Janssen, S, Kristensen, N.N., Verboord, M., Marquart, F., & Lamberti, G. (2024). Europeans' digital cultural participation: Diversification, democratization, barriers, and affordances. *International Journal of Communication*.

Online Appendix

Appendix 1 – Country Characteristics

Table A1. Country Characteristics: Cultural Policy Models, Prosperity and Inequality Levels, Access to Higher Education, Globalisation, and Digitalisation

		Serbia	Croatia	Spain	France	United Kingdom	Switzerland	Nether- lands	Finland	Den- mark
a)	Cultural policy model	South-	South-	South-	South-		Central-	Central		
		Eastern	Eastern	Western	Western	Liberal	Western	Western	Nordic	Nordic
b)	Per capita public spending on									
	cultural services 2017 (€)	n/a	85.62	108.26	230.58	90.42	297.19	175.41	211.32	333.67
c)	Level of cultural participation	Low	Low	Low	Low	Medium	Medium	Medium	High	High
d)	GDP per capita, PPP (constant									
	2021, international \$) in 2021	22,55	36,954	43,621	53,835	52,842	81,603	67,693	57,849	69,879
e)	GINI Index 2021	33.1	28.9	33.9	31.5	32.4	33.7	25.7	27.7	28.3
f)	Access to higher education: % of									
	the population in 2021 that	24.9	24.9	40.4	40.7	44.7	45.0	43.1	42.3	41.9
σ١	completed tertiary education Globalisation (overall KOF index	78.29	81.18	85.35	87.19	88.39	90.75	90.32	87.33	87.79
g)	scale 1–100 in 2021	76.23	01.10	63.33	07.19	00.33	30.73	90.32	07.33	67.79
h)	Active social media penetration	42%	51%	62%	60%	66%	53%	64%	60%	69%
	2021 (% of the population)									
i)	Broadband connectivity 2021 at	-	62%	94%	65%	63%	99%	99%	65%	96%
	least 100MB per household									
j)	Digital Readiness 2021 (ranking	n/a	n/a	7 th	36 th	10 th	18 th	11 th	n/a	15 th
	of 100 countries)									
k)	Share of the population with at	41%	63%	64%	62%	74%	78%	79%	79%	69%
	least basic digital skills in 2021									

Notes Table A1

- a) Source: Rius-Ulldemolins et al. (2019). https://doi.org/10.1080/07036337.2019.1645844
 - The Table includes the labels of the policy models used by Rius-Ulldemolins and colleagues to distinguish cultural policy models that prevail in different parts of Europe. These models show considerable differences in the amount of public spending on culture and are associated with different levels of cultural consumption and artistic activity.
- b) Source: Eurostat (2019). Culture Statistiques 2019. https://data.europa.eu/doi/10.2785/118217 This report (p. 109) provides data on the total amount of overall public spending on cultural services in 2017. To calculate spending per capita, we identified each country's expenditure on cultural services and divided this by the population figures provided by Eurostat in the section Population change – Demographic balance and crude rates at the national level. Data retrieved 15 May 2024 from: https://www.eea.europa.eu/data-andmaps/data/external/population-change-demographic-balance-and-5
- c) Source: Rius-Ulldemolins et al. (2019). https://doi.org/10.1080/07036337.2019.1645844. Their analysis of levels of cultural participation draws on Eurobarometer 2013 data.
- d) Source: World Bank (2023). GDP (Gross Domestic Product) per capita, PPP (Purchasing Power Parity) in 2021. This measure provides insight into the average economic standard of living in a country by factoring in the differences in prices and living costs. Data retrieved 15 May 2024 from: https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.KD?end=2022&start=1990&view=chart
- e) Source: World Bank (2023). The Gini index measures the level of inequality in each country; a higher score reflects a higher level of inequality. The Table shows the Gini index for 2021 (2020 for Switzerland). Data retrieved 15 https://data.worldbank.org/indicator/SI.POV.GINI?end=2022&most_recent_year_desc=true&start=2022
- f) Source: Eurostat (2024). The Table shows the percentage of the population aged 25-64 in 2021 who completed higher education (ISCED11 categories 5-8). The UK figure pertains to 2019. https://doi.org/10.2908/EDAT LFSE 03
- Source: KOF Index of Globalisation (2021). Data retrieved 15 May 2024 from: https://kof.ethz.ch/en/forecastsand-indicators/indicators/kof-globalisation-index.html
- h) Source: Statista (2021). Active social media penetration 2021 (% of population). Data retrieved 15 May 2024 from: https://www.statista.com/statistics/295660/active-social-media-penetration-in-european-countries/
- Source: European Commission (2021). Broadband Coverage in Europe 2021. https://data.europa.eu/doi/10.2759/642537
- Source: Economic Intelligence Unit (2021). The Inclusive Internet Index 2021. Data retrieved 15 May 2024 from https://impact.economist.com/projects/inclusive-internet-index/2021/readiness?country=Spain
 - The Readiness category examines the capacity to access the Internet, including skills, cultural acceptance, and supporting policy. Cf. Methodology report. Retrieved 15 May 2024 from: https://impact.economist.com/projects/inclusive-internet-index/downloads/3i-methodology.pdf
- k) Source: Eurostat (2024): Individuals' level of digital skills. The Table shows the percentage of the population aged
- 16-74 in 2021 who have at least basic digital skills. https://doi.org/10.2908/ISOC_SK_DSKL_I21

