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## **EXPLORING THE RELATIONSHIP BETWEEN SUBJECTIVE WELL-BEING AND DIVERSITY AND INTENSITY IN CULTURAL CONSUMPTION**

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# Exploring the relationship between subjective well-being and diversity and intensity in cultural consumption

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## Abstract

This paper proposes a novel approach to explore the relationship between cultural participation and subjective well-being. While most empirical research has considered such a connection using cultural activities individually or in additive terms, we adopt cultural consumption profiles that simultaneously combine variety and intensity of engagement in different cultural activities. Using data from the 2018 Italian Multipurpose survey on households “Aspects of daily life”, we first derive major profiles of cultural consumers through Latent Class Analysis and investigate how heterogeneity in cultural profiles which combine intensity and diversity is associated with overall life satisfaction and relevant domains (health, leisure and friendship relations). The results of our empirical analysis indicate a positive relationship between cultural participation and overall life satisfaction, which generally increases according to the diversity and intensity of practices expressed in the profiles of cultural consumers. Still, diversity in consumption becomes more relevant in specific domains of life satisfaction. These findings contribute to a better understanding of the role of cultural consumption habits on individual well-being and have implications for the variety of culture-led welfare policies.

**Keywords:** Life Satisfaction, Subjective well-being, Cultural consumption, Cultural participation, Cultural activities

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## 1. Introduction

Over the last decades, there has been a growing awareness that economic welfare only partially contributes to individual well-being's multidimensional nature. Subjective well-being and other related concepts, such as life satisfaction or happiness, have thus become the focus of an expanding range of research within the social sciences, with studies identifying beyond economic and material conditions other more intangible and less observable drivers (Felce and Perry, 1995; Diener et al., 1999; Frey, 2010).

An extensive body of research from different disciplines has documented how both active and passive engagement in arts and cultural activities can enhance individual well-being through several dimensions, including improved cognitive skills, mental health, psychological well-being, sense of meaning in life, and pro-social attitudes (McCarthy et al., 2001; Fancourt and Finn, 2020). From an empirical viewpoint, many studies have relied on small-scale and highly situated evidence. However, more recent quantitative works, drawing on representative samples of population data, have investigated the effects on the subjective well-being of different types of engagement in arts and cultural activities (Blessi et al., 2014; Brown et al., 2015; Grossi et al., 2012; Hand, 2018; Lee and Heo, 2020; Michalos and Kahlke, 2010; Wheatley and Bickerton, 2017, 2019; Ateca-Amestoy et al., 2021).

In general, the findings indicate a positive relationship or impact. However, the adopted empirical approaches mainly consider the effect of a single cultural activity or, at most, in additive terms. Although some of these studies have also used simple metrics on the variety of arts and cultural practices, the evidence is limited insofar as the interactions between the consumption of cultural goods are not fully explored about individual well-being. Arguably, subjective well-being is more likely to be linked to the personal leisure experience observed as a lifestyle pattern, ultimately determined through the heterogeneity in consumption choices over a set of different cultural activities (Ateca-Amestoy et al., 2008). What is missing is a comprehensive account of how subjective well-being is related to cultural consumption emerging from the combination of variety and intensity of engagement in different cultural activities simultaneously.

To fill this gap, we borrow from the sociological literature (Katz-Gerro, 2004) the notion of cultural consumption "profiles" used to identify in a population prevailing patterns that stem from consumption habits on different cultural products and services rather than single cultural activities. Since the seminal work of Bourdieu (1984), sociological research has distinguished between highbrow and lowbrow cultural goods, referring to the stratification of social groups,

which reflected in preferences in cultural consumption<sup>2</sup>. Questioning Bourdieu's argument, Peterson (1992) introduced the notion of cultural omnivores and univores. The former are individuals who experience and appreciate various cultural products or genres within a cultural field (highbrow, middlebrow, and lowbrow), while the latter experience only one, or at least a much narrower group of products. The omnivore/univore thesis has been subsequently reconsidered to account for expanding cultural consumer profiles. For example, Sullivan and Katz-Gerro (2007) identify the "voracious" omnivore, where the variety and participation frequency of cultural leisure activities are considered.

From an empirical viewpoint, research on the cultural omnivore/univore thesis has opened up the analysis of the segmentation of cultural consumers in different countries using population data on participation and frequency of engagement in cultural and leisure activities (Sintas and Alvarez, 2002; Vander Stichele and Laermans, 2006; Alderson et al., 2007; Chan and Goldthorpe, 2007; Katz-Gerro et al., 2009; Warde and Gayo-Cal, 2009; Katz-Gerro and Jæger, 2013). In this case, latent class analysis has been the most widely adopted approach to classify cultural consumption patterns.

From this perspective, the paper aims to assess how distinct cultural consumption patterns are associated with life satisfaction and specific domains, which are not hierarchically marginal but include fields such as health, leisure and friendship relations. While overall life satisfaction tends to be positively related to domain satisfaction (Rojas, 2006; Easterlin and Sawangfa, 2009), a more systematic analysis of domain satisfaction could provide a better understanding of the channels through which cultural consumption is related to subjective well-being.

Using data from the 2018 Italian Multipurpose survey on households' "*Aspects of daily life*", which presents consumption information for eight different cultural activities, we first derive six profiles of cultural consumers through Latent Class Analysis based on the diversity and frequency of attendance to various cultural activities. The profiles range from *Culturally Inactive* individuals to subjects marginalized by different combinations of diversity and attendance intensity (*Lowbrow Univore*, *Lowbrow Active*, *Heritage Lover*, *Cultural Omnivore*, *Voracious*). After controlling for individual socio-demographic characteristics- which proxy the monetary and the time constraints and the human capital, which can favour easy access to consumption - and control for local supply of cultural goods -which represent the local attitude to cultural activities and a constraint to its consumption -, we investigate how heterogeneity in cultural profiles is associated with overall life satisfaction and relevant domains. The results of our empirical analysis

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<sup>2</sup> Following Peterson (1997), the notion of *highbrow*, related to culture, refers to pure arts, such as classical music, literature, and drama, while *lowbrow* refers to more popular culture. Most cultural consumption research focused on measures of participation in *highbrow* and *lowbrow* cultural activities to investigate tastes and preferences.

confirm a positive relationship between cultural participation and overall life satisfaction, which generally increases according to the diversity and intensity of practices expressed in the profiles of cultural consumers.

Still, a more complex picture arises when considering domain satisfaction across cultural consumption patterns. In particular, diversity of consumption, even just in lowbrow cultural activities, tend to lead to higher levels of satisfaction in life subdomains, suggesting a greater relevance of the breadth of the leisure experience relative to the intensity of engagement.

Different regional profiles of culture consumption and well-being suggest compensating cultural interventions that should favour more diversity than intensity while addressing specific regional cultural needs.

The paper is organised as follows: Section 2 describes the data and the empirical methods; Section 3 presents the results; in Section 4, we conclude by discussing the main findings and policy implications.

## **2 Data and empirical methodology**

The data used in this study is a sample of about 42,000 individuals from the 2018 Italian Multipurpose Survey on Households “*Aspects of daily life*”, conducted by the Italian National Institute of Statistics (ISTAT). The survey, carried out on an annual basis, explores several dimensions of individuals’ living conditions, including questions on cultural participation along with the individual level of satisfaction with life, as well as subdomains concerning respondents’ health, leisure and friendships. Its purpose is to improve knowledge of the habits of citizens and the problems they face every day and give information on aspects such as work-life balance and relationship life, home and the area in which the individuals live, political and social participation, health, lifestyles, and relationship with services, investigating in a perspective in which the definition of social information derives from the combination between the objectivity of the behaviour and subjectivity of the judgment.

Given our research question, we obtain general characteristics such as gender, age, education, marital status, presence of children and the working position of each individual. The primary variable of interest concerns the degree of individual satisfaction with life and different domains (health, leisure, friendship relations). Information on the variety and intensity of engagement in various cultural activities is also included. More specifically, respondents were asked to report the frequency of participation in the last twelve months in various outdoor cultural and leisure activities, namely sports events, dancing venues, music concerts, classical music concerts,

cinemas, theatres, museums, and monuments. Answers' possibilities were: "never"; "1-3 times"; "4-6 times"; "7-12 times", and "more than 12 times" in the last twelve months.

We aim to detect the *Cultural Consumption Profiles* emerging from the participation and intensity of engagement in different activities simultaneously. To do this, we use the Latent Class Analysis (*LCA*)<sup>3</sup>, which represents the most common method to point out the composition of cultural consumption profiles.

The mathematical approach for *LCA* is the following:

$$P(Y = y) = \sum_{c=0}^c \gamma_c \prod_{j=1}^J \prod_{r=1}^R \rho_{j,rj|c}^{I(yi=rj)} \quad (1)$$

Where  $P(Y = y)$  is the probability of observing a specific vector of responses, conditional to  $I(y_j = r_j) = 1$  if the response to variable  $j = r_j$ , 0 otherwise;  $\gamma_c$  is the probability of belonging to latent class  $c$ , while  $\rho_{j,rj|c}^{I(yi=rj)}$  is the probability of observing the response  $rj$  to item  $j$  for each individual  $i$ . The crucial parameters to be estimated are  $\gamma$ : latent class membership probabilities, and  $\rho$ : item-response probabilities, conditional on  $\gamma$ . The rationale is that *LCA* endogenously creates classes composed of relatively homogeneous responses such that each type is a weighted average of respondents, and each respondent has a positive probability of membership in each category. Hence, *LCA* enables us to combine group respondents with similar preference structures in cultural consumption according to the diversity and intensity of attendance.

We proceed as follows: in the first step, we explore the effects of heterogeneity among responses by estimating the probability of the class in which each individual is more likely to fall based on their score on cultural consumption variables. This allows us to identify the relative proportion of respondents falling into each cultural cluster, facilitating the naming of the profiles. Secondly, we estimate several models with an increasing number of classes (from a one-class model to a six-classes model) to determine the optimal number of types according to the CAIC and BIC criteria (see Table A1 in Appendix). In the third step, to assess the independent relationship between participation in each leisure group of activities and life and domain satisfaction score, we include the cultural consumption profiles obtained with *LCA* as explanatory variables in our regression model.

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<sup>3</sup> The analysis was implemented using the *LCA* Stata Plugin, developed for Stata by "The Methodology Center". This offers the possibility, in the post-estimation phase, to assign each member of the sample to the latent class to which it is most likely to belong, based on the values reported for each indicator (the classes are self-exclusive. Therefore, each individual is assigned to only one of these). This allows us to divide the sample among the subgroups identified and to conduct the subsequent empirical analysis on the latter.



