

COMPOSITION AND PERCEPTION OF BACKGROUND MUSIC IN SELECTED HOSPITALITY FACILITIES IN THE CZECH REPUBLIC

Dagmar WEBEROVÁ – Radim BAČUVČÍK – Martin KAZÍK –
Jana ČERNÁ

ABSTRACT:

The aim of this research study is to analyse the state of background music played in facilities of the hospitality industry in the Czech Republic in relation to how customers perceive said music. The study draws from a part of the findings of a quantitative survey focused on the analysis of music currently used in commercial spaces. The survey, which took place in 2019, consisted of respondents' in-person visits and led to the production of a total of 6,909 reports, of which 1,190 (21%) came from facilities in the hospitality industry. The results have been analysed using methods of descriptive and inferential statistics, such as the ANOVA test, Tukey's HSD test, chi-squared test, and Pearson correlation. While the results confirm that the use of background music in the form of popular song mixes played from the radio or other sources is prevalent, they also show that this option is rated the least positively by the respondents.

KEY WORDS:

hospitality industry, marketing, music in marketing, perception of music

1 Introduction

The economic environment generates strong competitive mechanisms in a wide range of business areas.¹ Apart from the product itself, there are many other attributes that influence success on the market,² the

¹ See: ADAMISIN, P. et al.: Managerial Approaches of Environmental Projects: An Empirical Study. In *Polish Journal of Management Studies*, 2018, Vol. 17, No. 1, p. 27-38; DOBRODOLAC, M. et al.: A Study on the Competitive Strategy of the Universal Postal Service Provider. In *Technology Analysis & Strategic Management*, 2016, Vol. 28, No. 8, p. 935-949.

² Compare to: DOBRODOLAC, M. et al.: A Model for the Comparison of Business Units. In *Personnel Review*, 2018, Vol. 47, No. 1, p. 150-165; HITKA, M. et al.: Factors Forming Employee Motivation Influenced by Regional and Age-Related Differences. In *Journal of Business Economics and Management*, 2019, Vol. 20, No. 4, p. 674-693; KAMPF, R. et al.: Generational Differences in the Perception of



Assoc. Prof. PhDr. Dagmar
Weberová, Ph.D., MBA
Faculty of Multimedia
Communications
Tomáš Baťa University
Univerzitní 2431
760 01 Zlín
Czech Republic
weberova@utb.cz

Dagmar Weberová is a graduate of the Faculty of Arts of the Comenius University in Bratislava and she became an Associate Professor in Management at the Comenius University in Bratislava in 2013. As part of her pedagogical and research activities, she focuses on intercultural communication, intercultural marketing and globalisation issues. In practice, she is involved in counselling on business negotiations with foreign partners and workforce diversity in multinational companies.



Mgr. Martin Kazík
Faculty of Multimedia
Communications
Tomáš Baťa University
Univerzitní 2431
760 01 Zlín
Czech Republic
kazik@utb.cz

Martin Kazík is a Ph.D. student, lecturer and researcher at the Faculty of Multimedia Communications of Tomáš Baťa University in Zlín. He has Master's degree in Marketing Communication earned at the Department of Marketing Communications of the Faculty of Multimedia Communications at Tomáš Baťa University in Zlín. In his research he focuses on application of design thinking methods in academic education and research. He lectures Digital Marketing, Service Marketing, Service Design and Modern Marketing Research Methods.



Assoc. Prof. Ing. Radim
Bačuvčík, Ph.D.
Faculty of Multimedia
Communications
Tomáš Baťa University
Univerzitní 2431
760 01 Zlín
Czech Republic
bacuvcik@utb.cz

Radim Bačuvčík is an Associate Professor at the Department of Marketing Communication, the Faculty of Multimedia Communications at Tomáš Baťa University in Zlín. He is a graduate in Multimedia Studies at the Comenius University in Bratislava, holds a Ph.D. degree in Musicology at Palacký University Olomouc, a Master's degree in Marketing Communication at Tomáš Baťa University in Zlín, and another Master's degree in Economy and Management at Brno University of Technology. Those fields he combines in his many publications and research same as in his pedagogical practice.



Ing. Jana Černá, Ph.D.
Faculty of Mass Media
Communication
University of Ss. Cyril
and Methodius in Trnava
Nám. J. Herdu 2
917 01 Trnava
Slovak Republic
jana.cerna@ucm.sk

Jana Černá is a graduate of the Faculty of National Economy of the University of Economics in Bratislava. In pedagogical, scientific and publishing activities, she specialises in the topics of services and tourism in the whole spectrum of these issues, specifically in services and tourism marketing.

musical background of commercial spaces being one of them.³ Music can be used as a powerful marketing tool in the place of purchase. Together with other signals affecting human senses, music creates the atmosphere of a certain space. The atmosphere is capable of influencing customers' purchase behaviour by either creating attention, delivering a message, or creating an effect.⁴ Music played in the background might lead to producing desired attitudes or behaviour among customers. On the other hand, the wrong choice of music and certain aspects of it, such as pitch or volume, may interfere with the business goals of an entity.⁵ In the context of marketing, the choice of musical background can be an element of the product and communication mix of organisations.

In a market environment, consumers are more exposed to not only visual, but also auditory stimulation. There is a growing interest from professionals in how to connect the visual appearance of products and service locations with music. According to Klein et al.,⁶ music affects visual perception; music can change the consumer's view of products and services. As noted by Turley and Milliman,⁷ there are three main atmospheric effects that have been measured by a wide number of researchers in the past years. Those three effects are on sales, time spent in the environment and approach-avoidance behaviour. Most studies combine those effects as a dependent variable of their research. For example, many have measured how music might affect the amount of time spent in the shop or service and the volume of purchased goods or the amount spent.⁸ Other studies focus on how background music is perceived by customers and how it affects, for instance, their mood or pleasure and arousal felt during time spent in the establishment.⁹ This might affect the shopping behaviour of customers but also the way they interact with staff or salespeople.¹⁰ Background music could also affect the cognitive functions of customers. For example, it might affect how deeply they think or process information about a purchased product.¹¹ The basic idea that music may be described in terms of gustatory stimulus qualities is certainly not new. Some describe in their studies how choice of music might change perception of taste, they referred to this phenomenon as 'sonic seasoning' or multisensory correspondence.¹² For example,

Corporate Culture in European Transport Enterprises. In *Sustainability*, 2017, Vol. 9, No. 9, 1561; KUCHARČÍKOVÁ, A., MIČIAK, M., HITKA, M.: Evaluating the Effectiveness of Investment in Human Capital in E-Business Enterprise in the Context of Sustainability. In *Sustainability*, 2018, Vol. 10, No. 9, 3211; MADLEŇÁK, R., ŠVADLENKA, L.: Acceptance of Internet Advertising by Users in the Czech Republic. In *E & M Ekonomika a management*, 2009, Vol. 12, No. 1, p. 98-107.

3 VILČEKOVÁ, L., ŠTARCHON, P.: Consumer Perception of Selected Brands Explored Through Archetypes. In *4th International Conference on Education and Social Sciences (INTCESS)*. Conference Proceedings. Istanbul: INTCESS, 2017, p. 819-823.

4 KOTLER, P.: Atmospherics as a Marketing Tool. In *Journal of Retailing*, 1973, Vol. 49, No. 4, p. 48-64.

5 MILLIMAN, R. E.: Using Background Music to Affect the Behavior of Supermarket Shoppers. In *Journal of Marketing*, 1982, Vol. 46, No. 3, p. 86-91.

6 KLEIN, K., MELNYK, V., VÖLCKNER, F.: Effects of Background Music on Evaluations of Visual Images. In *Psychology & Marketing*, 2021, Vol. 38, No. 12, p. 2240-2246.

7 TURLEY, L. W., MILLIMAN, R. E.: Atmospheric Effects on Shopping Behavior. In *Journal of Business Research*, 2000, Vol. 49, No. 2, p. 193-211.

8 See: CALDWELL, C., HIBBERT, S. A.: The Influence of Music Tempo and Musical Preference on Restaurant Patrons' Behavior. In *Psychology & Marketing*, 2002, Vol. 19, No. 11, p. 895-917; LAMMERS, H. B.: An Oceanside Field Experiment on Background Music Effects on the Restaurant Tab. In *Perceptual and Motor Skills*, 2003, Vol. 96, No. 3, p. 1025-1026; MILLIMAN, R. E.: The Influence of Background Music on the Behavior of Restaurant Patrons. In *Journal of Consumer Research*, 1986, Vol. 13, No. 2, p. 286; MILLIMAN, R. E.: Using Background Music to Affect the Behavior of Supermarket Shoppers. In *Journal of Marketing*, 1982, Vol. 46, No. 3, p. 86-91; SMITH, P. C., CURNOW, R.: "Arousal Hypothesis" and the Effects of Music on Purchasing Behavior. In *Journal of Applied Psychology*, 1966, Vol. 50, No. 3, p. 255-256; SULLIVAN, M.: The Impact of Pitch, Volume and Tempo on The Atmospheric Effects of Music. In *International Journal of Retail & Distribution Management*, 2002, Vol. 30, No. 6, p. 323-330.

9 Compare to: ANDERSSON, P. K. et al.: Let the Music Play or Not: The Influence of Background Music on Consumer Behavior. In *Journal of Retailing and Consumer Services*, 2012, Vol. 19, No. 6, p. 553-560; BURNER, G. C.: An Oceanside Field Experiment on Background Music Effects on the Restaurant Tab. In *Perceptual and Motor Skills*, 2003, Vol. 96, No. 3, p. 94-104; DUBÉ, L., MORIN, S.: Background Music Pleasure and Store Evaluation: Intensity Effects and Psychological Mechanisms. In *Journal of Business Research*, 2001, Vol. 54, No. 2, p. 107-113; YALCH, R., SPANGENBERG, E.: Effects of Store Music on Shopping Behavior. In *Journal of Consumer Marketing*, 1990, Vol. 7, No. 2, p. 55-63; YALCH, R. F., SPANGENBERG, E.: Using Store Music for Retail Zoning: A Field Experiment. In MCALISTER, L., ROTHSCCHILD, M. L. (eds.): *ACR North American Advances in Consumer Research Volume 20*. Provo: Association for Consumer Research, 1993, p. 632-636.

