MUSIC CONSUMER BEHAVIOUR IN THE CZECH REPUBLIC

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Abstract

The rapid emergence of new digital technologies has had a huge impact on the cultural world in general, and on music in particular, and in the last few decades has unleashed staggering changes in virtually all aspects of artistic life - both for creators and for the creative industries that have established themselves around them. In the case of music, these technological changes, most of which go hand in hand with the adoption of computers, the internet and related tools by an ever-growing audience, have revolutionized the way music is created, produced, sold, distributed and consumed today.

The aim of this study was to find commonalities and trends in consumer behaviour for different groups of consumers divided according to commonly used segmentation criteria. The research findings confirm the current trends of digitalisation and the increasing popularity of using digital platforms and social networks not only for listening to music but also for finding other related content, especially among younger generations.

Keywords

music; consumer behaviour; music industry

1 Introduction

The rapid and intense emergence of digital technologies since the late 1990s has had a huge impact on culture, especially music, and has caused major changes in the art world (Álvarez, 2017). These technological changes, including the adoption of computers, the internet and related tools, have revolutionized the creation, production, distribution and consumption of music (Schumpeter, 2013).

Digital technologies and distribution channels have brought predictions of a more direct relationship between artists and consumers, which should weaken the role of intermediaries and the dominance of large companies, and strengthen the role of prosumers. However, the latter change has not yet lived up to expectations (Álvarez, 2017). Important milestones have been internet piracy and legally distributed online music, especially streaming services, which have reignited the growth of the music industry after years of declining revenues.

Research shows the different impacts of piracy on the music industry. Some studies suggest that piracy reduces music sales (Towse, 2003). Research also shows that while CD sales are declining, concert attendance is increasing (Ginsburgh & Throsby, 2013) and that consumers who engage in internet piracy spend more on legal music than others (Watson et al., 2015).

Streaming services like Spotify are replacing online music sales and popularising the trend of unbundling, where users choose individual tracks instead of entire albums (Aguiar & Waldfogel, 2018). This phenomenon may increase the demand for individual songs, but has a negative effect on the overall demand for recorded music and the revenue generated from its sale (Elberse, 2010). Unbundling and piracy have a similar impact on weakening the relationship between the demand for live performances and recorded music (Papies & van Heerde, 2017).

The digitisation of music and the development of streaming and live music are key to sustaining the music industry. The mutual adoption of new sales strategies and technologies between the digital recording industry and the concert industry is seen as positive (Naveed et al., 2017).

Another study shows that free music streaming does not have a significant effect on CD sales and positively affects live music attendance, but only for national or international artists (Watson et al., 2015).

The aim of this article is to identify and define current trends in the consumer behaviour of Czech consumers of music content, or rather its two main components: recorded music and live performances.

2 The impact of digitalisation on purchasing processes

Research in digital marketing focuses on how digital technologies affect the buying process. Thanks to the beehive-like network, consumers are better informed and cannot be easily led by companies. This trend has important implications for research on purchasing behaviour. We are entering a decision-making environment that is in constant flux; many consumers engage in a continuous loop of sharing product information, following the latest news on social media and asking for opinions (Ashman et al., 2015).

Grewal et al. (2013) evaluated how marketing practices in the digital realm influence buying patterns. These studies provide new insights into how digital technologies and online environments are changing the buying processes and how consumers interact with different marketing channels.

As time passes and the ways in which consumers interact with brick-and-mortar stores and online marketplaces change, it is necessary to rethink basic assumptions about the psychology of consumer decision making (Ashman et al., 2015).

3 Segmentation of music consumers and its criteria

Whether you are a music publisher or distributor, a club operator, a promoter or a festival organiser, you need to engage with your customers, i.e. your audience, both actual and potential, to create the right product portfolio.

3.1 Segmentation criteria

The choice of the criteria to be observed should be based on the predefined area, i.e. the above mentioned forms of observed markets. Within the market for live concert performances, a homogeneous group of regular visitors to music events can be observed, the individual segments of which are further differentiated according to the following criteria (Ginsburgh & Throsby, 2013). In the case of the leisure market, this is a rather heterogeneous environment within which common characteristics for certain segments need to be defined (Solomon, 2010).

3.1.1 Demographic criteria

Demographic criteria to watch include gender, age, education, marital status, occupation and income (Reid & Bojanic, 2010). Profiles of typical attendees of certain types of cultural events or listeners of music of a certain style or with certain consumption habits, with gender segmentation being one of the common methods used to describe markets (Bačuvčík, 2010).

3.1.2 Geographical criteria

From a geographical point of view, it is useful for club operators and concert organisers to differentiate visitors according to the distance of their residence or place of stay (e.g. students often visit clubs in their place of study rather than in their place of residence). Geographical criteria are not so important in monitoring the consumption of recorded music, but it is possible to observe if the habits of listeners vary according to region, size of residence, etc., but large differences cannot be assumed (Solomon, 2010).

3.1.3 Socio-economic criteria

Social class, income level, family background and lifestyle often play a role in determining reasons for and against attending concerts (Coleman, 1983).