Since the survey's SWB measures are ordinal, the more suitable estimation model should be an ordinal regression model. However, we argue that given the high subjectivity of the scores and the peculiar nature of the cultural consumption patterns and individual well-being, the probit regression model, through a binary choice that summarises the individual decisions, is better suited to address the cultural question. It also eases the interpretation of the intensity and diversity of consumption of cultural goods, which will be shown in the data section.

Therefore, the relationship between cultural participation and subjective well-being is estimated by the following specification:

$$SWB_{ird} = \alpha + \beta_1 CCP'_{ird} + \beta_2 X'_{ird} + \beta_3 Z'_r + u_{ird} \quad (2)$$

where SWB is the well-being of individual  $i$ , in region  $r$  for each domain  $d$  (including life satisfaction) that assumes a value equal to 1 in case individual  $i$  in region  $r$  is entirely or fairly satisfied in the domain  $d$ , and 0 otherwise. More specifically, we test different measures of overall (life) and domain satisfaction  $d$ . Life satisfaction is measured on an 11-point Likert scale (0 = not satisfied at all, 10 = completely satisfied) based on the question, '*Taking all things together, how satisfied would you say you are with your life?*'. In binary choice regression models, we use a dummy variable taking the value of 1 in the top four categories (7–10 score) and 0 otherwise. Satisfaction in subdomains of life (health, friendships, and leisure time) over the last twelve months is measured in the survey on a 4-point Likert scale (1 = very happy, 2 = quite happy; 3 = little happy; 4 = completely unhappy). In this case, we use dummy variables taking the value of 1 if the individual is either "very happy" or "quite happy" and 0 otherwise<sup>4</sup>.

$CCP'$ , the explanatory variable of primary interest, represents the cultural consumption profiles for individual  $i$ , region  $r$ , and each SWB domain  $d$ . It is a vector of six degrees of individual participation and intensity of engagement in different cultural activities simultaneously. The cultural consumption profiles obtained through the implementation of *LCA* are described in more in-depth in the next section.  $\beta_1$  indicates the correlation between the cultural consumption profiles and individual SWB. Positive and significant  $\beta_1$  shows that the heterogeneity in cultural profiles, due to a combination between intensity and diversity, is positively associated with a probability of having a high overall life satisfaction and relevant domains (health, leisure, friendship relations).  $X'$  is a vector of individual-level observable characteristics commonly identified in the literature as the most pertinent factors affecting individual well-being. More specifically, we consider age groups (dummies for 25-64 and above 65 years old, with respondents under 25 as the reference

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<sup>4</sup> For robustness check, we also implement an ordinal regression. Estimates are available on request.

group), marital status, and the presence of children in the household. Educational attainment is captured by dummies referring to low, upper-secondary, and tertiary levels (low education is the reference group and includes up to the lower-secondary level). We further use dummies on labour status, partly capturing differences in household income (information not available due to restrictions to data access) and differences in the availability of leisure time.<sup>5</sup> The choice of relatively large categories for age, education and labour status is justified as we use these groups in subsequent analysis to test the effects of cultural consumption patterns across different socio-demographic groups.<sup>6</sup>

$Z'$  is a vector of regional-specific characteristics. For each cultural consumption activity considered at the individual level, we include an array of proxies capturing, directly or indirectly, the geographic variation in the local cultural supply at the regional level. We control for the per capita number of cinemas, concert halls and classical music concerts, theatres, dance floors, monuments, museums, and sporting clubs. These covariates allow isolating the effect of individual current cultural consumption on subjective well-being from the potential impact arising from the opportunity to engage in cultural and leisure experiences available in the local context. To control for additional unobserved characteristics of the geographical area and location-specific factors, we include dummies for the macro-region of residence. More specifically, we have the geographical location of residence as defined with dummies for macro-regions, namely North-East, Centre, South, and Islands (North-West is the reference group). Finally,  $u_{jird}$  is the error term, capturing the unobservable factors that influence SWB. Table 1 reports the descriptive statistics for all the variables.

[Table 1 around here]

### 3 Cultural consumption profiles

Heterogeneity in cultural consumption emerges in Italy. Participation and frequency of attendance in eight cultural activities (Table A2 in the appendix) present a very skewed distribution for all cultural activities, revealing significant non-participation rates. Going to the cinema is the most popular activity, followed by dancing venues, music concerts and sports events, whereas going to the theatre is the least frequently attended activity.

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<sup>5</sup> The dummy variables refer to the following categories: unemployed (reference group), employed and out-of-labour force (including retired, housekeeper and students).

<sup>6</sup> The results for the relation between cultural consumption patterns and life or domain satisfaction hold even when controlling for alternative and more fine-grained specifications of individual socio-demographic characteristics.

To determine cultural consumption clusters measured through *LCA*, we use three frequencies of attendance for each activity: no participation, low attendance (1-6 times), and high attendance (7 or more). *LCA* has been implemented on the sample of individuals being the number of classes identified according to the CAIC and BIC criteria. Table A2 in the Appendix summarises the model selection process. Although the information parameters decreased with the number of classes up to seven classes, the need to observe the parsimony and interpretability of the model led us to prefer a model with fewer classes. As a result, we identify six classes of cultural consumer profiles (BIC= 8356 e CAIC= 8457,  $G^2=7282$ ).

Table 2 shows the different profiles of the six clusters, their size in the sample, and the conditional probabilities of attending ‘never’, ‘1 to 6 times’ or ‘7 or more times’ in a year for a specific activity. The first cluster refers to individuals who do not engage in cultural and leisure activities. This cluster, *Culturally Inactive*, accounts for more than 36% of respondents. Cluster 2 displays very high conditional probabilities of non-participation for all activities except for cinema attendance (1-6 times). This group, named *Lowbrow Univore*, represents about 24 per cent of individuals. *Lowbrow Active* (Cluster 3) is instead a relatively smaller group of cultural consumers (6 per cent) corresponding to those individuals with a higher likelihood of participating (also with high frequency) in a broader range of lowbrow activities (dancing venues, sports events, music concerts, and cinema) and, simultaneously, with a higher probability of not engaging in highbrow activities such as theatre and classical music concerts. Cluster 4, accounting for 18% of the population, displays a distinct pattern of cultural consumption, possibly peculiar to the Italian context. Individuals in this group show a marked propensity to visit heritage sites (museums, monuments) but have a relatively lower probability of participating in highbrow and lowbrow cultural activities (except for cinema). As this group is distinct from the previous ones engaging in lowbrow activities, but at the same time, it does not fit traditional patterns of highbrow cultural consumption, it is labelled *Heritage Lover*. The final two clusters (5 and 6) correspond to those individuals most active in the entire set of cultural and leisure activities. Cluster 5, accounting for 10% of individuals, captures *Cultural Omnivore*, individuals engaging in all the activities considered as previously identified in the sociological literature. Cluster 6, finally, in line with findings by Sullivan and Katz-Gerro (2007), represents a relatively small but distinct subgroup (2.6 per cent) of *Voracious omnivores*, that is, individuals who participate in all activities and also have a high frequency of engagement (7+ times).

[Table 2 around here]

## 4 Empirical Results

### 4.1. Relationship between Life satisfaction and cultural consumption

We consider the relationship between cultural consumption patterns and overall life satisfaction as the first set of results. Table 3 reports the results of ordered probit and probit regressions for the key variables of interest.

[Table 3 around here]

All the coefficients and marginal effects are statistically significant (relative to the reference group of *Culturally Inactive*). For the probit models, where the ordinal scale of life satisfaction is transformed in a dummy, marginal effects are generally robust and relatively stable to different specifications of the dependent variable, except when using high cut-off values (9 on a scale of 10) that capture only extremely satisfied people. As stated before, we opt for a probit model with a binary dependent variable expressing life satisfaction equal to or above seven as the main specification for the interpretation of the findings, which seems the most appropriate to explain the trade-off between diversity and intensity of consumption.

Regression 1 in Table 4 reports the marginal effects of the variables for the probit estimation.

[Table 4 around here]

Starting from socio-demographic and context-specific covariates, the effects are generally in line with the empirical works on subjective well-being. In our analysis, gender does not seem to lead to significant differences in life satisfaction, consistent with the evidence found in other research (Meisenberg and Woodley, 2015). While a U-shaped relationship between age and subjective well-being is found in the literature (Graham and Pozuelo, 2017), our results indicate a similar relation with young respondents (14-24 years group) displaying the highest probability of being satisfied, 8% higher than adults (age 25-44), 13% higher than 46-64 age group and 11% higher than old ones. Respondents who are married or in a civil relationship are more likely to be satisfied with life than singles, while separated and divorced are less satisfied than singles. The probability of being satisfied also increases with education, suggesting a positive relationship between individual capabilities and enjoyment of life.

Conversely, the presence of children is not statistically significant, consistent with previous works that considered the effect of parenthood using this variable (Angeles, 2010). Employed and out-of-labor-force respondents are more likely to be satisfied with life than unemployed. While differences in life satisfaction between employed and unemployed people can stem from

differences in economic and working conditions, the positive and statistically significant marginal effect for the out-of-labour-force category can be driven by retired people, whose life satisfaction is generally higher than other categories (see, e.g., Wheatley and Bickerton, 2017; Hand, 2018). To better illustrate how cultural consumption profiles are related to life satisfaction, we examine the effect of the covariates on predicted probabilities of being satisfied with life, keeping all others constant at their means. As shown in Fig. 1, the effect of cultural consumption profiles leads, in many cases, to significant differences in predictive margins and a clear pattern.

[Figure 1 around here]

More in detail, the probability of being satisfied with life is constantly increasing for *Culturally Inactive* to *Cultural Omnivore* consumers, respectively, 0.59 for the former and 0.81 for the latter type. A significant rise in probability occurs between *Culturally Inactive* and *Lowbrow Univore*, suggesting that even sporadic engagement in a few cultural and leisure activities, such as cinema attendance, is positively associated with increased life satisfaction. At the same time, a slight decrease in the predictive margins from *Cultural Omnivore* to *Voracious* indicates that once an individual already has a habit for diversified cultural and leisure activities, greater intensity in engagement does not influence life satisfaction.

Overall, these results unveil how accounting for cultural consumption patterns can provide a complex but more comprehensive understanding of the relation between subjective well-being and cultural and leisure experiences than analyses taking single activities as the observation unit. To further clarify this point, for illustrative purposes, Table A3 in the Appendix presents regressions on the same data using the decision to engage in each activity as single cultural consumption covariates. The marginal effects confirm that the probability of being satisfied with life increases with participation in any cultural and leisure activities. One could also infer which activity leads to the most substantial effect. However, the results and size of the effects provide little guidance insofar as the decision to engage simultaneously in specific cultural and leisure activities is not considered.

To better assess the interactive effect of cultural consumption patterns with specific demographic features, we discuss additional findings running regressions over subsamples of the population by gender, education, age and labour status (Table A4 in the Appendix).

While the results for gender and age group are generally in line with those found for the whole population, we find some distinct patterns across education and labour status.

