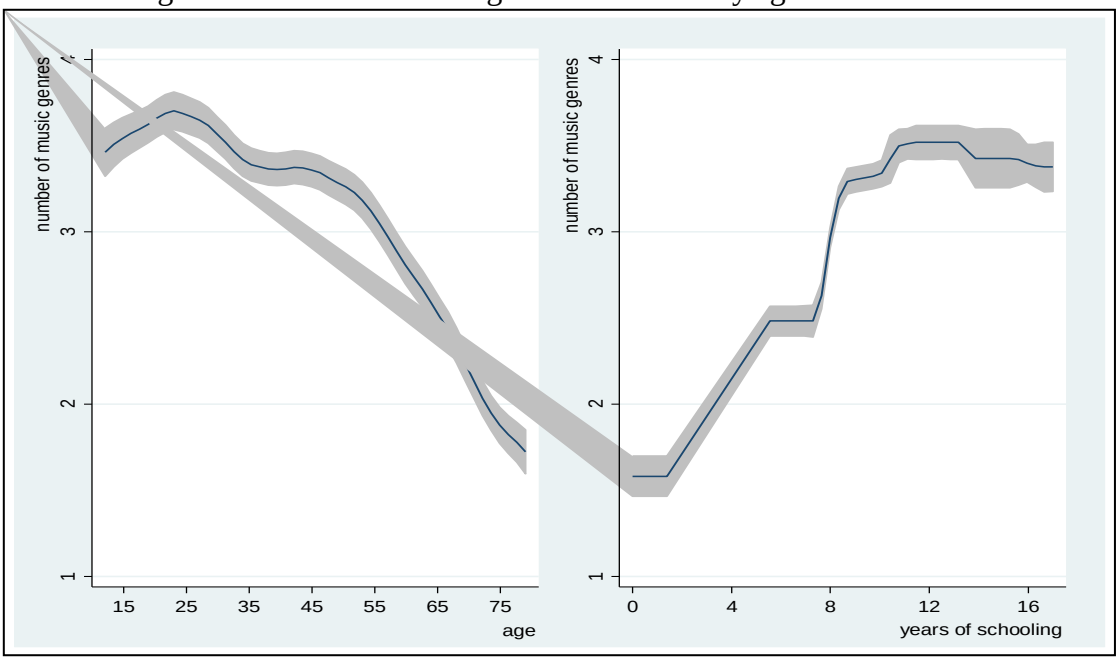
5. Results

In this section, we present the main results of the empirical analysis. First, using non-parametric techniques, we examine the relationship between the diversity of music consumed dependent upon the variables of age and education.[3] This allows us to summarize the cloud of points shown in Figure 1, that describes all the observed combinations of music consumption with age or education along a smooth curve, In particular, we use the Nadaraya-Watson nonparametric smoother (Nadaraya, 1964 and Watson, 1964) with the Epanechnikov kernel (Epanechnikov, 1969) applied to the number of music genres and both age and years of schooling, separately. We have applied this analysis to the entire sample, including also those that declare no musical consumption. We are aware that non-consumers are not randomly distributed by age and education. In fact, less than 3 percent of teenagers do not listen to music at all, but this proportion increases up to one third for people over 75 years.

[3] We have focused on these two variables because, as we have seen in section 3, they are really frequent determinants of music consumption all around the world. We have also used sex but this variable was not significant.

As expected, younger people tend to listen to more different music genres. We observe a maximum at around 25 years of age and a steady decrease up to 50 years which declines rapidly from there on. That implies that older people have, on average, a very narrow range of music preferences and consumption, if any. As we will discuss later, among older people, many do not listen to music at all; some are focused on classical music, others on popular music but almost none have a preference for highbrow and lowbrow genres simultaneously.

Figure 1. Number of music genres consumed by age and education



Note: The shaded regions represent the 95 percent confidence intervals

With regard to education, the greater the numbers of years of schooling, the wider the number of musical choices. However, these differences are only significant when we compare people with less than primary and primary education with those with secondary or more education. Despite the similar number of musical genres consumed by people with secondary or higher education, a qualitative difference between them is observed, since the proportion of university graduates who listen to classical music doubles that of those with secondary education. We performed this analysis for males and females separately and we have not found any significant difference. Hence, these patterns for age and education do not differ by gender.