Appendix 2 - Survey data

Table A2. Survey Methodology and Sample Statistics

					Highest Education	
			Gender	A 000	(%, Vocational,	Internet
Country	Survey Agency	Sample	(%, Ref:	Age	Tertiary, or	Use ^{bc}
		Size n	Female)	M (SD)	University	M (SE)
					Degree) ^a	
Croatia	Ipsos	1,200	54.2	46.89 (16.73)	23.2 (24.9)	3.34 (.025)
Denmark	Epinion	1,666	54.7	53.35 (16.01)	46.5 (42.0)	4.00 (.021)
Finland	Taloustutkimus	1,247	54.7	55.17 (17.63)	49.3 (42.3)	3.72 (.025)
France	IFOP	2,259	53.8	51.56 (19.54)	43.2 (40.7)	3.60 (.018)
Netherlands	I&O Research	1,596	53.7	49.82 (17.14)	44.5 (43.1)	3.89 (.021)
Serbia	Ipsos	1,237	55.7	48.24 (16.56)	25.0 (24.9)	3.06 (.024)
Spain	Ipsos	1,398	52.1	47.27 (14.93)	58.9 (40.7)	3.93 (.023)
Switzerland	DemoSCOPE	1,370	50.4	51.83 (14.86)	40.9 (45.4)	3.84 (.023)
United Kingdom	Yougov	2,411	58.1	50.66 (16.91)	51.1 (45.0)	3.91 (.017)
Total		14,384	54,3%	50.66 (17.09)	43.7%	3.72 (.007)

Note: Due to financial restraints and availabilities of research agencies, the surveys were distributed in different ways across the countries, using F2F (face-to-face interview), CAWI (computer-assisted web interview), CATI (= computer-assisted telephone interview), and PAPI (paper-and-pencil interview). In Croatia and Serbia, the survey was administered F2F; in Denmark, the Netherlands, Spain, Switzerland, and France, CAWI and CATI were employed (in the Netherlands, a small addition of PAPI); in Finland, CAWI and PAPI; in the UK, only CAWI. Response rates varied across countries because of the different contact methods.

