

# Young People's Leisure Patterns: Testing the Life Cycle Hypothesis

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January 2015

## Abstract

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## 1 Introduction

### 1.1 The stratification of leisure

Since Bourdieu (1979) groundbreaking monograph, *La Distinction*, published in English in 1984, the sociology of culture has been interested in interpreting the relationship between the social space and the space of cultural habits. Bourdieu (1979/1984) has developed a social theory of cultural practices grounded on the data he gathered about the French in the 70s. His theory proposed the existence of an homology between the social and the cultural spaces that describe individuals lifestyles. Making use of Geometrical Data Analysis methods, concretely multiple correspondence analysis, MCA, he developed a cultural space of French lifestyles. He found the space to be structured by three dimensions that he named habitus. When he plotted the indicators of social position on the cultural space, he found that the indicators of capital composition (economic versus cultural) were associated to the first dimension; the indicators capital volume, to the second dimension—both dimensions formed the structural approach to social life—, and the indicators of life trajectories were associated to the third dimension—signaling the individual's capacity of agency. He concluded that the cultural lifestyles of the French were related to their social position through their habitus—cognitive mechanisms of appreciation and action. The habitus, them, were hold by individuals only as long as they would hold the social position associated to the habitus. As a consequence, individuals that would change their social position would, as well, change their habitus. To what extent? According to Bourdieu's theory, it depends on individuals' social trajectories (the transition from one social position to another).

This homology between the social and the cultural spaces through the habitus has been interpreted as evidence of the Highbrow/popular culture distinction among privileged classes and the disadvantaged. Then, positions in the cultural space have been interpreted as cultural expressions of social positions, as expressions of the value of individuals occupying social positions, of distinctiveness or of necessity, depending on the social position. Individuals in privileged social positions use cultural differences as expressions of differences in social value, as a legitimization of a ‘natural’, even though social, hierarchy of social value. This process of legitimization has been called symbolic violence, and it is based on markers of cultural capital, as the academic qualifications provided by the educational system, among others. In consequence, Bourdieu (1984) has suggested that social mobility and social reproduction is mediated by the school based system of accreditation (Daenekindt & Roose, 2014; Emmison, 2003; Nagel, 2010; Pugh, 2011).

However, these univorous patterns of tastes and behaviors—highbrow for the privileged, popular taste for the disadvantaged—have been challenged since Peterson showed that individuals occupying privileged social positions exhibited an omnivorous pattern of musical tastes (Richard A Peterson & Simkus, 1992). Peterson proposed that even though he had found evidence in favor of the homology thesis, the relationship between the social space and the space of cultural lifestyles showed an omnivorous pattern of tastes for the privileged social positions, and two univorous patterns for the other people—whether the univorous pattern was formed of a highbrow taste or a popular one, depended on the social position held by the individuals. Peterson thesis found evidence in later works grounded on US data or non-US data (see Richard A Peterson, 2004 for a review.).

Since then, research has focused its attention on the relations of social class indicators with the space of culture. Although Bourdieu’s homology thesis has been contested (Chan & Goldthorpe 2007a,b ???) due to differences in research methodologies (Richard A. Peterson, 2007; Wuggenig, 2007) or in the meaning of cultural indicators used in research (Bennett et al., 2008), findings describe Bourdieu’s social homology, but with an omnivorous/univorous pattern: the indicators of a privileged social position are positively related to the established taste (Reeves, 2014), but when the indicator of age is introduced in the analysis, the latter is positively related to contemporary taste (Coulangeon, 2003; Eijck, 2001; López-Sintas & García-Álvarez, 2002a, 2002b). In fact findings suggest that the composition and volume of capital as well as age are the main structuring factors of the cultural space. Even more findings suggest that age structure cultural tastes orthogonally to the indicators of capital (López-Sintas, Cebollada, Filimon, & Gharhaman, 2014; Tampubolon, 2008b, 2008a). Similar findings have been reported for different cultural spaces and countries (Purhonen, Gronow, & Rahkonen, 2009; M. Savage, 2006).