In particular, the effect of cultural consumption on the probability of being satisfied with life decreases at higher degrees of education. At low levels of education, those engaging in more

diverse and frequent cultural and leisure activities report a higher probability of satisfaction with life. Conversely, at high levels of education, except for *Voracious* cultural consumers, cultural consumption has a lower effect on life satisfaction. This finding underlines the potential beneficial effects of engagement in cultural and leisure activities for those less educated.

Looking at differences across labour conditions, the most substantial effect of cultural consumption on life satisfaction (particularly for being *Cultural Omnivore*) occurs for unemployed respondents, followed by retired. This finding confirms the value of cultural consumption as an enriching activity contributing to the quality of life, as those that have more available time are also the ones that benefit the most from engaging in cultural and leisure activities.

#### ***4.2. Effects of cultural consumption patterns on domain satisfaction***

In this section, we explore how cultural consumption patterns are associated with satisfaction over different domains of life, namely health condition, friendship and leisure time. As before, as an estimation strategy we use a probit model with a dichotomous dependent variable taking the value of 1 if the respondent is either “very happy” or “quite happy”, and 0 otherwise. While Regressions 2-5 in Table 4 present the marginal effects of all the variables on being satisfied in each subdomain of life, in Fig. 2a-3c, we display the differences across cultural consumption profiles on predicted probabilities of being satisfied with life, keeping all other covariates constant at their means.

[Figure 2 around here]

A first clear pattern emerging from Figure 2 is that, like for general life satisfaction, being *Culturally Inactive* is systematically associated with lower levels of satisfaction in all the domains considered (even relative to the *Lowbrow Univore*) by about 15% in the probability of satisfaction with leisure, health condition, and friendship.

We find a positive and robust association between cultural consumption and satisfaction with leisure time, with *Cultural Omnivore* and *Voracious* displaying very high predictive margins. For example, being a *Cultural Omnivore* leads to a 0.76 probability of being satisfied with own leisure time, in contrast with a 0.60 probability for *Culturally Inactive* consumers. The results show that the *Lowbrow Active* consumers reach a level of satisfaction between the *Omnivores* and *Voracious*, and this result is replicated for Health and Friendship satisfaction, stressing the importance of the variety of consumption but not of specific cultural goods which demand more human capital. The type of activities performed by this cluster (attending sports events, cinema, dancing venues, and music concerts) tends to be characterized by relatively high levels of social interaction and physical activity (especially for dancing venues). However, this finding is partially

counterintuitive, as *Cultural Omnivore* and *Voracious* also engage in the same activities, suggesting that expanding the engagement toward more refined and highbrow cultural activities is not necessarily associated with higher health benefits, satisfaction with friends' relationships and also for the satisfaction in leisure activities is sufficient the expansion of Lowbrow activities.

This last result is in line with those of Wheatly and Bickerton. (2017, 2019) suggesting how engagement in cultural and leisure activities primarily and expectedly leads to leisure satisfaction benefits. However, we should remind that since the question in the Italian survey does not disentangle between satisfaction with the amount of leisure time or its quality, such results can be explained by two mutually reinforcing channels. Cultural consumption increases the quality of the leisure experience and affects the reported satisfaction. Alternatively, more active cultural consumer profiles could be those with relatively more time to spend for leisure, thus, reported answers might also capture satisfaction with time availability rather than only the effect of the type of experience.

Finally, looking at the relationship between cultural consumption patterns and distinct domain satisfaction across different subsamples (Tables A5 – A7 in the Appendix), we obtain some particular trends regarding the previous finding on overall satisfaction. Firstly, older people display more substantial effects on health satisfaction if they are active cultural consumers, confirming that engagement in cultural and leisure activities can be a critical factor or mediator of health conditions at a later stage of life. Secondly, female active cultural consumers (regardless of the typology) do not tend to display higher satisfaction than males except for leisure.

Thirdly, the effect of cultural consumption on a different type of satisfaction is more robust for people out of the labour force, and highly educated. Similarly, the effect of cultural consumption on leisure satisfaction is higher for employed with little time at their disposal, but the difference with the retired and the unemployed is minimal supporting the interpretation that the content of the leisure activity matter for all the categories.

#### **4.3. Territorial effect of cultural consumption**

Given the relevance of geographical differences in cultural participation, we illustrate the territorial distribution of the cultural consumer profiles across Italian regions in Figure 3. The share of *Culturally Inactive* and *Lowbrow Univore* is higher in the southern part of Italy. At the same time, more active cultural consumers, namely *Cultural Omnivore*, *Voracious*, and *Heritage Lover*, tend to be concentrated in the northern and central regions of the country. This could be in line with the cultural supply at the regional level, which facilitates or hinder cultural consumption by the population. This evidence partly confirms the north-south divide characterizing the social and cultural participation of the Italian population (Campagna et al., 2020). More interestingly, only

the group of the *Lowbrow Active* seems to be more homogeneously distributed in the country (with a higher concentration in the central and southern regions).

[Figure 3 around here]

Along this line, the predictive margins (Figure 4) show a generalised much higher increase in the probability of being satisfied with life for cultural consumption profiles in the North (West and East) and Center than in the South and Island, with specific patterns for each regional area. In Center Italy, the Cultural *Omnivore* profile presents the highest marginal increase in life satisfaction compared with the other profiles; in absolute terms, it does not reach 80%, while in the North-East, 85% is reached. The South and the Islands are where life satisfaction is less affected by the consumption of cultural goods: *Lowbrow Active* marginal participation reaches 63% while in the Islands, 74%. All these results suggest the need for specific cultural policies that could affect the quantity and variety of the cultural offer more than the quality and also more suited to the needs of the local community.

Table 5 shows the probit estimations of the determinants of life satisfaction across the Italian macro areas. Once again, the intensity of engagement in different cultural activities (from *Culturally Inactive* to *Lowbrow Univore*, and from *Lowbrow Univore* to *Lowbrow Active*) leads to an increase in life satisfaction. Different cultural trends can be observed at the level of single macro-areas. In the North and Center, greater intensity and variety in the consumption of cultural goods has a more positive impact on life satisfaction, while in the South and Islands, the dominant cultural profile is *Heritage Lover*. This is connected with the large heritage supply, which drives the demand for cultural goods.

[Table 5 around here]

Finally, a more in-depth analysis for each satisfaction domain is shown in tables A8-A10 (Appendix) for single macro areas. First, a transition from *Culturally Inactive* to *Lowbrow Univore* leads to an increase in individual satisfaction for all the domains considered for each macro area. In general, greater variety and intensity in cultural engagement appears to have a positive impact on health satisfaction in the South as well as in the North. This trend is replicated for friend and leisure satisfaction (table A9-A10 in the Appendix); however, a more intense e varied engagement in cultural activities (*Cultural Omnivore* and *Voracious*) is associated with a greater probability of being satisfied with friends in the North than in the South and the Islands, where a more moderate consumption is prevalent (*Lowbrow Active*) or towards specific cultural goods (*Heritage Lover*)



## 5. Discussion and conclusions

Individual well-being and the factors influencing life satisfaction in its different domains are at the centre of policy and research priorities. In the last decades, engagement in arts and culture and its positive effects on well-being, health conditions, and satisfaction with specific aspects of life has become a point of reference for several empirical works based on small-scale and highly situated evidence, or mainly focusing on the effect of cultural and leisure activities individually.

However, findings and policy implications often overlooked the possibility that subjective well-being might be related to cultural consumption “profiles” emerging from the simultaneous participation and intensity of engagement in different cultural activities.

To address this lack of evidence, in this paper, we explore for Italy the relationship between life satisfaction and individuals with specific consumption profiles constructed through Latent Class Analysis based on the participation and frequency of attendance to various cultural and leisure activities.

While the quantitative evidence supports the argument that participation in the arts and cultural activities is positively associated with life satisfaction and its subdomains, our results provide a novel perspective that can also inform the design of culture-led welfare policies.

In line with previous literature (Brown et al., 2015; Hand, 2018, Wheatly and Bickerton, 2017), satisfaction with life and with leisure time has been confirmed to be positively correlated with the variety and breadth of cultural activities in which one engages with the profile of cultural omnivores expressing the highest satisfaction. However, once an individual already has a habit for diversified cultural and leisure activities, greater intensity in engagement does not influence life satisfaction. These results accord with findings that spending time in various experiences is associated with increased subjective well-being, mainly by hindering satiation effects (Galak et al., 2011; Etkin and Mogilner 2016).

Our results also unveil that, compared to *Culturally Inactive*, smaller but still substantial gains in life satisfaction can be achieved by other cultural consumers. For example, differences between *Culturally Inactive* and *Lowbrow Univore* indicate that even developing the habit of sporadic engagement in one or few lowbrow cultural and leisure activities is crucial for improving the likelihood of being satisfied with life. Similarly, for Italy, we find that a specific category of cultural consumers mainly interested in visiting heritage institutions (*Heritage Lover*) display a relatively high probability of being satisfied with life after controlling for other socio-demographic characteristics. This result is consistent with recent evidence at the European level on the potential of heritage engagement to enhance individual life satisfaction (Ateca-Amestoy et al., 2021). Moreover, we find that developing variety only in lowbrow cultural activities can be the most

effective habit affecting satisfaction with health and friendship, while expanding the engagement toward more refined and highbrow cultural activities is not necessarily associated with higher benefits in these domains of life.

From a policy perspective, our findings support the view that more attention must be given to cultivating cultural consumption habits to improve subjective quality of life and suggest some directions and priorities for action.

Encouraging diverse consumption of cultural experiences is a priority. This can be achieved by fostering cultural institutions across different fields to develop bundling strategies for their products and services. It can be especially effective if targeted at those who already fit into relatively active cultural consumer profiles.

However, considering that the process of habit formation of cultural consumption can be prolonged, policies aimed at encouraging omnivorous cultural behavior that includes highbrow cultural activities do not seem appropriate for most cultural inactives. On the contrary, in these cases, inclusive actions to reduce barriers to accessing lowbrow cultural activities (i.e. transforming a *Culturally Inactive* into a *Lowbrow Univore*) are sufficient to improve quality of life, particularly in terms of perceived health and social relationships, especially in the areas with less consumption of the South.

Our analysis also reveals that more marginalised socio-demographics categories, particularly those with a low level of education, out-of-labour or unemployed, would benefit the most from cultural consumption as a channel for improving life and domain satisfaction. As a result, policies should target these groups as a priority.