Once we had analysed the quantitative component of the diversity of music consumption (number of consumed genres), we focused on investigating the qualitative differences in the patterns of music consumption. To do so, we used cluster analysis to classify consumers according to their musical choices using information about the particular music genres people listen to. Clustering consists in assigning observations to groups (or clusters), in such a way that the observations within each group are similar with respect to the variables of interest, and the groups differ from one another. We clustered individuals only with respect to the music genres they listen to, so that observations within a group share similar musical tastes but may differ in terms of other characteristics. However, we expected some similarities in terms of educational attainment, age and probably sex, within groups of similar music consumption patterns, even if these variables are not used to classify people. The cluster analysis yields 12 distinct groups, ranging from those who hardly listen to any music to omnivores, as listed in Table 2. Although not very strong, we observe a negative correlation between the size of the groups and the variety of genres they listen to. The smaller groups are associated to the consumption of a larger diversity of music styles.

Table 2. Cluster analysis

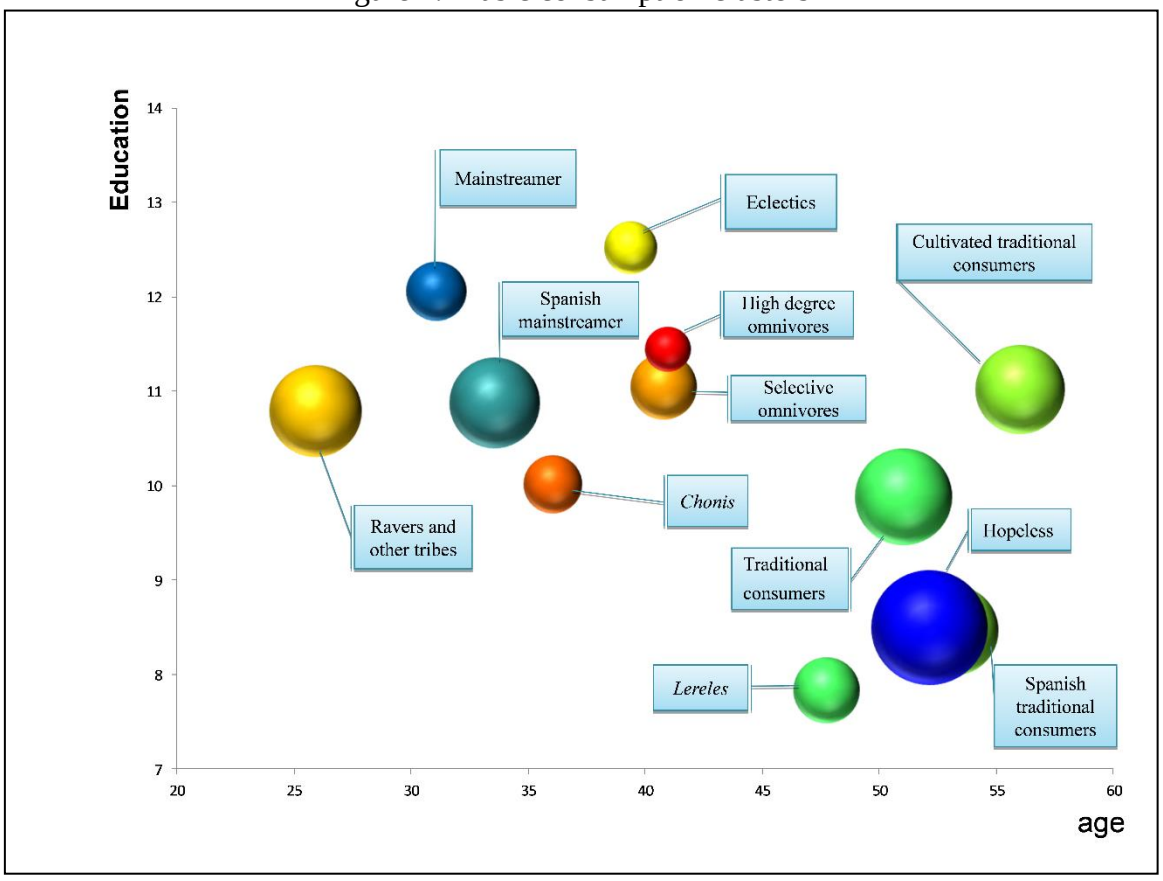
Cluster	Music genres	Male (%)	Age	Education (years)	Size
High degree omnivores	11.87	50.92	40.95	11.45	381
Chonis	6.05	44.60	36.05	9.88	639
Selective omnivores	5.21	38.88	40.76	11.02	841
Ravers and other tribes	4.68	63.17	25.88	10.79	1,613
Eclectics	4.06	55.64	39.36	12.52	532
Cultivated traditional consumers	3.53	44.65	56.00	11.05	1,532
Spanish traditional consumers	3.44	45.32	53.16	8.47	1,538
Traditional consumers	2.13	39.01	51.02	10.02	1,784
Lereles	2.08	50.85	47.71	7.84	826
Spanish mainstreamer	1.82	47.82	33.55	10.88	1,562
Mainstreamer	1.69	54.44	31.05	12.07	676
Hopeless	0.94	47.62	52.13	8.50	2,562

