

University of Warsaw Faculty of Economic Sciences

## Working Papers No. 4/2020 (310)

## "I GO, I PAY". THE ROLE OF EXPERIENCE IN RECOGNIZING THE NEED FOR PUBLIC FINANCING OF CULTURAL GOODS

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WARSAW 2020



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# "I go, I pay". The role of experience in recognizing the need for public financing of cultural goods

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**Abstract:** Public financing of culture is a common phenomenon - especially in European countries. Empirical studies reveal that it is socially acceptable and even desirable. However, a question arises: what factors influence support for such a cultural policy? The study shows that the most important determinant is related to experience - past and future, anticipated. People who often and intensively consume various cultural goods, are also more willing to subsidize them through the public sector. The results of the study not only show that regular contact with culture has a positive impact on understanding the important role of the state in shaping the cultural sector, but also that the attitude towards cultural policy changes rapidly after crossing a certain threshold of experience.

**Keywords**: cultural policy, cultural goods, experienced goods, rational addiction, non-market valuation

JEL codes: Z10, Z18, D12, D91

Acknowledgments: The authors wish to thank prof. Mikołaj Czajkowski, the supervisor of the diploma thesis which is the basis of the article, for help and substantive care.

The study was funded by National Science Centre of Poland, grant number: PRELUDIUM 2014/15/N/HS4/01441.

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#### 1. Introduction

Cultural goods embody or create values that cannot be fully expressed in monetary terms and that may not be disclosed by the market. As a rule, their total value exceeds their use value. Passive-use value of cultural goods results from a number of social benefits these goods bring. The public character of cultural goods, as well as recognized passive-use values that carry positive external effects, create the basis for financing culture from public funds. Lack of subsidies compensating for the consumption of passive-use values may result in a lower than optimal supply of goods characterized by undisclosed demand (Murzyn-Kupisz 2010, Wiśniewska and Czajkowski 2017).

As a rule, citizens are willing to pay taxes to subsidize cultural goods, even if they are not their direct users (Bille Hansen 1997; Rushton 2000, Orivel 1996). Research conducted using non-market valuation methods provides information on the total value of specific goods based on estimated willingness to pay (WTP, research review: Noonan 2003). The authors also pose a question about what determines the level of social support for culture (Feder and Katz-Gerro 2012) and to what extent politicians' decisions reflect preferences of citizens (Schulze and Ursprung 2000).

A review of the literature on the determinants of support for public financing of culture constitutes the starting point for the identification of variables explaining the support for financing culture from public funds. Chapter 3 contains a description of the database, dependent and independent variables, and a research methodology used in the study. The econometric results are presented in Chapter 4. The article ends with a summary of the main observations and presents potential directions for further research.

#### 2. Literature review

We discover the value of cultural goods through their consumption. They are classified as experienced goods and are a subject for the rational addiction theory, i.e. demand for cultural goods increases with increasing consumption. It takes time to get to know them and appreciate them. We do not see their values on a regular basis, we will see them only in the future. The passion for art is acquired or discovered, so its consumption increases over time (Brito and Barros 2005, Throsby 2003; Throsby and Ginsburgh 2006). Most studies confirm the significant impact of experience on the demand for culture. Castiglione and Infante (2016) distinguish three theories of shaping the preferences related to culture and art, which state that

the current demand is a function of previous experiences: 1. the theory of habits, according to which only the past has an impact on the current consumption; 2. "learning-by-consuming" - each time consumers take part in a cultural event, they experience pleasure on the basis of which they change their future expectations; 3. "rational addiction", which indicates the role of both past and future assumed experience in shaping current consumption. Bonato et al. (1990) estimate the theatrical demand from the perspective of the theory of rational addiction, by means of which they explain the relationship between consumption and time in relation to the demand for theatre performances. They include past consumption in their study.