Although the findings underline the positive relationship between cultural consumption and different forms of individual well-being, several limitations should be considered. First, as for most empirical studies on this subject using population data, cross-sectional data does not allow to explore causality, but only conveys correlations. In this respect, our findings must be read as a complement to experimental evidence, which, however, has the limitation of relying on small-scale and highly situated samples. Second, because our approach is based on constructing cultural consumer profiles derived from Italian data, the results and policy implications may not necessarily apply to other contexts. Although it is desirable to test the validity of the results in other countries, it is encouraging to note that other empirical works have found several cultural consumer profiles identified for Italy in our research (i.e. cultural omnivores, voracious, univores, inactives). Despite these limitations, our analysis provides a novel methodological approach to disentangle the relationship between the complex nature of cultural consumption and the multifaceted dimensions of individual well-being.

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## TABLES

Table 1 - Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
<i>Satisfaction with life domains (dummies)</i>					
Life satisfaction	38,678	0,69	0,45	0	1
Health satisfaction	38,822	0,81	0,38	0	1
Friend satisfaction	38,801	0,83	0,36	0	1
Leisure satisfaction	38,768	0,68	0,46	0	1
<i>Cultural consumption profiles</i>					
Cultural Inactive	36,579	0,37	0,48	0	1
Lowbrow Univore	36,579	0,25	0,43	0	1
Lowbrow Active	36,579	0,06	0,25	0	1
Heritage Lover	36,579	0,17	0,37	0	1
Cultural Omnivore	36,579	0,09	0,29	0	1
Voracious	36,579	0,02	0,16	0	1
<i>Socio-demographics</i>					
Gender	42,287	0,48	0,49	0	1
Age<25	42,287	0,20	0,40	0	1
Age 25-44	42,287	0,24	0,42	0	1
Age 45-64	42,287	0,30	0,46	0	1
Age >=65	42,287	0,24	0,43	0	1
Single	40,926	0,37	0,48	0	1
Married/Cohabitant	40,926	0,46	0,49	0	1
Separated/Divorced	40,926	0,07	0,26	0	1
Widow	40,926	0,08	0,27	0	1
Child	42,287	0,35	0,47	0	1
Low education	40,611	0,51	0,49	0	1
Medium education	40,611	0,34	0,47	0	1
High education	40,611	0,13	0,34	0	1
Employed	39,033	0,41	0,49	0	1
Out-of-Labor-Force	39,033	0,45	0,49	0	1
Unemployed	39,033	0,58	0,49	0	1
<i>Regional cultural supply (per 100,000 inhabitans)</i>					
Sport clubs	41,308	18,35	12,4	3,24	39,83
Cinemas	41,308	8,59	2,50	3,90	13,35
Dance floors	41,308	17,11	9,01	4,78	44,46
Concerts	41,308	19,51	9,80	7,11	41,26
Theaters	41,308	27,90	10,05	12,94	48,06
Museums	41,308	11,00	9,49	3,74	66,08
Monuments	41,308	11,00	9,49	3,74	66,08
<i>Context-specific covariates</i>					
North-West	41,406	0,21	0,41	0	1
North-East	41,406	0,20	0,40	0	1
Center	41,406	0,18	0,39	0	1
South	41,406	0,28	0,45	0	1
Islands	41,406	0,09	0,29	0	1

Table 2 – Parameter estimates for the of 6 latent classes model, cluster size and conditional probabilities

Cluster Profile Label		Culturally Inactive	LowBrow Univore	LowBrow Active	Heritage Lover	Cultural Omnivore	Voracious
<b>Size</b>		36%	24%	6,3%	18%	10%	2,6%
<b>Theater</b>	Never	.99	.85	.84	.68	.37	.30
	1-6 times	.007	.13	.15	.30	.59	.47
	7+ times	.0008	.004	.0003	.01	.02	.21
<b>Museum</b>							
	Never	.98	.99	.81	.07	.03	.02
	1-6 times	.01	.0003	.18	.90	.94	.34
	7+ times	.0004	.001	.002	.01	.02	.62
<b>Classical Music</b>							
	Never	.99	.97	.82	.90	.63	.48
	1-6 times	.0009	.02	.17	.09	.35	.29
	7+ times	.0002	.004	.005	.002	.008	.22
<b>Music</b>							
	Never	.99	.88	.33	.86	.23	.39
	1-6 times	.006	.11	.63	.13	.74	.37
	7+ times	.0003	.00001	.02	.0006	.02	.22
<b>Sport Events</b>							
	Never	.96	.72	.35	.68	.39	.56
	1-6 times	.02	.23	.52	.27	.49	.26
	7+ times	.01	.03	.11	.04	.10	.16
<b>Disco</b>							
	Never	.98	.82	.32	.88	.49	.60
	1-6 times	.01	.14	.50	.09	.38	.16
	7+ times	.006	.03	.16	.01	.11	.22
<b>Monuments</b>							
	Never	.98	.90	.85	.34	.17	.08
	1-6 times	.01	.09	.13	.64	.79	.38
	7+ times	.0008	.0004	.004	.01	.02	.53
<b>Cinema</b>							
	Never	.94	.39	.14	.32	.07	.16
	1-6 times	.05	.57	.75	.60	.69	.35
	7+ times	.00004	.03	.10	.06	.23	.48

Table 3 – Determinants of Life Satisfaction – Probit and ordered probit estimation

	(1)	(2)	(3)	(4)	(5)
	Cut off: 6	Cut off: 7	Cut off: 8	Cut off: 9	Ordered Probit
Lowbrow Univore	0.0710*** (0.00521)	0.0740*** (0.00687)	0.0363*** (0.00720)	0.000574 (0.00506)	0.157*** (0.0148)
Lowbrow Active	0.0916*** (0.00760)	0.107*** (0.0109)	0.0420*** (0.0119)	-0.0133 (0.00793)	0.181*** (0.0245)
Heritage Lover	0.0953*** (0.00565)	0.132*** (0.00762)	0.0799*** (0.00834)	0.0212*** (0.00603)	0.256*** (0.0171)
Cultural Omnivore	0.119*** (0.00628)	0.164*** (0.00909)	0.110*** (0.0105)	0.0168** (0.00752)	0.313*** (0.0215)
Voracious	0.0995*** (0.0104)	0.145*** (0.0149)	0.121*** (0.0173)	0.0407*** (0.0131)	0.319*** (0.0350)
Individual covariates	YES	YES	YES	YES	YES
Geographic covariates	YES	YES	YES	YES	YES
Observations	36,772	36,772	36,772	36,772	36,772

Note: Coefficients displayed for ordered probit; Marginal effects displayed for probit models. The baseline category is Culturally Inactives. The cut-off shows the threshold of the Life Satisfaction scale (0-10) used to determine the dichotomous depvar

Table 4– Probit estimations of the determinants of Life and Domain Satisfaction

Dependent variable:	(1) Life satisfaction	(2) Health satisfaction	(3) Friend satisfaction	(4) Leisure satisfaction
Lowbrow Univore	0.0740*** (0.00687)	0.0912*** (0.00558)	0.106*** (0.00552)	0.0932*** (0.00689)
Lowbrow Active	0.107*** (0.0109)	0.131*** (0.00861)	0.158*** (0.00738)	0.168*** (0.0104)
Heritage Lover	0.132*** (0.00762)	0.112*** (0.00611)	0.115*** (0.00613)	0.0986*** (0.00791)
Cultural Omnivore	0.164*** (0.00909)	0.119*** (0.00777)	0.152*** (0.00676)	0.159*** (0.00928)
Voracious	0.145*** (0.0149)	0.112*** (0.0119)	0.153*** (0.00995)	0.180*** (0.0145)
Employed	0.175*** (0.00837)	0.0753*** (0.00695)	0.0289*** (0.00669)	-0.0834*** (0.00878)
Out-of-Labor-Force	0.146*** (0.00919)	0.0268*** (0.00753)	0.0131 (0.00732)	0.0379*** (0.00973)
Male	-0.0187*** (0.00515)	-0.0255*** (0.00413)	-0.0121*** (0.00397)	-0.0482*** (0.00520)
Age: 25-44	-0.0828*** (0.00909)	-0.0480*** (0.00558)	-0.0372*** (0.00721)	-0.0692*** (0.0105)
Age: 45-64	-0.132*** (0.00973)	-0.133*** (0.00637)	-0.0590*** (0.00759)	-0.0817*** (0.0110)
Age: >=65	-0.113*** (0.0109)	-0.195*** (0.00821)	-0.0766*** (0.00866)	-0.0356*** (0.0120)
Married/Cohabitant	0.110*** (0.00800)	0.0288*** (0.00644)	0.0369*** (0.00611)	0.00273 (0.00780)
Separated/Divorced	-0.00266 (0.0111)	0.00282 (0.00876)	-0.0108 (0.00872)	-0.0371*** (0.0107)
Widow	0.0107 (0.0123)	-0.0251*** (0.00959)	-0.0332*** (0.00969)	-0.0505*** (0.0122)
Child	0.00357 (0.00617)	0.0141*** (0.00484)	-0.0116** (0.00468)	-0.0584*** (0.00617)
Secondary School	0.0329*** (0.00886)	0.0508*** (0.00693)	0.0325*** (0.00652)	0.0308*** (0.00907)
Diploma	0.0471*** (0.00917)	0.0554*** (0.00727)	0.0255*** (0.00688)	0.0425*** (0.00937)
Degree/Phd	0.0848*** (0.0108)	0.0774*** (0.00863)	0.0171** (0.00857)	0.0486*** (0.0111)
North-East	-0.0837*** (0.0151)	-0.00133 (0.0123)	-0.00935 (0.0118)	-0.0407*** (0.0153)
Center	-0.152*** (0.0142)	-0.0174 (0.0116)	-0.0208 (0.0110)	-0.0704*** (0.0141)
South	-0.0531*** (0.00981)	0.0132 (0.00811)	-0.00187 (0.00781)	-0.0322*** (0.0102)
Islands	0.0133	0.0190	0.0234**	-0.00275



	(0.0133)	(0.0115)	(0.0105)	(0.0148)
Museums	0.00347***	-0.000576	0.000624	0.00146***
	(0.000461)	(0.000363)	(0.000353)	(0.000460)
Cinemas	0.0228***	0.0107***	0.00313	0.0173***
	(0.00377)	(0.00305)	(0.00292)	(0.00383)
Theaters	-0.00540***	-0.00323***	-0.00187	-0.00470***
	(0.00127)	(0.00100)	(0.000975)	(0.00128)
Concert halls	0.00455***	-0.00107	0.000443	0.000808
	(0.00117)	(0.000921)	(0.000894)	(0.00117)
Sport facilities	0.00606***	0.00312***	0.00180***	0.00454***
	(0.000809)	(0.000649)	(0.000620)	(0.000811)
Dance floors	-0.00163***	2.53e-06	-0.000183	-0.000714***
	(0.000231)	(0.000184)	(0.000178)	(0.000233)
Monuments	-0.029***	.0118202**	-0.02365***	-0.01360*
	(0.00728)	(0.005762)	(0.00563)	(0.00737)
Observations	36,772	36,916	36,895	36,865

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Note: Marginal effects displayed for probit models. The baseline category is Culturally Inactives.