- a) In brackets is the percentage of higher educated people (ISCED11 categories 5-8) aged 25-64 years in 2021, according to Eurostat data. Cf. https://doi.org/10.2908/EDAT_LFSE_03. The survey data pertain to respondents between 18 and 80 years old, so the figures are not fully comparable but still provide a reasonable indication of the representativeness of the data. While the samples represent the population structures in the respective countries fairly closely, older age groups, women and higher-educated people are (somewhat) overrepresented in most countries. Hence, we control for age, gender and education in most analyses based on the INVENT-survey data.
- b) Internet use was measured by the following question: "How often do you use the internet (either on a computer, laptop, tablet, smartphone, or smart television)?", on a scale from 0 (almost never) to 4 (almost daily). Reported coefficients are adjusted Mean (M) and Standard Error (SE) controlled for Education level, Gender, and Age.
- c) Internet use served as a filter question in the survey. Only respondents who reported using the Internet at least once a month were asked about their engagement in different digital cultural activities. As a result, 862 respondents (6.0%) were excluded from the subsequent analyses because of missing data; the majority were from Serbia (n = 274), Croatia (n = 188), and France (n = 181). Our analysis of digital cultural participation thus involved 13,522 respondents.

Appendix 3 - Measurements

Table A3-a. Operationalization of Survey Variables

ITEM/QUESTION WORDING
How often do you use the Internet? (either on a computer, laptop,
tablet, smartphone, or smart television)
0 – (Almost) never; 1 – Less than once a month; 2 – At least once a
month; 3 – At least once a week; 4 – (Almost) daily
How often do you do the following things on the Internet? (either on a
computer, laptop, tablet, smartphone, or smart television)
0 – (Almost) never; 1 – Less than once a month; 2 – At least once a
month; 3 – At least once a week; 4 – (Almost) daily
Publish or post photographs that you took yourself
2. Publish or post other creative content that you produced yourself
(e.g., blog posts, videos, podcasts, webzines)
3. Share your opinions about arts, culture, or entertainment (e.g., via
posts, ratings, reviews)
4. Follow celebrities or influencers (e.g., on Facebook, Instagram,
YouTube) E. Rivi sultural products or sorvices (e.g., books, tickets, artworks)
5. Buy cultural products or services (e.g., books, tickets, artworks)6. Search information on arts, culture, or entertainment (e.g., music,
movies, museums)
7. Listen to music via streaming services (e.g., Spotify, Deezer)
8. Watch films or television series on streaming services (e.g., Netflix,
HBO, Disney+)
9. Play video or computer games online
10. Watch short entertainment videos (e.g., YouTube, TikTok)
11. Visit online concerts, museums, or performances
In what year were you born? (recoded into age in years)
,
What is your gender?
What is your gender?
What is your gender?
What is your gender? Gender was treated as binary (female=1; male=0), with "other" (0.1 "prefer not to say" (0.2%) coded as missing data.
What is your gender? Gender was treated as binary (female=1; male=0), with "other" (0.1
What is your gender? Gender was treated as binary (female=1; male=0), with "other" (0.1 "prefer not to say" (0.2%) coded as missing data. In which type of city or place do you live?
What is your gender? Gender was treated as binary (female=1; male=0), with "other" (0.1 "prefer not to say" (0.2%) coded as missing data. In which type of city or place do you live? 0 – House or farm in the countryside
What is your gender? Gender was treated as binary (female=1; male=0), with "other" (0.1 "prefer not to say" (0.2%) coded as missing data. In which type of city or place do you live? 0 – House or farm in the countryside 1 – Country village with less than 1.000 inhabitants 2 – Municipality with 1.000 to 10.000 inhabitants 3 – Town or municipality with 10.000 to 40.000 inhabitants
What is your gender? Gender was treated as binary (female=1; male=0), with "other" (0.1 "prefer not to say" (0.2%) coded as missing data. In which type of city or place do you live? O – House or farm in the countryside 1 – Country village with less than 1.000 inhabitants 2 – Municipality with 1.000 to 10.000 inhabitants 3 – Town or municipality with 40.000 to 80.000 inhabitants
What is your gender? Gender was treated as binary (female=1; male=0), with "other" (0.1 "prefer not to say" (0.2%) coded as missing data. In which type of city or place do you live? O – House or farm in the countryside 1 – Country village with less than 1.000 inhabitants 2 – Municipality with 1.000 to 10.000 inhabitants 3 – Town or municipality with 10.000 to 40.000 inhabitants 4 – Town or municipality with 40.000 to 80.000 inhabitants 5 – City with 80.000 to 150.00 inhabitants
What is your gender? Gender was treated as binary (female=1; male=0), with "other" (0.1 "prefer not to say" (0.2%) coded as missing data. In which type of city or place do you live? O – House or farm in the countryside 1 – Country village with less than 1.000 inhabitants 2 – Municipality with 1.000 to 10.000 inhabitants 3 – Town or municipality with 10.000 to 40.000 inhabitants 4 – Town or municipality with 40.000 to 80.000 inhabitants 5 – City with 80.000 to 150.00 inhabitants 6 – City with 150.000 to 250.000 inhabitants
What is your gender? Gender was treated as binary (female=1; male=0), with "other" (0.19) "prefer not to say" (0.2%) coded as missing data. In which type of city or place do you live? O – House or farm in the countryside 1 – Country village with less than 1.000 inhabitants 2 – Municipality with 1.000 to 10.000 inhabitants 3 – Town or municipality with 10.000 to 40.000 inhabitants 4 – Town or municipality with 40.000 to 80.000 inhabitants 5 – City with 80.000 to 150.00 inhabitants