Once the clusters were defined, we analysed the differences in the average age, education and gender among groups. In some cases, we also incorporated self-declared interest in

music since this variable is a good proxy of music preferences (see, for instance, Fernandez-Blanco et al (2009).[4]

For ease of interpretation, we have plotted the clusters in Figure 2 with age and education in the axis. The size of each sphere represents the sample size of the cluster and its colour the diversity of the music consumption: from red (high diversity) to blue (no diversity at all).

Figure 2. Music consumption clusters



One thing that should be taken into account is the importance of Spanish specific genres in this classification. For almost all genres of singing, from lyrical to popular music, we observe that language has an important impact on music consumption and on the definition of music clusters. In fact, consumption of *Zarzuela*[5] and Spanish and South

[4] It should be noted that the socio-economic differences are the result of the analysis and they are absent in the origin of the groups, as would have been the case if they were included in order to define clusters.
[5] Spanish lyrical-dramatic genre that has its origin in the Baroque.

American popular genres (including *flamenco, tango, bolero, corrido, salsa…*) are fundamental determinants of at least four clusters.

In order to present the main characteristics of each cluster, we will use the role of classical music as a guiding thread. We have identified four clusters with a declared above average consumption of classical music and opera. But only one cluster is defined mainly as consuming classical music with other genres playing a very minor role, if any. Therefore, the distinction between highbrow and lowbrow profiles could be somewhat outdated and the importance of omnivores as classical music consumers is increasing in line with the findings of other countries (see, Peterson and Simkus, 1992; Fisher and Preece, 2003; van Eijck, 2001; and Favaro and Frateschi, 2007).

Among the omnivore groups, we identify what we have named ***high degree omnivores***, who consume almost all music genres to a high degree. It is the smallest group representing only 2.63% of the sample. Individuals in this cluster are middle aged and tend to be relatively highly educated. On average, they declare to consume nearly 12 different types of music. They are important consumers of classical music (62% on average) and opera (30%) but they are more likely to listen to pop-rock music (around 90%) or selective genres within popular music: blues (81%) or jazz (80%).

The second group, ***selective omnivores***, is composed mainly of females (61% of the cluster), with relatively high education and an average age of 41 years. They exhibit high levels of consumption of songwriter (87%), melodic (75%) and Spanish and Latin pop rock music (90%). The proportion of individuals who declare to consume classical music is well above the average but standing at only 24%. However, they hardly consume any minority popular music genres: flamenco (4%), electronic (3.3%), blues (3%) or jazz (1.6%).

Individuals in the third cluster, ***eclectics***, represent a small group (3.7% of the sample). They are around 39 years of age, and exhibit the highest educational level. They have the highest self-declared interest in music. They are characterized by high levels of blues (76%), jazz (51%) and pop and rock (60%) consumption. They do not like flamenco, electronic music or metal rock. Their consumption of classical music is average, but they do not listen to opera or lyrical music.

Fourth, the ***cultivated traditional consumers*** cluster, is characterised by very high levels of consumption of classical music (85.3%), opera (25.4%) and zarzuela (23.6%). It is one of the largest clusters, with more than 1,500 observations (above 10% of the sample). Individuals in this group have a high self-declared interest in classical music; they are highly educated and are middle-aged and old. Within this cluster, the older individuals exhibit a higher interest in opera, while the younger ones also listen to songwriters, pop and melodic music.

The next clusters are characterized by a low consumption of classical music and, in some cases, by a very low interest in any kind of music. The ***Spanish mainstreamers***, one of the largest clusters (11.1%), is composed by relatively young individuals with average educational level. They just listen to mainstream music with a very high prevalence of Spanish (88%) and Latin (58%) pop-rock. The ***mainstreamers***, representing 4.7% of the sample, are among the youngest and most educated individuals. However, despite their high levels of education, they have null classical music consumption. They just listen to foreign (99.7%) and Spanish (63%) pop-rock, without any observable consumption of Latin pop-rock. We have denominated these two groups mainstreamers because they do not present any preference for any genre apart from pop-rock. However, the difference in the average educational attainment between both groups seems to be associated with a truly remarkable divergence in the role played by language in their musical tastes.[6] Despite all other cohort similarities, ***mainstreamers*** do not listen to Latin music and almost all enjoy foreign pop-rock; while the ***Spanish mainstreamers*** consume Latin pop-rock but much less foreign pop-rock.