10 DUBÉ, L., CHEBAT, J. C., MORIN, S.: The Effects of Background Music on Consumers' Desire to Affiliate in Buyer-Seller Interactions. In *Psychology & Marketing*, 1995, Vol. 12, No. 4, p. 305-319.

11 For example: CHEBAT, J. C., CHEBAT, C. G., VAILLANT, D.: Environmental Background Music and In-Store Selling. In *Journal of Business Research*, 2001, Vol. 54, No. 2, p. 115-123; SWEENEY, J. C., WYBER, F.: The Role of Cognitions and Emotions in the Music Approach Avoidance Behavior Relationship. In *Journal of Services Marketing*, 2002, Vol. 16, No. 1, p. 51-69.

12 See: REINOSO-CARVALHO, F. et al.: Not Just Another Pint! The Role of Emotion Induced by Music on the Consumer's Tasting Experience. In *Multisensory Research*, 2019, Vol. 32, No. 4-5, p. 367-400; REINOSO-CARVALHO, F. et al.: A Sprinkle of Emotions vs a Pinch of Crossmodality: Towards Globally Meaningful Sonic Seasoning Strategies for Enhanced Multisensory Tasting Experiences. In *Journal of*

the term "dolce" refers to the gentle musical style. Or a certain composer combines the sound of an oboe with a sweet and sour taste, the keyboard has a liqueur flavour (associates a delicious sound) and so on.¹³ Many aspects such as tempo, volume, pitch, softness, fit, or even style of music, are used as independent variables in studies focused on background music. The largest number of studies focuses on the tempo, investigating how fast-paced or slow-paced music affects customer behaviour or mood.¹⁴ Music volume was selected as an independent variable by Lammers,¹⁵ whose research suggests that purchases were significantly higher when the music was soft in volume. Other researchers variate more of those aspects in their studies. Some of them use different categories of music styles as two independent variables in their research. Areni and Kim compare how customers' purchase behaviour differs when classical music and pop music (top 40) is played in the background. The results of their research, conducted on a wine store, show that customers are more likely to spend more money on wine bottles when classical music is playing in the background, as opposed to top-forty music.¹⁶ Biswas et al. describe that background ambient music may affect the choice of healthy and unhealthy food by customers.¹⁷ The music fit (coherence with the style of the shop, service or product) is an interesting subject of several studies.¹⁸

Most of the studies mentioned above focus on the setting of retail shops, stores, or supermarkets. However, only few of them deal with music in restaurants.¹⁹ In their meta-analytic review of background music in retail settings, Garlin and Owen describe five effects which were clearly evident (small to moderate) in the following relationships:

- Familiarity/liking has a positive effect on patronage.
 - The mere presence of music has a positive effect on patronage as well as felt pleasure.
 - Slower tempo, lower volume and familiar music results in subjects staying marginally longer at a venue than when the tempo or volume are high, or the music less familiar.
 - A higher volume and tempo, and the less liked the music, the longer customers perceive time duration.
- This has most implications for waiting customers.

Business Research, 2020, Vol. 117, p. 389-399; SPENCE, C.: Multisensory Experiential Wine Marketing. In *Food Quality and Preference*, 2019, Vol. 71, p. 106-116.

13 KNOEFERLE, K., SPENCE, C.: Crossmodal Correspondences between Sounds and Tastes. In *Psychonomic Bulletin & Review*, 2012, Vol. 19, No. 6, p. 878-896.

14 Compare to: ARENI, C. S., KIM, D.: The Influence of Background Music on Shopping Behavior Classical Versus Top-Forty Music in a Wine Store. In MCALISTER, L., ROTHSCCHILD, M. L. (eds.): *ACR North American Advances in Consumer Research Volume 20*. Provo: Association for Consumer Research, 1993, p. 336-340; CHEBAT, J. C., CHEBAT, C. G., VAILLANT, D.: Environmental Background Music and In-Store Selling. In *Journal of Business Research*, 2001, Vol. 54, No. 2, p. 115-123; DUBÉ, L., CHEBAT, J. C., MORIN, S.: The Effects of Background Music on Consumers' Desire to Affiliate in Buyer-Seller Interactions. In *Psychology & Marketing*, 1995, Vol. 12, No. 4, p. 305-319; KIM, K., ZAUBERMAN, G.: The Effect of Music Tempo on Consumer Impatience in Intertemporal Decisions. In *European Journal of Marketing*, 2019, Vol. 53, No. 3, p. 504-523; KNOEFERLE, K. M., PAUS, V. C., VOSSEN, A.: An Upbeat Crowd: Fast In-store Music Alleviates Negative Effects of High Social Density on Customers' Spending. In *Journal of Retailing*, 2017, Vol. 93, No. 4, p. 541-549; MILLIMAN, R. E.: The Influence of Background Music on the Behavior of Restaurant Patrons. In *Journal of Consumer Research*, 1986, Vol. 13, No. 2, p. 286; MILLIMAN, R. E.: Using Background Music to Affect the Behavior of Supermarket Shoppers. In *Journal of Marketing*, 1982, Vol. 46, No. 3, p. 86-91; OVALI, E.: The Effects of Background Music Dimensions on Customer Attitude Towards Retail Store. In *ISMC 2019: 15th International Strategic Management Conference. Conference Proceedings*. London: Future Academy, 2019, p. 113-122.

15 LAMMERS, H. B.: An Oceanside Field Experiment on Background Music Effects on the Restaurant Tab. In *Perceptual and Motor Skills*, 2003, Vol. 96, No. 3, p. 1025-1026.

16 ARENI, C. S., KIM, D.: The Influence of Background Music on Shopping Behavior Classical Versus Top-Forty Music in a Wine Store. In MCALISTER, L., ROTHSCCHILD, M. L. (eds.): *ACR North American Advances in Consumer Research Volume 20*. Provo: Association for Consumer Research, 1993, p. 336-340.

17 BISWAS, D., LUND, K., SZOCS, C.: Sounds Like a Healthy Retail Atmospheric Strategy: Effects of Ambient Music and Background Noise on Food Sales. In *Journal of the Academy of Marketing Science*, 2018, Vol. 47, No. 1, p. 37-55.

18 See: CHEBAT, J. C., CHEBAT, C. G., VAILLANT, D.: Environmental Background Music and In-Store Selling. In *Journal of Business Research*, 2001, Vol. 54, No. 2, p. 115-123; CHOO, B. J. K. et al.: The Sound of Music on the Pocket: A Study of Background Music in Retail. In *Psychology of Music*, 2020, Vol. 49, No. 5, p. 1381-1400; NORTH, A. C., HARGREAVES, D. J., MCKENDRICK, J.: In-Store Music Affects Product Choice. In *Nature*, 1997, Vol. 390, No. 6656, p. 132-132.

19 See: CALDWELL, C., HIBBERT, S. A.: The Influence of Music Tempo and Musical Preference on Restaurant Patrons' Behavior. In *Psychology & Marketing*, 2002, Vol. 19, No. 11, p. 895-917; LAMMERS, H. B.: An Oceanside Field Experiment on Background Music Effects on the Restaurant Tab. In *Perceptual and Motor Skills*, 2003, Vol. 96, No. 3, p. 1025-1026; MILLIMAN, R. E.: The Influence of Background Music on the Behavior of Restaurant Patrons. In *Journal of Consumer Research*, 1986, Vol. 13, No. 2, p. 286; SULLIVAN, M.: The Impact of Pitch, Volume and Tempo on the Atmospheric Effects of Music. In *International Journal of Retail & Distribution Management*, 2002, Vol. 30, No. 6, p. 323-330; WILSON, S.: The Effect of Music on Perceived Atmosphere and Purchase Intentions in a Restaurant. In *Psychology of Music*, 2003, Vol. 31, No. 1, p. 93-112.

- Tempo has the greatest effect on arousal.²⁰

This meta-analytic review works with a total of 157 papers, but only a fraction of those focus on the setting of restaurants. By dealing specifically with the hospitality industry, the presented research fills a knowledge gap in the wide range of findings published on the topic of background music so far, focusing on determining what music is currently played in these types of commercial spaces in the Czech Republic and how it is perceived by customers.

2 Music in Commercial Spaces

Based on the amount of thought that goes into the use of background music in business, there are two ‘types’ that we could expect to find in commercial spaces, depending on the approach of business owners, managers, and staff. In those places where business owners and managers have not yet considered working deliberately with background music to achieve a certain goal, we can expect to find music selected at ‘random’. The negative effects associated with this approach, where the selection of background music usually depends on a particular member of the staff and their personal preferences, have been described by Daunfeldt et al.²¹ Traditionally, this ‘random’ selection approach means that music is played from a radio broadcast. Alternatively, a streaming service such as *YouTube* or *Spotify* can be used nowadays. From the customer’s point of view, these options may not be easily distinguishable. Theoretically, what may help tell them apart is the relative proportion of music, advertisements, and, most importantly, spoken word heard in the broadcast. However, the amount of spoken word, which may serve as a way to identify a radio broadcast, can be very low and therefore undetectable by the customer. The share of spoken word serves as one of the criteria used by the Council for Radio and Television Broadcasting (RRTV), the Czech broadcasting regulatory body, when granting a license, with the acceptable range usually being 5 – 20%.²² While the amount of spoken word depends on the nature of the program, many radio stations fall somewhere along the lower end of the spectrum. Internet radio, exempt from these restrictions, may decide to feature spoken word only at some parts of the day or not at all, making the distinction from other formats like *YouTube* and *Spotify* impossible. Generally, this situation (music from radio or analogue broadcast) means that the selection of the source of music is at the full discretion of the staff currently present on shift. The fact that this predominantly leads to background music being played from a radio broadcast, is supported by research by Franěk and Mužík, who estimate that radio broadcasts make up at least 40% of all background music played in commercial spaces in the Czech Republic.²³ Given the availability of digital alternatives at present, we expect the share of radio to be quite lower, which is explored further in our research.

In cases where a more targeted approach is taken by the management, we can expect to come across the use of special recordings, made directly for the given commercial space, or in-store radio. This can be music created specifically for a certain brand or, more commonly, music from databases available for free commercial use and databases of popular songs licensed for this purpose.²⁴ Such databases allow their users to search for music by keywords, used to describe the mood that is to be attained by playing such music, and create playlists that fit the needs of the customers. The importance of this selection is further examined in the literature review by Michel et al.²⁵

20 GARLIN, F. V., OWEN, K.: Setting the Tone with the Tune: A Meta-Analytic Review of the Effects of Background Music in Retail Settings. In *Journal of Business Research*, 2006, Vol. 59, No. 6, p. 761.

