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in the United States**

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# **Gender and Highbrow Cultural Participation in the United States\***

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## **Abstract**

The literature on cultural choice largely focuses on the influence of socioeconomic background upon aesthetic tastes and cultural consumption. However, empirical analyses consistently report that gender is an essential determinant of highbrow cultural participation. In particular, women are considerably and significantly more likely than men to participate in high-status cultural activities.

Using recent data on the United States (Survey of Public Participation in the Arts 2008), this research integrates several explanations of the gender gap in highbrow cultural participation. A negative binomial model explores the effect of 1) early socialization in the arts and family background 2) education 3) differential involvement by gender in the labor force; and 4) the influence of marriage, on women's and men's cultural participation. A disaggregated analysis by age groups indicates that early socialization in the arts completely accounts for women's higher cultural consumption in younger age groups and that education increases men's participation in the arts more than women's for oldest respondents. These findings do not support the idea that the gendered division of labor on highbrow culture has disappeared for younger respondents, but delineate instead how gendered patterns of participation in the arts are mediated by broad transformations in the educational regime in the United States.

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## **Introduction**

The literature on cultural choice mostly focuses on the influence of class and status background upon aesthetic tastes and cultural participation. However, one of the most consistent findings in empirical research on cultural consumption is that gender is an essential determinant of cultural participation. More specifically, women participate more than men in high status cultural activities. Women are more likely than men to read fiction (Tepper 2000, Douglas 1980) but also to go to art museums and to attend classical concerts, opera concerts, live plays, and dance performances (Lizardo 2006, Bihagen and Katz-Gerro 2000, Dumais 2002, DiMaggio and Mohr 1985, DiMaggio 1982, Robinson 1993, Cheerbo and Peters 1995). However, research on the determinants of the gender gap in highbrow culture remains scarce. Indeed, as DiMaggio notes, “The relative neglect of gender has been something of an embarrassment to research on cultural capital” (DiMaggio 2004: 99).

Using recent data on the United States (Survey of Public Participation in the Arts 2008), my research integrates several explanations of the gender gap in highbrow cultural participation: 1) early socialization in the arts and family background 2) education 3) differential involvement by gender in the labor force; and 4) the influence of marriage, on women’s and men’s cultural participation. I find two main results. First, early socialization in the arts is the most relevant explanation of women’s higher participation in high culture for the younger age groups (less than 55 years old): differences in early socialization in the arts between girls and boys completely account for the gender gap in cultural participation for these respondents. For reasons I shall explain, I believe that this finding reflects more of a cohort change than an age effect. Second, education has a negative influence on the gender gap in high culture for the oldest age group (55 years old and more): as educational attainment increases, the difference between women’s and men’s participation in the arts decreases. These results, taken together, do not support the idea that the gendered division of labor on

highbrow culture has come to an end for younger cohorts. They indicate that the differences between men's and women's arts participation, both within and between cohorts, are mediated by broad changes in the educational regime (including both formal education and extra-curricular activities) in the United States.

This paper is organized as follows. First, I review the literature on gender and highbrow cultural choice. I present several hypotheses that have been offered to explain the gender gap in cultural consumption. Second, I describe the source of data and present measures and methods. Third, I put the hypotheses to an empirical test, and further specify them in order to take age groups into account. I conclude with a discussion of the results.

## **1. Literature review**

Why do women participate more than men in time-consuming highbrow cultural activities? The literature emphasizes four areas of investigation for explaining the gender gap in highbrow cultural participation: gendered stereotypes on high culture in middle and upper-middle class families leading to different patterns of socialization in the arts for girls and boys; the structure of employment and the workplace culture; the influence of education and socioeconomic status; and marital status and spousal influence. These arguments are not mutually exclusive. Rather, most of the processes delineated below can be combined in explaining why women participate more than men in highbrow culture.

### **1.1 Separate spheres, early socialization, and socioeconomic background**

Scholars have emphasized the role of societal views of high status culture and childhood socialization in explaining the gender gap in arts consumption. High culture is widely seen as a feminine realm. Historians trace the elective affinities between women's fiction reading and the rise of the separate spheres ideology among middle- and upper-class families to the 18<sup>th</sup> and 19<sup>th</sup> centuries (Gray 2000, Flint 1993, Douglas 1980). The separate

spheres ideology emphasizes the gendered distinction between public and private: in the economic and political realms men have a central role as citizens and workers, while the family is a “haven in a heartless world” where women take center stage and seem to have unlimited power over children’s education and the household<sup>1</sup>. This Victorian ideology was constructed in a specific historical context, with the development of the “male provider” myth, mostly in Anglo-American countries (Ferree 1990: 872, but see Gray 2000 for a recent analysis of the German case). The separate spheres argument may shed light on the gender gap in cultural participation. It mostly applies to fiction reading (Tepper 2000), because reading takes place within the home, but it can be extended to public performances of legitimate culture: symphony orchestras, operas, or museums soon became “civilized” and safe places where middle- and upper-middle class women could spend time (see DiMaggio 1982a, b on the emergence and development of the Boston Symphony Orchestra and Museum of Fine Arts). It is also sometimes alleged that the consumption of high culture items promotes psychological traits and behaviors that are widely seen as appropriate for women, such as rule-following behaviors, individualism and the avoidance of competition (Tepper 2000: 257).