The next group, ***ravers and other tribes***, is composed mainly by young males being the most homogeneous cluster in terms of age with a mean of 25.8 years. They have relatively low educational levels, although many are still at school. They are interested in some niches. We can identify subgroups by music genres such as reggae, metal, electronic, house, rap or hip hop.

The ***traditional consumers*** **group** is the second largest (12.3%). It is composed by more than 60% females and, on average they are in their late forties/early fifties and have below

[6] Snowball et al. (2010) have also discussed the effects of home language on cultural consumption.

average education. These individuals listen mainly to melodic music (75%), songwriter (55%), and some Spanish pop-rock (41%) and report a really low consumption of any other genres. The ***Spanish traditional consumers*** cluster also represents a large part of the sample (10.6%) and is composed of middle-aged and old individuals with very low education, just slightly over eight years of schooling. Individuals in this group consume melodic (53%), songwriter (50%) and flamenco (44%). However, the most distinctive pattern is their high consumption of folk music (65%). They listen to no blues, jazz or lyrical music.

The following two clusters have some common features: they are the two most homogeneous groups in terms of education, both with very low average schooling and a high appreciation for flamenco. The main difference between them is their average age and their consumption of pop-rock. Individuals in the older group, ***lereles***[7], are 5.7% of the sample. On average, they are in their late forties and, although they are not the oldest group, they exhibit the lowest average level of education of all the clusters, with only 80% possessing primary or less than primary education. They declare a low interest in music, especially for classical music. Their consumption of music is very high for flamenco (86%) and very low for everything else except Spanish pop-rock for which they have a lower than average consumption (36%). No one in this cluster declared having listened to classical music. The younger of these two groups, which we have named ***chonis,***[8] is also a relatively small group formed by 4.6% of the sample. They are young adults and, again, have very low levels of education, especially if they are compared with their cohorts. Conversely to the ***lereles***, they listen to a larger variety of genres, including some classical music; but their preferences are especially focused on traditional Spanish popular music such as flamenco (81%), new flamenco (65%) and pop and rock (90%). Only 4.2% declare to consume jazz and 3.2% electronic music. Regarding highbrow music, 8.6% listen to classical music but they have a very low consumption of lyrical music.

[7] *Lerele* is a Spanish colloquialism to denote certain groups of individuals, who have low education levels and consume Spanish folk music and flamenco.
[8] *Choni* is a colloquialism used in Spain to refer to young girls (*cani* is the word for males) with low education and very specific music preferences.

Finally, the ***hopeless*** cluster is characterised by almost no music consumption. It is the largest cluster identified, with 2,562 observations that represent 17.7% of the sample. Individuals in this group are, on average, 52 years old, with very low education and a very low self-declared interest in music.

6. Conclusions

In this chapter, we have analysed the characteristics of music audiences in Spain. We strongly believe that the characterization of consumers (and non-consumers) of cultural goods and activities is not only interesting from an academic point of view, but also from an economic policy perspective. It is desirable that policymakers and cultural practitioners are well informed in order to design cultural policies that are both effective and efficient: effective in the sense of meeting certain targets, such as ensuring equity in access to culture; and efficient, as they are allocating scarce public resources that could be assigned to alternative and desirable uses, such as education and health.

Using data from the 2011 Survey on Spanish Habits and Cultural Practices (SHCP-2011), we have performed cluster analysis to obtain a detailed classification of consumers based on the types of music they declare to listen to. In particular, we have identified 12 distinct clusters of music listeners. For each group, we have then provided a descriptive analysis of their mean characteristics in terms of gender, age and education with a view to understanding the socio-economic profiles associated to music tastes.

While groups differ widely in terms of their musical choices and personal characteristics, we observe that individuals do not just consume either classical or popular music, since most of them are, to different extents, omnivores. In fact, one third of the sample declared listening to more than four different types of music, although these genres frequently formed part of popular music.

Education continues to be the main instrument for increasing diversity of music consumption. First, it has a big impact on classical and lyrical music appreciation, thus increasing their consumptions. Second, education is highly correlated with self-declared interest in music, which, in turn, is key to enhancing diversity in music consumption. Therefore, improvements in education and childhood exposure to music could help to encourage music interest and, consequently, contribute towards the diversity of musical

consumption, especially for classical and lyrical styles. We consider that education and childhood exposure to music would be more effective if they were focused on personal enjoyment and satisfaction rather than on the more formal aspects of music.

Finally, we have found some genres with a low consumption by groups of people that focus their demand on Spanish music. As linguistic aspects of music seem to have a relevant impact on music demand, any improvement in foreign languages abilities could lead to an increase in the variety of music consumption.

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