21 DAUNFELDT, S. O. et al.: Effects of Employees’ Opportunities to Influence In-Store Music on Sales: Evidence from a Field Experiment. In *Journal of Retailing and Consumer Services*, 2021, Vol. 59, 102417.

22 *Manuál postupu rozhodování Rady pro rozhlasové a televizní vysílání o udělení licence k provozování rozhlasového a televizního vysílání šířeného prostřednictvím vysílacích podle zákona č. 231/2001 Sb., o provozování rozhlasového a televizního vysílání*. Released on 6th June 2017. [online]. [2022-03-03]. Available at: <https://www.rrtv.cz/files/licencni_rizeni/manualPostupu.pdf>.

23 FRANĚK, M., MUŽÍK, P.: Postoje k funkci hudby v obchodním prostředí. In *Opus musicum*, 2003, Vol. 35, No. 3, p. 19-23.

24 *Background Music That Works | Mood-Based Music for Your Business*. [online]. [2021-01-18]. Available at: <<https://www.soundtrackyourbrand.com/>>.

25 MICHEL, A., BAUMANN, C., GAYER, L.: Thank You for the Music – Or Not? The Effects of In-Store Music in Service Settings. In *Journal of Retailing and Consumer Services*, 2017, Vol. 36, p. 21-32.

Previous research (see, for example, Areni and Miller’s work)²⁶ suggests that this approach to the use of music is mostly reserved to larger retail chains so far, gaining foothold mostly in stores that sell fast-moving consumer goods, food (including fast food chains), and fashion goods (clothing and footwear), while in non-chain stores, an ‘intuitive’ or ‘indifferent’ approach is more prevalent. Looking at the four types of facilities examined in this research, we can expect tea rooms to play music specific to their environment (a selective approach to the choice of music can be expected); other types of facilities are expected to feature in-store radio more prevalently, apart from regular radio music and popular song mixes. These assumptions are expressed in research hypotheses RH1 and RH2.

3 Customers’ Perception of Background Music in the Hospitality Industry

The second part of our research deals with how background music in commercial spaces is perceived by the people who visit them – the customers. As a general rule, the goal of playing music in a commercial space should be to balance out a series of factors, which may be directly opposed to one another. The first such condition is that the customer needs to feel good in the space – simply put, they need to like the music that is being played. In this regard, we can expect the most ‘average’ (in many senses of the word) music to be the most liked.²⁷ For example, the relationship between liking for music and its arousal-evoking qualities follows an inverted-U graph, meaning that music that is too arousing (which often translates to fast-paced, rhythmic, loud, etc.) is perceived as unpleasant (such as aggressive), while music that is too relaxing (which often translates to slow-paced, rhythmless, soft, etc.) may even go unnoticed. Another important element that comes into play in hospitality facilities is the fact that patrons want to have a conversation there, which could be hindered by music that is too strong or even considered average in other settings. Therefore, we can suppose music played in restaurants can be rather soft in volume (as opposed to night clubs, for example) and that such music may be rated more positively by the customers. This phenomenon is examined in the research by Maruyama et al., who describe the negative effect of loud music, as rated by the customers of a café.²⁸

Another factor at play is the potential of music to influence actual behaviour. Several underlying aspects, which have been subject of extensive scientific research over time, may be involved. In his now-classic experiment,²⁹ Milliman attempted to validate the results of an earlier study conducted in a supermarket setting, which showed that slow-paced music leads to customers moving slowly around the store and spending more, by varying slow tempo and fast tempo background music in a medium-sized, above-average-priced restaurant. Neither type of music led to an increase in the overall amount spent on food, however, both the amount spent on drinks and consumption speed were affected.³⁰ Although the longer time spent in the restaurant meant that patrons spent more on drinks, the pace with which they drank was practically constant. Caldwell and Hibbert came to a similar conclusion in their research,³¹ while Sullivan suggests that slow tempo music led to an increase in the overall amount spent both on food and drinks.³² Tarlao et al. find that increasing the

26 ARENI, C. S., MILLER, R.: Sales Effects of In-Store Radio Advertising. In *Journal of Marketing Communications*, 2012, Vol. 18, No. 4, p. 285-295.

27 See: BERLYNE, D. E.: *Aesthetics and Psychobiology*. New York: Appleton-Century-Crofts, 1971.

28 MARUYAMA, N. et al.: Assessing the Ease of Conversation in Multi-Group Conversation Spaces: Effect of Background Music Volume on Acoustic Comfort in a Café. In *Building Acoustics*, 2020, Vol. 27, No. 2, p. 137-153.

29 MILLIMAN, R. E.: The Influence of Background Music on the Behavior of Restaurant Patrons. In *Journal of Consumer Research*, 1986, Vol. 13, No. 2, p. 286.

30 MILLIMAN, R. E.: Using Background Music to Affect the Behavior of Supermarket Shoppers. In *Journal of Marketing*, 1982, Vol. 46, No. 3, p. 86-91.

31 CALDWELL, C., HIBBERT, S. A.: The Influence of Music Tempo and Musical Preference on Restaurant Patrons’ Behavior. In *Psychology & Marketing*, 2002, Vol. 19, No. 11, p. 895-917.

32 SULLIVAN, M.: The Impact of Pitch, Volume and Tempo on the Atmospheric Effects of Music. In *International Journal of Retail & Distribution Management*, 2002, Vol. 30, No. 6, p. 323-330.

volume of music led to bigger sales and longer time spent in the restaurant.³³ The relationship between louder music and higher consumption of drinks has also been noted by both McCarron and Tierney³⁴ and Guéguen et al.³⁵ With regards to food consumption, a university canteen study by Roballey et al. shows that music tempo does not have an effect on the total time spent, but it does affect the speed at which each bite is consumed, suggesting that people eat smaller bites more frequently when fast tempo music is played.³⁶

The conclusions of the aforementioned studies are rather ambiguous: On the one hand, it would seem that more arousing music, such as loud and fast-paced, could lead to faster and thus greater consumption. On the other, slower (so rather relaxing) music appears to lead to longer time spent in the restaurant, which in turn improves sales (of drinks, at the least). Another aspect that needs to be taken into account is the mere fact that, rather than by the specific musical parameters (tempo, volume), customer behaviour may be affected by whether they like the music or not. A notorious study by Herrington and Capella shows that customers' musical preference had the greatest effect on how much time they spent in a supermarket.³⁷ The findings of Beer and Greitemeyer show that the choice of music can also affect how much older restaurant patrons tip.³⁸ Nevertheless, our research does not delve into the realm of examining actual buying behaviour, but rather focuses on the perception of background music played in commercial spaces by people who visit them. On that account, we expect that customers in the hospitality industry will deem 'average' music as the most appropriate, where 'average' refers to popular songs played from the radio or other sources, which is also the type of music that people come into contact with most frequently (this assumption is expressed in research hypothesis RH4), and that music that is softer in volume will be rated more positively, as it allows for unhindered conversation (this assumption is expressed in research hypothesis RH3).

4 Materials and Methods

The aim of this research inquiry is to analyse the state of background music played in facilities of the hospitality industry in the Czech Republic in relation to how customers perceive said music. The study draws from a part of the findings of a quantitative survey focused on the analysis of background music currently used in commercial spaces. The survey, which took place all throughout the year 2019, saw the production of a total of 6,909 observation reports, submitted by respondents upon in-person visits to commercial facilities across the whole territory of the Czech Republic. A total of 160 respondents were involved in the study, each one submitting 40 reports on average. The research sample was distributed proportionately across Czech regions in terms of report number. Reports were submitted to the website *vypIinto.cz*, ensuring that data from each respondent would be digitised and summarised. The number of reports pertaining to the hospitality industry was 1,190 (21% of reports submitted in the whole study), with 41.4% submitted by men and 58.6% by women. 49.4% of respondents were 25 or less than 25 years old, while 50.6% were older than 25. As for the type of hospitality facility, 48.5% came from restaurants and hotels, 34.2% from cafés and patisseries (known as *cukrárna*, a Czech pastry and cake shop similar to a German *Konditorei* with indoor seating and coffee on the menu), 11.3% from fast food and drink outlets, and 6% from tea rooms. 9% of the surveyed facilities were located inside shopping centres, while 91% were standalone stores with a separate street level entrance. The

33 TARLAO, C. et al.: Influence of Sound Level on Diners' Perceptions and Behavior in a Montreal Restaurant. In *Applied Acoustics*, 2020, Vol. 174, 107772.

34 MCCARRON, A., TIERNEY, K. J.: The Effect of Auditory Stimulation on the Consumption of Soft Drinks. In *Appetite*, 1989, Vol. 13, No. 2, p. 155-159.

35 GUÉGUEN, N., HÉLÈNE, L. G., JACOB, C.: Sound Level of Background Music and Alcohol Consumption: An Empirical Evaluation. In *Perceptual and Motor Skills*, 2004, Vol. 99, No. 1, p. 34-38.

36 ROBALLEY, T. C. et al.: The Effect of Music on Eating Behavior. In *Bulletin of the Psychonomic Society*, 1985, Vol. 23, No. 3, p. 221-222.

37 HERRINGTON, J. D., CAPPELLA, L. M.: Effects of Music in Service Environments: A Field Study. In *Journal of Services Marketing*, 1996, Vol. 10, No. 2, p. 26-41.

38 BEER, A., GREITEMEYER, T.: The Effects of Background Music on Tipping Behavior in a Restaurant: A Field Study. In *Psychology of Music*, 2018, Vol. 47, No. 3, p. 444-450.

observation report consisted of three parts. While the first part contained information on the commercial activity (type of facility, product category – goods/services/combination of both, product description, town, and town size), the second part served to evaluate the music (type of music, nature of music – tempo, volume, respondent's perception of quality – environmental fit, subjective impression), and the third part dealt with information about the respondent (age, gender, musical training). When describing the nature of music, respondents were able to rate different aspects on a scale and provide additional comments in an open question. The type of music was selected from a list of predefined categories (a mix of popular songs played from the radio, a mix of popular songs played from other sources, music by a single artist or from a movie soundtrack, instrumental versions of popular hits, instrumental music most likely created for commercial spaces, orchestral and classical music, esoteric and ambient music, other ambient sounds such as trees rustling and water flowing), and an 'other' option was provided, in case the respondent did not find their type of music in the list. The subsequent synthesis of answers in the 'other' category brought about 8 more categories (music from TV or *YouTube*, live music/DJ set, in-store radio featuring music interspersed with commercial announcements or exclusively commercial announcements, metal / rock / retro / jazz music, folk and ethnic music – Czech / Slovak / Moravian / Asian / Turkish / Indian, seasonal music, electronic / house / reggae / pop / rap music). The results were analysed with the use of methods of descriptive statistics and further tested with an ANOVA test, Tukey's HSD test, chi-squared test, and Pearson correlation.