How are these “separate spheres” reproduced from one generation to another? An explanation often advanced relies on early socialization in the arts. Arguments based on socialization stress that girls are particularly encouraged by their parents (and, most often, by their mothers) (Octobre 2005, Donnat 2001) to participate in cultural activities, because parents think that artistic and literary activities are appropriate for girls. In elite, upper-middle class, and middle-class families, parents play an essential role in influencing the artistic formation of their children: they gather information on arts classes, pay for the lessons and

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<sup>1</sup> The concept of “separate spheres” has different meanings for historians (see, for instance, Scott 1986), historians of culture (Douglas 1980) and for sociologists (Collins 1988, Ferree 1990). In history in particular, there has been a lot of debates on the status of the separate spheres, as an instrumental discourse or a prescriptive ideology (Kerber 1988). The definition provided above is the one I rely on when I use the concept throughout the paper.

drive children to their different after-school activities. Using American data, Dumais reports that girls outnumber boys in each one of the following activities: art lessons, music lessons, dance lessons, library visits, concerts, and visits to art museums (Dumais 2002: 52; see also Kaufman and Gabler 2004, DiMaggio 1982). This early socialization plays an important role in shaping the aesthetic tastes of women for the rest of their life. Bourdieu has emphasized the importance of early socialization in defining one's "habitus," a transferable system of cognitive and practical dispositions (Bourdieu 1984, Lizardo 2004) essential for appreciating art-work. Hence, women are more likely than men to appreciate and participate in highbrow cultural activities because they were more encouraged to do so as children. The socialization argument also helps to explain how the gender gap in cultural capital is reproduced from one generation to another.

In order to put this line of analysis to an empirical test, I argue that the gender gap in early arts lessons mirrors these broad cultural scripts: parents who think that being familiar with high culture is a specifically feminine asset will be more likely to register girls rather than boys for private arts lessons.

*Hypothesis 1: Women participate more than men in highbrow arts activities because they were more likely to take artistic lessons during their childhood.*

Historians have characterized the phenomenon of separate spheres as specific to elite, upper-middle and middle-class families (Kerber 1988). Therefore, we should expect it to be more important when family background is more prestigious. Researchers have highlighted how family background has an influence on participation in high culture that varies with gender. DiMaggio (1982) focuses on the complex relation between social background, gender, and cultural capital. He shows indeed that cultural capital has a larger impact on grades for women whose fathers were college graduates, a phenomenon he labels "cultural reproduction," while the impact of cultural capital on grades is more substantial for sons of

men in less educated groups, following a “cultural mobility” model (DiMaggio 1982: 196; see also Dumais 2002, Dumais 2006). Expanding this line of analysis, we should expect women to invest more in cultural capital as their family background is more prestigious.

*Hypothesis 2: The positive effect of parental education on arts participation is stronger for women than for men.*

### 1.2 The ambiguous effect of education

According to the literature, education could have either a positive or a negative influence on the gender gap in cultural participation.

First, in line with the analysis in terms of separate spheres and early socialization presented above, Collins (1988, 1992) highlights how the gendered division of status labor is socially stratified. While men specialize in the household’s productive responsibilities (the class sector, along Weberian lines), women are in charge of the family’s status work: they are “Goffmanian laborers” who take care of the household’s status needs and public self-presentation. According to Collins, this gendered status work differs depending on class background. In working class households, women’s status work deals with the cleanliness of the home, cooking, and consumerism. In high-status households, women participate in voluntary organizations and in highbrow cultural activities (Collins 1988: 35). Hence, the gender gap in highbrow cultural consumption should increase when education increases.

*Hypothesis 3a: The positive effect of education on arts participation is stronger for women than for men.*

Second, it is possible to argue on the contrary that when education increases the gender gap in cultural participation should decrease. Bourdieu has noted the strong relation between educational attainment and cultural capital (Bourdieu 1979). The concept of cultural

capital has been used in somewhat confusing and contradictory ways (Lamont and Lareau 1988). Here I rely on Mohr and DiMaggio's definition: "By cultural capital, we refer to prestigious tastes, objects, or styles validated by centers of cultural authority, which maintain and disseminate societal standards of value and serve collectively to clarify and periodically revise the cultural currency" (Mohr and DiMaggio 1995: 168). According to Bourdieu, educational attainment and cultural capital go hand in hand: cultural capital is necessary to succeed in the higher educational system, and conversely higher educational curricula promote a taste for high culture. Consequently, when education increases, participation in high culture should also increase. In addition, as noted above, because of the separate spheres phenomenon, women are already socialized during their childhood to appreciate high culture more than men. Therefore, the effect of education on participation in the arts should be less important for women than for men. In other words, the gender gap in high culture should be smaller for highly educated respondents, compared to other respondents.

*Hypothesis 3b: The positive effect of education on arts participation is stronger for men than for women.*

### 1.3 Employment status and workplace culture

A second direction of research on gender and cultural participation focuses on the effect of work in explaining why women participate more than men in highbrow cultural activities. Three main arguments emerge: the "time constraint" argument, the "cultural occupations" argument, and the "workplace culture" argument.

A first body of research explores the relation between work status and highbrow cultural consumption. It hypothesizes that women who work part-time or not at all will participate more in high status cultural activities than women who work full-time because they have more free time (Tepper 2000). Because women are more likely to work part-time or

to be unemployed than men, it would explain the gender gap in cultural participation.

However, as Tepper rightly notes, one should be careful when relying on the part-time / full-time distinction: the decision for a woman to work part-time (or not to work) might reflect a traditional ideology (“women’s work is in the home”). Women working part-time might participate more than other women in highbrow cultural activities not because of their employment status but because of their gender ideology (Tepper 2000: 260). Tepper further specifies ways to control for this problem, but here I only focus on the first part of his argument to derive the following hypothesis:

*Hypothesis 4. Women participate more than men in highbrow arts activities because they are less likely to work full-time.*

A second body of inquiry emphasizes the kind of occupations held by women. Collins (1988) argues that, because of the gendered division in status labor, women are more likely to work in the cultural and educational sectors. He states that “this enables [women] to short-circuit the loop between class and culture. Their class position may be more modest than their cultural level, because they work where the culture is produced, and so to speak, pilfer it for themselves in the process of purveying it to others” (Collins 1988: p. 40). According to this argument, women are more likely than men to work in the culture-production sector. These occupations are associated with a higher level of cultural capital. Hence, it contributes to explaining the gender gap in highbrow cultural activities. Bihagen and Katz-Gerro try to put this analysis to an empirical test, using data on cultural consumption in Sweden (Bihagen and Katz-Gerro 2000). They find that respondents inside and outside the culture production sector do not have significantly different levels of participation in highbrow culture, and that gender differences are not smaller within cultural sector. These findings cast doubts on the “cultural occupations” argument, but it has not been tested on American data.