According to the theory of rational addiction, individuals accept the total current price of addictive goods, as well as the costs of future, increased consumption associated with addiction (Becker and Murphy 1988, Gruber and Koszegi 2001). Cigarettes, drugs or alcohol are well examined in the context of addictive goods, but culture is not. Castiglione and Infante (2016) believe that despite the significant impact of past consumption experiences, the key to "rational addiction" lies in the attitude in which the consumers, during their decision-making processes, wonder about their future preferences. Therefore, in addition to the impact of past experiences, they test the hypothesis that future participation in culture also affects current consumption. The results suggest that the consumers of performing arts in Italy are fully rational and see the positive effect of past and future consumption on their current behavior. On the other hand, a study of cinema demand conducted by Cameron (1999) did not show any firm support for such a hypothesis. Yamamura (2009) is critical of Cameron's research. He believes that Cameron has not used key variables. Yamamura complements his study with these variables and he finds evidence supporting the rational addiction hypothesis in relation to cinema demand in Japan. Sisto and Zanola (2008) also prove that cinema consumption is consistent with this hypothesis. Coefficients of both past and future consumption are positive and significantly different from zero. In addition, as the authors emphasize, the future consumption coefficient is smaller than the previous one. This could be explained by the case of satiating goods, that is, consumption which drops after the accumulation of a certain amount of consumer experience (Castiglione and Infante 2016).

Since many studies show that experience in consuming cultural goods has a significant impact on the demand for these goods, we can assume that it plays an equally important role for willingness to subsidize culture. According to DiMaggio and Pettit (1999), annual participation in art is an exceptionally important subsidy support predictor, and moreover it reduces the impact of other variables. Public subsidies of culture are simply an alternative way to private financing. If the majority of citizens declare their willingness to subsidize culture through the public sector, then the cultural experience should have a positive impact on the strength of this belief. The study shows how being an active participant in cultural life affects willingness to subsidize culture through the public sector. Two research hypotheses are tested. Firstly, a positive link between past participation in culture and support for the public patronage of culture is examined. The second hypothesis, based on the theory of rational addiction, says that the stated future consumption of cultural goods positively influences this support.

Apart from cultural experience, other consumer characteristics, which may affect the willingness to subsidize culture, are also included in the research. The choice of variables for the study is based on literature on the demand for culture in general - regardless of how it is financed. It shows that people with higher income appreciate culture more widely and they support public subsidies for culture (Benito, Bastida, and Vicente 2013, Getzner 2002, Lewis and Rushton 2007). Demand for art is increasing with income, but consumers usually prefer financing culture through a public wallet rather than from private savings (Feder and Katz-Gerro 2012).

The impact of parenthood and age on the willingness to subsidize culture could be ambiguous. People raising children more often show intergenerational altruism, thus an increase in public support for culture in societies with a high percentage of young people could be expected. Nevertheless, the high alternative cost of leisure may, for some parents, outweigh the benefits derived from culture. Thus, general support for government intervention in the field of culture would be reduced (Werck, Heyndels, and Geys 2008). On the same basis, the low alternative cost of time for older people may lead them to support public financing of culture. Due to public budget constraints, growth in one sector must be financed by a reduction in another sector. A high percentage of older people increases public health spending and a high percentage of young people increases education spending, which in turn leads to lower expenditure on culture (Benito et al., 2013).

The theory suggests that education increases pleasure derived from culture and art (Benito et al., 2013). People with higher education create demand for art and are more likely to support it financially (Brooks 2001, DiMaggio and Pettit 1999, Lewis and Rushton 2007). First of all, if people with higher education are more likely to use positively addictive cultural goods, the more frequent consumption of cultural goods is accompanied by higher marginal utility. Secondly, people with higher education should value art more because they are a part of the environment in which it is appreciated. In addition, better educated people usually have well-educated parents, so probably they experienced culture as children, which results in the fact that as adults they better understand and appreciate it. Finally, studies employing contingent

valuation method (CVM) has also confirmed that well-educated people attribute higher value to culture and are willing to pay more for it. The only question is whether they perceive the participation of the public sector as a proper approach. However, referring to the aforementioned research, which states that on average people are willing to leave culture funding to the public sector, well-educated people should be conducive to public spending on culture.

According to DiMaggio and Pettit (1999), the main determinant of supporting spending on art is simply to support interventions of public sector in other fields. If someone thinks that the government should increase spending on the environment or medical care, he or she also believes that it should increase spending on culture and the arts. Therefore, probably, those who oppose the introduction of taxes in general will also not accept culture subsidies.

#### 3. Description of the database and methodology

#### 3.1. Data

The database used in this work was created on the basis of a survey commissioned by the University of Warsaw to the GfK Polonia opinion polling company in 2014. The sample included 1699 respondents who settle their taxes in Warsaw and are representative in terms of sex, age and education. The survey concerns participation in the cultural life of Warsaw: preferences related to visits to theaters, cinemas and museums, attitude towards public subsidies and the perception of culture in general.