Country-specific educational attainment recoded first into ISCE codes and further summarized into six categories to allow for comparison across countries What is the highest educational diploma you have achieved? 1 – No formal education/Primary education; 2 – Lower second education (4 years or less); 3 – Upper secondary education (5 or years); 4 – Post-secondary non-tertiary education; 5 – Vocation tertiary education; 6 – University education Migrant background Were you born in [country]? (yes/no) Were your parents born in [country]? (Mother – Father yes/no Recoded into Migrant background if either was answered with education of yourself? O Strongly disagree; 1 – (Somewhat) disagree; 2 – Neither nor disagree; 3 – (Somewhat) agree; 4 – (Strongly) agree Learning about other cultures (4 items) 1. I am interested in learning more about people who live in countries 2. I enjoy exchanging ideas with people from other cultures countries. 3. I like to learn about other ways of life. 4. I enjoy being with people from other countries to learn at unique views and approaches. Socializing with diverse others (4 items) 1. At cultural events I like to talk to people who have a differ background than me. 2. At cultural events I like to talk to people who have a differ background than me. 3. It is great to participate in cultural events and activities we diverse group of people. 4. Culture connects people and bridges political, social, and divides.	.D 2011
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	roligious
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Enjoying cultural products from all I enjoy cultural products from all over the world. over the world	
Connecting with people with shared The Internet has enabled me to make contact with people who	share
cultural interests the same cultural interests as me.	
BARRIERS TO (DIGITAL) CULTURAL PARTICIPATION	
First four items are measured as agreement statements:	
To what extent do you agree or disagree with the following de	scriptions
of yourself? 0 — Strongly disagree; 1 — (Somewhat) disagree; 2 — Neither ag	ree nor
disagree; 3 – (Somewhat) agree; 4 – (Strongly) agree	
Cultural activities often too expensive Cultural activities are often too expensive for me.	
No time for cultural activities I have no time for cultural activities because I am too busy.	

Lack of digital skills	I often lack the skills to find the information I need on the Internet.
Internet skepticism	The increased use of the Internet has created more problems than solutions in [country].
Distrust of Social Media	To what extent do you trust social media (e.g. Facebook)?
	0 – Completely trust; 1 – Trust; 2 – Somewhat trust; 3 – Neither trust nor distrust; 4 – Somewhat distrust; 5 – Distrust; 6 – Completely distrust
OFFLINE CULTURAL PARTICIPATION	
	How often do you typically go to the following events or places? (Please answer for a situation in which there are no restrictions because of COVID-19.) 0 – (Almost) never; 1 – At least once a year; 2 – 4-6 times a year; 3 – (Almost) every month; 4 – (Almost) every week
Classical (highbrow) cultural activities (2 items)	 Classical music concert, opera, ballet performance, or theatre performance in a concert hall or theatre Museum, monument, or historical place
Popular cultural activities	Popular music concert or popular music festival
(5 items)	Local fair with food and music
	3. Dining out in a restaurant
	4. Going to a café, pub, or bar
	Visit a second-hand market, flea market, or collectors' fair