*Hypothesis 5. Women participate more than men in arts activities because they are more likely to specialize in the educational and cultural sectors.*

Finally, a recent piece of research emphasizes the part of workplace culture in explaining differing rates of cultural consumption between men and women. Lizardo argues that there is “no such thing as “the” gender gap in highbrow cultural choice” (Lizardo 2006a: 18). He shows instead that the gender gap only occurs among respondents who are also part of the labor force. For retired people and students, he reports no significant difference between the cultural consumption of men and women. Additionally, Lizardo relies on Bourdieu’s theory of class fractions and reports that “as the volume of economic capital increases relative to cultural capital, men reject highbrow culture at a faster rate than women, thus increasing the gender gap in “market oriented” fields” (Lizardo 2006a: 12). Women in the workplace are more docile and they are less likely to become alienated from the official dominant culture – high culture, according to Lizardo – of the firm. This process is reinforced by sex-segregated networks. Therefore, “women who work in “market oriented” fields (...) are less likely than men who work in the same fields to reject the dominant culture of their superiors in favor of other forms of coordination culture” (Lizardo 2006a: 11). Consequently, when people have a relatively larger amount of economic capital compared to cultural capital, the gender gap in highbrow cultural consumption increases. A problematic element in Lizardo’s argument regards his statement that high culture is in fact the dominant culture of the firm. Erickson (1992), in her analysis of the Toronto securities industry (which Lizardo quotes in his article) asserts, on the contrary, that high culture is mostly irrelevant in the private sector. Business culture, she argues, plays the role of high culture in sustaining mechanisms of distinction within the firm. However, Lizardo’s findings on the relation between employment status and the gender gap in cultural capital are intriguing.

*Hypothesis 6. The positive effect of being active in the labor force on arts participation is stronger for women than for men.*

#### 1.4 Marital status and spousal influence

Marital status also has an impact on the difference between men and women's highbrow cultural participation. Sociologists have emphasized that research on cultural consumption has paid scarce attention to social networks (Lizardo 2006b) and peer groups (Pasquier 2010). The family, and especially spousal influence on cultural participation, is a good entry point to understand the processes at stake. Using a subsample of the Survey of Public Participation in the Arts 1992 on married couples, Upright (2004) provides two main findings. First, he shows that individual arts participation is indeed influenced by the spouse's artistic and social background. When one's spouse has high levels of arts socialization and educational attainment, one is more likely to attend arts events both with and without his or her spouse, even when individual attributes are controlled for. Second, Upright reports that these processes are gendered: men whose wives have higher arts socialization and education backgrounds will be more likely than comparable men to attend art events, even after controlling for the husband's attributes. Additionally, Upright finds that the educational attainment of wives is often a better predictor of husbands' cultural participation in the arts than husbands' own education and arts socialization variables (Upright 2004: 139). Therefore, the gender gap in highbrow arts activities should be smaller when people are married than when they are not, because women will increase the rate of arts participation of their spouses.

*Hypothesis 7. Women participate relatively more than men in highbrow arts activities when they are single, divorced, or widowed, than when they are married.*

## **2. Data and measures**

In this article I rely on an American source of data. I use the Survey of Public Participation in the Arts (SPPA). The SPPA was conducted by the Bureau of the Census as a supplement to the Current Population Survey in 2008, and 18,444 completed surveys were collected from a sample of U.S. households using a stratified, multi-stage, clustered design. Several modules were asked to different subsets of this sample.

### 2.1 Dependent variable

First, the “highbrow” or “legitimate” cultural activities under consideration need to be defined. Instead of imposing a pre-constructed definition of legitimate culture, I explore the structure emanating from the data. I rely on a factor analysis (principal component factor) on all the out-of-home leisure and cultural activities that could be found in the SPPA 2008. The questions considered are: attending a classical concert, attending an opera, attending a live play, attending a dance performance (modern dance and ballet), attending a jazz performance, visiting an art museum, visiting a historic site, going to a movie, going to a sports event, participating in a sports activity/participating in exercise programs, and doing an outdoor activity (camping, hiking, canoeing). The formulation of the questions on performing arts is the following: “With the exception of elementary or high school performances, did you go to \_\_\_ during the last 12 months?” For visits to museums or historic sites, the formulation is: “During the last 12 months did you visit \_\_\_?”

I do not take into account reading, listening to music, or other cultural activities taking place at home. Indeed it seems clear that the constraints limiting cultural consumption are different for out-of-home and at-home activities. In particular, geographical location, income, and the presence of children at home are essential factors explaining variation in out-of-home cultural participation. In contrast, reading or listening to music at home follows different patterns. Hence, my analysis is limited to out-of-home activities.

Table 1 presents the findings of the factor analysis.

< Table 1 about here >

For each factor, I consider the loads above 0.5. A “leisure” factor and a “highbrow” factor emerge. The “leisure” factor shows high loads for middlebrow activities: visiting a historic site, going to the movies, attending a sports event, participating in a sports activity. It explains 21.7% of the variance. The “highbrow” factor is loaded by high-status cultural activities: attending a classical concert, an opera, a live play, a dance performance, a jazz performance, visiting an art museum. It explains 21.55% of the variance, almost as much as the leisure factor.