The dependent variable is the respondents' attitude to the statement: "Cultural activities should be subsidized from public funds" (*dotcul*). For the purposes of the study, the answers were coded according to the Likert scale: 1 - I strongly agree, 2 - I rather agree, 3 - I do not know, 4 - I rather disagree and 5 - I strongly disagree.<sup>1</sup> Table 1 shows the number and frequency of the answers. The results are in line with the literature, the vast majority of the population (80%) agree, in whole or in part, with public subsidies for culture.

<sup>&</sup>lt;sup>1</sup> Originally, responses corresponded to: 1 - I strongly agree, 2 - I rather agree, 3 - I rather disagree, 4 - I strongly disagree, 5 - I do not know. To avoid removing from the sample respondents who answered "I do not know", the answer was moved to the third position, and is interpreted as a neutral approach to the subsidy.

Coding	Meaning	Number	Frequency (%)
dotcul	"Cultural activities should be subsidized from		
	public funds."		
1	I strongly agree	586	34.49
2	I rather agree	763	44.91
3	I do not know	116	6.83
4	I rather disagree	165	9.71
5	I strongly disagree	69	4.06
dotcul2	"Cultural activities should be subsidized from public funds."		
0	I rather agree I do not know I rather disagree I strongly disagree	1113	65.51
1	I strongly agree	586	34.49

Table 1. The number and frequency of the variable dotcul and dotcul2.

A key independent variable *experience*, which is the sum of the number of visits to Warsaw's cultural institutions over the last year, was created for the purposes of the study. The variable describes past consumption of cultural goods. Due to the limitations of the database, it does not refer to any type of these goods, but only to three representative ones: visits to theaters, cinemas and museums. The average number of visits to the cinemas among the respondents was just over 4, to theaters almost 3, and to museums under 2. The independently tested number of visits to individual cultural institutions showed a similar effect on the variable *dotcul*. Considered in a sum, they reflect participation in cultural life in general - without assessing the characteristics of these experiences. Due to the limit applied to responses regarding participation in three individual cultural institutions (maximum 12 per year), the maximum value of the response variable is 36, although some respondents could participate in culture more often.

Since the variable *dotcul* initially accepted a finite number of values (5) measured on a ordinal scale, an ordered logit model was used to perform the initial regression. In order to interpret the results, the marginal effects obtained for each of the five levels of *dotcul* were calculated (Table 2).

Dotcul level	1	2	3	4	5
Coefficient	0.0037	-0.0013	-0.0007	-0.0012	-0.0005
Standard error	0.0019	0.0007	0.0004	0.0006	0.0002
Experience mean result	10.31	8.68	7.72	8.5	9.39
The share of people who declare a total lack of participation ( <i>experience</i> $=$ 0)	4.44%	7.73%	12.93%	12.12%	8.7%
The share of people who declare low participation ( <i>experience</i> < 5)	22.7%	30.93%	44.83%	36.97%	31.88%

 Table 2. The marginal effects of an ordered logit model for the variable experience and relation between variables dotcul and experience.

The increase in participation in culture (experience) raises the probability of strong support for public subsidies (dotcul=1), while for other levels of the variable, this impact was negative. The gradual increase in the value of the experience does not result in a smooth transition from the level of 5 dotcul ("I strongly disagree") to level 1 ("I strongly agree"). The increase in experience raised the probability of transition to the level 1 of the dotcul from all other levels of the variable in a similar way. This means that the size of the negative coefficients for 2-4 levels of dotcul turned out not to be ordered with respect to the assumptions. On the contrary: increase of experience impacts the probability of strong opposition to public subsidies (dotcul=5) the least negatively, and the most negative effect was observed for dotcul=2 ("I rather agree"). Thus, we observe the fundamental difference between strong consent for subsidies and partial consent or uncertainty about subsidies. The transition of attitude towards subsidies (from any level of the dotcul to dotcul=1) is sudden. We suppose that in order to agree with public subsidies, a person must "immerse in culture", "be saturated with it" and thus exceed a certain threshold of experience. Both above and below this threshold, the number of experiences is not so important. Seeking confirmation for this interpretation, it is worth looking more closely at the variable experience.