The influence of socio-economic criteria and social status on cultural preferences, activities, tastes and consumption behaviour in the Czech Republic has also been investigated by Šafr (2008). His research shows that the effect of class cannot be completely ignored in explaining lifestyle and cultural preferences and that consumption and cultural tastes are linked to vertical position in society.

In terms of subcultures, music listeners are defined primarily by the preferred genres associated with the subcultures and the associated visual and character identity (Oravcová & Kolářová, 2012).

3.1.4 Criteria of use

Concert-goers should also be defined and differentiated according to use criteria, i.e.:

1) user status - attending concerts x not attending concerts
2) usage rates - frequency and regularity of concert attendance and listening to recordings
3) loyalty - visitors to one club x multiple clubs

This distribution of visitors is important both with regard to targeting advertising and long-term communication with visitors, but above all in terms of pricing policy. These different visitor groups typically have different individual price elasticities of demand, which also vary with respect to different socio-economic factors, for example, the demand of higher income viewers was less elastic than that of the middle income segment (Duell, 2018).

Felton (1994/1995), in his research on attendance at American orchestras, divides audiences according to their relationship to the cultural institution into regular attendees and subscribers. Her research shows that the price elasticity of demand of subscribers is significantly lower than that of regular patrons.

3.1.5 Segmentation by expected value, attitudes and opportunities

Here, the main phenomena observed are reasons for attending a concert, expected benefits of attending and attitudes towards different types of concerts, and popularity of different musical genres. For consumption of recorded music, one can then look at opportunities for listening to music, attitudes towards different forms of listening and the means used (Kotler & Armstrong, 2012).

4 Methods

The research design was designed to respect three basic requirements: reliability, replicability and validity (Bryman & Bell, 2015). Based on the stated objectives and priorities, a quantitative research design was chosen and the associated primary data collection method.

Subsequently, the research questions were set in relation to the literature search. The formulation of the research questions followed the methodological approach of Brymann & Bell (2015).

RQ1: What criteria are most important for defining consumer segments?

RQ2: What are the common elements of consumer behaviour for different groups of consumers?

4.1 Data collection

For the purpose of the research, a questionnaire survey was prepared with a sample of 453 respondents selected on the basis of purposive sampling supplemented by quota sampling using an online panel to fill in missing segments of the sample. An online panel of respondents operated by Click4Survey Ltd. was used, for which quotas were determined according to demographic criteria to ensure that the sample was representative.

Applied psychological and sociological research often uses samples from commercial online panel data, which are controversial due to quality concerns. A 2019 meta-analysis compared estimates of internal reliability of scales and effect sizes from online panels with estimates from conventionally collected data. Results show that data from online panels have similar psychometric properties and criterion validity to conventionally obtained data (Walter et al., 2019). Given the online nature of the data collected, the sample can be considered representative of the online population.

4.2 Analysis of the questionnaire survey

The aim of the questionnaire survey was to find common features of consumer behaviour for individual groups of consumers divided according to the above segmentation criteria. The questionnaire survey data was cleaned and coded. The data obtained was exported into a spreadsheet format and entered into SPSS statistical software for further analysis. Descriptive statistical methods, correlation analysis and two-stage cluster analysis were used.

Descriptive methods

For the analysis, a first-level classification is used, identifying the frequency of occurrence of each variant of the monitored indicators in absolute and relative frequencies, which in some cases is accompanied by graphs or tables. The modus defines the most frequently occurring values, the median represents the mean of the values, i.e. the feature that divides the set into two halves, and the arithmetic mean is used, accompanied by the standard deviation, which expresses the degree of its homogeneity.

Correlation analysis

The relationship between cardinal and ordinal variables is assessed using Pearson's (hereafter referred to as r) correlation coefficient, which examines the degree of dependence between two variables. The coefficient takes values from -1 to 1. The strength of the relationship (in absolute values) is assessed as 0.1-0.3 weak, 0.3-0.7 moderate and values above 0.7 strong. Correlation analysis determines whether a relationship exists between the variables of interest and the strength of that relationship.

Two-stage cluster analysis

The basic idea of cluster analysis is to divide a number of cases (usually respondents) into subgroups according to a predetermined criterion that is assumed to reflect the similarity of individuals within and the dissimilarity between subgroups (Dolnicar, 2002).

The clustering method was developed for the analysis of large data sets and consists of two stages - steps. In the first step, the so-called pre-clustering or preclustering of variables takes place in order to generate a data matrix with fewer variables for the next step. In the second step, all original and newly generated clusters are gradually merged into one large cluster (Chiu et al., 2001). The advantage of this method is the ability to work with different combinations of variables, as well as the ability to determine the optimal number of clusters and identify the most significant variables in the set (Bacher et al., 2004).

5 Research results

The aim of the research was to find common features of consumer behaviour for individual groups of consumers divided according to the established segmentation criteria (age, education, monthly income, opportunities for listening to reproduced music, motives for attending a concert, influence of social environment, needs and attitudes of the respondents, etc.) and factors influencing selected elements of consumer behaviour.

5.1 Consumer segmentation

Consumer segmentation was conducted using an a posteriori approach (Dolnicar, 2004) because segmenting a large sample of respondents using an a priori approach has less potential for defining individual segments (Ehrnrooth & Gronroos, 2013). The selection of segmentation variables was inductive due to the nature of the sample (Ketchen & Shook, 1996).