I rely on this factor analysis to create a “highbrow participation” variable<sup>2</sup>. This variable is an index taking into account all the activities scoring above 0.55 in the second factor: classical concert, opera, jazz concert, dance performance, live play, and art museum. The Cronbach’s alpha of the index is 0.67, which is an acceptable score.

A bivariate analysis of the cultural participation index shows that women participate more than men in highbrow cultural activities: on average, women have been to 0.88 highbrow cultural activities, while men have been to 0.66 cultural activities in the past twelve months. This difference is highly significant ( $p < 0.001$ ). Descriptive statistics on the cultural participation index can be found in Appendix A (Table A-1).

## 2.2 Independent variables

Gender is a dichotomous variable (female is equal to 1).

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<sup>2</sup> It should be noted that I do not take into account the activities with high loadings on the leisure factor in the rest of the analysis. These activities (visiting a historic site, going to the movies, attending a sports event, participating in a sports activity) did not overall reveal an overwhelming gendered pattern: women were more likely than men to visit a historic site, go to the movie, and participate in a sports activity, and men were more likely than women to attend a sports event. Therefore their exclusion from the analysis does not bias the results.

Early socialization in the arts is operationalized as an index taking into account seven retrospective questions asked about artistic lessons taken before the respondent was 18 years old: music classes, visual arts classes, acting classes, dance classes, creative writing classes, art history classes, music appreciation classes. These questions were asked to a random subset of the sample (N=6,528). As shown in Figure 1, the difference between men and women grows as the number of artistic lessons taken as a child increases. Men are more likely than women to report no artistic lesson before 18 years old (65% against 57%). In contrast, women are almost twice more likely than men to have taken five artistic lessons as a child (1.44% against 0.79%).

< Figure 1 about here >

Education comes with five categories: less than high school, high school graduate, some college, college graduate, graduate education (“some college” is used as the reference category in my models)<sup>3</sup>. Parental education takes the larger value of the father’s or the mother’s years of schooling. When the father’s education is missing, the mother’s education is used instead, and vice versa.

Marital status is a dichotomous category (being married is equal to 1).

Following Lizardo’s operationalization, the respondent is considered to be active in the labor force when he or she has reported working in the past week and is between 25 and 64 years old (Lizardo 2006: 15)<sup>4</sup>. Active respondents are considered to be working fulltime when they currently work more than 39 hours a week.

Following Bihagen and Katz-Gerro’s method (2000: 334) for testing the “cultural occupation” argument, I create a dummy variable equal to one when the declared occupation

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<sup>3</sup> I found similar results when I used a continuous variable (years of schooling) for education.

<sup>4</sup> Similar results were found when the definition of being active in the labor force did not entail any age restriction.

of the respondent is either part of the “arts, design, entertainment, sports, and media occupations”<sup>5</sup> or of the “education, training, and library occupations.”

The models also control for a set of relevant demographic and socioeconomic variables. Age is a categorical variable with four categories: 18 to 34 years old, 35 to 44 years old, 45 to 59 years old, 60 years old and up. Family income is a categorical variable with 16 categories. Region has seven categories: New England, Middle Atlantic, Midwest, North Central, Southeast, Mountains, Pacific. Metropolitan status has three categories: metropolitan, non-metropolitan, non identified. Race and ethnicity are two dichotomous variables. I control for the presence of children under 18 years old at home.

### 2.3 Model

I use a negative binomial regression model, where the dependent variable is the cultural capital index, a count variable with strong overdispersion. Similar results were found using a logistic model with a dichotomous dependent variable (having participated in any kind of arts activity in the past twelve months or not).

It should be noted that the hypotheses call for different methods of empirical test. H1 (early socialization), H4 (part-time jobs) and H5 (cultural occupations) are tested by examining how the coefficient of gender changes when new variables are entered into the models. H2 (parental education), H3a and H3b (education), H6 (active in the labor force), and H7 (marriage) are tested with interaction terms between the variable “female” and the other variable under consideration. For the first set of hypotheses, I argue that a new variable mediates the effect of gender. Hence, controlling for this variable should decrease or suppress

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<sup>5</sup> This variable is the only one detailing the specialty of the occupation held by the respondent, and not only the sector recode (being a janitor in the publishing sector would then count as an occupation in the publishing sector) or the occupational recode (which does not mention the sector of activity). The category includes sports, but from the employment sector variable, it is clear that sports represent a small percentage of the occupations grouped under this category.

the effect of gender. For the second set of hypotheses, I hypothesize that some variables have a different effect on men's and women's cultural participation and I use interaction terms.

### 3. Results

In this section I present my empirical analyses. First, I put the hypotheses to a test, using the full sample. The results support three explanations of the gender gap in arts participation: education, early socialization in the arts and employment in the cultural or educational sectors mediate the difference between women's and men's highbrow cultural consumption. Second, I turn to the effect of age/cohort membership in conditioning the gender gap in highbrow culture and I run some of the models on separate age groups. The analysis confirms the strong effect of early socialization in the arts for the younger respondents and reveals that education increases men's arts participation more than women's for the oldest age group.

First, the models presented in Table 2 test the hypotheses delineated above on the full sample<sup>6</sup>.

< Table 2 about here >

The baseline model (0) documents that there is indeed a strong gender gap in highbrow cultural participation, even when socioeconomic and demographic variables are controlled for. The differences in logs of expected counts for highbrow participation is expected to be 0.26 unit higher for females compared to males, everything else being controlled. This coefficient is highly significant and it is the highest in the model.