Even though researchers do not agree about the right indicators for testing the homology hypothesis (Richard A Peterson, 2004), most research have found

evidence about the omnivorous thesis using different sets of cultural indicators. Current research designs have used indicators of both, participation in the arts as well as cultural tastes in contemporary Britain, UK (Roux, Rouanet, Savage, & Warde, 2008) and in Flanders, Belgium (Roose, Eijck, & Lievens, 2012). Their findings show that the space of culture is structured first by a predisposition towards cultural engagement–involvement versus disengagement–, and second by cultural taste–a taste for the established versus and emergent taste. When analyzing the correlation among the indicators of social position and the cultural space, they found that cultural engagement was related to the indicators of economic and cultural capital, and the cultural taste to age. The Omnivorous pattern is usually associated to young and privileged individuals.

Research, however, implicitly acknowledges that the effect of a social position on the habitus of individuals holding it does not interact with age. Yet, Bourdieu (1984) warns us about the differences concerning the biological and social age. He suggests that some individuals get early into the labor market occupying, then, an underprivileged social position (in terms of capital's volume and composition) and developing the habitus of an older individual. The *social age hypothesis*, then, suggests that the effect of the biological age on the young individual's patterns of behavior depends on its social position, his and his parents. That is, individuals occupy social positions defined by a set of indicators: a young individual holding a privileged social position will develop a habitus (a long adolescence, for instance) different from the habitus of a young individual holding an underprivileged position (almost without adolescence). To test the *biological age hypothesis* against the *social age hypothesis*, we need to find evidence that the relationship between age and young people leisure patterns is mediated by their social position.

Probably, Bourdieu argues, the fact that young people from underprivileged social positions have increased their participation in secondary education has produced the illusion that young people form an homogeneous social category. In France, in 1951 only 5,3% of the young people that could hold a high secondary diploma held it, but in 2001 it was the 66% (Hersent, 2003)(Hersent 2003:15 ???). As young people remain more time in the educational system, and living at their parents' home, it is more probable that underprivileged individuals will discover the temporal status of a long adolescence and will develop an habitus similar to the habitus of other young people holding privileged social positions. This fact produces the illusion of young people being homogeneous. If Bourdieu (1984) proposition is true, then we should find that the lifestyles of young individuals will differ only after certain age, but be similar below it. In fact, Zeijl, Bois-Reymond, & Poel (2001), when studying the leisure patterns of 10-15 year old preadolescents, found that the indicator of social class was not related to the space of leisure activities. However, social class was related to the number of leisure appointments during week and weekend and to the organized leisure activities young people were involved in. Roberts et al. (2009 ???) also found that the differences in leisure trajectories of young people in the South Caucasus from age 16 to 30 were widening due to the different social class

trajectories they followed. Then, to find support to the *social age hypothesis*, we should find not only a relationship between young people patterns of leisure and age but also an interaction between age and young individuals social position. Not finding a meaningful interaction, the data would support the biological age hypothesis instead the social one.

Genre is another social category that seems to structure the space of culture, but findings are not convergent. Depending on the space of culture considered as well as the social context, findings suggest that women have developed a cultural taste that presupposes them towards the most social and established art and culture (Organization, 2011). That is, research has shown that leisure activities are gendered (Lamont and Fournier 1992;???) (Bryson, 1997; Eijck, 1997; Katz-Gerro & Shavit, 1998; Lamont, Schmalzbauer, Waller, & Weber, 1996). However, the findings are not generalizable due to variations in social and cultural spaces (López-Sintas & García Álvarez 2002???). Notwithstanding, the development of a gendered cultural taste would depend on the specialization of roles developed in traditional social settings: home for women, work for men. To find support to the specialization of gender roles hypothesis women have to be associated to a more social and legitimate art pattern of leisure than men. On the other hand, the reproduction of the specialization of gendered roles is more often observed among underprivileged families. In consequence, we expect that the specialization of gender roles will be less manifest among young individuals holding privileged social positions.