Demographic and geographical criteria

The demographic segmentation criteria were gender and age. The sample consists of a total of 453 respondents with a gender distribution of 47% male (N=213), 51.9% female (N=235) and 1.1% other/not identified (N=5). The respondents are divided into seven age categories. The categories with the highest representation are 30 to 39 years (20.1%) and 40 to 49 years (20.8%), which sufficiently corresponds to the age structure of the Czech population. On the other hand, respondents aged 70 and over are the least represented.
Geographic segmentation was not used due to the low representation of some regions and the lack of significant relationships between geographic criteria and other variables.

Socio-economic criteria

Socioeconomic segmentation criteria were educational attainment, social status and average net monthly income. Among the respondents, the highest proportion of people with completed secondary education with a high school diploma (45.7%), followed by secondary education with a certificate of education (17.2%), university (13.9%) and higher vocational education (13%). 7.1% of respondents with completed primary education responded, while 3.1% indicated other education.

In terms of social status, the most represented group was the respondents working in a main job, the second largest group was self-employed.

Subsequently, respondents were divided into six categories according to their average net monthly income, with the largest group being those with an average monthly income between CZK 24,000 and CZK 34,000 (27.2%); the representation of the other segments is approximately the same, with the exception of the high-income groups with an income of CZK 50,000 to CZK 100,000 per month (10.4%) and above CZK 100,000 per month, which make up only a small part of the sample (1.5%).

Criteria of use

The first indicator monitored was the average monthly expenditure on culture and the average monthly expenditure on music. While the arithmetic mean was approximately CZK 1 380 per month for culture and CZK 760 per month for music, the median showed mean values of CZK 9 000 per month for culture and CZK 300 per month for music, while the value of the character with the highest frequency (modus) was CZK 1 000 per month for culture and CZK 0 for music.

Subsequently, the sample was analysed according to other usage criteria, namely user status and usage rate, i.e. based on time spent listening to music per day, frequency of attending concerts and frequency of purchasing recordings. In terms of daily intensity of music listening, the segments devoting 30 minutes to 1 hour, 1 to 2 hours and 2 to 3 hours per day to music are most strongly represented, with an average of approximately two and three-quarters hours per day. In terms of frequency of concert attendance, respondents were asked if they regularly attended concerts, followed by the average number of concerts attended per month. Of the respondents, 57.4% stated that they do not attend concerts regularly (at least 10 concert visits per year). The arithmetic mean of the number of concerts attended per month was 1.9 concerts, the median was 1 concert per month, and the mode was 0 concerts per month. The regularity and frequency of concert attendance for each age group was also examined, as shown in Table 1 a Table 2.

N=453		**Do you regularly attend concerts?**	
		Yes	No
Age	15-21	40,0 %	60,0 %
	22-29	76,1 %	23,9 %
	30-39	65,9 %	34,1 %

	40-49	37,2 %	62,8 %
	50-59	24,4 %	75,6 %
	70 and over	13,2 %	86,8 %
Total		42,6 %	57,4 %

Table 1 - Regularity of concert attendance by age (source: own elaboration)

N=453		How many concerts do you attend per month on average?		
		Arit. average	Median	Modus
Age	15-21	1,47	1,00	0,0
	22-29	3,09	2,00	2,00
	30-39	2,89	1,00	1,00
	40-49	2,33	1,00	0,0
	50-59	0,85	0,0	0,0
	60-69	0,45	0,0	0,0
	70 and more	0,18	0,0	0,0

Table 2 - Frequency of concert attendance by age (source: own elaboration)

Segmentation based on causal criteria (preferences, attitudes and opportunities)

In terms of genre preferences of the sample, the most represented genres were rock and pop, followed by electronica, metal/hardcore and punk-rock. The least preferred music genres were R'n'B/soul, ska/reggae and indie.

Consumption of recorded music

The 8 available options were assigned values on preference scales ranging from 1 to 8, with "travelling" and "attending concerts" being the highest, while work or study, housework and relaxing at home were the next most preferred opportunities to listen to music, and the least preferred opportunities to listen to music while sleeping or falling asleep or as a main activity, as shown in Table 3.

On what occasions do you listen to music most often/most often?								
N=453	Work/study	Travel	Before/at bedtime	At rest	When playing sports	For household chores	At concerts	Main activity
Ar. diameter	4,56	6,05	2,94	4,78	3,27	4,97	5,00	2,98
Median	5,00	7,00	2,00	5,00	2,00	5,00	5,00	3,00
Modus	1	8	1	6	1	5	8	1

Table 3 - Opportunities for listening to music (source: own elaboration)

In a similar way, respondents were asked about the source from which they most often get their music news. Social media was the most common source for most respondents, with word of mouth being the second most preferred option. Printed music magazines were the least sought after source of information. Another aspect of consumer behaviour examined was the medium through which consumers of music content encounter contemporary music. 39.7% of respondents cited music streaming platforms as the most common medium. A large number of respondents (29.8%) most frequently encounter contemporary music through radio and 7.1% through social media.