Unsurprisingly, higher education and parental education have a positive and significant effect on highbrow cultural consumption. Regarding the influence of age, only the oldest category

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<sup>6</sup> In the models presented below, I keep all the variables in all the models, therefore controlling for all the possible effects. I found similar results when I introduced variables one by one to the baseline model.

(60 years old and up) has a positive and significant effect on highbrow cultural participation once socioeconomic and demographic variables are controlled for.

Model 1 tests the effect of education on the gender gap in arts participation. An interaction term between female and graduate education (M.A. or PhD) is included in the model: the coefficient is negative and significant. The coefficient for the interaction term between female and college graduate is not significant. These results support the idea that graduate education has a negative impact on the gender gap (H3b). There does not appear to be any issue of collinearity in this model: the variance inflation factor (VIF) is very low.

Model 2 tests the hypothesis on the influence of early socialization in the arts. Early artistic lessons are a strong predictor of adult cultural participation. The coefficient for early lessons is high (0.26) and it is significant at the 0.001 level. The gender coefficient decreases by 0.07 point compared to Model 1, which suggests that almost 25% of the gender difference actually reflects differences in childhood socialization. The question on early socialization in the arts was only asked to a subset of the sample, which explains the sharp decrease in the number of observations. The findings of Model 2 support the first hypothesis.

Model 3 examines the effect of having an occupation in the cultural or educational sectors. The effect of cultural and educational jobs is strong, positive (0.18), and significant. It reduces the gender effect by more than 20% compared to Model 2 (0.23 to 0.18). Therefore, the fifth hypothesis receives support.

Model 4 includes the remaining variables: interaction terms between parental education and female; working fulltime; an interaction term between female and employment status (being active in the labor force); and an interaction term between female and marriage. None of these coefficients is significant. The interaction term with parental education is negative, but does not reach significance: the second hypothesis is disconfirmed. The “time constraints” argument (fourth hypothesis) is not supported: working fulltime has a negative

influence on cultural participation, but it is not significant. The interaction term between employment status and female it is not significant: the sixth hypothesis is not supported<sup>7</sup>. Finally, the interaction term between gender and being married is not significant<sup>8</sup>. This seventh hypothesis is not supported by our data. The gender coefficient is not significant in Model 4, which is due to the presence of the interaction terms.

The conclusions that may be drawn from the results presented in Table 2 are intriguing. Three hypotheses are fully supported by the data: gender differences in early socialization in the arts account for the difference between women's and men's participation in the arts (H1); education has a negative influence on the gender gap in cultural consumption (H3b); and having an occupation in the cultural or educational sectors also accounts for part of the difference between women's and men's cultural participation (H5). The remaining hypotheses are not supported. In the second part of this section, I turn to the role of age and/or cohort membership in modulating the determinants of the gender gap in cultural participation.

Important transformations in the gendered patterns of participation in highbrow culture could happen with cohort change, for several reasons. First, the situation of women in American society has been transformed significantly in the past sixty years. The massive entry of middle-class and upper-middle class women in the paid labor force began in the 1950s (Goldin 2006). A rapid increase in the proportion of women in the higher education system also started in the 1950s: women now earn 58% percent of all bachelor's degrees in the United States (Buchmann, DiPrete and McDaniel 2008: 326, Jacob 1996). Second, the importance of highbrow culture has dramatically declined in the past decades, in particular for young people. DiMaggio and Mukhtar (2004) report that younger cohorts' participation in the

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<sup>7</sup> In Appendix A, I replicate the exact method used by Lizardo (2006) and still find different results when I control for socioeconomic variables.

<sup>8</sup> The coefficients for the variables "employment status" and "marital status" were not included in the table because of space constraints. The two coefficients were negative and significant.

arts is significantly lower today than older cohorts' participation when they were the same age. This analysis is supported here with the results on the contrasting influence of age on arts participation. In Table 1, as far as age is concerned, the only significant coefficient appears for the oldest age category (more than 60 years old), not for the younger age groups.

Because of these recent changes both in women's situation and in the relative importance of highbrow culture, a decline in the separate spheres ideology and in particular in the division of labor on highbrow culture could be expected. More specifically, one main change could be expected to take place: the influence of early socialization in the arts as a mediating factor in the relation between gender and arts participation should be stronger for older respondents who were raised in a more traditional separate sphere ideology.

Strictly speaking, it is impossible to distinguish between age effects and cohort effects with cross-sectional data. In the analysis below, I do not make any assumption on the age vs. cohort effect implied by the results. In the discussion section, I argue that cohort effects make more sense given the findings.

In Table 3, I distinguish three broad age groups or cohorts<sup>9</sup>: 18 to 34 year old, 35 to 54 years old, and 55 years old and older. These groups were identified in order to divide the sample in three roughly equal subdivisions (both in the baseline model and once early socialization in the arts is added to the model), and I run some of the models already presented in Table 2 on these separate subsamples. The models control for all the socioeconomic and demographic variables included in the previous table, but only the variables used in the interaction terms are presented in this table because of space constraints. Similar results (available upon request) were found when different age categories were used (for instance when the oldest group includes more respondents). All the models control for the set of variables already mentioned above, but I only present the relevant coefficients below.

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<sup>9</sup> In this part of the analysis, I use the two terms interchangeably, before discussing the relative the two effects.

< Table 3 about here >

The baseline model (0) shows the influence of gender on cultural participation by age group. Gender has a positive and significant influence on cultural consumption for all groups, but particularly for the oldest age group (older than 55 years old). The pseudo R-square increases from 0.08 for the youngest group to 0.11 for the oldest group. The number of observations is roughly comparable across age groups (N=2825, 3766, 3308). There is no disappearance of the gender gap in arts participation for the younger age groups.

