#### Theoretical framework

The conceptualization of cultural participation has been studied with outstanding variety, showing multiple aims and outcomes depending on the measure. Analyses focus on the stratification of visitors in terms of supporting or denying the importance of highbrow/lowbrow, or omnivorous, which means combining all kinds of cultural events (Bennett et al. 2009; Falk and Katz-Gerro 2016; Warde 2017; Warde et al. 2007). Studies on the conditions of cultural participation investigate the drivers, patterns, motivations, and obstacles for people to participate more in culture (Martinez-Martinez et al. 2021; Walmsley 2011), often with regard to specific groups like gender or age (Christin 2012; Romanovska 2020; Toepoel 2011; Willekens and Lievens 2014). Special focus has been given to non-participation (Heikkila 2022; Heikkila and Lindblom 2022; Rode-Breymann 2020), concluding that what is seen as non-participation is an everyday culture (Ebrey 2016; Miles and Gibson 2016; Stevenson et al. 2017). Typologies of participants support the understanding of visitor profiles to serve cultural policy or cultural management and bring suitable offers in programming (Bianchini et al. 2020), or to increase the quality of production (Bille and Olsen 2018).

Even though it is not unproblematic, the social benefits of cultural participation have been widely studied from the perspectives of cultural policy, as well as health (Allin 2015), economy (Ateca-Amestoy et al. 2016), education (Dumais 2002), and psychology (Thomson and Chatterjee 2022). Most studies take into consideration self-reported well-being, operationalized as mental health (Elsden and Roe 2020; Fancourt and Baxter 2020; Hansen et al. 2015; Lee et al. 2021; Yoon et al. 2020), satisfaction with life (Reyes-Martínez 2022; Wheatley and Bickerton 2019), or happiness (Ateca-Amestoy et al. 2016; Bertacchini et al. 2021; Hand 2018).

A substantial focus on the relationship between well-being and culture is discussed to provide methodological clarity of the concepts and data procedures (Galloway 2006; Oman 2019; 2021), as much of the policy and consultancy work tends to mislead the interpretation for greater political appeal (Oman and Taylor 2018; Stevenson 2013).

Additionally, data-based studies on the quality of life and cultural participation at an urban level, such as those by Blessi et al. (2016), are isolated and rarely followed by more in-depth empirical work; there is also a lack of updates based on the contemporary multitude of crises. The conceptualization of urban well-being is often enriched with other dimensions, like environmental and social conditions (Zhang et al. 2018), or neighborhood quality (Mouratidis and Yiannakou 2022; Sirgy and Cornwell 2002). Instead of adhering to the classic model of growth through culture (Ferilli et al. 2017; Florida 2004), studies on urban sustainability and cultural participation could also include empirical examples and simultaneously focus on social, environmental, ecological, and cultural development (Meyrick and Barnett 2021; Throsby 2017).

### Methodology

Research questions and hypotheses for the survey were developed based on research conducted on cultural participation in Košice during the ECoC years 2012-2014. Consequently, the initial part of the research concentrated on the frequency of cultural visits within the city. Additionally, we inquired about typologies based on psychometric methods used in audience management (Hill et al. 2004). These typologies were rated on a 5-point Likert scale, where respondents could strongly agree (5) or strongly disagree (1). To complement the investigation of cultural participation outside the home, we also inquired about cultural practices at home, as is standard in cultural participation surveys.

The final sample is N= 651, the original design was built on quota system designed to match results from the Statistical office of Slovakia from 2019, however, final sample does not mirror the quota system in detail. The population of older age (older than 50) is slightly overrepresented in the sample, and the younger (under 30) population is underrepresented. Geography of the city is represented via districts

(the city is divided into four state districts) and the sample respects the population distribution. Male population is also slightly more represented in the sample over female.

# Results Latent Class Analysis of Cultural Participation Descriptive Statistics

The typology of cultural participation has typically been studied using the method of Latent Class Cluster Analysis. To align with previous discussions on cultural participation in the city of Košice, we conducted latent class analysis as well. However, the variables used in this analysis extended beyond mere typologies of cultural participation based on attendance at events. We utilized additional variables aimed at enhancing the granularity of information about patterns of cultural participation. The first group described actual cultural participation outside the home, the second group described patterns of cultural participation at home, and the third group described the psychographic typology of visitors. To standardize the variables, we adapted them to scales of 1-3 or 1-4. These variables included:

	Ν	Missing	Mean	Median	Std. Deviation	Variance
Concert - Classical Music	649	2	1.68	1.00	.925	.855
Concert – Popular Music	648	3	2.12	2.00	.984	.968
Theatre (opera, balet, play)	647	4	2.17	2.00	.989	.978
Cinema, movie screening	648	3	2.48	3.00	1.112	1.236
Library	648	3	1.78	1.00	1.182	1.398
Museum	648	3	2.06	2.00	.903	.815
Castle or Other Site of Cultural Heritage	646	5	2.36	2.00	.929	.863
Gallery or Other Exhibition Space	644	7	2.00	2.00	.956	.914
Art in Public Space (Park, Square)	639	12	2.45	3.00	.958	.919
Folklore	643	8	1.95	2.00	.934	.872
Educational Event, Workshop, Discussion	636	15	1.67	1.00	1.014	1.028
	Ν	Missing	Mean	Median	Std. Deviation	Variance
Reading books in free time	648	3	2.42	3.00	.727	.528
Following social media	647	4	2.56	3.00	.792	.627
Reading magazines and newspaper	649	2	2.64	3.00	.666	.443
Playing computer games	594	57	2.16	2.00	.373	.139
Watching television	647	4	2.83	3.00	.528	.279
Watching films and series online	649	2	2.02	2.00	.910	.828
Meeting friends	638	13	2.68	3.00	.507	.257
Listening to music at home	648	3	2.89	3.00	.426	.182