When researching the leisure of young people in an autonomous region as Catalonia with two local languages (Catalan as well as Spanish) and a quarter of its young people speaking another language at home, it seems necessary to take into account the relations of the language spoken at home with the leisure patterns of young people. Bourdieu (1984) has introduced the concept of the linguistic habitus that differs from the Chomskyan linguistic competence. The former is not the simple production of discourse, but a discourse that fits a particular context—a market or a field—that is socially acceptable according to the rules that organize interaction among individuals in a social context. The theory suggests that the linguistic habitus has a social value when language is used properly—with linguistic and social competence—, and then, and only then, the linguistic and social competence is transformed into what Bourdieu (1984) calls linguistic capital, and signals the social value of the persons that exhibit linguistic and social competence.

Young people develop at home the linguistic habitus needed to be socially competent in their social interactions outside home. Speaking the proper local language at home, young people can naturally associate the right linguistic competences to the proper social context. How competent they will be transforming their language competence into linguistic capital will depend on the variety of social interaction contexts they experiment during their childhood, and this, among other factors, depends on the social position of their parents. To find support to Bourdieu's linguistic capital hypothesis we should find a relationship between

young people's patterns of leisure and the language spoken at home. Whether it is distributed equally among all social positions, it is an empirical matter.

## 2 Research Design

### 2.1 Data

The data came from the 2012 Catalan Young People Survey, EJC12. It was a stratified two-stage sample: in the first stage municipalities were chosen, in the second, young people. Finally 3002 individuals, aged from 15 to 34, were personally interviewed at their homes, and the survey started on April 3rd , until August, 3rd (see Serracant, 2013). Individuals were asked about their sociodemographic indicators as well as about their parents: education, labour activity, mobility, housing, leisure, social policy, language, health, and economic situation.

### 2.2 Indicators of the leisure space

Young people interviewed were asked about the kind of leisure activities they normally do. Individuals were given a list of activities and they just had to choose among the options. The following elections were possible: go clubbing (*gcl*), reading novels (*rnv*), playing sports (*spt*), nightlife (*nlf*), travelling outside Catalonia (*toc*), hiking tour (*hkt*), playing video gamers (*pvg*), watching TV (*tv*), attending political events (*ape*), attending religious services (*ars*), going to the movies (*gmv*), going to the theatre (*gth*), going to dance, performances, opera or classical music (*gdoc*), going to concerts of modern music (*gcm*), studying (*std*), going to museums and exhibitions (*gmu*), being with friends on the street (*wfs*), staying with friends (*swf*), shopping (*shp*), walking (*wal*), reading traditional daily newspaper (*tnp*), reading digital daily paper (*dnp*), reading blogs (*rbl*), sensing and receiving e-mails (*email*), chanting (*chat*), using social networks (*snw*), watching internet media (*wim*), playing online games (*pog*), downloading movies (*dmv*), downloading music (*dms*), downloading games (*dvg*), downloading software (*dsw*). Descriptor are provided in Table XX.

### 2.3 Social indicators

As indicators of social class we will use two indicators of education provided by the survey, the respondents' education level as well as their's father education level. In the former case, education levels was recorded into 4 categories: less than compulsory low secondary (*<ls*), compulsory low secondary (*ls*), high secondary (*hs*), university (*college*). Parent's educations, instead, was coded as compulsory low education or less (*ls*), secondary education (*hs*), and university

(*college*). Respondent's occupation was recorded into managers (*managers*), technicians and professionals (*technicians*), occupations requiring an average qualification (*avequal*), occupations without requiring a qualification (*lowqual*).

Language spoken at home was recorded into four categories: Catalan as well as Spanish (*CatSp*), only Spanish (*Sp*), other languages (*other*). Age was recorded into four categories: 15-19 years (*a1*), 20-24 years (*a2*), 25-29 years (*a3*), 30-34 years (*a4*). Genre was recorded as male (*m*) & female (*f*).