The mean number of visits is similar for all *dotcul* levels (Table 2). However, there is a clearly <u>smaller</u> share of people who do <u>not</u> participate in culture in the case of people fully supporting public subsidies to culture. It applies also in the case of people declaring the number of visits as less than five per year. In the case of people fully agreeing with subsidies, it is less than 23%, while, for example, among people who are indifferent to subsidies it is almost 45%. Therefore, we can speak of a higher "saturation" with the cultural experiences of people who unquestionably support public subsidies.

However, where does the fundamental difference between people who declare strong support for subsidies and those who only "rather" agree with them come from? Referring to the phenomenon of social desirability bias, it can be assumed that the respondents indicating the "rather agree" option, try to build on the basis of the survey a better picture of themselves and thus feel a bit better. The social desirability effect results from respondents' inclination to self-presentation in the best possible light and it causes many problems in survey-based research (DeMaio 1984, Groves et al., 2009). Culture research suffers from this bias as well as studies in health, religious or addiction and sex life issues (Rushton 2000). The database probably includes people who overestimate their willingness to support public subsidies to culture. The above analysis show that only those who are completely determined actually support them. Therefore, the distinction between the levels of the response from 2 ("I rather agree") to 5 ("I strongly disagree") should be omitted, and due to the lack of significant differences between them, they should be combined and interpreted together as an attitude opposite to a strong positive one. In this way, the binary variable *dotcul2* was created (Table 2).<sup>2</sup>

The variable *next* is the sum of the variables regarding the stated future visits to theaters in the next 12 months. In the survey, the respondents were only asked about the future consumption of theatre performances, so the next variable is not the perfect equivalent of the *experience* variable for future consumption. However, we assume that *next* is the approximation of the planned participation in culture in general, bearing in mind the similar impact of three types of past experiences (visits to theaters, cinemas and museums) on the support of public subsidies to culture. However, it should be taken into account that the declaration of many visits to theatre does not necessarily mean frequent visits to cinema or museum.

A number of attitudinal and socio-demographic variables presumably affecting dependent variable were selected. For the purpose of an econometric study, some variables from the original database had to be transformed. The levels of attitudinal variables, *mottax* (""I am against the introduction of any additional taxes") and *motcultu* ("I care about the future condition of culture in Warsaw") were adjusted to 5-point Likert scale adopted for the *dotcul* variable. On the basis of information on the number of children accompanying respondents during the last visit to the museum, cinema and theatre binary variables were created (respectively: *musaccch2, cinaccch2, thaccch2*), which show whether the respondent was accompanied by a child (or children). The *age* variable specifies the age of the respondent, the *age2* variable is the square of the first one. The age variable was calculated based on the variable encoding the respondent's year of birth. The *age2* variable was introduced because of the quadratic dependence of age

<sup>&</sup>lt;sup>2</sup> Thanks to this modification, it was also possible to avoid too much variation in the levels of the *dotcul* variable. The number of levels from 3 ("I do not know") to 5 ("I strongly disagree") was very small compared to 1 ("I strongly agree") and 2 ("I rather agree").

suggested by econometric literature. 303 people did not answer any of the income-related questions (*monc*). Therefore, the models were estimated for 1397 respondents.

Tables 3 and 4 contain descriptive statistics of the variables used in the final versions of the models.<sup>3</sup>

Variable	Meaning	Mean	Standard deviation	Min	Max			
	Number of visits to museums,	9.19	7.09	0	36			
experience	theaters and cinemas during the last			-				
enperience	year							
	Number of planned visits to theaters	3.3	5.15	0	110			
next	within 12 months	5.5	5.15	0	110			
	Monthly net income (in PLN 100) as	30,9	27,55	0	250			
monc	•	50,9	27,55	0	230			
	an average of the indicated range	44.05	16.2	10	05			
age	Age	44.95	16.3	19	95			
age2	Squared age	2285.45	1564.29	361	9025			
<b>Fable 4. The</b>	e number and frequency of discrete	independe	nt variables.					
Coding	Meaning	Ν	umber	Frequen	cy (%)			
edugroup	Education							
1	Primary	27	2	16.01				
2	Secondary	73	80	42.97				
3	High	69	07	41.02				
havejob	Doing paid work in the last 12 months							
0	No	32	26	19.19				
1	Yes		373	80.81				
mottax	"I am against the introduction of any	additional						
	taxes."							
1	I strongly agree	44	7	26.31				
2	I rather agree	46	51	27.13				
3	I do not know	45	57	26.90				
4	I rathrer gisagree	15	54	9.06				
5	I strongly disagree	18	30	10.59				
motcultu	"I care about the future condition of culture in							
	Warsaw."							
1	I strongly agree	61	0	35.9				
2	I rather agree	77	75	45.62				
3	I do not know	17	74	10.24				
4	I rather disagree	63	5	3.71				
5	I strongly disagree	77	7	4.53				
musaccch2	Did a child accompany you during the las	t visit to						
	the museum??							
0	No	92	25	54.41				
1	Yes	77	15	45.59				
cinaccch2	Did a child accompany you during the la	st visit to						
	the cinema?							
0	No	64	7	38.06				
1	Yes		)53	61.94				
thaccch2	Did a child accompany you during the la							
	the theatre?							
0	No	72	20	42.35				
	Yes	98		57.65				