Based on previous findings, it can be expected that the most frequent type of background music played in commercial spaces in the hospitality industry is music from the radio or a mix of popular songs from other sources. Due to their tendency to take a more selective approach to the choice of music, tea rooms are expected to deviate from the other business categories. The following hypotheses can thus be proposed:

RH1: The most frequently used types of music in commercial spaces in the hospitality industry, excluding tea rooms, are a mix of popular songs played from the radio and from other sources.

RH2: A mix of popular songs played from the radio and from other sources is equally represented in relation to the other types of music in commercial spaces of cafés and patisseries, fast food and drink outlets, and restaurants and hotels.

RH3: In all surveyed types of facilities, music that allows for quiet conversation, i.e., neutral to softer in volume, is rated more positively by customers.

RH4: Compared to all other types of music, a mix of songs from the radio or from other sources is subjectively rated the most positively by customers.

5 Results

The analysis focused on surveying background music currently used in commercial spaces in the hospitality industry in the Czech Republic. In the research, 4 types of facilities were surveyed: restaurants and hotels, cafés and patisseries (Czech style pastry shops known as *cukrárny*), fast food and drink outlets, and tea rooms. Figure 1 provides an overview of the composition of type of music played, as reported for each type of facility.

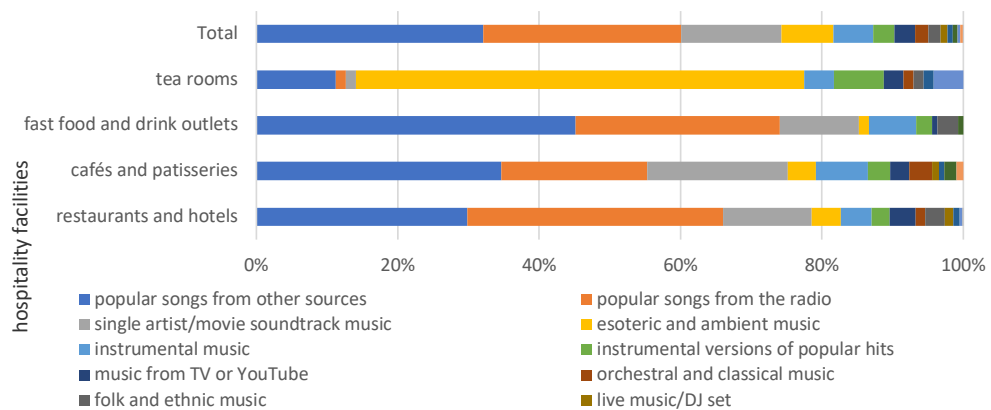


Figure 1: Music type composition by type of hospitality facility

Source: Own processing

In the surveyed facilities, the following types of music were identified: a mix of popular songs played from the radio, a mix of popular songs played from other sources, music by a single artist (such as a music album) or from a movie soundtrack, instrumental versions of popular hits, instrumental music most likely created for commercial spaces, orchestral and classical music, esoteric and ambient music, other ambient sounds such as trees rustling and water flowing, music from TV or *YouTube*, live music/DJ sets, in-store radio featuring music interspersed with commercial announcements or exclusively commercial announcements, metal / rock / retro / jazz music, folk and ethnic music (Czech, Slovak, Moravian, Asian, Turkish, Indian), seasonal (Christmas) and children's music, and electronic / house / reggae / pop / rap music.

Looking at the overall survey results, it is evident that a mix of popular songs played from the radio (27.98%) and from other sources (32.1%) are the two most prevalent categories, with the latter clearly dominating. Music by a single artist or from a movie soundtrack comes in third (14.2%), followed by esoteric and ambient music (7.31%). Close behind are instrumental music most likely created for commercial spaces (5.63%) and instrumental versions of popular hits (3.03%). Music from TV and *YouTube* makes up for 2.94%, while orchestral and classical music is played in 1.85% of the surveyed facilities. The remaining types of music, such as live music/DJ sets (0.92%), metal / rock / retro / jazz music (0.76%), folk and ethnic music (1.76%), seasonal music (0.34%), electronic / house / reggae / pop / rap music (0.67%), and other ambient sounds (0.42%), are not significantly represented in the overall composition.

When it comes to tea rooms, esoteric and ambient music (63.38%) is the dominant music type, followed by a mix of popular songs played from other sources (11.27%) and instrumental versions of popular hits (7.04%). Other ambient sounds (4.23%) and instrumental music (4.23%) are both more prominent in tea rooms than in other surveyed types of facilities. Music from TV or *YouTube* makes up 2.82%, while the remaining types of music, such as a mix of popular songs played from the radio, music by a single artist or from a movie soundtrack, orchestral and classical music, metal / rock / retro / jazz music, and folk and ethnic music are negligible (making up 1.41% each). Live music, electronic / house / reggae / pop / rap music, seasonal music, and in-store radio were not reported.

In fast food and drink outlets, a mix of popular songs played from other sources is the most common (45.19%), followed by a mix of popular songs played from the radio (28.89%). Music by a single artist or from a movie soundtrack (11.11%) placed third, followed by instrumental music (6.67%). Folk and ethnic music makes up 2.96%, while instrumental versions of popular hits (2.22%) have been identified as well. Esoteric and ambient music, music from TV or *YouTube*, and electronic / house / reggae / pop / rap have negligible representation.

Our findings in cafés and patisseries are very similar to those identified in fast food and drink outlets. A mix of popular songs played from other sources is the most prevalent (34.64%), followed by a mix of popular songs played from the radio (20.64%). The third and fourth most represented music types are identical to fast

food and drink outlets – music by a single artist or from a movie soundtrack (19.9%) and instrumental music (7.37%). This is followed by esoteric and ambient music (3.93%), orchestral and classical music (3.19%), and instrumental versions of popular hits (3.19%). Music from TV and *YouTube* (2.7%) has been reported as well. Live music, seasonal music and metal / rock / retro / jazz music have a negligible representation in cafés and patisseries (less than 1%).

In restaurants and hotels, a mix of common songs played from the radio (36.22%) dominates the list, with a mix of common songs played from other sources close behind (29.81%). Music by a single artist or from a movie soundtrack places third (12.48%), followed by instrumental music (4.33%) and esoteric and ambient music (4.16%). Both music from TV and *YouTube* (3.64%) and folk and ethnic music (2.77%) are represented as well. Instrumental versions of popular hits and orchestral and classical music are somewhat represented, while live music, metal / rock / retro / jazz music, other sounds, and in-store radio have negligible representation in restaurants and hotels.

Table 1: Absolute and relative quantities of music types in hospitality facilities

MUSIC TYPE GROUP		HOSPITALITY FACILITIES				TOTAL
		Restaurants and hotels	Fast food and drink outlets	Cafés and patisseries	Tea rooms	
Mix of popular songs played from the radio or from other sources	Count	381	225	100	9	715
	% within HF's	66%	55.3%	74.1%	12.7%	60.1%
Other music types	Count	196	182	35	62	475
	% within HF's	34%	44.7%	25.9%	87.3%	39.9%
Total	Count	577	407	135	71	1,190
	% within HF's	100%	100%	100%	100%	100%

Source: Own processing

Table 1 reports the relative and absolute quantities of music types played in the surveyed hospitality facilities. The results show that a mix of popular songs played from the radio or from other sources can be found in 60.1% of hospitality facilities, regardless of their type. The highest and lowest relative representation can be seen in cafés and patisseries (74.1%) and tea rooms (12.7%), respectively. If we disregard tea rooms, these types of music make up 63.1% on average (min. 55.1%), amounting to a majority in all three remaining types of facilities. **Therefore, the results reported in Table 1 allow us to confirm research hypothesis RH1.**

Next, we tested whether a mix of popular songs played from the radio or from other sources is equally represented in relation to the other types of music in commercial spaces of cafés and patisseries, fast food and drink outlets, and restaurants and hotels. Three possible pairs of hospitality facilities were tested in order to determine whether the selected music types are played with an equal frequency in each one, compared to all the other types. As the results of the chi-squared test and Cramér's V (Table 2) have shown, fast food and drink outlets use a mix of popular songs played from the radio or from other sources significantly less (weak relationship) than both restaurants and hotels and cafés and patisseries, where the use of these music types is equal. This goes against RH2, which assumed equal representation in all three types of facilities. **Therefore, research hypothesis RH2 has been rejected.**

Table 2: Test of the use of a mix of popular songs played from the radio or from other sources in comparison to other music types in commercial spaces of hospitality facilities

		Value	df	Approximate significance
Restaurants and hotels vs. fast food and drink outlets	Chi square	11.655	1	0.001
	Cramér's V	0.109		0.001
	Contingency coefficient	0.108		0.001
Cafés and patisseries vs. fast food and drink outlets	Chi square	14.911	1	0.000
	Cramér's V	0.166		0.000
	Contingency coefficient	0.164		0.000
Restaurants and hotels vs. cafés and patisseries	Chi square	3.229	1	0.072
	Cramér's V	0.067		0.072
	Contingency coefficient	0.067		0.072

Source: Own processing

Our research also focused on characterising music played in hospitality facilities in terms of the following attributes: loud vs. quiet, fast-paced vs. slow-paced, hard (aggressive) vs. soft, arousing vs. relaxing, complex vs. simple. Figure 2 shows the arithmetic average reported characteristics of each type of music present in the survey. Respondents rated each characteristic on a scale of 1 to 5, where 1 refers to very loud, music volume vs. other sounds, fast-paced, aggressive, arousing, and complex, and 5 refers to very quiet, slow-paced, soft, relaxing, and simple.