Table 5 – Probit estimations of the determinants of Life Satisfaction, heterogeneity across the macro area

DV:Life satisfaction	(1) North-West	(2) North-East	(3) Center	(4) South	(5) Islands
Lowbrow Univore	0.0798*** (0.0144)	0.0960*** (0.0146)	0.0913*** (0.0162)	0.0497*** (0.0132)	0.0355 (0.0216)
Lowbrow Active	0.118*** (0.0234)	0.142*** (0.0208)	0.0946*** (0.0265)	0.0600*** (0.0207)	0.138*** (0.0350)
Heritage Lover	0.116*** (0.0148)	0.128*** (0.0148)	0.130*** (0.0176)	0.156*** (0.0166)	0.153*** (0.0259)
Cultural Omnivore	0.162*** (0.0178)	0.173*** (0.0169)	0.173*** (0.0202)	0.156*** (0.0202)	0.115*** (0.0336)
Voracious	0.165*** (0.0247)	0.173*** (0.0245)	0.0924*** (0.0351)	0.145*** (0.0389)	0.105 (0.0607)
Male	-0.0189 (0.0103)	-0.0168 (0.0101)	-0.0155 (0.0118)	-0.0178 (0.0104)	-0.0238 (0.0172)
Age: 25-44	-0.0647*** (0.0195)	-0.0277 (0.0187)	-0.0735*** (0.0212)	-0.123*** (0.0174)	-0.122*** (0.0293)
Age: 45-64	-0.0867*** (0.0203)	-0.0740*** (0.0200)	-0.134*** (0.0227)	-0.195*** (0.0192)	-0.162*** (0.0312)
Age: >=65	-0.0742*** (0.0222)	-0.0571*** (0.0219)	-0.142*** (0.0254)	-0.175*** (0.0221)	-0.116*** (0.0355)
Employed	0.154*** (0.0186)	0.152*** (0.0187)	0.191*** (0.0210)	0.195*** (0.0153)	0.206*** (0.0247)
Out-of-Labor-Force	0.152*** (0.0210)	0.156*** (0.0208)	0.183*** (0.0233)	0.137*** (0.0164)	0.122*** (0.0261)
Married/Cohabitant	0.0746*** (0.0156)	0.105*** (0.0155)	0.129*** (0.0183)	0.108*** (0.0168)	0.124*** (0.0265)
Separated/Divorced	-0.00141 (0.0210)	-0.00416 (0.0228)	0.00528 (0.0245)	-0.0143 (0.0232)	0.000310 (0.0375)
Widow	-0.00853 (0.0250)	-0.00853 (0.0259)	0.0213 (0.0276)	0.0244 (0.0241)	-0.0146 (0.0409)
Child	0.0369*** (0.0124)	-0.00187 (0.0120)	-0.00592 (0.0140)	0.0121 (0.0127)	-0.0380 (0.0208)
Secondary School	0.0183 (0.0176)	-0.00414 (0.0181)	0.0134 (0.0210)	0.0544*** (0.0170)	0.0855*** (0.0281)
Diploma	0.0162 (0.0184)	0.00975 (0.0184)	0.0222 (0.0218)	0.0781*** (0.0175)	0.107*** (0.0297)
Degree/Phd	0.0349 (0.0220)	0.0262 (0.0220)	0.0666*** (0.0249)	0.134*** (0.0210)	0.185*** (0.0347)
Regional cultural supply covariates	YES	YES	YES	YES	YES
Observations	7,986	7,632	6,943	10,537	3,674

Note: Marginal effects displayed for probit models. The baseline category is Culturally Inactive.

## FIGURES

Figure 1 – Predictive Margins with 95% CI on the probability of being satisfied with life for cultural consumer profiles

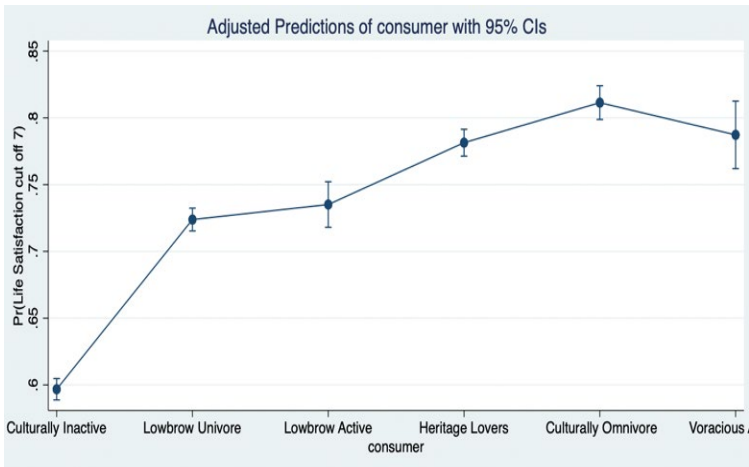
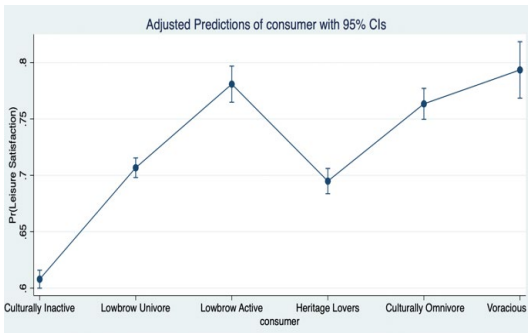
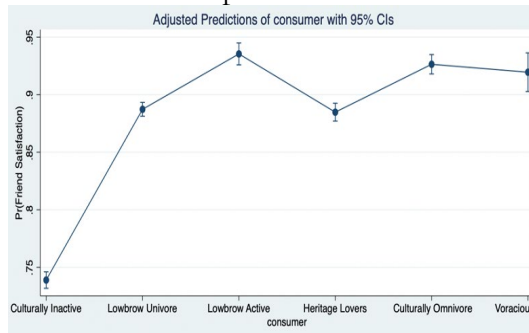


Figure 2 - Predictive Margins with 95% CI on the probability of being satisfied with life subdomains for cultural consumer profiles

3a: Leisure



3b: Friendship



3c: Health

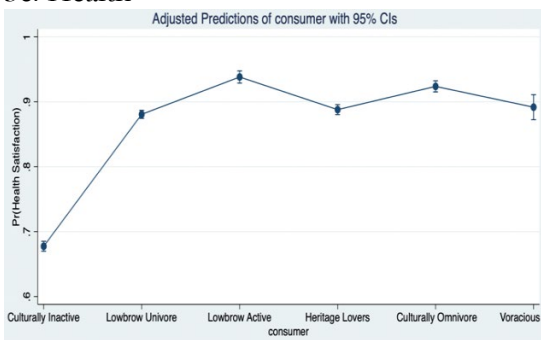
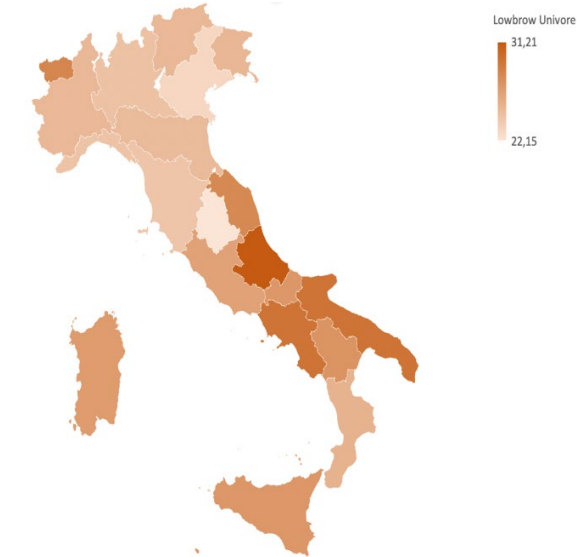


Figure3 – Share of cultural consumer profiles over sample population, regional differences