 Table 3. Description and descriptive statistics of continuous independent variables.

<sup>3</sup> Variables regarding gender as well as the fact of having children turned out to be statistically insignificant in an econometric study, therefore they are not presented in Tables 3 and 4. Their ambiguous impact on participation in culture was also noted in previous studies.

#### 3.2 Research methodology

If the explained response is an endogenous qualitative variable and it is binary (it takes values 0 or 1), then we can use the probit or logit model. Econometric literature defines such cases by quantual response or discret choice models; which also include ordered models. The use of the probit model was excluded due to the higher values of the logarithm of the likelihood function, as well as the lower values of information criterions, which indicated a better fit of the logit model to the data. Therefore, a logit model was used.

The first regression included all selected independent variables. Many of them, including all socio-demographic variables (coding education, gender, age, employment and parenthood), turned out to be insignificant, which made carrying out the correct interpretation of the results impossible. As no transformations of these variables helped, they had to be removed from the model. Another regression with limited number of variables was carried out. LR test (likelihood-ratio test) confirmed the correctness of the restrictions. This solution was also supported by the observation of DiMaggio and Pettit (1999), according to which annual participation in art reduces the impact of other variables on support for subsidies.

#### 4. The results of the empirical study

Past consumption of culture (*experience*) turned out to be co-linear with stated future consumption of culture (*next*). The *experience* variable included in the same model took over the significance of the *next* variable. Those who are actively participated in culture in the past will probably state frequent participation in the future. Therefore, two independent models explaining the *dotcul2* variable were estimated: one with the *experience* variable among independent variables, the second with a variable *next*. Since the coefficients are not interpreted in the logit model, the marginal effects were calculated. Table 5 presents the results for the models with both variable: *experience* and *next*.<sup>4</sup> For continuous variables, partial effects are interpreted as the effect of a unit change in the independent variable on the probability of success (in this case: the probability that the person will be strogly willing to subsidize culture). For discrete variables, they are interpreted as the difference between the probability of success for the level of the *dotcul2* equal to 0 and equal to 1 for the other variables set at the average value, as well as for the base levels of other discrete variables. The conclusions drawn from the

<sup>&</sup>lt;sup>4</sup> The results of a logit model with variable *experience* and with the variable *next* are included in Table 1A in the Appendix.

interpretation of odds ratios are consistent with the interpretation of partial effects and are not presented in this article.

	Mode	l with	Model with		
Variable	experience		next		
	marg.ef.	st. err.	marg.ef.	st. err.	
<b>Participation in culture</b> (experience / next)	0.0062	0.0021	0.0062	0.0030	
Income (in PLN 100) (monc)	-0.0010	0.0010	-0.0009	0.0010	
Accompanying children: museum (musaccch2)	0.0579	0.0313	0.0699	0.0307	
Accompanying children: cinema (cinaccch2)	-0.0291	0.0332	-0.0216	0.0329	
Accompanying children: theatre (thaccch2)	-0.0670	0.0331	-0.0650	0.0330	
I care about future condition of culture (motcula	tu)				
I rather agree	-0.1926	0.0280	-0.1965	0.0279	
I do not know	-0.2290	0.0422	-0.2299	0.0421	
I rather disagree	-0.2618	0.0286	-0.2605	0.0289	
I strongly disagree	-0.2019	0.0447	-0.2094	0.0432	
I object to new taxes (mottax)					
I rather agree	0.0982	0.0402	0.1037	0.0402	
I do not know	0.1058	0.0553	0.1159	0.0552	
I rather disagree	0.0912	0.0392	0.0938	0.0393	
I strongly disagree	0.2939	0.0529	0.2932	0.0529	

Table 5. The marginal effects of the logit model with variables experience and next.