Model 1 tests the influence of education on the gender gap in arts participation by age group. The coefficient for the interaction term between female and graduate education is negative for the three age groups, but it is of greater amplitude (0.38) and significant at the 0.05 level only for the oldest age group (more than 55 years old). For this oldest age group, the gender coefficient increases by a third and the pseudo R-squared gets slightly higher compared to the baseline model. This finding supports the idea that higher education has a negative impact on the gender gap in high culture (H3b) only for the oldest group. The other interaction term (between female and college graduate) varies in direction between the three age groups and never reaches significance. There is no issue of collinearity with this model: the variance inflation factor (VIF) was very low for the three age groups.

Model 2 adds early socialization in the arts to the model. The coefficient for early socialization is positive, significant, and almost the same for the three age groups. Interestingly, once early socialization in the arts is controlled for, the influence of gender for the respondents who are less than 34 years old completely disappears: the coefficient for gender is close to zero and not significant. For the middle age group (35 to 54 years old), the coefficient for gender decreases and loses significance. Controlling for early socialization has a lesser impact for the oldest group. Overall, Model 2 indicates that the gender gap in

cultural participation for the younger age groups is in fact due to gender differences in early socialization in the arts and supports the first hypothesis. This finding does not hold for the oldest age group.

Model 3 explores how having an occupation in the cultural or educational sectors plays out differently by age group. Having a cultural or educational occupation has a positive influence on participation in the arts for the three age groups, but it is only significant for respondents who are 18 to 34 years old (0.25) at the 0.05 level. However, for this youngest group, adding this variable in the model does not significantly change the gender coefficient. Similar results were found when the measure of early socialization was introduced separately in the model. Therefore, the fifth hypothesis is not confirmed for the different age groups.

To summarize, the “early socialization” argument (Hypothesis 1) is fully supported for the younger respondents (between 18 and 54 years old), not for the oldest age group. The argument about the negative influence of education (Hypothesis 3b) is supported for the oldest age group (older than 55 years old), not for the younger age groups. The “cultural occupation” argument (Hypothesis 5) is not confirmed when age groups are taken into account. The remaining hypotheses on social background (H2), the positive influence of education (H3a), the effect of part-time jobs (H4) and workplace culture (H6), or the influence of marriage (H7) were not supported by the data for any age group<sup>10</sup>.

#### **4. Discussion**

Why do women participate more than men in highbrow cultural activities such as classical concerts, operas, live plays or art museums? An examination of the determinants of women’s and men’s highbrow cultural consumption showed that there is not one explanation for the gender gap that accounts for all differences. In contrast, the analyses presented above have pointed out that there are different mechanisms that account for the gender gap in

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<sup>10</sup> None of the interaction terms was significant and they did not change significantly the other coefficients in the model (results available upon request), therefore I removed them from the models for the sake of parsimony.

cultural participation in different age groups. For the younger age groups, early socialization in the arts accounts completely for the gender gap in arts participation<sup>11</sup>. For the oldest age group, educational attainment has a greater effect on men's cultural consumption compared to women's.

The findings for the younger age groups can then be interpreted in two ways, either as an age effect or as a cohort effect. First, it could mean that early socialization in the arts matters more for young respondents only because they did not yet experience other important moments of the life course that should have a strong impact on one's lifestyle: for example, holding an occupation for a long time, living with a spouse, or raising children. However, these factors do not seem to matter either for the oldest age group, as analyzed above. Additionally, this argument would mostly apply to the youngest respondents, not to the middle age group (35 to 54 years old), for which I find similar results. Therefore, the findings might stem from a cohort effect. Extra-curricular activities, arts lessons included, are much more prominent now than a few decades ago (see the relation between age and early arts lessons, Figure A-1 in Appendix A), and they have an important effect on college admission and educational achievement (Dumais 2006, 2002). The results suggest that gender differences in participation in highbrow culture depends more on the gendered educational choices made by parents today than they did forty years ago.

The second important finding regards the influence of education on women's and men's cultural consumption for the oldest age group (more than 55 years old). Why does higher education have a relatively more important influence on men's cultural participation than on women's for the oldest respondents only, and not for younger respondents? No explanation based on age is obvious here; hence I directly turn to cohort effects. There could be two possible explanations. First, it could be that men and women from younger cohorts

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<sup>11</sup> There is a methodological issue related to the use of this retrospective variable on early artistic lessons that I detail and discuss in Appendix C.

who are not highly educated are not as different regarding their participation in high culture as in older cohorts. Therefore, higher education would then have less of an impact on the gender gap in highbrow cultural consumption for younger generations. However, as discussed above, gender differences in early socialization in the arts explains more of the gender gap in high culture for the youngest than for the oldest respondents, which challenges this first explanation: the separate spheres seem in fact more important for younger cohorts than for older cohorts. In addition, descriptive statistics do not support this analysis. For respondents who did not graduate from high school, women's average participation in highbrow culture (on the arts participation index) is 16% higher than men's for the youngest cohort, and 20% higher than men's for the oldest cohort. The change in the gender gap in highbrow cultural participation is not large enough to support this explanation. Second, it could be that the connection between higher education and cultural capital has loosened. For the cohort born before 1958, who went to college before 1970, there was a humanistic background associated with college or graduate education in most Western countries. Bourdieu documented this strong relation between high culture and higher education in France for the same period (Bourdieu 1979). However, higher education has changed quite dramatically in the past forty years. With the development of vocational and professional curricula, colleges and graduate schools gradually became more disconnected from the traditional ideal of the cultured, highbrow student participating in the arts intensively. The influence of higher education on participation in the arts for people who specialize in scientific, technical or business curricula might be very limited or even null. And these fields of study are still extremely strongly segregated by gender (Buchmann, DiPrete and McDaniels 2008, Jacob 1996). To summarize, men in the oldest cohort were more likely to follow a humanistic curricula, acquire cultural capital (a sharper learning process than for women's, because men could not rely on early socialization in the arts), and they participated in the arts relatively more than women when

they had a graduate degree. In contrast, men in younger cohorts are more likely to specialize in vocational, technical or business curricula, therefore higher education is not correlated for them with a strong increase in cultural capital, while for women it still is. Consequently, education does not reduce the gender gap in cultural participation for younger cohorts as used to be the case for older generations.