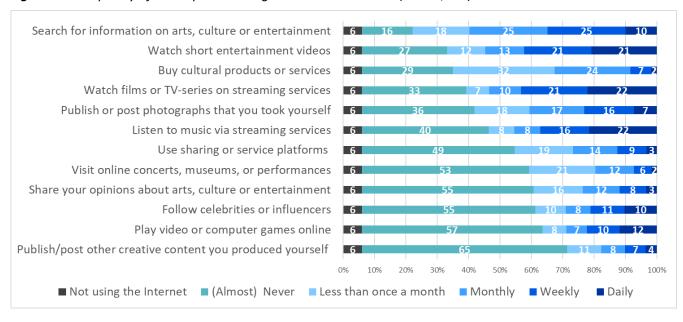
 Table A3-b.
 Predictors of Different Types of Digital Cultural Participation

Duadistan	Scale	No. of	Reliability	М	SE
Predictor		Items	(Cronbach's α)	IVI	SE
BARRIERS TO (DIGITAL) CULTURAL PARTICIPATION	0-4ª				
Cultural activities often too expensive	-	1		2.10	.010
No time for cultural activities	-	1		1.73	.010
Lack of digital skills	-	1		1.08	.010
Internet skepticism	-	1		2.04	.010
Distrust of social media	0-6 ^b	1		3.85	.012
SOCIOCULTURAL AFFORDANCES	0-4 ^a				
Learning about/connecting with other	-	4	.92	2.050	.008
cultures				2.859	.008
Socializing with diverse others at	-	4	.82	2.66	007
cultural events				2.00	.007
Connecting with people with shared		1		2.07	.011
interests				2.07	.011
Enjoying cultural products from all	-	1		2.64	000
over the world				2.64	.009
OFFLINE CULTURAL PARTICIPATION	0-4 ^c				
Classical (highbrow) cultural activities	-	2	.67	1.27	.010
Popular cultural activities	-	5	.69	3.66	.012

Note: Reported coefficients are adjusted Mean and Standard Error (SE), controlled for Education level, Age, and Gender. ^aScale: 0 (completely disagree) to 4 (completely agree); ^bScale: 0 (completely trust) to 6 (completely distrust); ^cScale: 0 (almost never) to 4 (almost weekly).

Appendix 4 – Frequency of Participation in Digital Cultural Activities

Figure A4. Frequency of Participation in Digital Cultural Activities (N = 14,384)



Appendix 5 – Additional Tables PCA of Digital Cultural Participation

Table A5-a. Correlations Between Digital Cultural Participation Variables

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Publish photos	_										
2. Publish other	.502	_									
3. Share opinions	.393	.494	_								
4. Follow celebrities	.328	.296	.283	_							
5. Buy products/ services	.207	.272	.355	.206	_						
6. Search information	.184	.198	.361	.231	.462	_					
7. Listen to music	.184	.174	.196	.324	.278	.295	_				
8. Watch films/TV	.185	.159	.196	.314	.257	.263	.520	_			
9. Play computer games	.135	.208	.204	.215	.124	.120	.213	.251	_		
10. Short videos	.248	.241	.236	.405	.126	.241	.330	.345	.298	_	
11. Online concerts/museums	.259	.357	.415	.207	.391	.369	.208	.191	.181	.210	_

Note. All correlations are two-tailed Pearson coefficients and significant at $p \le .001$

Table A5-b. Correlations Between Factors/Components

Component	1	2	3
1 Content Creation and Sharing	1.000	.265	206
2 Audiovisual Entertainment	.265	1,000	274
3 Cultural Information and Access	206	274	1.000

Note: Oblimin rotation with Kaiser normalization. Average between factors is .245.