Two indicators are used as controls: Region and city size. Region was recorded into 7 categories: Barcelona's metropolitan area (*metropolitan*), counties of Girona (*girona*), counties of Tarragona (*tarragona*), counties of *Terres de l'ebre* (*ebre*), counties of *Ponent and Alt Pirineu and Aran* (*altPririneu*), central counties *central*, *Penedès* (*penedes*). City size was recorded into four categories: less than 2000 inhabitants (*s2*), between 2001-10000 inhabitants, (*s10*), between 100001 and 50,000 (*s50*), more than 50,000, (*s50+*)

## 2.4 Analysis

In order to test the hypotheses developed in the theoretical section, first we had to reduce the 32 leisure indicators into a few scales of leisure that would structure the space of leisure of Spanish young people. These scales of leisure are a measurement of the leisure habitus of our sample of young people, and would provide us with a set of scales with the proper properties for clustering individuals according to their patterns of leisure.

### 2.4.1 Scales of leisure

To obtain a measurement of individuals leisure habitus we used multiple correspondence analysis, MCA, a procedure classified in the family of Geometric Data Analysis (GDA). MCA not only help us to reduce the dimensionality of the set of 32 leisure indicators but also the scales are the best measurement of leisure habitus (see Greenacre, 1993, @nishisato\_elements\_1994). MCA (Greenacre, 1984, 1993) – also known as homogeneity analysis, HA (Nishisato, 1994) – looks for the category scale values which lead to respondents' scores maximally correlated with their scale values. This procedure allows us not only to reduce the 32 initial indicators, but also to interpret the scales as the measurement of leisure habits that explain the association we observe between the leisure indicators. Furthermore, with the scales we can form a space of leisure and explore their association with the original leisure indicators as well as with the position of individuals in the space according to their score in the scale. These scales of leisure have the optimal properties for clustering individuals according to their habits of leisure—uncorrelated and standardized.

#### **2.4.2 Clustering individuals according to their patterns of leisure**

After preprocessing categorical indicators with MCA and finding the individuals' scores in the scales of leisure we proceeded to cluster individuals according to their patterns of leisure. This is a standard procedure for analyzing categorical indicators (Lebart, Morineau, & Warwick, 1984). For clustering individuals Lebart et al. suggest the complementary use of two numerical algorithms, first an agglomerative hierarchical clustering (as an aid to judge the sample heterogeneity and to decide the number of clusters into which partition the sample) and then a divisive algorithm for optimally dividing the sample into  $k$  clusters. However numerical algorithms usually fail to recover the actual patterns of behavior when the clusters do not have an spherical shape. For that reason we have used a mixture model strategy for clustering individuals that takes into account the actual shape of clusters (Chris Fraley & Raftery, 2002).

#### **2.4.3 Testing hypothesis**

Finally, to test the hypotheses we used a model from the multinomial logit family (Venables & Ripley, 2002). We model the association between the set of pattern of leisure and the set of social position indicators as a multinomial model where the deterministic relationship is modeled according to a vector of social position indicators and a vector of parameters. The stochastic component, is modeled as an additive component that is identically and independently distributed according to the double exponential distribution. Finally, the probability of classifying an individual in cluster  $k$  given his or her social position indicators is given by a multinomial logit model (Long, 1997).

#### **2.4.4 Statistical computation**

The models have been estimated with *R: A Language and Environment for Statistical Computing* (R Core Team, 2014). Specifically the MCA scales of leisure were estimated with the package *ade4* (Dray & Dufour, 2007). Individuals were clustered according to their leisure patterns discovered with the *mclust* package that implements a model-based clustering procedure based on finite normal mixture modeling (C. Fraley, Raftery, Murphy, & Scrucca, 2012). Finally to test the hypothesis we used a multinomial logit model implemented in the *nnet* package (Venables & Ripley, 2002).