The increase in the previous participation in culture by one visit per year increases the probability of willingness to subsidise culture by 0.62 percentage points. People actively participating in culture are convinced about the legitimacy of public subsidies. However, it should be remembered that some people who are not fully convinced of the idea of public subsidies but still participate in culture, have a significant negative impact of experience on the lack of full consent for subsidies. These may result from several factors, which cannot be verified due to model constraints. First of all, the group of people participating in culture may include those with free-market attitude, having objections to taxes in general, which negative impact on willingness to subsidise culture may be stronger than the positive impact of experience helping to identify and understand the public functions of culture. Using the offer of private institutions (e.g. cinemas), they could notice that they function well enough without state subsidies. Observing people who spend their savings on expensive tickets, they could be convinced that culture could be maintained without the influence of politics. Secondly, people who often take part in culture recognize better the quality of experience gained and may be better aware of the mechanisms of public financing. Therefore, they may neither agree with the current subsidy streams, nor see any chance of repairing the system, and thus may object to

patronage despite general support for the idea. In both cases, these can be the people who privately sponsor culture or are ready to do it.

The increase in the stated future number of visits to theaters in the next 12 months by one increases the probability of willingnesss to subsidize culture by 0.62 percentage points. The result is in line with the assumptions of the theory of rational addiction and confirms our hypothesis that the size of future consumption has a positive and significant impact on the willingness to subsidize culture now. What's more, the impact of planned future consumption is as strong and as statistically significant as the past consumption. The explanation of the impact of future consumption may also be found in the option value. People who plan frequent, future visits must ensure the possibility of future consumption. Public subsidies can be one of the solutions.

Both models (with *experience* and with *next*) deliver similar estimations for the rest of independent variables. The following description refers to the results of the model with variable *experience*. The increase in income (*monc*) by PLN 100 results in a decrease in the probability of willingness to subsidize culture by 0.1 percentage point. The increase in income leads to a reduction in the likelihood of strong support for subsidies. This observation is consistent with a part of the literature. First, the increase in income leads to an increase in consumption, which, in turn, increases the revenues of cultural institutions and reduces the need for subsidies. If people with high incomes often participate in culture, they do not agree to public subsidies that could lead to paying more and getting less (if access to cultural goods is more common, then the consumption of cultural goods by people who have benefited so far can decrease, at least when exclusion from the consumption is possible). They may be advocates of private patronage.

The children's company during the last visit in cultural venue brings ambigiuos results for the willingness to subsidize culture. People who were accompanied by at least one child during the last visit in a museum are more likely to provide a strong support of public subsidies by 5.8 percentage points. In turn, people who were accompanied by at least one child during the last visit to a theater have a 6.7 percentage point lower probability of strong support for public subsidies.<sup>5</sup> It is worth considering why the presence of children in museums makes us more willing to spend public money for culture, while in the case of theaters - it discourages public subsidies.

People assign educational value to museums, much more strongly than to theaters or cinemas. Museums are also places that enhance the sense of national pride that parents may

<sup>&</sup>lt;sup>5</sup> The children's company during visits to cinemas turned out to be statistically insignificant.

want to engraft in their children. Finally, we can also refer to the influence of the bequest value. We would like the museum exhibits to be well preserved for future generations (e.g. for our grandchildren). The museums (like monuments), not cinemas or theaters make us realize this value. The children's company can positively influence the desire to care for cultural heritage. Although the impact of the variable *thaccch2* is surprising and difficult to interpret, the explanation can be sought in the level of income of people who decide to take their children to theaters. These are mostly rich people (the correlation between the variables *monc* and *thaccch2* is positive and amounts to 0.134). They do not have to rely on the support of the public sector. They buy tickets by themselves and believe that they will also be able to do the same in the future. Therefore, they do not recognize the need to finance the theaters because of the option value. In addition, a visit to a theater with a child may be perceived as an artistic or entertainment experience rather than an educational one, and thus private financing may seem more adequate (there are no such strong premises that the theatrical experience would be widely available).