Consuming live performances

The next part of the questionnaire survey on the consumption of live concert performances was aimed at exploring the reasons for attending concerts and the reasons that discourage concert attendance. On a preference scale from 1 to 8, respondents assigned importance to each reason, with 1 being an indicator of the lowest level and 8 being the highest. The individual reasons and their values are shown in Table 4.

What is the main reason for you to attend the concert?								
N=453	Music itself, Artist	Spending time with friends	Increase social credit	Relaxation	Alcohol, drug consumption	I am an active musician myself	Date, activity with partner	As part of the job description
Ar. diameter	6,79	5,16	3,07	5,43	2,83	3,26	3,17	2,38
Median	8,00	6,00	3,00	6,00	2,00	2,00	3,00	1,00
Modus	8	7	1	6	1	1	1	1

Table 4 - Reasons for attending a concert (source: own elaboration)

In the same way, respondents were asked about the main reasons that discourage or prevent them from attending a concert, see Table 5.

What are the most common reasons that discourage you from attending a concert?								
N=453	Leisure activity of a non-cultural nature	Leisure activity of a cultural nature	Budget, price of admission	Lack of free time	Family / Partner	Distance from the venue	Venue	Unattractive club dramaturgy
Ar. diameter	3,74	3,60	4,95	5,28	3,66	4,62	3,96	3,39
Median	3,00	3,00	5,00	6,00	4,00	5,00	4,00	3,00
Modus	1	1	8	8	1	1	1	1

Table 5 - Reasons for not attending a concert (source: own elaboration)

5.2 Defining trends for consumer segments using correlation and cluster analysis

Correlation analysis

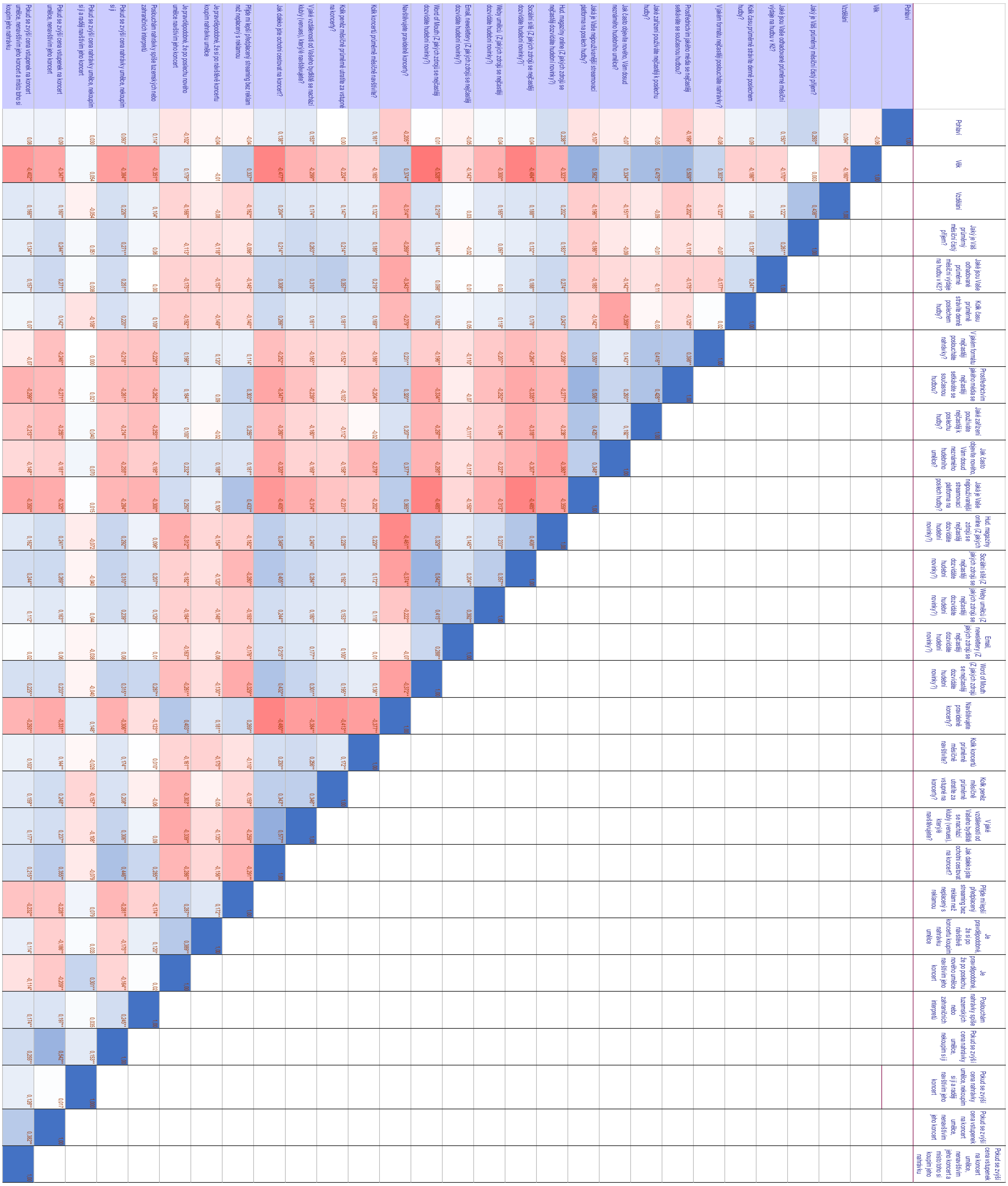

Image 1 - Correlation matrix (source: own elaboration)

Using correlation analysis (Pearson correlation coefficient was used, correlations with a significance level of 0.01 were considered - marked ** in the correlation matrix), trends in preferences and purchasing behaviour were determined for some of the above consumer segments.