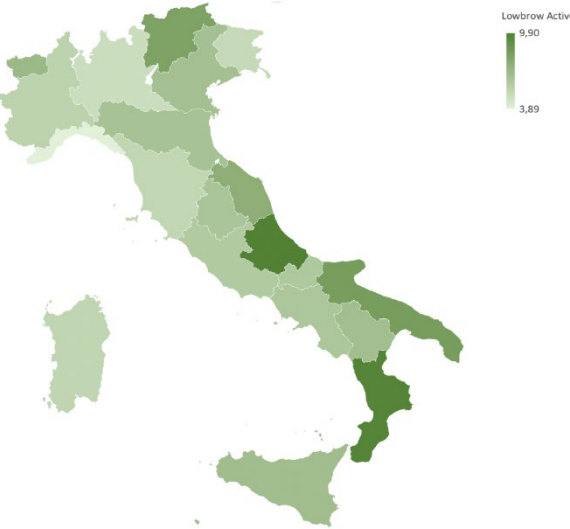
1a. Culturally Inactive



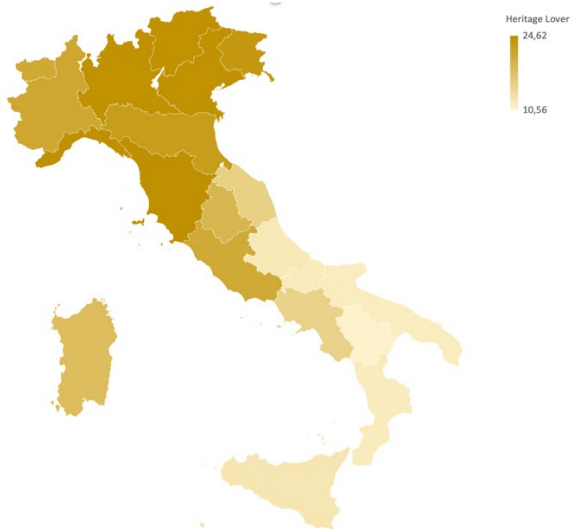
1b. Lowbrow Univore



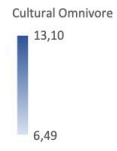
1c. Lowbrow Active



1d. Heritage Lover



1e. Cultural Omnivore



1f. Voracious

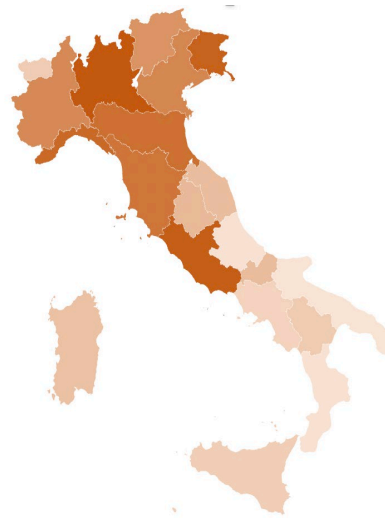
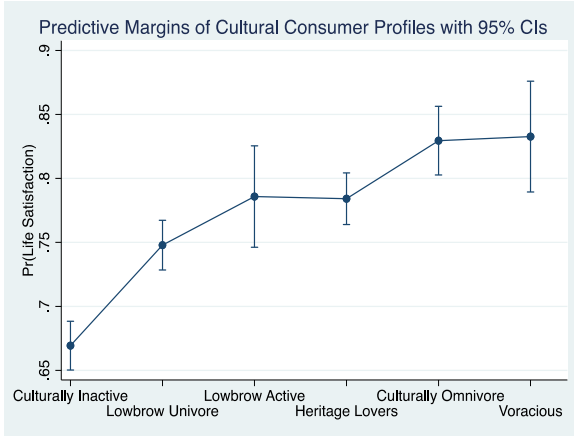
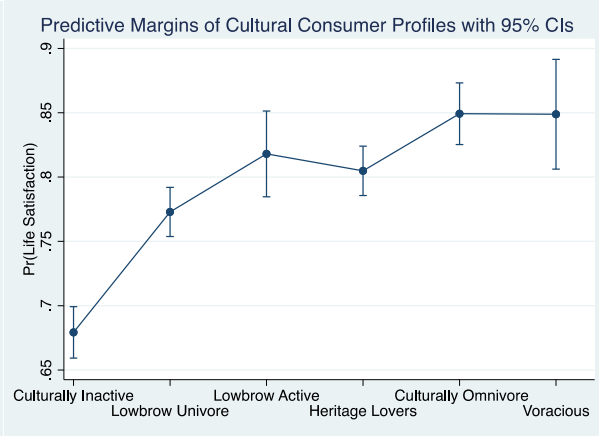


Figure 4: Predictive Margins with 95% CI on the probability of being satisfied with life for cultural consumer profiles, for Italian macro areas

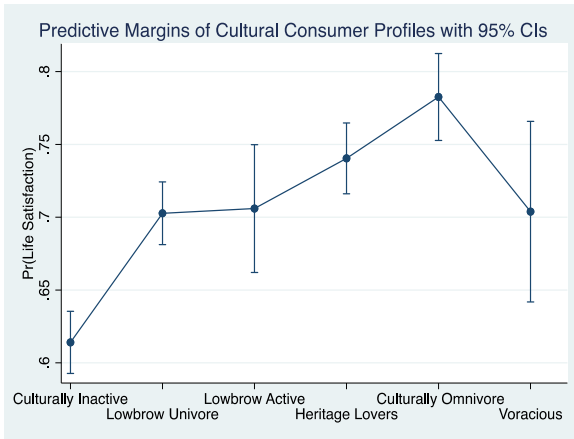
4a: North-West



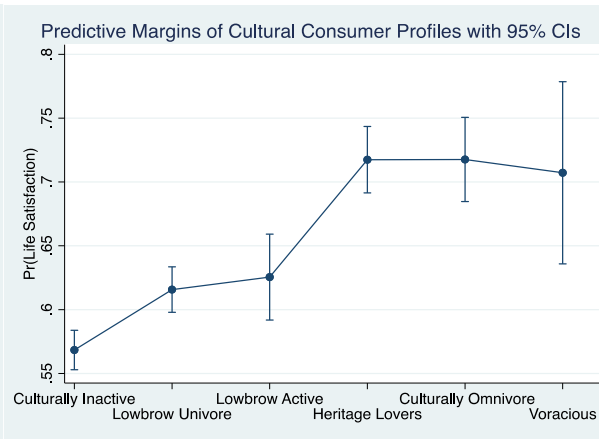
4b: North-East



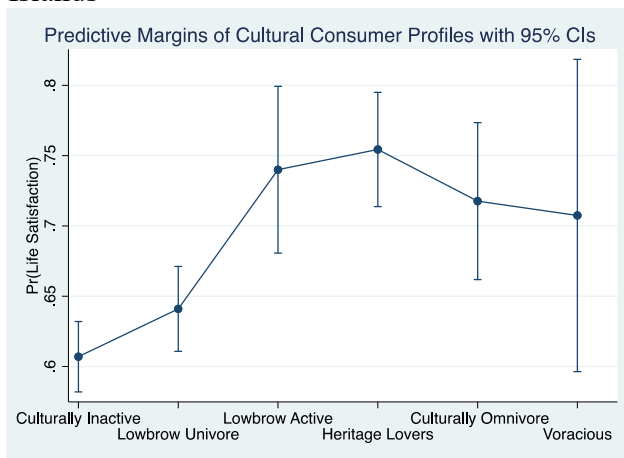
4c: Center



4d: South



4e: Islands



## APPENDIX

Table A1 - Goodness of fit measures for model selection, Latent Class Analysis

Model	G2	df	Entropy	BIC	CAIC	ΔBIC	ΔAIC
2-class	21585	6527	0,81	21936	21969	-	-
3-class	14671	6510	0,73	15202	15252	-6734	-6717
4-class	10325	6493	0,74	11037	11104	-4165	-4148
5-class	7905	6476	0,76	8798	8882	-2239	-2222
6-class	7282	6459	0,71	8356	8457	-442	-425
7-class	6628	6442	0,71	7883	8001	-473	-456

Table A2 – Frequency of attendance per cultural and leisure activity (percent per category)

	Frequency				
	Never	1-3 times	4-6 times	7-12 times	13+times
Sport events	71.15	19.20	4.11	1.81	2.74
Disco	81.79	10.32	3.47	1.93	2.49
Cinemas	51.24	31.13	10.01	4.21	2.40
Music concerts	80.07	16.62	2.22	0.55	0.53
Classical music concerts	91.01	7.23	0.93	0.37	0.45
Theatre	81.13	15.73	1.90	0.78	0.46
Museums	68.96	23.57	5.13	1.60	0.75
Monuments	73.25	20.16	4.46	1.33	0.80

Table A3 – Probit estimation of the determinants of life satisfaction, single cultural and leisure activities considered individually and in additive terms.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
DV:Life satisfaction									
Sport events	0.0703*** (0.00621)								0.0375*** (0.00662)
Disco		0.0472*** (0.00705)							0.0135 (0.00746)
Cinemas			0.0597*** (0.00571)						0.0218*** (0.00625)
Classical Music concerts				0.0725*** (0.00904)					0.0105 (0.00985)
Music concerts					0.0669*** (0.00662)				0.0126 (0.00745)
Theaters						0.0848*** (0.00691)			0.0373*** (0.00772)
Museo							0.0965*** (0.00604)		0.0466*** (0.00799)
Monuments								0.0863*** (0.00616)	0.0311*** (0.00788)
Employed	0.184*** (0.00835)	0.188*** (0.00835)	0.184*** (0.00836)	0.189*** (0.00835)	0.186*** (0.00836)	0.184*** (0.00835)	0.182*** (0.00835)	0.183*** (0.00835)	0.174*** (0.00837)
Out-of-Labor-Force	0.152*** (0.00918)	0.154*** (0.00918)	0.152*** (0.00918)	0.153*** (0.00918)	0.153*** (0.00918)	0.148*** (0.00918)	0.145*** (0.00918)	0.148*** (0.00918)	0.143*** (0.00919)
Male	-0.00595 (0.00523)	-0.0169*** (0.00513)	-0.0189*** (0.00514)	-0.0181*** (0.00513)	-0.0180*** (0.00513)	-0.0220*** (0.00515)	-0.0200*** (0.00514)	-0.0187*** (0.00513)	-0.0157*** (0.00528)
Age: 25-44	-0.103*** (0.00868)	-0.101*** (0.00879)	-0.0969*** (0.00891)	-0.106*** (0.00852)	-0.104*** (0.00867)	-0.100*** (0.00859)	-0.0941*** (0.00871)	-0.101*** (0.00860)	-0.0835*** (0.00910)
Age: 45-64	-0.151*** (0.00924)	-0.148*** (0.00944)	-0.142*** (0.00954)	-0.160*** (0.00906)	-0.152*** (0.00922)	-0.157*** (0.00913)	-0.151*** (0.00925)	-0.157*** (0.00915)	-0.135*** (0.00987)
Age: >=65	-0.140*** (0.0104)	-0.139*** (0.0106)	-0.126*** (0.0108)	-0.153*** (0.0102)	-0.141*** (0.0104)	-0.148*** (0.0103)	-0.140*** (0.0104)	-0.146*** (0.0103)	-0.116*** (0.0111)
Married/Cohabitant	0.104*** (0.00794)	0.107*** (0.00799)	0.105*** (0.00795)	0.104*** (0.00795)	0.107*** (0.00796)	0.103*** (0.00794)	0.106*** (0.00796)	0.104*** (0.00795)	0.111*** (0.00803)
Separated/Divorced	-0.00670 (0.0110)	-0.00440 (0.0111)	-0.00796 (0.0111)	-0.00649 (0.0110)	-0.00313 (0.0111)	-0.00805 (0.0110)	-0.00622 (0.0111)	-0.00693 (0.0111)	-0.00203 (0.0111)
Widow	-0.00142 (0.0122)	0.00255 (0.0123)	0.00254 (0.0122)	-0.000647 (0.0123)	0.00283 (0.0122)	-0.000778 (0.0122)	0.00367 (0.0122)	0.00166 (0.0122)	0.00901 (0.0123)
Child	-0.000728 (0.00616)	0.00316 (0.00617)	0.000956 (0.00615)	0.00146 (0.00616)	0.00281 (0.00616)	0.00183 (0.00616)	0.00237 (0.00616)	0.00136 (0.00616)	0.00331 (0.00618)
Secondary School	0.0530*** (0.00899)	0.0550*** (0.00901)	0.0476*** (0.00897)	0.0530*** (0.00899)	0.0538*** (0.00898)	0.0488*** (0.00897)	0.0441*** (0.00888)	0.0471*** (0.00891)	0.0400*** (0.00885)
Diploma	0.0863*** (0.00906)	0.0896*** (0.00906)	0.0764*** (0.00912)	0.0868*** (0.00907)	0.0857*** (0.00907)	0.0804*** (0.00906)	0.0659*** (0.00907)	0.0721*** (0.00907)	0.0560*** (0.00913)
Degree/Phd	0.148*** (0.0101)	0.152*** (0.0101)	0.133*** (0.0103)	0.144*** (0.0102)	0.144*** (0.0102)	0.131*** (0.0103)	0.106*** (0.0107)	0.117*** (0.0105)	0.0909*** (0.0108)
North-East	0.00346 (0.00739)	0.0226*** (0.00733)	0.0164** (0.00719)	0.0139 (0.00716)	0.0108 (0.00720)	0.0107 (0.00722)	0.0175** (0.00714)	0.0189*** (0.00711)	-0.0842*** (0.0151)
Center	-0.0681*** (0.00787)	-0.0488*** (0.00779)	-0.0577*** (0.00768)	-0.0551*** (0.00758)	-0.0607*** (0.00770)	-0.0616*** (0.00773)	-0.0557*** (0.00764)	-0.0575*** (0.00763)	-0.154*** (0.0142)