Appendix 6 — Prevalence of Types of Digital Cultural Participation by Country

Table A6-a. Estimated Marginal Means Dependent Variables

	Croatia	Denmark	Finland	France	Nether-	Serbia	Spain	Switzer-	UK	Total	F value
					lands			land			Countries
Audiovisual Entertainment	1.168	1.614	1.571	1.545	1.659	1.098	1.905	1.311	1.622	1.536	108.79***
(0-4)	(.027)	(.021)	(.025)	(.019)	(0.21)	(.027)	(.023)	(.023)	(.017)	(800.)	
Content Creation and Sharing	1.078	.790	.919	.906	.997	1.361	1.461	.647	.730	.950	176.62***
(0-4)	(.029)	(.022)	(.027)	(.020)	(.023)	(.029)	(.024)	(.025)	(.091)	(800.)	
Cultural Information and Access	1.062	1.220	1.182	1.386	1.382	1.217	1.695	1.240	1.126	1.277	74.798***
(0-4)	(.026)	(.020)	(.024)	(.018)	(.020)	(0.26)	(.022)	(.022)	(.017)	(.007)	
Overall Digital Cultural	1.116	1.284	1.289	1.327	1.389	1.203	1.728	1.112	1.245	1.307	103.71***
Participation	(.021)	(.016)	(.020)	(.015)	(.017)	(.021)	(.018)	(.018)	(.014)	(.006)	
(0-4)											

Note: Results Univariate ANOVA, controlled for Education level, Age, and Gender. Reported coefficients are Mean (SE). *p < .05. **p < .01. ***p < .001.

Table A6-b. Audiovisual Entertainment: Country Differences

	Mean differences between countries									
	Mean*	Spain	NL	UK	DK	Finland	France	Switzerland	Croatia	Serbia
Spain	1.905		.245***	.283***	.290***	.334***	.360***	.594***	.737***	.807***
Netherlands	1.659	245***		.037	.045	.088**	.114***	.348***	.492***	.561***
UK	1.622	731***	037		.007	.051	.077**	.311***	.454***	.524***
Denmark	1.614	290***	045	007		.044	.069*	.303***	.447***	.517***
Finland	1.571	334***	088**	051	044		.026	.260***	.403***	.473***
France	1.545	360***	114***	077**	069*	026		.234***	.378***	.447***
Switzerland	1.311	594***	348***	311***	303***	260***	234***		.143***	.213***
Croatia	1.168	737***	492***	454***	447***	403***	378***	143***		.070
Serbia	1.098	807***	561***	524***	517***	473***	447***	.631***	070	

Note: *Mean values are the estimated marginal means taken from Table A3 which also reports the standard errors. Countries are ranked according to the highest score. Reported coefficients are mean differences based on estimated marginal means, controlled for Education level, Age, and Gender. p < .05. **p < .01. ***p < .001.

Table A6-c. Content Creation and Sharing: Country Differences

					Mean dif	ferences be	tween coun	tries		
	Mean*	Spain	Serbia	Croatia	NL	Finland	France	Denmark	UK	Switzerland
Spain	1.461		.100**	.383***	.464***	.543***	.555***	.671***	.731***	.814***
Serbia	1.361	100**		.283**	.364***	.442***	.455***	.570***	.631***	.713***
Croatia	1.078	383***	283***		.081*	.159***	.172***	.287***	.348***	.431***
Netherlands	.997	464***	364***	081*		.078*	.091**	.206***	.267***	.349***
Finland	.919	543***	442***	159***	078*		.013	.128***	.188*	.271***
France	.906	555***	455***	172***	091**	013		.115***	.175***	.258***
Denmark	.790	671***	570***	287***	206***	128***	.115***		.060*	.143***
UK	. 730	731***	631***	348***	267***	188***	175***	060*		083**
Switzerland	.647	814***	713***	431***	349***	271***	258***	143***	083***	

Note: *Mean values are the estimated marginal means taken from Table A3 which also reports the standard errors. Countries are ranked according to the highest score. Reported coefficients are mean differences based on estimated marginal means, controlled for Education level, Age, and Gender. *p < .05. **p < .01. ***p < .001.