## 3 Findings

### 3.1 Leisure scales

The MCA conducted on the set of leisure indicators suggests that the first scale or axis (interpreted as a scale of leisure habits) explained the 59.8 % of the variation; the second, the 13.7%; and the third, the 4.1%; that is, the 77,6 % of the variation—we have adjusted the variation explained as Greenacre (1993) suggests. The decision of how many scales to retain for analysis depends on the scale's contribution to the variance of the sample and on how easy it is to interpret the scale. In **Figure 1**, upper-left panel, it is easy to see that from the fourth scale on the increment in the variance explained was small and the scales were difficult to interpret. For that reason we have retained the first three scales or plot axes for forming the space of leisure and, later, clustering individuals. The meaning of the leisure scales can be judge looking at their association with the original 32 leisure indicators.

#### [Figure 1: The scales of leisure]

To interpret the three scales of leisure as habits of leisure activities we have two aids: (1) the space of leisure formed by the three scales that play the role of axes in the two dimensional spaces shown in **Figure 1**, and (2) the contribution of each original indicator to the variance explained by each scale of leisure (**Table A1**). Both ways of interpretation should lead to the same meaning.

In the space of leisure habitus the indicators nearer to the axes and placed further from the origin are the indicators that make a significant contribution to the axis variation they are nearest to. Unfortunately the visual inspection of the space of leisure is not clear enough when the indicators superpose—happens when one have many indicators—, for that reason we will make a complementary use of both aids. But first let's see what the space of leisure tells us.

Specifically, the first axis separates the negative answers to the indicators of leisure (see the upper-right panel of **Figure 1**) from positive answers (to the right in that panel). The first scale captures a generic pattern of leisure activity (the indicators of labels are explained in the following paragraphs and in the appendix, **Table A1**). On the other hand, the second axis separates the indicators of culture activity (up in the same panel) from the other indicators of leisure activities (down). The third axis instead separates the indicators of social leisure (see down-left and down-right panels) from other leisure activities conducted at home, entertainment, especially digital leisure (see down-right panel). In summary, the first dimension is interpreted as the *scale of leisure activity*, the second, the *scale of cultural activity*, and the third separates the non cultural activity into *social leisure* and *recreation activity* (mainly digital leisure).

The interpretation of the space of leisure is consistent with the analysis of the contribution of each indicator to the axes variation (**Table A1** in the Appendix).

Particularly, the indicators that make a contribution above the average and have a positive association to the first axis are the following activities: go clubbing (*gcl*) (in Table A1 the Y symbol means that the activity is done frequently or habitually), nightlife (*nlf*), going to the movies (*gmv*), going to concerts of modern music (*gcm*), being with friends on the street (*wfs*), read blogs or websites (*rb1*), check email (*email*), download movies (*dmv*), download music (*dms*), download games (*dvg*) and download software (*dsw*); the indicators that contribute significantly with a negative association are the following: do not go out at night, not studying, not staying with friends in the street, staying with friends, not to reading blogs, do not reading e-mail, no chatting, no downloading movies, and not downloading music. In short, the first scale captures a generic pattern of leisure activity.

The indicators that contribute significantly to the variation of the second axis, with a positive association, are the ones related to the entertainment at home: Reading books (*rb1*), playing video games (*pvg*), playing online (*pog*), downloading music (*dms*) and video games (*dvg*); in the other direction, with a negative association, the indicators of cultural leisure outside home: going to the theatre (*gth*), going to dance performances, opera and classic music (*gdoc*), going to concerts modern music (*gcm*), going to museums and exhibitions (*gmu*), travelling outside Catalonia (*toc*), and hiking (*hkt*).

On the other hand, the indicators that contribute significantly to the third axis and are positively associated are the indicators related to the social and relational leisure activities: go clubbing (*gcl*), having a nightlife (*nlf*), being with friends in the street (*wfs*), and chatting (*chat*) on the Internet; negatively associated are the indicators of entertainment activities performed at home: playing with video consoles (*pvg*), reading the daily newspapers on the internet (*dnp*), playing online (*pog*), downloading movies (*dmv*), games (*dvg*), and software (*dsw*). That is, this axis separates social leisure activities from those performed for entertainment at home, especially the digital leisure activities.