South	-0.0836*** (0.00809)	-0.0990*** (0.00826)	-0.101*** (0.00933)	-0.100*** (0.00772)	-0.0946*** (0.00793)	-0.0901*** (0.00794)	-0.0894*** (0.00720)	-0.0928*** (0.00718)	-0.0545*** (0.00981)
Islands	-0.0323*** (0.0102)	-0.0522*** (0.0103)	-0.0532*** (0.0111)	-0.0538*** (0.00982)	-0.0556*** (0.00949)	-0.0520*** (0.00948)	-0.0510*** (0.00934)	-0.0572*** (0.00936)	0.0122 (0.0133)
Sport facilities	0.00217*** (0.000292)								0.00607*** (0.000810)
Dance floors		0.000178*** (5.66e-05)							-0.00164*** (0.000231)
Cinemas			0.00323 (0.00166)						0.0231*** (0.00377)
Concert halls				0.00112*** (0.000314)					0.00452*** (0.00117)
Theaters					0.00157*** (0.000319)	0.00170*** (0.000319)			-0.00537*** (0.00127)
Museums							0.00203*** (0.000292)		0.00348*** (0.000461)
Monuments								0.00201*** (0.000292)	
Observations	36,772	36,772	36,772	36,772	36,772	36,772	36,772	36,772	36,772

Note: Marginal effects displayed for probit models. The baseline category is Culturally Inactive.

Table A4 – Probit estimation of satisfaction with life by cultural consumption profiles, heterogeneity across socio-demographics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(10)	(11)	
	Work condition			Age			Educational level				
Gender											
DV: Life satisfaction	Employed	Retired	Unemployed	Young (<25)	Adult (25-64)	Old (>=65)	Low	Medium	High	Male	Female
Lowbrow Univore	0.0518*** (0.0101)	0.0955*** (0.0102)	0.0876*** (0.00930)	0.304*** (0.0831)	0.0634*** (0.00838)	0.0940*** (0.0140)	0.0946*** (0.00950)	0.0495*** (0.0111)	0.0492** (0.0225)	0.0690*** (0.00970)	0.0781*** (0.00973)
Lowbrow Active	0.0935*** (0.0142)	0.0898*** (0.0200)	0.113*** (0.0164)	0.360*** (0.0878)	0.116*** (0.0128)	-0.0420 (0.0646)	0.117*** (0.0187)	0.0966*** (0.0151)	0.0733** (0.0302)	0.0924*** (0.0145)	0.128*** (0.0164)
Heritage Lover	0.111*** (0.0110)	0.139*** (0.0113)	0.148*** (0.0105)	0.402*** (0.0918)	0.118*** (0.00965)	0.148*** (0.0148)	0.180*** (0.0121)	0.108*** (0.0116)	0.0847*** (0.0203)	0.136*** (0.0109)	0.128*** (0.0106)
Cultural Omnivore	0.146*** (0.0120)	0.163*** (0.0155)	0.175*** (0.0139)	0.460*** (0.0893)	0.164*** (0.0109)	0.178*** (0.0309)	0.180*** (0.0182)	0.138*** (0.0136)	0.145*** (0.0210)	0.167*** (0.0126)	0.161*** (0.0131)
Voracious	0.155*** (0.0189)	0.134*** (0.0230)	0.128*** (0.0222)	0.266** (0.129)	0.143*** (0.0193)	0.188*** (0.0294)	0.110*** (0.0359)	0.109*** (0.0234)	0.163*** (0.0244)	0.154*** (0.0213)	0.139*** (0.0207)
Individual covariates	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Geographical covariates	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	15,748	17,216	21,024	4,073	22,492	10,203	17,344	13,905	5,523	17,522	19,250

Note: Marginal effects displayed for probit models. The baseline category is Culturally Inactive.



Table A5 – Probit estimation of satisfaction with Health conditions by cultural consumption profiles, heterogeneity across socio-demographics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
	Work condition				Age			Education level			Gender	
DV: Health satisfaction	Employed	Retired	Unemployed	Young (<25)	Adult (25-64)	Old (>=65)	Low	Medium	High	Male	Female	
Lowbrow Univore	0.0380*** (0.00715)	0.137*** (0.00916)	0.127*** (0.00802)	0.490*** (0.111)	0.0684*** (0.00624)	0.153*** (0.0135)	0.121*** (0.00825)	0.0612*** (0.00845)	0.0858*** (0.0174)	0.0890*** (0.00760)	0.0936*** (0.00815)	
Lowbrow Active	0.0735*** (0.00917)	0.170*** (0.0189)	0.172*** (0.0145)	0.553*** (0.121)	0.117*** (0.00819)	0.171*** (0.0571)	0.147*** (0.0171)	0.107*** (0.0107)	0.123*** (0.0211)	0.130*** (0.0106)	0.130*** (0.0141)	
Heritage Lover	0.0531*** (0.00770)	0.165*** (0.00993)	0.154*** (0.00895)	0.551*** (0.125)	0.0720*** (0.00729)	0.214*** (0.0141)	0.157*** (0.0104)	0.0788*** (0.00857)	0.108*** (0.0158)	0.117*** (0.00828)	0.107*** (0.00892)	
Cultural Omnivore	0.0593*** (0.00864)	0.170*** (0.0152)	0.166*** (0.0128)	0.492*** (0.118)	0.0933*** (0.00820)	0.229*** (0.0297)	0.136*** (0.0178)	0.0879*** (0.0103)	0.123*** (0.0166)	0.128*** (0.00993)	0.108*** (0.0119)	
Voracious	0.0467*** (0.0144)	0.161*** (0.0204)	0.157*** (0.0183)	0.211 (0.165)	0.0707*** (0.0149)	0.250*** (0.0278)	0.101*** (0.0321)	0.0969*** (0.0152)	0.108*** (0.0192)	0.143*** (0.0142)	0.0822*** (0.0184)	
Individual covariates	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Geographical covariates	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Observations	15,798	17,285	21,118	4,105	22,562	10,245	17,446	13,940	5,530	17,604	19,312	

Note: Marginal effects displayed for probit models. The baseline category is Culturally Inactive.

Table A6 - Probit estimation of satisfaction with friends by cultural consumption profiles, heterogeneity across socio-demographics

DV: Friend satisfaction	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Work condition			Young (<25)	Age		Education level			Gender	
	Employed	Retired	Unemployed		Adult (25-64)	Old (>=65)	Low	Medium	High	Male	Female
Lowbrow Univore	0.0776*** (0.00820)	0.115*** (0.00846)	0.122*** (0.00741)	0.230** (0.105)	0.0976*** (0.00667)	0.133*** (0.0115)	0.113*** (0.00749)	0.0995*** (0.00886)	0.0986*** (0.0195)	0.0977*** (0.00765)	0.113*** (0.00793)
Lowbrow Active	0.123*** (0.0100)	0.181*** (0.0133)	0.185*** (0.0106)	0.496*** (0.117)	0.154*** (0.00835)	0.141*** (0.0472)	0.162*** (0.0126)	0.149*** (0.0105)	0.164*** (0.0223)	0.154*** (0.00933)	0.158*** (0.0119)
Heritage Lover	0.0774*** (0.00909)	0.142*** (0.00901)	0.144*** (0.00817)	0.248** (0.115)	0.102*** (0.00766)	0.155*** (0.0122)	0.137*** (0.00944)	0.107*** (0.00924)	0.107*** (0.0181)	0.101*** (0.00877)	0.128*** (0.00858)
Cultural Omnivore	0.118*** (0.00927)	0.185*** (0.0109)	0.179*** (0.00989)	0.382*** (0.114)	0.144*** (0.00792)	0.232*** (0.0184)	0.150*** (0.0136)	0.135*** (0.0103)	0.170*** (0.0181)	0.141*** (0.00925)	0.163*** (0.00982)
Voracious	0.136*** (0.0126)	0.159*** (0.0164)	0.155*** (0.0153)	0.0805 (0.156)	0.149*** (0.0122)	0.224*** (0.0185)	0.136*** (0.0246)	0.131*** (0.0159)	0.175*** (0.0200)	0.153*** (0.0132)	0.153*** (0.0146)
Individual covariates	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Geographical covariates	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	15,788	17,271	21,107	4,105	22,551	10,235	17,428	13,936	5,531	17,595	19,300

Note: Marginal effects displayed for probit models. The baseline category is Culturally Inactive.

Table A7 - Probit estimation of leisure satisfaction by cultural consumption profiles, heterogeneity across socio-demographics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Work condition			Age			Education level.			Gender	
DV: Leisure satisfaction	Employed	Retired	Unemployed	Young (<25)	Adult (25-64)	Old (>=65)	Low	Medium	High	Male	Female
Lowbrow Univore	0.113*** (0.00793)	0.104*** (0.00965)	0.105*** (0.00860)	0.213** (0.0870)	0.0887*** (0.00863)	0.0984*** (0.0130)	0.101*** (0.00919)	0.0831*** (0.0113)	0.0944*** (0.0241)	0.0905*** (0.00967)	0.0951*** (0.00979)
Lowbrow Active	0.158*** (0.0119)	0.181*** (0.0162)	0.189*** (0.0134)	0.468*** (0.0948)	0.167*** (0.0133)	0.166*** (0.0492)	0.185*** (0.0165)	0.159*** (0.0152)	0.163*** (0.0325)	0.154*** (0.0137)	0.188*** (0.0158)
Heritage Lover	0.128*** (0.00858)	0.114*** (0.0109)	0.113*** (0.0100)	0.155 (0.0947)	0.0914*** (0.0102)	0.117*** (0.0141)	0.104*** (0.0127)	0.0998*** (0.0122)	0.0930*** (0.0221)	0.100*** (0.0114)	0.0970*** (0.0110)
Cultural Omnivore	0.163*** (0.00982)	0.151*** (0.0145)	0.150*** (0.0131)	0.328*** (0.0933)	0.166*** (0.0117)	0.177*** (0.0269)	0.129*** (0.0187)	0.150*** (0.0142)	0.190*** (0.0231)	0.142*** (0.0131)	0.177*** (0.0131)
Voracious	0.153*** (0.0146)	0.155*** (0.0206)	0.159*** (0.0194)	0.196 (0.136)	0.195*** (0.0196)	0.203*** (0.0244)	0.141*** (0.0336)	0.174*** (0.0235)	0.212*** (0.0281)	0.173*** (0.0211)	0.187*** (0.0200)
Individual covariates	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Geographical covariates	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	19,300	17,249	21,075	4,103	22,535	10,223	17,403	13,931	5,531	17,586	19,279

Note: Marginal effects displayed for probit models. The baseline category is Culturally Inactive.