Another statistically significant variable (*motcultu*) describes how much people care about the future condition of culture in Warsaw. People who do not care about it have a 19.26 percentage point lower probability of strong support for subsidies than people who care much. For people who are indifferent to the future condition of Warsaw culture and those who rather do not pay attention to it, the probability is from 20.19 to 26.18 percentage points smaller than for those who definitely care about it. The results are not surprising. They confirm that if people pay attention to culture in general, they also think that the public sector is the right body to provide support for it.

Variable *mottax* shows the degree of objection to the imposition of new taxes. People who totally agree to the introduction of new taxes are by 29.39 percentage points more likely to support state subsidies for culture than those who totally oppose the introduction of new taxes. According to the literature, such a large impact suggests that economic views are very significant in the context of public subsidies for culture, as well as for other public spending. People unconvinced to the introduction of further taxes have from 9.12 to 10.58 percentage points higher probability of strong support for state subsidies than those that completely oppose new taxes.

Most sociodemographic variables turned out to be insignificant for support for public financing of culture, which is confirmed by the ambiguous results presented in the literature. In spite of that, they can have a significant impact on willingness to subsidize culture by influencing participation in culture. Linear regression was performed on a normalized experience variable (*zexperience*), including socio-demographic variables as independent variables. Table 6 shows the results of regression with statistically significant variables.

Variable	Coefficient	St. err.		
Income (in PLN 100) (monc)	0.0049	***	0.0013	
Education (edugroup)				
Secondary	0.2760	***	0.0692	
High	0.5531	***	0.0748	
Age(age)	-0.02437	**	0.0096	
Age square (age2)	0.0002	**	0.0001	
Paid job (havejob)				
Yes	0.2485	***	0.0654	
Constant	-0.0325		0.2003	

Table 6. Linear regression with a normalized variable experience as dependent variable.

Notes: Baseline levels: primary education and no paid work over the last year. \*, \*\*, \*\*\* indicates significance at the 10%, 5% and 1% level.

The interpretation of the results allows to distinguish a group of people who on average most actively participate in culture, as well as the group that does not participate at all or participates least actively. As the income increases, the number of visits to cinemas, museums and theaters goes up too. The result is in line with intuition. None of the three examined goods (theatrical performances, cinema screenings, museum tours) is fully public - admission fees are sometimes high (especially in the case of theaters). It is worth recalling that the impact of income on the willingness to subsidize culture, according to what has been written earlier, is the opposite - i.e. it is negative. The richer people participate more actively in culture, but the increase in income also leads to a decrease in the likelihood of strong support for public subsidies for culture by these people. Statistically significant and positive influence of higher education can be observed. This is in line with the literature, which suggests that mostly educated people create demand for culture and art. As predicted, people with secondary education more often participate in culture than those with primary education. People who performed paid work during the last year were more likely to participate in culture. It has been mentioned earlier that non-working people have a lower alternative cost of time, which in turn may lead to the fact that they will be more willing to participate in culture. Probably, however, the income criterion and general life activity prevail. Professionally inactive people are often inactive in other areas of life. With increasing age, participation in culture is growing, but slowly. Maximum of the square function<sup>6</sup> is achieved for a person aged 64. For people over 64 years, the relationship between age and participation in culture is negative. This means that the

 $<sup>^{6}</sup>$  zexperience = 0.0002age<sup>2</sup> - 0.0244age

number of visits decreases faster as the age increases. As Polish people over 65 are retiring, this result shows that the decline in cultural activity is associated with the end of professional activity. Interestingly, according to DiMaggio and Pettit (1999), old age is associated with aversion to public subsidies. However, the age was not a statistically significant variable in our

#### 5. Summary

model explaining support for public financing of culture.

The results of the study show that the experience of participation in culture has a positive impact and is crucial for the willingness to finance culture through the public sector. The result is consistent with earlier observations about experienced goods and the theory of learning-byconsuming. According to literature, people actively participating in culture are aware of the presence of passive-use values generated by cultural goods, one of the main rationale for public subsidies in this sector. The hypothesis based on the theory of rational addiction was also confirmed, according to which the future consumption of culture exerts a positive and significant influence on the willingness to subsidize culture. The sudden change from the position of the opponent to the position of the person supporting the subsidies is an original observation. This means that changing attitude requires exceeding a certain threshold of experience and does not change gradually as the intensity of participation in culture increases. The observation concerns both past and the future consumption.