### 3.2 Clustering individuals according to their leisure patterns

We modeled the sample of individuals as a multivariate normal mixture model with  $k$  components. By default the package *mclust* C. Fraley et al. (2012) estimates models with 9 components and 10 covariance structures and provides the BIC values for all models (see C. Fraley et al. (2012), pages 8 and 54 for further description). *Table 1* includes the BIC values for models with 1 to 9 clusters (see the rows) and each cluster is modeled with up to ten different covariance structures. In this case, the best model according to BIC is a 4 cluster model with ellipsoidal, but equal shape covariance, with 23 degrees of freedom, BIC -1073.205 (the maximum BIC is taken over all of the models and numbers of components considered).

[**Table 1** around here]

Once identified the individuals that form each cluster we can represent them in the space of leisure. *Figure 2* shows the position of individuals in the space of leisure and their classification in the four patterns of leisure, and *Table 2* shows the mean values of the three leisure scales in the four clusters. The biggest cluster, 1, is situated in the negative side of the space of leisure formed with the first two scales—less leisure activities than the mean individual and a little bit more cultural than the mean individual, even though with values near to zero, but in the positive side of the third scale, the social leisure, indicating that the individuals classified in this cluster only have a social leisure habit superior to the mean and a cultural habitus superior to the mean. We call it the *social pattern of leisure*. Individuals in cluster 2 are placed to the right of the first axis—more leisure activities than the mean individual, but to the left part of axis 2 and 3, indicating that they do leisure activities that are cultural and recreational at home. We call it the *cultural omnivorous leisure pattern*. Individuals in cluster 3 have the higher pattern of leisure activity that it is characterized by entertainment leisure activities. We call it the *entertainment pattern of leisure*. Finally individuals in cluster 4 do less leisure activity than the mean profile, but the activity they do is attending to religious services. We call it the *religious pattern of leisure*.

[**Table 2** around here]

In conclusion, the four patterns of leisure found suggest that a very large group, 46% of the population, has a social leisure pattern (go clubbing, playing sports, nightlife, attending religious services, studying, staying with friend in the street, staying with friends, shopping, walking, reading traditional newspaper, email, chatting, social networking, watching internet media). The second cluster of leisure has a cultural omnivorousness pattern: they do every thing except go clubbing, kicking, playing video games, watching TV, attending religious services, being with friends in the street, shopping, walking, chatting or playing online games. The third clusters has been named entertainment leisure pattern: go clubbing, sports, nightlife, playing video games, watching TV, going to the movies, with friend in the street, reading digital newspaper, reading blogs, playing online games, downloading everything. Finally, the fourth cluster has been named the religious pattern of leisure attending almost only to religious services.

[**Figure 2:** Clusters in the space of leisure habits]

To complete the description of the four patterns of leisure in **Figure 3** we present the mosaic plot of the cross section distribution of the leisure patterns by the six individuals' social categories. Mosaic plots (Friendly, 1994; Hartigan & Kleiner, 1984) are a graphical method for visualizing the association between two or more categories. The association between the patterns of leisure and the genre of the individuals suggests that women have greater changes of being found in the social and cultural patterns of leisure and men abound more in the recreational

pattern. According to the age, the chances of being classified in the religious cluster increases as individuals get older, and the chances of being classified in the recreational leisure pattern decreases as individuals get older, but the chances of being classified in the social and cultural clusters increases with age.

As far as the education is concerned, the chances of being classified in the religious pattern of leisure is reduced as individuals are better educated, but the chances of being classified in the other three patterns, increases with the educational level. The relation between the patterns of leisure and the occupation follows a pattern similar to the one exhibited by the education.

The language spoken at home is also related to the leisure patterns: the chances of being classified in the religious pattern of leisure increases as families spoke only Spanish or other foreign languages at home; Individuals living in families speaking both Catalan and Spanish languages at home are the ones with better chances of being classified in the cultural pattern of leisure. Finally the association between the patterns of leisure and parents' educations follows the pattern exhibited by respondents' education, but the relationship is strongest for parents holding a college education: they exhibit the greatest association with the social and cultural patterns of leisure.