The coefficient takes values from -1 to 1. The strength of the relationship (in absolute values) is assessed as 0.1 - 0.3 weak, 0.3 - 0.7 moderate and values above 0.7 strong (Hendl, 2009). Correlation analysis determines whether there is a relationship between the variables under study and the strength of this relationship, but does not express causality.

The strength of the correlations found was mostly weak or moderate, but given the size and heterogeneity of the sample, even weaker correlations are indicative of certain trends.

Due to the inductive approach, correlations of all variables were examined. Image 1 shows only a selection of the variables that proved to be the most significant in defining consumer behaviour.

Age

Of the demographic segmentation criteria, significant correlations were found only for age. This variable was also found to be the most significant in the cluster analysis, which is discussed in the following section.

The following relationships were found:

1) A moderately strong positive correlation between age and radio as the medium through which respondents most frequently encounter contemporary music (r=0.509) and radio as the most used device for listening to music (r=0.475).
2) Weak negative correlation between age and frequency of discovery of new music artists (r=-0.334) and regularity of concert attendance (r=-0.374). Thus, younger age groups discover new artists slightly more frequently than older generations and more of them attend concerts regularly.
3) A moderately strong negative correlation between age and the use of streaming services for listening to music (r=-0.562), indicating a relatively low popularity of new digital technologies among the older population.
4) Moderately strong correlations were also found for comparative Likert scales focusing on verbal interpretation of the price elasticity of demand for recorded music and live performances. The price of both recordings (r=0.384) and concerts (r=0.347) was found to play a greater role for consumers as they get older, thus demand is more elastic for older people.

Socio-economic criteria

a) **Education** - apart from a moderately strong correlation between educational attainment and average monthly income, only a few weaker correlations were found with several aspects of consumer behaviour. Education can therefore be seen as a minor factor that does not play a major role in consumer behaviour.

b) **Average monthly income**

   1) There is a weak positive correlation between average net monthly income and estimated average monthly expenditure on culture (r=0.218) and on music (r=0.261). Thus, music consumption increases slightly more with higher income than culture consumption in general, but the difference is not very significant.
   2) A weak positive correlation between average net monthly income and monthly spending on streaming platforms (r=0.304). The correlation implies that people with higher incomes are slightly more likely to use multiple streaming services simultaneously, as shown by the subsequent cluster analysis.
   3) There is a weak negative correlation between average monthly income and the price elasticity of demand (r=-0.271 for the price of recordings and r=-0.244 for the price of concerts), so the relationship is slightly stronger than in the case of educational attainment and can be interpreted as meaning that the demand of people with higher incomes is slightly less price elastic.

For the remaining socio-economic criteria, no significant relationships were found to illustrate trends in consumer behaviour.

Criteria of use and causal criteria

Correlations were sought both between individual use criteria and between use criteria and other variables.

a) Preferred genres

In terms of genre preferences, in addition to the correlations between popular genres, e.g. moderate negative correlation with r=-0.409 between pop and metal/hardcore, weak negative correlation with r=-0.282 between pop and punk or, on the contrary, weak positive correlation with r=0.340 between metal/hardcore and punk, i.e. expected relationships between similar or very distant genres especially in terms of affection for the given subcultures, only a few significant correlations were found. The only more significant correlations were found for genres generally associated with membership of specific subcultures exhibiting certain common behavioural elements typical of those subcultures, together with a distinctive visual style and other elements.

b) Time spent listening to music every day

1) A weak positive correlation (r=0.359) between time spent listening to music per day and the frequency of discovery of new music artists. Thus, people spending more time listening to music are also more likely to discover new artists.
2) Moderately strong positive correlation (r=0.415) between daily time spent listening to music and work/study as the main opportunity for listening to music. Thus, people listening to music as a background to study or work generally spend more time listening to music on a daily basis.

c) Regular attendance at concerts

1) A moderately strong correlation (r=0.413) between regular concert attendance and average monthly expenditure on concert ticket purchases, i.e. regular concert goers spend more money on average on concerts.
2) A moderately strong correlation (r=0.480) between regular concert attendance and the distance respondents are willing to travel to a concert, with regular attendees showing a greater willingness to travel further to a concert.
3) A moderately strong positive correlation (r=0.403) between regular concert attendance and agreement with the statement "I am likely to attend a concert after listening to a new artist". Thus, regular concert-goers are more likely to attend a concert based on having previously listened to a recording of that artist.
4) There is a weak negative correlation between regular concert attendance and the price elasticity of demand (r=-0.306 for the price of recordings and r=-0.331 for the price of concerts), so the demand of regular concertgoers appears to be slightly less price elastic in the cases of both recordings and concerts.