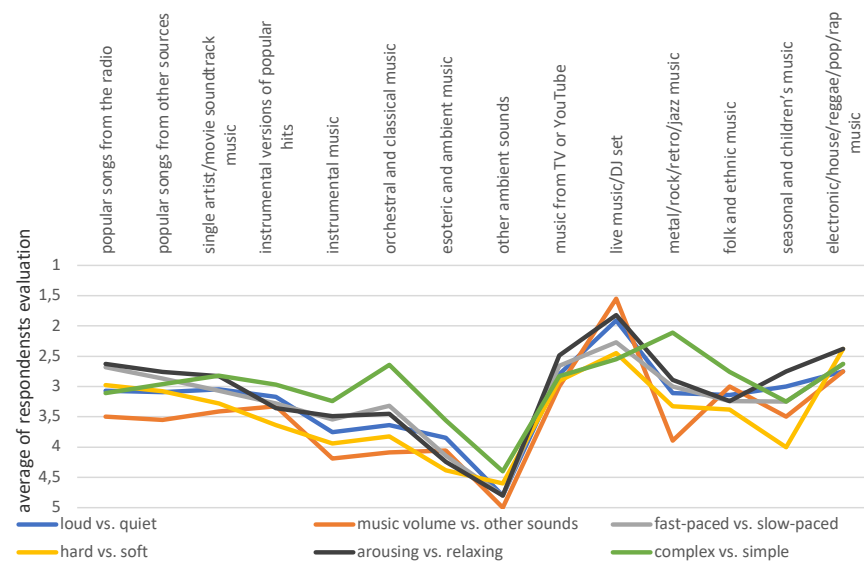


Figure 2: Reported music characteristics by music type

Source: Own processing

As shown in Figure 2, in-store radio was rated the loudest by respondents, while other ambient sounds were rated the quietest, most slow-paced, simplest, softest and most relaxing overall. Esoteric and ambient music scored second with its relaxing effect (4.24) and was perceived as very soft (4.8), very simple (4.4), rather quiet (3.56), and slow-paced. On the contrary, live music/DJ set was perceived as loud and arousing (1.82), hard (2.55), fast-paced (2.45), and simple. Respondents perceived in-store radio music as active (2.00), fast-paced, hard, and simple. On the other hand, metal / rock / retro / jazz music was perceived by respondents as complex (2.11), while other attributes were rated as average. Seasonal music was characterised as soft (4.00),

while other attributes such as tempo and complexity (both 3.25), volume and arousal effect (2.38) correspond to average values. Orchestral and classical music was perceived as slightly more complex (2.64), while other attributes were rated as average. The graph also shows that the attributes of most surveyed music types were rated as average, including a mix of songs played both from the radio and from other sources, music by a single artist or from a movie soundtrack, instrumental versions of popular hits, music from TV or YouTube, folk and ethnic music, and electronic / house / reggae / pop / rap music.

Table 3 reports the correlations of subjective impression and environmental fit, as rated by the respondents, to the musical characteristics discussed earlier. The results, significant at the 0.01 level, show that all attributes used to characterise the music affect the subjective impression of the respondents, while environmental fit is affected by all attributes except for the volume of the music. Each characteristic was rated on a scale of 1 to 5, where 1 always corresponds to the more active attribute in the pair (loud, fast-paced, hard, arousing, complex). Similarly, the subjective impression and environmental fit were both rated on a scale of 1 to 5, where 1 is the most positive and 5 is the most negative. Pearson correlation has identified weak to mild correlations, as seen in Table 3:

- The respondents perceive quiet music, which does not overpower other sounds in the environment, in a more positive way. They prefer music with a medium to slow tempo and a rather relaxing effect, which is softer, but which is not based only on simplicity (more complex musical compositions are preferred).
- The respondents' idea of music that is fitting for the environment is music that is not as fast-paced, does not have a pronounced arousing effect, has a slightly complex composition and is softer. Respondents do not consider the volume of the music as relevant in terms of its environmental fit.

Table 3: Correlation of subjective impression and environmental fit to musical characteristics

		Correlations							
		Loud vs. quiet	Music volume vs. other sounds	Fast-paced vs. slow-paced	Hard vs. soft	Arousing vs. relaxing	Complex vs. simple	Subjective impression	Environmental fit
Loud vs. quiet	Correlation	1	.713**	.523**	.494**	.513**	.212**	-.194**	-0.048
	Sig. (2-tailed)		0	0	0	0	0	0	0.099
Music volume vs. other sounds	Correlation	.713**	1	.396**	.367**	.374**	.172**	-.146**	-0.018
	Sig. (2-tailed)	0		0	0	0	0	0	0.532
Fast-paced vs. slow-paced	Correlation	.523**	.396**	1	.703**	.746**	.284**	-.262**	-.222**
	Sig. (2-tailed)	0	0		0	0	0	0	0
Hard vs. soft	Correlation	.494**	.367**	.703**	1	.696**	.258**	-.331**	-.268**
	Sig. (2-tailed)	0	0	0		0	0	0	0
Arousing vs. relaxing	Correlation	.513**	.374**	.746**	.696**	1	.290**	-.233**	-.193**
	Sig. (2-tailed)	0	0	0	0		0	0	0
Complex vs. simple	Correlation	.212**	.172**	.284**	.258**	.290**	1	.143**	.144**
	Sig. (2-tailed)	0	0	0	0	0		0	0
Subjective impression	Correlation	-.194**	-.146**	-.262**	-.331**	-.233**	.143**	1	.669**
	Sig. (2-tailed)	0	0	0	0	0	0		0
Environmental fit	Correlation	-0.048	-0.018	-.222**	-.268**	-.193**	.144**	.669**	1
	Sig. (2-tailed)	0.099	0.532	0	0	0	0	0	

** Correlation is significant at the 0.01 level (2-tailed).

Source: Own processing

Table 4 reports the correlations of subjective impression and environmental fit to the music volume, both as a standalone characteristic and in relation to other sounds, for each surveyed facility type. In tea rooms, music that is not as loud is deemed more fitting (-0.338, p=0.004). However, based on the respondents' subjective impression, music that is not as loud is rated more positively in all types of facilities (weak to medium correlation). This is in line with RH3, which assumes that music that allows for quiet conversation, i.e., neutral to softer in volume, is rated more positively by customers in all types of surveyed facilities. **Therefore, the presented findings confirm research hypothesis RH3 at a 5% significance level.**

Table 4: Correlation of subjective impression and environmental fit to music volume by facility type

Correlations		RESTAURANTS AND HOTELS				CAFÉS AND PATISSERIES			
		Loud vs. quiet	Music volume vs. other sounds	Subjective impression	Environmental fit	Loud vs. quiet	Music volume vs. other sounds	Subjective impression	Environmental fit
Loud vs. quiet	Correlation	1	.726**	-.218**	-0.049	1	.711**	-.146**	-0.019
	Sig. (2-tailed)		0	0	0.239		0	0.003	0.703
Music volume vs. other sounds	Correlation	.726**	1	-.198**	-0.059	.711**	1	-0.087	0.021
	Sig. (2-tailed)	0		0	0.158	0		0.08	0.671
Subjective impression	Correlation	-.218**	-.198**	1	.660**	-.146**	-0.087	1	.687**
	Sig. (2-tailed)	0.000	0		0	0.003	0.08		0
Environmental fit	Correlation	-0.049	-0.059	.660**	1	-0.019	0.021	.687**	1
	Sig. (2-tailed)	0.239	0.158	0		0.703	0.671	0	
Correlations		TEA ROOMS				FAST FOOD AND DRINK OUTLETS			
		Loud vs. quiet	Music volume vs. other sounds	Subjective impression	Environmental fit	Loud vs. quiet	Music volume vs. other sounds	Subjective impression	Environmental fit
Loud vs. quiet	Correlation	1	.692**	-.275*	-.338**	1	.711**	-.146**	-0.019
	Sig. (2-tailed)		0	0.02	0.004		0	0.003	0.703
Music volume vs. other sounds	Correlation	.692**	1	-0.187	-0.197	.711**	1	-0.087	0.021
	Sig. (2-tailed)	0		0.119	0.099	0		0.08	0.671
Subjective impression	Correlation	-.275*	-0.187	1	.695**	-.146**	-0.087	1	.687**
	Sig. (2-tailed)	0.02	0.119		0	0.003	0.08		0
Environmental fit	Correlation	-.338**	-0.197	.695**	1	-0.019	0.021	.687**	1
	Sig. (2-tailed)	0.004	0.099	0		0.703	0.671	0	

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Source: Own processing

Next, our research examined how different types of music are perceived by the customers. More specifically, the respondents reported their subjective impression of the used background music and indicated how fitting it is for the environment. Both of these aspects were rated on a scale of 1 to 5, where 1 is the most positive, and 5 is the most negative. The ANOVA test confirmed that different types of music generate a different subjective impression in the customers (at a 1% significance level). Figure 3 provides a comparison of the subjective impression of different types of music. In-store radio has been excluded, as it was reported only once in the restaurant and hotel category, and its rating (5) is therefore considered irrelevant. The results show that metal / rock / retro / jazz music is rated the most positively, followed by orchestral and classical music and esoteric and ambient music. By contrast, the worst rating is attributed to a mix of songs played from the radio, music from TV or YouTube, and a mix of songs played from other sources.