[Figure 3: Description of Clusters]

### 3.3 Leisure patterns and explanatory variables

#### 3.3.1 Test of hypothesis

To gain a better knowledge of the leisure patterns' meaning we need to relate them to the explanatory variables in a way that could help us to test the hypothesis we have developed in the literature review. We have to relate the set of social indicators to the patterns of leisure found but in the way predicted by the hypothesis developed. The relationship between the patterns of leisure and the set of hypotheses is examined using a multinomial logistic model. **Table 3** shows the model selection process we followed to test the hypotheses. We first estimated a base model with no effects,  $M0$ , and tested it against a model that takes into account the city-size and region, the two control variables ( $M0b$ ). In *Table 3* the deviance is used to compare the two models with the likelihood ratio test, LR, and it suggests that the difference between the models' deviances is statistically meaningful—the p-value of the Chi-square distribution of LR statistic is less than 0.001 (however, the AIC statistic favors model  $M0$ ).

Against this model we tested the *biological age* and *gender hypotheses*, controlling for the effect of town-size and region, model  $M1$ . The indicators of age and gender are used to test the biological and gender hypotheses, respectively. The difference in models' deviances are statistically meaningful again—AIC statistic also favors model  $M1$ . Then we proceed to test model  $M1$  against model  $M2$  that incorporates the *social age hypothesis*; to test this hypothesis  $M2$  model

incorporates an interaction between biological age and an indicator of social position, concretely respondents' education. If we find evidence that favor *M2*, this would suggest that leisure patterns of behavior would be influenced by the biological age (if still statistically meaningful), as well as by the social position of individuals, and the evidence favors model *M2*. In model *M3* we introduced an interaction between gender and respondents' social position to test the *social gender hypothesis*, and the LR test as well as AIC statistic favor the *social gender hypothesis*. Finally, in order to test the *linguistic capital hypothesis* we introduced an interaction between the language used at home and an indicator of fathers' social position, educational level, in model *M4*. The evidence favors Model *M4*, suggesting that the impact of language on leisure patterns was mediated by the social position of parents.

[Table 3 around here]

### 3.3.2 Parameters

Table 4 describes the parameters for the final model, *M4*. Categorical variables are introduced in the model as dummy coding, in consequence we have to interpret parameters as variations in reference to the base category. As the parameters of a multinomial logistic model are expressed in relation to a based outcome, we have chosen the social leisure pattern (cluster 1) as the based outcome. Then the effect of a one-unit change in a concrete variable,  $X_j$ , will have to be interpreted as its impact compared to the base outcome, the social leisure pattern. As the relative probabilities of each pair of probabilities can be expressed as  $\frac{Y_i}{Y_{i'}} = \frac{p_i(X, B)}{p_{i'}(X, B)}$ , but  $B_j(i')$  is fixed to be zero in order to identify the model, then the relative probabilities due to a change of  $X_j$  by one unit are premultiplied by  $\frac{\exp(B_j(i))}{\exp(B_j(i'))} = \exp(B_j(i) - B_j(i'))$ , however as  $B_j(i')$  is zero to be able to identify the model, then the relative probabilities,  $\frac{p_i(X, B)}{p_{i'}(X, B)}$ , will change by  $\exp(B_j(i))$ .

Regression Results M4

### 3.3.3 The biological age hypothesis versus the social age hypothesis

The final model suggest that the *biological age hypothesis* finds little evidence: the main effect of age is not statistically meaningful, so individuals could be classify in any leisure pattern irrespective of the age, even though older individuals that are more probable to be classified in cluster 4 (*religious*) than in cluster 3 (*entertainment*). Education, instead, is associated to the social and cultural leisure patterns as shown in *Figure 3*. The interaction between age and education level apports evidence that favor the *social age hypothesis*. The capacity of age to classify individuals in the four leisure patterns depends on individuals' educational level: as the educational level gets higher, the variation in probabilities of being

classified in any cluster respect to being classified in the cluster of reference (*social*) is positive, and increases as individuals enjoy a high educational level. The impact is highest for the odds of individuals classified in the cultural omnivorous pattern.