	Ν	Missing	Mean	Median	Std.	Variance
					Deviation	
I use cultural events to spend time with family or friends	642	9	2.38	2.00	.669	.448
I like to use the opportunity to get out to cultural events socially, with drinks and food	642	9	2.24	2.00	.719	.517
I am looking for artistic value or strong emotional experience	640	11	2.34	2.00	.659	.434
I am interested in culture to gain new knowledge	642	9	2.37	2.00	.647	.418

I regularly visit some places that guarantee quality	637	14	2.13	2.00	.725	.525
I am happy to join cultural field as a volunteer	642	9	1.35	1.00	.614	.377
I am happy to discover new things and experiment	643	8	2.18	2.00	.697	.486
I can't remember the last time I attended a cultural event	643	8	1.57	1.00	.738	.544

## Model selection

Class	AIC	BIC	ABIC	CAIC	Log-likelihood	χ²	$G^2$
1	33805	34096	33890	34161	-16838	3.65e+14	19971
2	32538	33125	32709	33256	-16138	1.85e+15	18912
3	32107	32990	32364	33187	-15857	6.19e+14	18481
4	31722	32899	32064	33162	-15598	2.17e+16	18074
5	31574	33047	32003	33376	-15458	1.21e+15	17842
6	31503	33272	32018	33667	-15357	1.50e+14	17649
7	31483	33548	32084	34009	-15281	5.22e+13	17567
8	31346	33706	32033	34233	-15146	8.36e+13	17347
9	31364	34020	32137	34613	-15089	5.22e+13	17258

The selection of the LCCA model is guided by the BIC number, although AIC is also widely used. For this model, there were no consistent results; therefore, we selected BIC as the guiding indicator and decided on a 4-class model as the appropriate choice. This decision also allows for comparison with previous results from Šebová (2016).

## Latent Classes Then and Now

Latent class cluster analysis has been conducted for the European Capital of Culture evaluation in 2007 and 2012-2014 (Šebová 2016).

Year	Sample size	Class	Class	Class	Class	Class
2007	N=480	Lower Omnivore 61%	Only Popular Culture 18%	Omnivore 9%	Inactve 13%	
2012-2014	N=520		Only Popular Culture 49%	Omnivore 15%	Inactive 16%	Only Classical Culture 20%

Based on indicators for museums and galleries, literary events, cinema, theater, and concerts, new forms of art events were added in 2012-2014, including street art and new forms of culture utilizing the internet for cultural purposes. This development illustrated the shift in audiences in Košice, who, with a larger offering, were able to make a more specific selection according to their tastes. The group identified as "lower omnivores" in 2007 diversified into popular culture and omnivore categories, and a distinct group of classical culture admirers emerged. In previous study (Šebova, 2016) we noted that people who had previously engaged in cultural activities did so even more frequently, and although the number of inactive individuals increased, it was not as significant as the increase observed across Slovakia as a whole. Many events were organized for free, making them more accessible and reducing social stratification compared to 2007 (Šebová 2016).

In 2020, we also identified four groups.

Year	Sample size	Class	Class	Class	Class	Class
2020	N=651		Only Popular Culture 33 %	Omnivore 22%	Inactive 14%	Only Classical Culture 31 %

Class 1: Compared to the year of 2012-2013, we observe that the inactive segment is slightly lower (14%). Their visits, if any, are to the cinema, castles, or events in public spaces.

Class 2: Omnivores, constituting 22%, are most likely students who regularly attend all types of cultural events, express a keen interest in culture, and are highly social. This group watches TV the least and is uniquely distinguished by their attendance at workshops and educational events. However, their motivation for visiting cultural events, compared to the classical culture cluster, is less about acquiring new knowledge. They regularly visit places they consider reliable.

Class 3: Constituting 33%, followers of popular culture show a clear preference for social media and internet culture. In the city, they predominantly visit cinemas—much more than those who prefer classical culture—and events in open public spaces. They also prefer going out to meet friends. Compared to those who favor classical culture, their expressed interest in culture is lower (below average in responses to questions about visiting cultural events to meet friends, enjoy food, or seek quality culture).

Class 4: Making up 31%, respondents who support classical culture are most motivated by the acquisition of new knowledge and the emotional experiences derived from cultural activities. They also prefer going out with friends the most. Unlike other groups, they do not follow social media as much but are the most frequent readers of newspapers and magazines. They participate in cultural events less often than omnivores, but their preferences differ significantly from the popular culture cluster, favoring castles and events in public spaces the most, followed by traditional folk culture events.

Socioeconomic characteristics reveal that those with less cultural participation are employed, predominantly male, and age distribution is roughly a third in each category, over 30. They mostly have completed education at the high school level with graduation and have the highest rate of retirees. Class 2 members are primarily female, under 49 years old, with a university education. This class also has the largest proportion of students, but most members are employed or self-employed. Class 3 is dominantly male, slightly younger compared to Class 4, with both university and high school education, and employed. Class 4 has a slightly higher rate of women and the second highest number of retirees.

## Conclusion

These four clusters align with the results concluded in our analysis of cultural participation at the national level, based on data from the Eurobarometer (Šebová, Révészová 2020). Contrary to these results, we have a much smaller cluster of culturally inactive people (26% in 2007 and 32% in 2013), demonstrating a consistent effect of the city offering more opportunities than on a national scale, with the city's offerings being utilized through actual participation.

The size of the culturally omnivorous population is about the same as that on a national level during the selected period (25% in 2007 and 24% in 2013). Contrary to the results in our previous research, the population that visits popular culture is higher (23% in 2007 and 24% in 2013), as is the population of classical culture (which we named "occasional visitors of castles" in the article), which was 27% in 2007 and 24% in 2013.