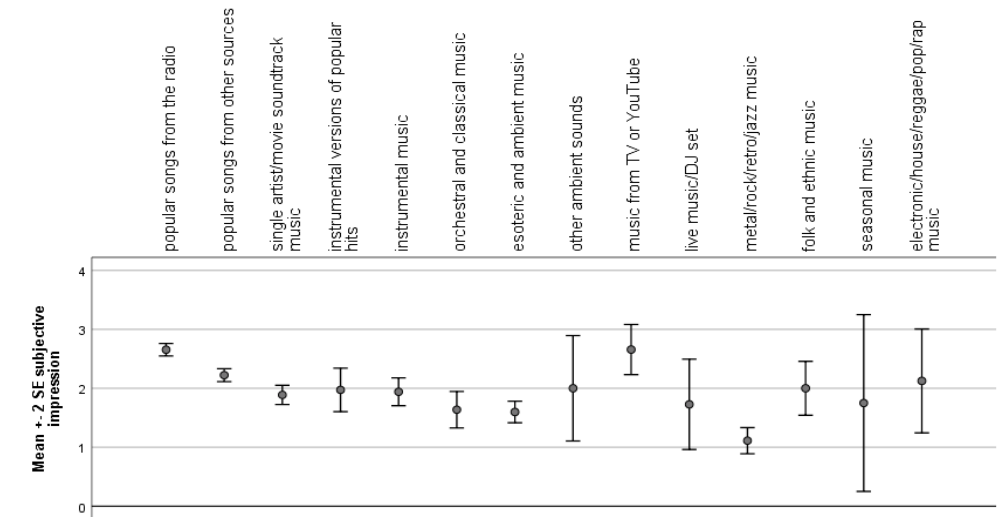


Figure 3: Reported subjective impression by music type

Source: Own processing

In order to test research hypothesis RH4, a Tukey's HSD test, described in Table 5, was carried out. Its goal was to identify significant differences at a 5% significance level in the subjective impression of a mix of songs played from the radio or from other sources in relation to other types of music. The results show that a mix of songs played from the radio receives a significantly more negative rating than other types of music, excluding other ambient sounds such as trees rustling and water flowing, music from TV or YouTube, live music/DJ set, metal / rock / retro / jazz music, folk and ethnic music, seasonal music, and electronic / house / reggae / pop / rap music. A mix of songs played from other sources receives a significantly more positive rating than a mix of songs played from the radio and, by contrast, a significantly less positive rating than music by a single artist or from a movie soundtrack and esoteric and ambient music. **Therefore, research hypothesis RH4 has been rejected at a 5% significance level.**

Table 5: Tukey's HSD test results for differences in the subjective impression by music type

(I) music type_	(J) music type reduced	Mean difference (I-J)	Std. error	Sig.	95% confidence interval	
					Lower	Upper
Mix of popular songs played from the radio	mix of popular songs played from other sources	.432*	0.077	0	0.17	0.69
	music by a single artist or from a movie soundtrack	.767*	0.097	0	0.44	1.09
	instrumental versions of popular hits	.682*	0.18	0.011	0.08	1.29
	instrumental music most likely created for commercial spaces	.714*	0.137	0	0.25	1.18
	orchestral and classical music	1.018*	0.225	0.001	0.26	1.78
	esoteric and ambient music	1.057*	0.123	0	0.64	1.47
	other ambient sounds such as trees rustling and water flowing	0.655	0.461	0.98	-0.9	2.2
	music from TV or YouTube	-0.002	0.182	1	-0.61	0.61
	live music/DJ set	0.927	0.314	0.156	-0.13	1.98
	metal/rock/retro/jazz music	1.544*	0.346	0.001	0.38	2.71
	folk and ethnic music	0.655	0.23	0.205	-0.12	1.43
	seasonal music	0.905	0.515	0.895	-0.83	2.64
	electronic/house/reggae/pop/rap music	0.53	0.366	0.976	-0.7	1.76
	Mix of popular songs played from other sources	mix of popular songs played from the radio	-.432*	0.077	0	-0.69
music by a single artist or from a movie soundtrack		.335*	0.095	0.028	0.02	0.65
instrumental versions of popular hits		0.25	0.178	0.982	-0.35	0.85
instrumental music most likely created for commercial spaces		0.282	0.136	0.714	-0.17	0.74
orchestral and classical music		0.586	0.224	0.334	-0.17	1.34
esoteric and ambient music		.625*	0.122	0	0.22	1.03
other ambient sounds such as trees rustling and water flowing		0.223	0.461	1	-1.33	1.77
music from TV or YouTube		-0.435	0.181	0.478	-1.04	0.17
live music/DJ set		0.495	0.313	0.951	-0.56	1.55
metal/rock/retro/jazz music		1.111	0.345	0.077	-0.05	2.27
folk and ethnic music		0.223	0.229	1	-0.55	0.99
seasonal music		0.473	0.515	1	-1.26	2.2
electronic/house/reggae/pop/rap music		0.098	0.366	1	-1.13	1.33

* Correlation is significant at the 0.05 level (2-tailed).

Source: Own processing

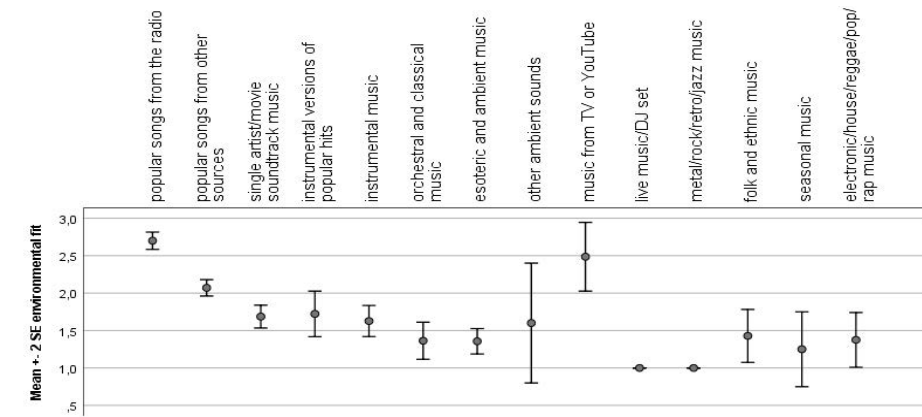


Figure 4: Reported environmental fit by music type

Source: Own processing

Figure 4 provides an overview of the mean environmental fit of each music type with the standard error of ± 2 , as reported by the customers. In-store radio has been excluded from the comparison and the test, as it was reported only once in the restaurant and hotel category, and its rating (5) is therefore considered irrelevant. Surprisingly, a mix of popular songs played from the radio and music from TV or YouTube are rated as the least fitting by the customers. A mix of popular songs played from the radio and from other sources are the two most commonly used types of music in all the surveyed facilities except for tea rooms, it is safe to say that they are the least fitting choices for the given business environment. The greatest standard error has been reported for the environmental fit of other ambient sounds such as trees rustling and water flowing, seasonal music, music from TV or YouTube, electronic / house / reggae / pop / rap music, and folk and ethnic music. Further investigation, aimed at determining whether this could be caused by the fact that these types of music were used by a certain type of facilities, has revealed this assumption to be improbable in the case of seasonal music and other ambient sounds, as seasonal music was only reported in fast food and drink outlets, and other ambient sounds were reported in tea rooms and hotels and restaurants, with the mean rating not varying significantly. The following types of music are rated as more fitting: live music/DJ set (reported in fast food and drink outlets and restaurants and hotels), esoteric and ambient music (reported in all four types of facilities), metal / rock / retro / jazz music, orchestral and classical music (reported in all types of facilities except for cafés and patisseries), and seasonal music (fast food and drink outlets).

6 Discussion

A survey of music played in restaurants and hotels, cafés and patisseries, fast food and drink outlets, and tea rooms has revealed that the prevalent form of background music is a mix of popular songs, either played directly from a radio broadcast or from other sources in the form of playlists. These two types of music together represent almost two thirds of all reported cases, with music played from the radio attributing to 27.98% and popular songs from other sources making up 32.1% of all cases. Other music types had a much lower representation – music by a single artist or from a movie soundtrack (either as an album or a playlist) was identified in 14.2% of cases, esoteric and ambient music in 7.31% of cases, instrumental music most likely created for commercial spaces in 5.63% of cases, instrumental versions of popular hits in 3.03% of cases, orchestral and classical music in 1.85% of cases, and other ambient sounds analogous to music, such as sounds of the forest or waterfalls, in 0.42% of cases. If we compare these findings to those of an earlier study on the state of music in commercial settings, which estimated the share of radio music to be at least 40%, we can see

that although the reported share of music played from the radio is lower (27.98%), adding up the category of popular songs played from other sources, such as online playlists on platforms that are internet radios or resemble those in nature, gives a total of 60.1%, a value that is about 50% higher than what the 2003 study had reported.

Nevertheless, the relative frequency of reported music types varies across different types of facilities. Understandably, the greatest difference has been observed in the case of tea rooms, where esoteric and ambient music clearly dominates (reported in 63.38% of cases), roughly corresponding to the use of popular songs played from the radio or from other sources in the surveyed facilities overall. The reported share in tea rooms is 12.7%, which, together with the closely related type of instrumental versions of popular hits (7.04%), makes up around one fifth of total music production in this type of facility. Fast food and drink outlets stand in direct opposition, with music played from the radio being the dominant type of background music used (45.19%). Together with a mix of popular songs from other sources (28.89%), quite similar in its miscellaneous nature, they represent around three quarters of all reported cases. The differences between each type of facility are significant, making it possible to confirm research hypothesis RH1, which assumed that the most frequently played type of music is a mix of popular songs played from the radio or other sources, with the exception of tea rooms. Significant differences can also be found in the degree to which these types of music are played in fast food and drink outlets in comparison to the two remaining types of facilities (excluding tea rooms), restaurants and hotels and cafés and patisseries, which use a mix of popular songs played from the radio or from other sources significantly more than fast food and drink outlets do. This has led to the rejection of research hypothesis RH2, which assumed equal representation of these types of music in all three mentioned types of facilities.

The next part of our research dealt with the perception of musical characteristics. Five musical attributes were observed: loud vs. quiet, fast-paced vs. slow-paced, hard (aggressive) vs. soft, arousing vs. relaxing, and complex vs. simple. Our findings suggest that the rating of these attributes is often intertwined: Loud music is often rated as hard and arousing, while fast-paced music tends to be rated as arousing and loud. Overall, we can observe that such terms as loud, fast-paced, hard, arousing, and complex are used to denote strong and distinctive music, while their opposites of quiet, slow-paced, soft, relaxing, and simple point to a lower degree of distinction or a certain musical dullness. From this perspective, popular songs from the radio were rated as the most distinctive, while a mix of popular songs played from other sources and music by a single artist or from a movie soundtrack scored slightly lower in the observed parameters. Instrumental versions of popular hits and orchestral and classical music (with the exception of the complexity attribute) fall somewhat closer to the “indistinctive” end of the spectrum, while esoteric and ambient music and other ambient sounds are notably more indistinctive.