Most of the socio-demographic variables considered in this study turned out to be insignificant for the agreement to public cultural support. The result is consistent with the literature, which do not deliver any unambiguous results how these variables impact on peoples' opinion about public sector activities examined in this paper. Nevertheless, it was determined that if people care about culture in general, they are also more inclined to support public subsidies to culture. The willingness to subsidize culture is discouraged by high income and generally negative attitude to paying taxes. The mere possession of children does not determine support for subsidizing culture, but their company during a visit to muzuem does.

The study does not look for the answer to the question whether subsidies are justified, but rather for whom they are not and why. We found that they are unjustified for people who do not participate in culture. If we assume that cultural goods are quasi-public goods that generate benefits for the whole society, then the fact of not participating in culture does not limit the benefit a society gain from culture. By not participating regularly in culture, people are not sufficiently aware or convinced of the existence of these benefits. Thus, they do not see the need for publicly subsidize cultural goods. They can classify them as private goods, which they themselves do not report demand for. In this situation, the opposition to public subsidies for culture can in be interpreted in terms of free-riding.

Opposition to subsidies is problematic in the context of conducting cultural policy according to the preferences of citizens. Reducing spending on culture would lead to the neglect of a large part of cultural goods. Therefore, if we want the society to accept these expenses, first of all, we need to ensure the cultural participation at a sufficiently high level, and secondly to raise the awerness about the role of public sector in financing public goods, exemplified by cultural goods. The full conviction about the need for public financing of culture is of utmost significance, because the study shows that any degree of opposition or even uncertainty indicates that there is no real willingness to subsidize culture. The group that participates in culture the least often and therefore represents to the lack of support for public subsidies includes people with low income (no participation in culture), but also the rich (opposition to public sector intermediation), pensioners, and people without higher education.

This paper allows to indicate the directions of further research regarding social support for public subsidies for culture. First, the results of the study can be confirmed using variables that would express the future and past consumption of culture more fully. Primarily, they could be extended to other cultural experiences. Subsequently, it would be possible to expand the research group to include the citizens of the whole country and, by imitating American models, introduce variables related to the region of residence to the model. It would also be possible to add variables defining religious beliefs, the level of private subsidies and precise political views that seem to have a very significant impact on the position taken in this matter. The work can also be a starting point or direction for conducting a more detailed analysis of support for public culture donations by measuring specific WTP values using non-market valuation methods. It would be possible to examine to what extent (and why) people are willing to increase (or reduce) taxes from which the cultural sector is subsidized. This allows to measure the actual willingness to subsidize culture, and not just the strength of the attitude towards public subsidies in this field. Deeper investigation into the nature of the change of attitude, and thus an attempt to set a specific threshold of cultural experience, with which members of society are actually starting to support public subsidies might also bring interesting results, helpful in designing the optimal cultural policy.

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### Appendix

Variable	Model with <i>experience</i>			Model with <i>experience</i>			
Variable	Coef.	-	St. err.	Coef.	-	St. err.	
monc	-0.0000	*	0.0000	-0.0000		0.0000	
experience / next	0.0275	***	0.0093	0.0275	**	0.0131	
musaccch2	0.2556	*	0.1382	0.3083	**	0.1355	
cinaccch2	-0.1281		0.1456	-0.0953		0.1444	
thaccch2	-0.2949	**	0.1450	-0.2858	**	0.1447	
motcultu							
I rather agree	-0.8738	***	0.1318	-0.8915	***	0.1315	
I do not know	-1.3283	***	0.3607	-1.3323	***	0.3609	
I rather disagree	-1.5148	***	0.2412	-1.5003	***	0.2418	
I strongly disagree	-1.1130	***	0.3334	-1.1674	***	0.3328	
mottax							
I rather agree	0.4240	**	0.1704	0.4467	***	0.1702	
I do not know	0.4472	**	0.2265	0.4883	**	0.2254	
I rather disagree	0.3944	**	0.1670	0.4053	**	0.1670	
I strongly disagree	1.2176	***	0.2249	1.2143	***	0.2252	
Number of observations	1397			1397			
Total significance of varables	148.05	***		144.28	***		

Table 1A. Logit model with variables experience and next.

\*, \*\*, \*\*\* indicates significance at the 10%, 5% and 1% level



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