Taken together, these two results indicate a reinforcement of the gendered division of labor between cohorts when arts participation is concerned. Higher education does not counterbalance the gender gap in high culture anymore, and early socialization in the arts, a parental decision reflecting broad cultural scripts about appropriate gender roles, completely accounts for younger women's higher participation in the arts.

### **Conclusion**

I have demonstrated through disaggregated analyses by age groups that there are several factors determining the gender gap in highbrow cultural participation. The results indicate that early socialization in the arts is the most relevant explanation of women's higher cultural consumption for younger age groups and that higher education has a stronger influence on men's arts participation than on women's for the oldest age group. These findings run counter to the idea that there has been a marked decline in the gendered division of labor on highbrow culture.

Further research could develop these findings in several ways. First, using different waves of data from the Survey of Public Participation in the Arts, age and cohort effects could be distinguished by following cohorts and age groups across periods. Second, a qualitative approach involving interviews and life stories would give a more nuanced picture of the connection between women's participation in high culture and important events in their lives (holding an occupation, finding a spouse, or raising children, to list but a few). Third, the analyses presented here only use American data. Cross-national comparison with countries

where the Victorian model of “separate spheres” was less prominent would shed light on the role of historical and institutional processes in understanding why women participate more than men in highbrow culture.

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## Tables and Figures

Table 1. Factor analysis on leisure and cultural activities

	<b>Factor 1</b>	<b>Factor 2</b>
Classical concert	0.1160	0.7042
Opera	-0.0496	0.5720
Live play	0.1721	0.5872
Dance	0.1058	0.5997
Jazz	0.1658	0.5806
Art museum	0.4487	0.5523
Historic site	0.5283	0.4036
Movies	0.6475	0.1191
Sports events	0.6533	0.0940
Sports activity	0.7237	0.0905
Outdoor	0.6724	0.0858
Variance explained	21.70	21.55

Source: SPPA 2008. Unweighted data.