d) Opportunities for attending a concert and reasons for not attending a concert

1) Moderately strong positive correlation between the reasons for attending a concert "spending time with friends" and "increasing social credit, fitting in" (r=0.424) and between "spending time with friends" and "relaxing" (r=0.487).
2) Moderate positive correlation (r=0.405) between the reasons for attending a concert "spending time with friends" and the alternative for attending a concert "hanging out with friends".
3) Moderately strong positive correlation between the reason discouraging concert attendance "other leisure activity of a cultural nature" and the alternative for concert attendance

"theatre visit" (r=0.416) and the alternative for concert attendance "gallery or museum visit" (r=0.390).

e) Media used for listening to music and finding information

1) The sources from which respondents most often learn about music news and their correlation with other aspects of consumer behaviour:

- Online music magazines
  - and regular concert attendance - medium strong positive correlation (r=0.461),
  - and average monthly spend on music merchandising purchases - weak positive correlation (r=0.338),
  - and the distance respondents are willing to travel to a concert - weak positive correlation (r=0.349).

These relationships can be interpreted to mean that people using online music magazines as their most frequent source for music information attend concerts slightly more regularly, spend more on music merchandising, and are slightly more willing to travel longer distances to attend a concert.

- Social networks
  - and regular concert attendance - weak positive correlation (r=0.374),
  - and spending time with friends as a reason for attending a concert - moderately strong positive correlation (r=0.436),
  - and the distance respondents are willing to travel to a concert - a moderately strong positive correlation (r=0.405), i.e., social network users show a slightly greater willingness to travel further for a concert.
- Word of mouth
  - and Instagram as the social media most frequently used in connection with music - medium strong positive correlation (r=0.408),
  - and regular concert attendance - weak positive correlation (r=0.372),
  - and "spending time with friends" as a reason for attending a concert - moderately strong positive correlation (r=0.455),
  - and the distance respondents are willing to travel to a concert - a moderately strong positive correlation (r=0.432).

Consumers learning about music news through social media or word of mouth share common characteristics of more regular concert attendance, willingness to travel to concerts in more distant locations and the degree of importance placed on attending concerts in a larger group.

f) Purchasing tendencies

1) A moderately strong positive correlation (r=0.467) between average monthly spend on concert ticket purchases and average monthly spend on music merchandising purchases. Thus, consumers who spend more money on concert tickets can be expected to be slightly more likely to purchase additional merchandise.
2) There is a weak positive correlation (r=0.372) between the average monthly spending on music merchandising and the distance of the concert venues visited from the place of residence, so people who buy more music merchandise tend to travel further for concerts.

g) Attitudes

Here, the strength of the relationship between attitudes towards each statement measured by Likert scales was monitored; thus, the strength of the correlation represents the relationship between attitudes (both agreeing and disagreeing). The following correlations were found:

1) "I am likely to attend a concert after listening to a new artist" and "I am likely to buy a recording by an artist after attending a concert" - weak positive correlation (r=0.389).
2) "If the price of tickets to an artist's concert increases, I will not attend the artist's concert" and "If the price of an artist's recording increases, I will not buy it" - a moderately strong positive correlation (r=0.542), which suggests similar tendencies of price elasticity of demand for recordings and concerts for individuals.

Cluster analysis

To further identify customer segments, a two-stage cluster analysis was performed. Within the cluster analysis 2 tests were performed according to segmentation criteria:

Test 1 - funds spent

Test 2 - Preferences, regularity and opportunities

1) Test 1 - funds spent

The sample was analysed based on the following variables:

a) How much money do you spend on average per month on concert tickets?
b) On average, how much money do you spend per month buying music merchandise?
c) How much money do you spend on streaming on average per month?
d) On average, how much money do you spend per month to buy online recordings?
e) On average, how much money do you spend per month buying physical records?
f) Age
g) Size of residence

h) Average net monthly income

In the cluster analysis of the whole sample data, the input variables were divided into categorical and continuous variables, the default parameters were kept and the number of clusters was set to automatic optimization, resulting in 5 clusters with specific buying behavior.

1. Non-shoppers - low-income consumers of higher age

This group of consumers and is made up of 39.5% of respondents and includes mostly consumers of higher ages, or is made up almost exclusively of respondents over 40 years of age.

These are mostly representatives of lower income groups, with the highest representation of the CZK 15,000 to 24,000 per month category; the CZK 24,000 to 34,000 and less than CZK 15,000 per month categories are also significantly represented, while consumers with monthly incomes of CZK 34,000 to 49,000 are less represented.

In terms of educational attainment, respondents with secondary education are the most represented, with an equal share of secondary education with a high school diploma and an apprenticeship certificate making up the majority of this segment, supplemented by units of consumers with primary and higher vocational education. College-educated respondents do not comprise this group.

On average, they spend only CZK 46 per month on the purchase of physical recordings, which represents the purchase of a carrier at most twice a year; they do not purchase music merchandise at all or only minimally.

On average, members of this group spend CZK 167 per month on concert tickets, which corresponds to attending one cheaper concert per month or approximately one more expensive concert every two months.

On average, they spend CZK 18 per month on music streaming, so the vast majority of this group does not use subscription streaming at all.