Apart from the five attributes mentioned above, the respondents also rated their subjective impression of the music (an overall rating of how much they like it) and their opinion on how well it matched the environment where it was reported. Our findings suggest that, despite the widespread use of a mix of popular songs played from the radio or from other sources, these two types of music received the worst rating in terms of respondents’ subjective impression (with popular songs from other sources scoring slightly higher than music from the radio), and the difference was statistically significant. This led to the rejection of research hypothesis RH4, which assumed that popular songs from the radio or from other sources, which are, for all intents and purposes, the type of music that people are most accustomed to hearing and that enjoys the greatest popularity, would be rated most positively. This could mean that although the idea of ‘universally positively accepted music’ exists, the music that ends up being categorised as such and subsequently played on the radio and elsewhere may in fact satisfy only a small portion of the public, which is why it is rated negatively overall. Besides, chart-topping hits are produced to succeed on the market, which may come off as excessively intrusive to some, leading to negative sentiments towards such music, especially in the business context. Another observation worthy of note is the fact that music from the radio was not only rated worst in terms of subjective impression, but also with regards to how well it matched the environment where it was reported. If we also consider its overall dominance in commercial spaces, we can unequivocally conclude that most business owners and managers simply ‘settle’ for popular songs played from the radio and from other sources as the easiest and probably also

cheapest solution of playing music in their store, even though it is considered the least matching, at least from the customers’ perspective. In fact, the main takeaway for owners and managers of businesses that belong to one of the surveyed categories, is to put more thought into the choice of music, or rather to seek advice from experts who specialise in helping select background music for businesses.

Other key findings have to do with how much the rating of musical parameters can affect the overall subjective impression and opinion on environmental fit. While we can say that the subjective impression of music is significantly affected by all the rated attributes, environmental fit rating is affected by all parameters except for music volume. As for subjective impression, its positive rating is associated with a lower volume (allowing other sounds in the environment to be heard), mid to slower tempo, and steering clear from excessive simplicity. The same can be said about the positive rating of environmental fit (except for the volume aspect), although closer inspection of each type of facilities has revealed that lower volume positively affects environmental fit ratings in tea rooms. These findings help confirm research hypothesis RH3, which assumed that music that allows for quiet conversation, i.e., neutral to softer in volume, would be rated more positively by customers in the surveyed types of facilities. Nevertheless, let us not forget that a positive subjective impression or opinion on environmental fit may not always relate to the amount of time and/or money spent, since many studies have shown that turning up the volume in restaurants may increase sales.³⁹ Assuming that this consequence can be applied to the context of Czech hospitality facilities, the main takeaway from this for business owners and managers is unclear and depends on the particular business objective. If the goal is to evoke a good feeling in customers, then quieter music may suffice; if the goal is to increase sales, louder and/or more arousing music may be more suitable. Such relationships can be the subject of further research.

The outcomes of this study are mostly in line with findings of other studies that are presented in the part supporting research hypothesis RH3, where it is reported that customers prefer music at softer and quieter levels. In previous studies, many researchers had focused on how these two aspects affect the amount of money and time spent in the facility, such as Milliman.⁴⁰ In their meta-analytic review of 157 papers dealing with background music effects in retail but also in restaurants, Carlin and Owen point out similar conclusions: “*Slower tempo, lower volume and familiar music results in subjects staying marginally longer at a venue than when the tempo or volume are high, or the music less familiar.*”⁴¹ The amount of money spent in restaurants with either loud or quiet background music is still an interesting subject of research today, as evidenced by the research of Tarlao et al.,⁴² published earlier this year. However, the affinity of customers to music of a certain level of loudness has not been studied in detail. This is confirmed by another recent study by Maruyama et al., in their field experiment conducted in a café, they report that “*negative evaluations were related to high background music volume levels,*” adding that “*high background music volume together with occupancy of neighbouring tables tended to affect the evaluations negatively, reporting uncomfortableness, unease in conversing, and difficulty hearing the conversation within the group.*”⁴³ These findings correspond with the results of our research and further support research hypothesis RH3 presented above.

39 Compare to: GUÉGUEN, N., HÉLÈNE, L. G., JACOB, C.: Sound Level of Background Music and Alcohol Consumption: An Empirical Evaluation. In *Perceptual and Motor Skills*, 2004, Vol. 99, No. 1, p. 34-38; MCCARRON, A., TIERNEY, K. J.: The Effect of Auditory Stimulation on the Consumption of Soft Drinks. In *Appetite*, 1989, Vol. 13, No. 2, p. 155-159; TARLAO, C. et al.: Influence of Sound Level on Diners’ Perceptions and Behavior in a Montreal Restaurant. In *Applied Acoustics*, 2021, Vol. 174, 107772.

40 MILLIMAN, R. E.: The Influence of Background Music on the Behavior of Restaurant Patrons. In *Journal of Consumer Research*, 1986, Vol. 13, No. 2, p. 286.

41 CARLIN, F. V., OWEN, K.: Setting the Tone with the Tune: A Meta-Analytic Review of the Effects of Background Music in Retail Settings. In *Journal of Business Research*, 2006, Vol. 59, No. 6, p. 761.

42 TARLAO, C. et al.: Influence of Sound Level on Diners’ Perceptions and Behavior in a Montreal Restaurant. In *Applied Acoustics*, 2021, Vol. 174, 107772.

43 MARUYAMA, N. et al.: Assessing the Ease of Conversation in Multi-Group Conversation Spaces: Effect of Background Music Volume on Acoustic Comfort in a Café. In *Building Acoustics*, 2020, Vol. 27, No. 2, p. 150.

7 Conclusion

The aim of this study was to analyse the current state of background music in facilities of the hospitality industry. The research sample consisted of a total of 1,190 observation reports. Our research dealt with the selection of background music in the surveyed facilities, also interpreting the subjective judgement of the respondents. This method is quite unique in the field, as none of the studies found during literature review had used such a method. The choice of background music appears as an independent variable in the largest number of studies, while most of them compare the effect of two or more music options, based on genre or popularity, such as classical vs. popular music.⁴⁴ Other studies instead seek to evaluate the fit of the music to the environment in which it is played or to the product that is being sold.⁴⁵ This study's unique approach provides an evaluation of background music played in a real environment by direct observation.

Another unique aspect of this study is the broad spectrum of hospitality facilities that have been surveyed. Most studies on the topic focus on background music or background atmospherics in the retail settings, while a smaller number of studies explores the topic of background music in restaurants or cafés. The unique approach used in this study divides the surveyed hospitality facilities into four categories (restaurants and hotels, fast food and drink outlets, cafés and patisseries, tea rooms) and compares both how they use background music and how it is perceived by their customers. All the categories are thus shown in a new perspective, proving that each one deserves a slightly different approach to the use of background music. Moreover, describing the specific approach for each category appears to be a crucial opportunity for further research in this area. Nevertheless, the results of this research may inspire not only other researchers in the field, but also business owners and managers seeking advice on the use of background music in their establishment. As an example, we can point out that the findings of this study may discourage business owners from using radio as a source of background music in their facilities, because despite being the most available option, it is also the most unappealing option in the eyes of the customers. Further research may help identify the reason for customers' negative feelings towards mixes of popular songs played for example from the radio, TV, or *YouTube*.

Based on the results of the research, it can be concluded that the current choice of background music used in hospitality facilities does not provide the desired effect, and there is a demand for change in order to satisfy the customers who visit these facilities.

BIBLIOGRAPHY:

- ADAMISIN, P. et al.: Managerial Approaches of Environmental Projects: An Empirical Study. In *Polish Journal of Management Studies*, 2018, Vol. 17, No. 1, p. 27-38. ISSN 2081-7452.
- ANDERSSON, P. K. et al.: Let the Music Play or Not: The Influence of Background Music on Consumer Behavior. In *Journal of Retailing and Consumer Services*, 2012, Vol. 19, No. 6, p. 553-560. ISSN 0969-6989.
- ARENI, C. S., KIM, D.: The Influence of Background Music on Shopping Behavior Classical Versus Top-Forty Music in a Wine Store. In MCALISTER, L., ROTHSCCHILD, M. L. (eds.): *ACR North American Advances in Consumer Research Volume 20*. Provo : Association for Consumer Research, 1993, p. 336-340.
- ARENI, C. S., MILLER, R.: Sales Effects of In-Store Radio Advertising. In *Journal of Marketing Communications*, 2012, Vol. 18, No. 4, p. 285-295. ISSN 1352-7266.
- Background Music That Works | Mood-Based Music for Your Business*. [online]. [2021-01-18]. Available at: <<https://www.soundtrackyourbrand.com/>>.

44 See: ARENI, C. S., KIM, D.: The Influence of Background Music on Shopping Behavior Classical Versus Top-Forty Music in a Wine Store. In MCALISTER, L., ROTHSCCHILD, M. L. (eds.): *ACR North American Advances in Consumer Research Volume 20*. Provo : Association for Consumer Research, 1993, p. 336-340; LAMMERS, H. B.: An Oceanside Field Experiment on Background Music Effects on the Restaurant Tab. In *Perceptual and Motor Skills*, 2003, Vol. 96, No. 3, p. 1025-1026.

45 NORTH, A. C., HARGREAVES, D. J., MCKENDRICK, J.: In-Store Music Affects Product Choice. In *Nature*, 1997, Vol. 390, No. 6656, p. 132-132.