Table A8 – Probit estimations of the determinants of Health Satisfaction, heterogeneity across the macro area

DV:Health satisfaction	(1) North-West	(2) North-East	(3) Center	(4) South	(5) Islands
Lowbrow Univore	0.0800*** (0.0123)	0.0743*** (0.0121)	0.0954*** (0.0130)	0.0948*** (0.0102)	0.0989*** (0.0181)
Lowbrow Active	0.117*** (0.0201)	0.117*** (0.0174)	0.128*** (0.0206)	0.141*** (0.0151)	0.130*** (0.0327)
Heritage Lover	0.121*** (0.0121)	0.102*** (0.0120)	0.105*** (0.0142)	0.101*** (0.0133)	0.118*** (0.0222)
Cultural Omnivore	0.121*** (0.0158)	0.111*** (0.0148)	0.116*** (0.0173)	0.103*** (0.0172)	0.152*** (0.0276)
Voracious Active	0.109*** (0.0218)	0.110*** (0.0207)	0.134*** (0.0248)	0.101*** (0.0301)	0.0522 (0.0571)
Male	-0.0411*** (0.00861)	-0.0218*** (0.00825)	-0.0295*** (0.00939)	-0.00205 (0.00814)	-0.0373** (0.0146)
Age: 25-44	-0.0295** (0.0138)	-0.00861 (0.0142)	-0.0488*** (0.0123)	-0.0731*** (0.00906)	-0.0916*** (0.0166)
Age: 45-64	-0.0970*** (0.0151)	-0.0642*** (0.0156)	-0.140*** (0.0143)	-0.176*** (0.0108)	-0.202*** (0.0185)
Age: >=65	-0.140*** (0.0180)	-0.108*** (0.0184)	-0.198*** (0.0184)	-0.265*** (0.0154)	-0.287*** (0.0255)
Employed	0.0778*** (0.0159)	0.0727*** (0.0155)	0.0721*** (0.0171)	0.0945*** (0.0125)	0.114*** (0.0223)
Out-of-Labor-Force	0.0373** (0.0177)	0.0471*** (0.0171)	0.0399** (0.0190)	0.00978 (0.0131)	0.00863 (0.0230)
Married/Cohabitant	0.0143 (0.0131)	0.00855 (0.0123)	0.0504*** (0.0149)	0.0277** (0.0130)	0.0421 (0.0225)
Separated/Divorced	-0.00415 (0.0171)	-0.0124 (0.0177)	0.00835 (0.0196)	6.90e-05 (0.0184)	0.0377 (0.0301)
Widow	-0.0250 (0.0198)	-0.0445** (0.0201)	-0.0106 (0.0217)	-0.0294 (0.0186)	-0.0247 (0.0338)
Child	0.0282*** (0.0102)	0.00598 (0.00967)	0.00865 (0.0110)	0.0161 (0.00943)	0.0172 (0.0170)
Secondary School	0.0335** (0.0142)	0.0445*** (0.0146)	0.0554*** (0.0167)	0.0562*** (0.0130)	0.0187 (0.0223)
Diploma	0.0316** (0.0150)	0.0303** (0.0153)	0.0571*** (0.0176)	0.0774*** (0.0134)	0.0508** (0.0236)
Degree/Phd	0.0388** (0.0184)	0.0603*** (0.0180)	0.0887*** (0.0198)	0.0950*** (0.0163)	0.0864*** (0.0283)
Regional cultural supply covariates	YES	YES	YES	YES	YES
Observations	8,012	7,662	6,964	10,596	3,682

Note: Marginal effects displayed for probit models. The baseline category is Culturally Inactive.

Table A9 – Probit estimations of the determinants of Friends Satisfaction, heterogeneity across the macro area

DV:Friends Satisfaction	(1) North-West	(2) North-East	(3) Center	(4) South	(5) Islands
Lowbrow Univore	0.107*** (0.0121)	0.0874*** (0.0122)	0.0916*** (0.0132)	0.127*** (0.0102)	0.0836*** (0.0165)
Lowbrow Active	0.162*** (0.0166)	0.123*** (0.0165)	0.140*** (0.0185)	0.191*** (0.0125)	0.128*** (0.0248)
Heritage Lover	0.120*** (0.0125)	0.0915*** (0.0126)	0.0899*** (0.0146)	0.151*** (0.0122)	0.131*** (0.0181)
Cultural Omnivore	0.164*** (0.0138)	0.127*** (0.0141)	0.148*** (0.0151)	0.167*** (0.0140)	0.129*** (0.0227)
Voracious Active	0.171*** (0.0177)	0.152*** (0.0174)	0.127*** (0.0239)	0.157*** (0.0252)	0.0811 (0.0453)
Male	0.00424 (0.00830)	-0.00328 (0.00822)	-0.0180** (0.00917)	-0.0256*** (0.00781)	-0.0143 (0.0128)
Age: 25-44	-0.0153 (0.0175)	-0.0341** (0.0159)	-0.0115 (0.0180)	-0.0553*** (0.0127)	-0.0649*** (0.0176)
Age: 45-64	-0.0218 (0.0180)	-0.0330** (0.0162)	-0.0528*** (0.0193)	-0.0806*** (0.0136)	-0.123*** (0.0191)
Age: >=65	-0.0286 (0.0195)	-0.0502*** (0.0181)	-0.0547*** (0.0212)	-0.126*** (0.0167)	-0.132*** (0.0234)
Employed	0.0310** (0.0156)	0.0496*** (0.0155)	0.0527*** (0.0163)	0.0192 (0.0120)	0.0211 (0.0192)
Out-of-Labor-Force	0.0109 (0.0174)	0.0329 (0.0172)	0.0500*** (0.0182)	0.0242 (0.0127)	-0.0249 (0.0203)
Married/Cohabitant	0.0178 (0.0124)	0.0319*** (0.0123)	0.0337** (0.0138)	0.0353*** (0.0125)	0.0837*** (0.0202)
Separated/Divorced	-0.0189 (0.0172)	0.000645 (0.0180)	-0.0298 (0.0194)	-0.0191 (0.0184)	0.0294 (0.0283)
Widow	-0.0365 (0.0203)	-0.0353 (0.0211)	-0.0691*** (0.0229)	-0.0137 (0.0179)	-0.0320 (0.0331)
Child	-0.00930 (0.00983)	-0.0174 (0.00966)	-0.0101 (0.0108)	-0.00526 (0.00920)	-0.00997 (0.0151)
Secondary School	0.0219 (0.0135)	0.0307** (0.0145)	0.0394** (0.0158)	0.0349*** (0.0120)	0.0115 (0.0196)
Diploma	0.00626 (0.0144)	0.0215 (0.0151)	0.0235 (0.0168)	0.0301** (0.0126)	0.0293 (0.0208)
Degree/Phd	0.00987 (0.0178)	0.00159 (0.0189)	0.0163 (0.0200)	0.0129 (0.0165)	0.0379 (0.0259)
Regional cultural supply covariates	YES	YES	YES	YES	YES
Observations	8,013	7,644	6,963	10,592	3,683

Note: Marginal effects displayed for probit models. The baseline category is Culturally Inactive.



Table A10 – Probit estimations of the determinants of Leisure Satisfaction, heterogeneity across the macro area

DV: Leisure Satisfaction	(1) North-West	(2) North-East	(3) Center	(4) South	(5) Islands
Lowbrow Univore	0.103*** (0.0148)	0.0753*** (0.0153)	0.0858*** (0.0163)	0.0939*** (0.0128)	0.0925*** (0.0213)
Lowbrow Active	0.222*** (0.0216)	0.114*** (0.0229)	0.161*** (0.0246)	0.177*** (0.0189)	0.137*** (0.0363)
Heritage Lover	0.114*** (0.0157)	0.0833*** (0.0160)	0.0829*** (0.0182)	0.107*** (0.0169)	0.0966*** (0.0273)
Cultural Omnivore	0.172*** (0.0190)	0.150*** (0.0184)	0.163*** (0.0202)	0.141*** (0.0200)	0.151*** (0.0327)
Voracious Active	0.194*** (0.0263)	0.155*** (0.0278)	0.187*** (0.0309)	0.167*** (0.0374)	0.182*** (0.0547)
Male	-0.0433*** (0.0108)	-0.0361*** (0.0109)	-0.0462*** (0.0118)	-0.0590*** (0.0102)	-0.0550*** (0.0173)
Age: 25-44	-0.0247 (0.0233)	-0.0497** (0.0231)	-0.0647*** (0.0248)	-0.110*** (0.0192)	-0.0768** (0.0334)
Age: 45-64	-0.0397 (0.0241)	-0.0340 (0.0237)	-0.0809*** (0.0258)	-0.133*** (0.0205)	-0.104*** (0.0351)
Age: >=65	-0.0198 (0.0260)	0.00744 (0.0253)	-0.0337 (0.0277)	-0.0868*** (0.0230)	-0.0214 (0.0388)
Employed	-0.0596*** (0.0205)	-0.0419 (0.0214)	-0.0841*** (0.0219)	-0.101*** (0.0153)	-0.110*** (0.0252)
Out-of-Labor-Force	0.0869*** (0.0232)	0.0669*** (0.0238)	0.0477 (0.0245)	0.0134 (0.0166)	0.0118 (0.0272)
Married/Cohabitant	-0.0108 (0.0157)	0.00287 (0.0159)	0.00287 (0.0176)	-0.000776 (0.0161)	0.0321 (0.0262)
Separated/Divorced	-0.0480** (0.0211)	-0.000181 (0.0223)	-0.0568** (0.0234)	-0.0450** (0.0223)	-0.0144 (0.0361)
Widow	-0.0426 (0.0254)	-0.0533** (0.0271)	-0.0632** (0.0273)	-0.0472** (0.0233)	-0.0608 (0.0408)
Child	-0.0301** (0.0127)	-0.0872*** (0.0127)	-0.0325** (0.0140)	-0.0598*** (0.0124)	-0.0956*** (0.0208)
Secondary School	0.0231 (0.0191)	0.0191 (0.0205)	0.0230 (0.0214)	0.0472*** (0.0168)	0.0149 (0.0280)
Diploma	0.0423** (0.0197)	0.0186 (0.0210)	0.0206 (0.0222)	0.0641*** (0.0172)	0.0338 (0.0297)
Degree/Phd	0.0282 (0.0235)	0.0230 (0.0246)	0.0153 (0.0258)	0.0914*** (0.0207)	0.0698** (0.0356)
Regional cultural supply covariates	YES	YES	YES	YES	YES
Observations	8,012	7,643	6,958	10,578	3,674

Note: Marginal effects displayed for probit models. The baseline category is Culturally Inactive.