2. Students

Consumers making up 11.7% of the sample regularly consume recordings and concerts and buy music merchandise, but all in very small quantities.

Age up to 30 years, the most represented category is 15-21 years, in terms of average monthly income, this group consists almost exclusively of low-income respondents with income up to CZK 15 000 per month. The highest level of education attained here is most often primary or secondary education with a high school diploma.

On average, they spend only CZK 47 per month on the purchase of physical recordings, i.e. they buy physical recordings on average 2 to 3 times a year, and usually spend no more than CZK 200 per month on music merchandise.

Members of this group spend an average of CZK 338 per month on concert tickets. This would correspond to attending two to three cheaper or one more expensive concert per month,

They spend an average of 84 CZK per month on music streaming, which is equivalent to the price of discounted student subscriptions, and this group includes respondents who do not use subscription streaming.

3. **Occasional music consumers of working age**

This group makes up 29.6% of the sample and comprises mainly working age consumers (with the highest representation of 30-49 year olds).

This includes consumers in the middle to upper income groups with an equal representation of the average monthly income categories of CZK 24 000 to CZK 34 000, CZK 34 000 to CZK 49 000 and CZK 50 000 to CZK 100 000 per month with secondary, higher vocational or higher education.

On average, they spend only CZK 95 per month on the purchase of physical recordings, i.e. they buy a physical recording once every 3-4 months, and on average they spend CZK 410 per month on concert tickets.

Most members of this group do not regularly purchase music merchandise, those who do spend a maximum of CZK 200 per month. On average, they spend CZK 196 per month on music streaming (classic subscriptions with full price).

4. **Regular music consumers of working age - ordinary fans**

This group makes up 17.7% of the sample and includes mostly working-age consumers (with the highest representation of 30-39 year olds, a significant representation of 20-29 and 40-49 year olds, and a lower representation of 50-59 year olds) with a tendency to consume music regularly and to spend amounts in the low thousands of CZK per month on it, i.e. consumers with a relatively strong relationship to music.

The income groups of CZK 24,000 to 34,000 and CZK 34,000 to 49,000 are the most represented here and make up the majority of this group, while a smaller number of respondents in this group have an average income of CZK 15,000 to 24,000 and CZK 50,000 to 100,000, both of which are approximately equally represented. The most frequent highest level of education is secondary education with a high school diploma, while consumers with university or higher vocational education are also significantly represented.

On average, they spend CZK 350 per month on the purchase of physical recordings, i.e. on average they buy one physical recording per month (given current prices, this could be 8 vinyls and 4 CDs per year).

They spend an average of CZK 980 per month on concert tickets.

The average monthly spend on music merchandise is around CZK 500 per month, and they spend an average of CZK 174 per month on music streaming (classic full-price subscriptions or slightly discounted group subscriptions - Spotify family, etc.).

5. Carrier collectors, die-hard fans

This is a very marginal group, comprising only 1.5% of the sample. The age distribution is more or less even between the categories from 15 to 59 years old, with the highest share of the 22 to 29 years old category.

In terms of average monthly income, this group does not differ much from occasional and regular music consumers, with the income group of CZK 34,000 to 49,000 per month being the most represented.

The same is the case for education, where the representation of the individual categories is also even.

A significant specificity of this consumer group is the amount of money spent on the purchase of physical recordings and concert tickets, which is significantly higher than for all other segments.

On average, they spend CZK 1 857 per month on the purchase of physical recordings, which corresponds to the purchase of approximately 4 vinyl records or 5 to 6 CDs each month, so members of this group can be described as regular collectors of physical recordings.

They spend an average of CZK 3,357 per month on concert tickets, so they are frequent visitors to concerts that include performances with higher ticket prices.

Spending an average of CZK 293 per month on music streaming, these consumers typically combine 2-3 subscriptions to different streaming platforms, which is consistent with the behaviour of die-hard music fans with a particularly strong relationship with music.

2) Test 2 - Preferences, regularity and opportunities

The sample was analysed based on the following variables:

a) Preferred genres
b) From which sources do you most often get your music news?
c) In what format do you most often listen to recordings?
d) Through which medium do you most often encounter contemporary music?
e) What devices do you use most often to listen to music?

f) On average, how much time do you spend listening to music each day?
g) Do you regularly attend concerts?
h) How many concerts do you attend per month on average?
i) How often do you discover a new, unknown to you, musical artist?
j) What is the main reason for you to attend the concert?
k) What are the most common reasons that discourage you from attending a concert?
l) How far are you willing to travel for a concert?
m) Age
n) Size of residence
o) Average net monthly income

The main common features of consumer behaviour and purchase decision-making can therefore be seen in two defined clusters according to age within the given sample criteria, which can be defined as follows:

Group 1 - adolescents to middle-aged people

This group consists of 283 respondents (62.7% of the sample) and includes respondents from the age groups 15-21, 22-29, 30-39, 40-49 and a small proportion of the 50-59 age category.

Group 2 - middle-aged to retired people

This group consists of 168 respondents (37.3% of the sample) and includes respondents in the age groups 50-59, 60-69 and 70 and over.