- BEER, A., GREITEMEYER, T.: The Effects of Background Music on Tipping Behavior in a Restaurant: A Field Study. In *Psychology of Music*, 2018, Vol. 47, No. 3, p. 444-450. ISSN 0305-7356.
- BERLYNE, D. E.: *Aesthetics and Psychobiology*. New York : Appleton-Century-Crofts, 1971.
- BISWAS, D., LUND, K., SZOCS, C.: Sounds Like a Healthy Retail Atmospheric Strategy: Effects of Ambient Music and Background Noise on Food Sales. In *Journal of the Academy of Marketing Science*, 2018, Vol. 47, No. 1, p. 37-55. ISSN 0092-0703.
- BURNER, G. C.: An Oceanside Field Experiment on Background Music Effects on the Restaurant Tab. In *Perceptual and Motor Skills*, 2003, Vol. 96, No. 3, p. 94-104. ISSN 0031-5125.
- CALDWELL, C., HIBBERT, S. A.: The Influence of Music Tempo and Musical Preference on Restaurant Patrons' Behavior. In *Psychology & Marketing*, 2002, Vol. 19, No. 11, p. 895-917. ISSN 1520-6793.
- CHEBAT, J. C., CHEBAT, C. G., VAILLANT, D.: Environmental Background Music and In-Store Selling. In *Journal of Business Research*, 2001, Vol. 54, No. 2, p. 115-123. ISSN 0148-2963.
- CHOO, B. J. K. et al.: The Sound of Music on the Pocket: A Study of Background Music in Retail. In *Psychology of Music*, 2020, Vol. 49, No. 5, p. 1381-1400. ISSN 0305-7356.
- DAUNFELDT, S. O. et al.: Effects of Employees' Opportunities to Influence In-Store Music on Sales: Evidence from a Field Experiment. In *Journal of Retailing and Consumer Services*, 2021, Vol. 59, 102417. ISSN 0969-6989.
- DOBRODOLAC, M. et al.: A Study on the Competitive Strategy of the Universal Postal Service Provider. In *Technology Analysis & Strategic Management*, 2016, Vol. 28, No. 8, p. 935-949. ISSN 0953-7325.
- DOBRODOLAC, M. et al.: A Model for the Comparison of Business Units. In *Personnel Review*, 2018, Vol. 47, No. 1, p. 150-165. ISSN 0048-3486.
- DUBÉ, L., CHEBAT, J. C., MORIN, S.: The Effects of Background Music on Consumers' Desire to Affiliate in Buyer-Seller Interactions. In *Psychology & Marketing*, 1995, Vol. 12, No. 4, p. 305-319. ISSN 1520-6793.
- DUBÉ, L., MORIN, S.: Background Music Pleasure and Store Evaluation: Intensity Effects and Psychological Mechanisms. In *Journal of Business Research*, 2001, Vol. 54, No. 2, p. 107-113. ISSN 0148-2963.
- FRANĚK, M., MUŽÍK, P.: Postoje k funkci hudby v obchodním prostředí. In *Opus musicum*, 2003, Vol. 35, No. 3, p. 19-23. ISSN 0862-8505.
- GARLIN, F. V., OWEN, K.: Setting the Tone with the Tune: A Meta-Analytic Review of the Effects of Background Music in Retail Settings. In *Journal of Business Research*, 2006, Vol. 59, No. 6, p. 755-764. ISSN 0148-2963.
- GUÉGUEN, N., HÉLÈNE, L. G., JACOB, C.: Sound Level of Background Music and Alcohol Consumption: An Empirical Evaluation. In *Perceptual and Motor Skills*, 2004, Vol. 99, No. 1, p. 34-38. ISSN 0031-5125
- HERRINGTON, J. D., CAPPELLA, L. M.: Effects of Music in Service Environments: A Field Study. In *Journal of Services Marketing*, 1996, Vol. 10, No. 2, p. 26-41. ISSN 0887-6045.
- HITKA, M. et al.: Factors Forming Employee Motivation Influenced by Regional and Age-Related Differences. In *Journal of Business Economics and Management*, 2019, Vol. 20, No. 4, p. 674-693. ISSN 1611-1699.
- KAMPF, R. et al.: Generational Differences in the Perception of Corporate Culture in European Transport Enterprises. In *Sustainability*, 2017, Vol. 9, No. 9, 1561. ISSN 2071-1050.
- KIM, K., ZAUBERMAN, G.: The Effect of Music Tempo on Consumer Impatience in Intertemporal Decisions. In *European Journal of Marketing*, 2019, Vol. 53, No. 3, p. 504-523. ISSN 0309-0566.
- KLEIN, K., MELNYK, V., VÖLCKNER, F.: Effects of Background Music on Evaluations of Visual Images. In *Psychology & Marketing*, 2021, Vol. 38, No. 12, p. 2240-2246. ISSN 1520-6793.
- KNOEFERLE, K. M., PAUS, V. C., VOSSEN, A.: An Upbeat Crowd: Fast In-Store Music Alleviates Negative Effects of High Social Density on Customers' Spending. In *Journal of Retailing*, 2017, Vol. 93, No. 4, p. 541-549. ISSN 0022-4359.
- KNOEFERLE, K., SPENCE, C. H.: Crossmodal Correspondences between Sounds and Tastes. In *Psychonomic Bulletin & Review*, 2012, Vol. 19, No. 6, p. 878-896. ISSN 1069-9384.
- KOTLER, P.: Atmospherics as a Marketing Tool. In *Journal of Retailing*, 1973, Vol. 49, No. 4, p. 48-64. ISSN 0022-4359.
- KUCHARČÍKOVÁ, A., MIČIAK, M., HITKA, M.: Evaluating the Effectiveness of Investment in Human Capital in E-Business Enterprise in the Context of Sustainability. In *Sustainability*, 2018, Vol. 10, No. 9, 3211. ISSN 2071-1050.
- LAMMERS, H. B.: An Oceanside Field Experiment on Background Music Effects on the Restaurant Tab. In *Perceptual and Motor Skills*, 2003, Vol. 96, No. 3, p. 1025-1026. ISSN 0031-5125.
- MADLEŇÁK, R., ŠVADLENKA, L.: Acceptance of Internet Advertising by Users in The Czech Republic. In *E & M Ekonomie a management*, 2009, Vol. 12, No. 1, p. 98-107. ISSN 2336-5064.

Manuál postupu rozhodování Rady pro rozhlasové a televizní vysílání o udělení licence k provozování rozhlasového a televizního vysílání šířeného prostřednictvím vysílačů podle zákona č. 231/2001 Sb., o provozování rozhlasového a televizního vysílání. Released on 6th June 2017. [online]. [2022-03-03]. Available at: <https://www.rrtv.cz/files/licencni_rizeni/manualPostupu.pdf>.

MARUYAMA, N. et al.: Assessing the Ease of Conversation in Multi-Group Conversation Spaces: Effect of Background Music Volume on Acoustic Comfort in a Café. In *Building Acoustics*, 2020, Vol. 27, No. 2, p. 137-153. ISSN 1351-010X.

MCCARRON, A., TIERNEY, K. J.: The Effect of Auditory Stimulation on the Consumption of Soft Drinks. In *Appetite*, 1989, Vol. 13, No. 2, p. 155-159. ISSN 0195-6663.

MICHEL, A., BAUMANN, C., GAYER, L.: Thank You for the Music – or Not? The Effects of In-Store Music in Service Settings. In *Journal of Retailing and Consumer Services*, 2017, Vol. 36, p. 21-32. ISSN 0969-6989.

MILLIMAN, R. E.: The Influence of Background Music on the Behavior of Restaurant Patrons. In *Journal of Consumer Research*, 1986, Vol. 13, No. 2, p. 286-289. ISSN 0093-5301.

MILLIMAN, R. E.: Using Background Music to Affect the Behavior of Supermarket Shoppers. In *Journal of Marketing*, 1982, Vol. 46, No. 3, p. 86-91. ISSN 0022-2429.

NORTH, A. C., HARGREAVES, D. J., MCKENDRICK, J.: In-Store Music Affects Product Choice. In *Nature*, 1997, Vol. 390, No. 6656, p. 132-132. ISSN 0028-0836.

OVALI, E.: The Effects of Background Music Dimensions on Customer Attitude Towards Retail Store. In *ISMC 2019: 15th International Strategic Management Conference. Conference Proceedings*. London : Future Academy, 2019, p. 113-122.

REINOSO-CARVALHO, F. et al.: Not Just Another Pint! The Role of Emotion Induced by Music on the Consumer's Tasting Experience. In *Multisensory Research*. 2019, Vol. 32, No. 4-5, p. 367-400. ISSN 2213-4794.

REINOSO-CARVALHO, F. et al.: A Sprinkle of Emotions vs a Pinch of Crossmodality: Towards Globally Meaningful Sonic Seasoning Strategies for Enhanced Multisensory Tasting Experiences. In *Journal of Business Research*, 2020, Vol. 117, p. 389-399. ISSN 0148-2963.

ROBALLEY, T. C. et al.: The Effect of Music on Eating Behavior. In *Bulletin of the Psychonomic Society*, 1985, Vol. 23, No. 3, p. 221-222. ISSN 0090-5054.

SMITH, P. C., CURNOW, R.: "Arousal Hypothesis" and the Effects of Music on Purchasing Behavior. In *Journal of Applied Psychology*, 1966, Vol. 50, No. 3, p. 255-256. ISSN 0021-9010.

SPENCE, C.: Multisensory Experiential Wine Marketing. In *Food Quality and Preference*, 2019, Vol. 71, p. 106-116. ISSN 0950-3293.

SULLIVAN, M.: The Impact of Pitch, Volume and Tempo on the Atmospheric Effects of Music. In *International Journal of Retail & Distribution Management*, 2002, Vol. 30, No. 6, p. 323-330. ISSN 0959-0552.

SWEENEY, J. C., WYBER, F.: The Role of Cognitions and Emotions in the Music Approach Avoidance Behavior Relationship. In *Journal of Services Marketing*, 2002, Vol. 16, No. 1, p. 51-69. ISSN 0887-6045.

TARLAO, C. et al.: Influence of Sound Level on Diners' Perceptions and Behavior in a Montreal Restaurant. In *Applied Acoustics*, 2021, Vol. 174, 107772. ISSN 0003-682X.

TURLEY, L. W., MILLIMAN, R. E.: Atmospheric Effects on Shopping Behavior. In *Journal of Business Research*, 2000, Vol. 49, No. 2, p. 193-211. ISSN 0148-2963.

VILČEKOVÁ, L., ŠTARCHOŇ, P.: Consumer Perception of Selected Brands Explored through Archetypes. In *4th International Conference on Education and Social Sciences (INTCESS). Conference Proceedings*. Istanbul : INTCESS, 2017, p. 819-823.

WILSON, S.: The Effect of Music on Perceived Atmosphere and Purchase Intentions in a Restaurant. In *Psychology of Music*, 2003, Vol. 31, No. 1, p. 93-112. ISSN 0305-7356.

YALCH, R., SPANGENBERG, E.: Effects of Store Music on Shopping Behavior. In *Journal of Consumer Marketing*, 1990, Vol. 7, No. 2, p. 55-63. ISSN 0736-3761.

YALCH, R. F., SPANGENBERG, E.: Using Store Music for Retail Zoning: A Field Experiment. In MCALISTER, L., ROTHSCHILD, M. L. (eds.): *ACR North American Advances in Consumer Research Volume 20*. Provo : Association for Consumer Research, 1993, p. 632-636.