Table A6-d. Cultural Information and Access: Country Differences

					Mean differe	nces betwee	n countries			
	Mean*	Spain	France	NL	Switzerland	Denmark	Serbia	Finland	UK	Croatia
Spain	1.695		.309***	.367***	.455***	.474***	.478***	.512***	.569***	.632***
France	1.386	309***		.058*	.146***	.166***	.169***	.204***	.260***	.349***
Netherlands	1.382	367***	058*		.088**	.108***	.111***	.146***	.202***	.266***
Switzerland	1.240	455***	146***	088**		.020	.003	.057	.114***	. 177***
Denmark	1.220	671***	570***	108***	20		.115***	.038	.060*	.143***
Serbia	1.217	478***	169***	111**	023	003		.035	.091**	.155***
Finland	1.182	512***	204***	146***	020	038	035		.056	.120***
UK	1.126	569***	260***	202***	114***	094***	091**	056		064*
Croatia	1.062	632***	324***	266***	177***	158***	155***	120***	064*	

Note: *Mean values are the estimated marginal means taken from Table A3 which also reports the standard errors. Countries are ranked according to the highest score. Reported coefficients are mean differences based on estimated marginal means, controlled for Education level, Age, and Gender.

^{*}*p* < .05. ***p* < .01. ****p* < .001.

Appendix 7 – Additional Tables Multilevel Analyses of Digital Cultural Participation

Table A7. Explained Variances for Types of Digital Cultural Participation by Country

		Croatia	Denmark	Finland	France	Nether-	Serbia	Spain	Switzer-	UK
						lands			land	
Audiovisual Entertainment (0-4)	Sociodemo.	25.4%	39.9%	50.1%	33.7%	35.0%	23.4%	20.2%	34.2%	36.3%
	Barriers	2.3%	1.7%	1.6%	4.4%	2.5%	6.3%	2.3%	2.3%	1.8%
	Affordances	5.1%	3.0%	4.2%	4.0%	3.7%	3.2%	7.0%	3.9%	2.4%
	Offline part	3.3%	1.3%	0.3%	3.5%	1.6%	4.4%	3.6%	1.1%	1.5%
	Total	36.1%	45.9%	54.7%	45.6%	42.8%	37.3%	33.1%	41.5%	42.0%
Content Creation and Sharing (0-4)	Sociodemo.	5.6%	1.6%	5.7%	10.6%	3.8%	8.9%	8.6%	1.5%	7.3%
	Barriers	2.9%	3.7%	6.6%	14.6%	10.1%	6.9%	8.4%	2.8%	5.5%
	Affordances	5.3%	6.2%	8.0%	6.7%	7.3%	2.3%	9.4%	10.5%	7.8%
	Offline part	4.0%	2.4%	2.8%	7.5%	5.8%	6.6%	6.7%	2.2%	8.8%
	Total	17.8%	13.9%	23.1%	39.4%	27.0%	24.7%	32.7%	17.0%	29.4%
Cultural Information and Access (0-4)	Sociodemo.	8.9%	8.9%	9.8%	5.7%	7.0%	11.2%	4.2%	4.0%	7.5%
	Barriers	1.9%	8.0%	6.9%	4.4%	2.7%	3.6%	3.0%	3.1%	5.0%
	Affordances	15.4%	9.9%	13.7%	10.6%	13.6%	9.7%	17.1%	9.2%	10.1%
	Offline part	10.7%	15.6%	16.1%	17.2%	20.0%	12.9%	16.6%	12.2%	21.8%
	Total	36.9%	42.4%	46.5%	37.9%	43.3%	37.4%	40.9%	28.5%	44.4%

Note: Results OLS Regressions. Adjusted R² per dimension for blocks Table 3.