Given the number and nature of the clusters found and the common variables found for each group, it seems more appropriate to describe the differences in the behaviour of the two categories with respect to a few of the most important variables, rather than to describe the individual clusters as a whole.

The observed aspects of consumer behaviour are ranked according to their importance in defining the two consumer groups.

1. Through which medium do you most often encounter contemporary music?

While in Group 1 the most common medium was music streaming services and the second most common was video streaming services, in Group 2 these two options had a completely negligible representation and the most common medium was radio.

2. In what format do you most often listen to recorded music?

This variable is very closely related to the previous variable, with streaming services having the largest representation (78.4%) in Group 1, radio again predominating in Group 2 (60.1%), and original CDs also having some representation in Group 2, but almost none in Group 1.

3. What is your most used streaming platform for listening to music?

More than two-thirds of Group 1's share is held by the streaming platform Spotify, while more than half of Group 2 does not use any streaming service. While members of Group 1 use other streaming platforms, albeit to a limited extent, respondents in the older age categories make virtually no use of these services. Even Spotify, the most widely used service in the Czech Republic, has a minimal presence here.

4. From which sources do you most often get your music news?

In terms of sources of information about music news, two were found to show the biggest differences between the groups - word of mouth and social networks. While these two options were the most frequent responses for Group 1, they were the least frequent sources of information for Group 2.

5. How far are you willing to travel for a concert?

Differences in the distance that consumers are willing to travel to see a concert are to be expected given the age distribution, with Group 1 being the most likely to travel to a concert within the Czech Republic or the EU, while for Group 2 the most common options are within a municipality and within a region, with fewer members of the older age groups willing to travel within the Czech Republic and almost none within the EU or globally.

6. What devices do you use most often to listen to music?

The device used for listening to music is largely related to the most common format of recordings and the most frequent occasions for listening to music, so it is not too surprising that for Group 1, the most used device for listening to music is a smartphone with headphones (54.8%), which is related to the use of streaming services and frequent listening during other activities, as revealed by the correlation analysis. For Group 2, the most common device is the radio.

7. Do you regularly attend concerts?

As already found in the correlation analysis, there is a relationship between age and regularity of concert attendance... Members of younger age groups attend concerts with greater regularity than people of older age. The majority (92.9%) of the representatives of Group 2 stated that they do not attend concerts regularly.

8. How often do you discover a new, unknown to you, musical artist?

The frequency of new artist discoveries is significantly higher for Group 1 than for Group 2. In the first case, the most frequent options are at least once a week, at least once every two weeks and at least once a month, while the majority of Group 2 (69.0%) discover a new artist less than once a month.

9. Where do you most often buy music merchandise?

The last significant variable where the behaviour of the two groups differs significantly is the purchase of music merchandising. Although Group 1 also has a fairly significant representation of consumers who do not purchase music merchandise, the majority of respondents in this group (42.4%) do purchase music merchandise and purchase it most often directly at concerts. The majority of Group 2 (88.7%) do not purchase music merchandise at all.

6 Conclusion

The results of the research confirm the current trends of digitalisation and the growing popularity of using digital platforms and social networks not only to listen to music but also to search for other related content, especially among younger generations. Age has proven to be an important segmentation criterion in defining two basic clusters with common elements of consumer behaviour in terms of attitudes, preferences and usage patterns, ranging from the format and device for listening to music (older people still use mainly radio and radio for listening to music and hardly use streaming services, while younger people prefer other, mainly digital formats), the opportunities to listen to music (younger people are significantly more likely to listen to music e.g. When travelling in the car, on public transport, etc., This is not surprising given the greater popularity of mobile devices for listening to music, especially music players or mobile phones with headphones among younger people), but also in relation to the price elasticity of demand for music performances and recordings, with older generations being relatively more price elastic than younger generations, i.e. responding to changes in the price of recorded music and live performances by a more pronounced change in the quantity demanded of these goods. Five clusters were identified and defined in terms of purchasing behaviour and spending on consumption of recorded and live music, the identification of which, as well as the identification of preferences by age categories, is beneficial for management and marketing practice and can be used in the areas of strategy, short and long-term planning, pricing, segmentation and targeting by music managers, promoters and marketing and PR specialists.

The following research questions were answered in the analytical part of the thesis:

RQ1: What criteria are most important for defining consumer segments?

The most important segmentation criterion turned out to be the age of the respondents, while the social status, especially the average monthly income, was also important. Geographical criteria, on the other hand, appear to be irrelevant for defining music consumption. Criteria of use, preferences and attitudes were also found to be important.

RQ2: What are the common elements of consumer behaviour for different groups of consumers?

Five clusters were identified and defined in terms of purchasing behaviour and spending on consumption of recorded and live music, the identification of which, as well as the identification of preferences by age category, is beneficial for management and marketing practice and for further academic research. Common elements for each cluster were average monthly expenditure on the purchase of recordings and concert tickets, membership of a particular income group, and educational attainment proved to be an important element. Common elements of consumer behaviour in terms of attitudes, preferences and usage patterns were found for the two consumer clusters defined by the age of the respondents were the format and facilities for listening to music, the opportunities to listen to music, the reasons for the decision to consume live performances and the regularity of consumption of musical goods.

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