*Social gender hypothesis.* compared to women, men are less probable to be classified in the entertainment and religious patterns of leisure, but the classification in patterns also depends on the educational level of individuals. That is, when taking into account educational level gender differences are reduced in the case of the religious patterns, and erased or even reversed for being classified in the entertainment leisure pattern.

*Linguistic capital hypothesis.* The main effects of language does not seem to influence the probability of being classified in any pattern of leisure, but parents education reduces the chances of being classified in the entertainment and religious leisure patterns in reference to the social pattern of leisure. However, for families speaking other languages at home, parents' college education reduces the probability of being classified in the cultural and in the social and pattern. This fits the association exhibit in *Figure 3*.

## 4 Discussion

Leisure activities conducted by young people revealed structure similar to the structure reported by Roux et al. (2008) and Roose et al. (2012) when conducting research with a broad number of leisure indicators. That is, data shows first an habitus of conducting leisure activities, then an habitus of conducting cultural activities, and the third habitus classifies the non cultural activities into social and entertainment activities.

According to the three habitus individuals can be classified as having a social, cultural & omnivorous, entertainment or religious leisure pattern. The religious leisure pattern shows a below the average patterns of conducting leisure activities, except for attending to religious services. This habitus of individuals hardly doing leisure activities has been found in many pieces of research as well as the cultural and omnivorous pattern [López-Sintas & García-Álvarez (2006); Reeves (2014); ] (Chan & Goldthorpe 2007a and b;??? van Rees et al. 1999;??? López & García 2002 ???, 2006; Sintas & Álvarez 2004; Reeves 2014). The other two patterns of leisure, social and entertainment are more specific of the leisure patterns of young people.

Young people leisure patterns are socially structured: the main respondents educations as well as parents education are statistically meaningful, but age does not structure young people leisure patterns. This finding qualifies the findings reported so far that suggest that not only cultural capital and age are the main structuring factor of the space of practices, but that age stratifies oractives orthogonally to capital [Tampubolon (2008a); Tampubolon (2008b); Purhonen

et al. (2009); López-Sintas et al. (2014); M. Savage (2006)). As Bourdieu (1984) has suggested, young people apparently form an homogeneous category: biological age does not predict young people pattern of leisure.

Bourdieu's social age hypothesis, instead, explains the differences in the chances of being classified in the four patterns of leisure. That is, the relation of respondents' biological age with respondents' leisure patterns is mediated by their social position: The effect of education on the chances of being classified in the social and cultural-omnivorous patterns of leisure are reduced as individuals get older, but still are meaningful. In other words, the chances of being classified in the religious pattern of leisure increases.

The social gender hypothesis also find support. Even though the main effect of genre is statistically meaningful and men are positively related to the entertainment and social patterns of leisure, the main effect of genre is reduced or even reduced for the pattern of entertainment. This suggests that the leisure pattern of men and women are socially reproduced, that traditional families hold underprivileged social positions that developed a gendered pattern of leisure activities; modern families, in opposition, holding privileged social positions do not.

A sample with speaking so many language at home has given us the opportunity to test Bourdieu's linguistic capital hypothesis. The main effect of language suggests that speaking at home other foreign languages increases the probability of being classified in the religious pattern of leisure; but its interaction with parents' educational level reduces the probability of being classified in the religious and cultural pattern individuals whose parents have a college degree.

Our findings have theoretical and methodological implications. The biological age does not structure leisure practices orthogonally to social position. Although it seems that young people are an homogeneous social category, they aren't, the effect of biological age on social practices depends on individuals social position. Methodologically the findings suggests that when researching the structure of leisure practices of a sample with the complete social distribution of the biological age, we should test the mediation effect of individual social position on the leisure practices of each biological age.

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