Highlighted results: loads > 0.50

Figure 1

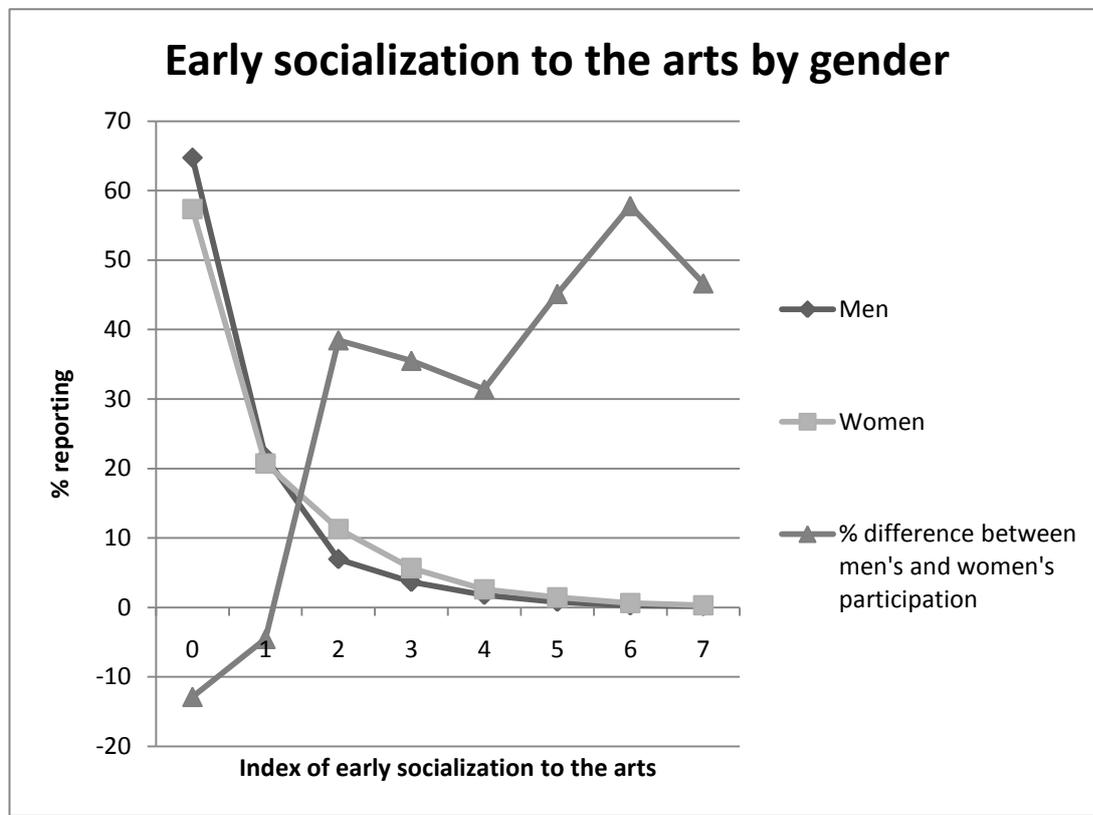


Table 2. Negative binomial model on the whole sample

	<b>Model 0</b>	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>
Gender (women=1)	0.26*** (0.03)	0.30*** (0.04)	0.23*** (0.06)	0.18** (0.07)	0.28 (0.17)
Age 18 to 34 years old	0.03 (0.05)	0.03 (0.05)	-0.07 (0.07)	-0.08 (0.07)	-0.06 (0.07)
Age 45 to 59 years old	0.09 (0.05)	0.09 (0.05)	0.11 (0.06)	0.13* (0.07)	0.14* (0.07)
Age 60 and older	0.23*** (0.06)	0.22*** (0.06)	0.32*** (0.08)	0.42*** (0.09)	0.40*** (0.09)
Education:					
Less than high school	-0.95*** (0.08)	-0.95*** (0.08)	-0.96*** (0.11)	-0.88*** (0.15)	-0.84*** (0.15)
High school graduate	-0.66*** (0.05)	-0.66*** (0.05)	-0.59*** (0.06)	-0.59*** (0.07)	-0.59*** (0.08)
College graduate	0.44*** (0.04)	0.45*** (0.06)	0.35*** (0.08)	0.35*** (0.08)	0.39*** (0.09)
Graduate education	0.71*** (0.05)	0.81*** (0.07)	0.72*** (0.09)	0.73*** (0.10)	0.73*** (0.10)
Parental education	0.06*** (0.01)	0.06*** (0.01)	0.05*** (0.01)	0.05*** (0.01)	0.06*** (0.01)
Gender*College graduate		-0.02 (0.07)	-0.02 (0.10)	0.01 (0.10)	0.04 (0.11)
Gender*graduate education		-0.18* (0.09)	-0.24* (0.11)	-0.25* (0.12)	-0.16 (0.13)
Early socialization in the arts			0.26*** (0.02)	0.24*** (0.02)	0.23*** (0.02)
Cultural occupation				0.18** (0.07)	0.16* (0.07)
Gender*parental education (grad.)					-0.16 (0.10)
Working fulltime					-0.09 (0.07)
Gender*employment status					-0.14 (0.17)
Gender*marital status					0.03 (0.10)
Constant	-2.27*** (0.11)	-2.29*** (0.11)	-2.41*** (0.15)	-2.08*** (0.18)	-2.20*** (0.22)
Observations	9899	9899	5366	3785	3515
Pseudo R-squared	0.099	0.099	0.128	0.125	0.125
Ll	-10126	-10124	-5263	-3979	-3681

Source: SPPA 2008. \*\*\* p<0.001, \*\* p<0.01, \* p<0.05. Standard errors in parentheses.

The models also control for geographical location, family income, presence of children under 18 at home, employment status, marital status, race and ethnicity. These variables are not essential for the argument, therefore I do not report the coefficients in this table.

**Table 3. Negative binomial model by age groups**

VARIABLES	Model 0 (Baseline)			Model 1 (Education)			Model 2 (Early socialization)			Model 3 (Cultural occupation)		
	18-34 yrs old	35-54 yrs old	55 and older	18-34 yrs old	35-54 yrs old	55 and older	18-34 yrs old	35-54 yrs old	55 and older	18-34 yrs old	35-54 yrs old	55 and older
Female	0.24*** (0.06)	0.21*** (0.05)	0.42*** (0.06)	0.23** (0.08)	0.19** (0.07)	0.56*** (0.09)	0.04 (0.10)	0.15 (0.10)	0.54*** (0.12)	0.02 (0.11)	0.14 (0.10)	0.62*** (0.16)
Education : College Grad.	0.48*** (0.08)	0.40*** (0.06)	0.42*** (0.08)	0.41*** (0.11)	0.35*** (0.09)	0.54*** (0.11)	0.34* (0.14)	0.20 (0.12)	0.54*** (0.15)	0.32* (0.14)	0.18 (0.12)	0.68*** (0.18)
Education : M.A. and more	0.74*** (0.10)	0.71*** (0.08)	0.64*** (0.09)	0.87*** (0.15)	0.74*** (0.10)	0.84*** (0.12)	0.82*** (0.19)	0.63*** (0.14)	0.80*** (0.15)	0.83*** (0.19)	0.60*** (0.14)	0.93*** (0.19)
Female*College graduate				0.11 (0.13)	0.09 (0.11)	-0.20 (0.14)	0.08 (0.17)	0.20 (0.15)	-0.37* (0.18)	0.05 (0.18)	0.21 (0.15)	-0.48* (0.23)
Female*M.A. and more				-0.21 (0.19)	-0.05 (0.13)	-0.38* (0.15)	-0.33 (0.24)	-0.12 (0.18)	-0.45* (0.19)	-0.36 (0.25)	-0.18 (0.18)	-0.54* (0.24)
Early social. in the arts							0.25*** (0.02)	0.25*** (0.02)	0.26*** (0.03)	0.23*** (0.03)	0.24*** (0.02)	0.22*** (0.04)
Cultural occupation										0.25* (0.12)	0.17 (0.10)	0.04 (0.14)
Constant	-2.19*** (0.22)	2.36*** (0.18)	-2.02*** (0.16)	-2.19*** (0.22)	-2.35*** (0.18)	-2.13*** (0.16)	-2.32*** (0.29)	-2.15*** (0.24)	-2.40*** (0.22)	-2.09*** (0.32)	-2.13*** (0.29)	-2.01*** (0.33)
Observations	2825	3766	3308	2825	3766	3308	1522	2023	1821	1250	1743	792
Pseudo R-squared	0.0863	0.1042	0.1184	0.0867	0.1044	0.1193	0.1210	0.1276	0.1480	0.1232	0.1249	0.1406
LL	-2895	-3868	-3292	-2894	-3867	-3289	-1472	-2000	-1753	-1242	-1779	-928

Source : SPPA 2008. \*\*\* p<0.001, \*\* p<0.01, \* p<0.05. Standard errors in parentheses. The models also control for geographical location, family income, presence of children under 18 at home, employment status, marital status, race and ethnicity. These variables are not essential for the argument, therefore I do not report the coefficients in this table.

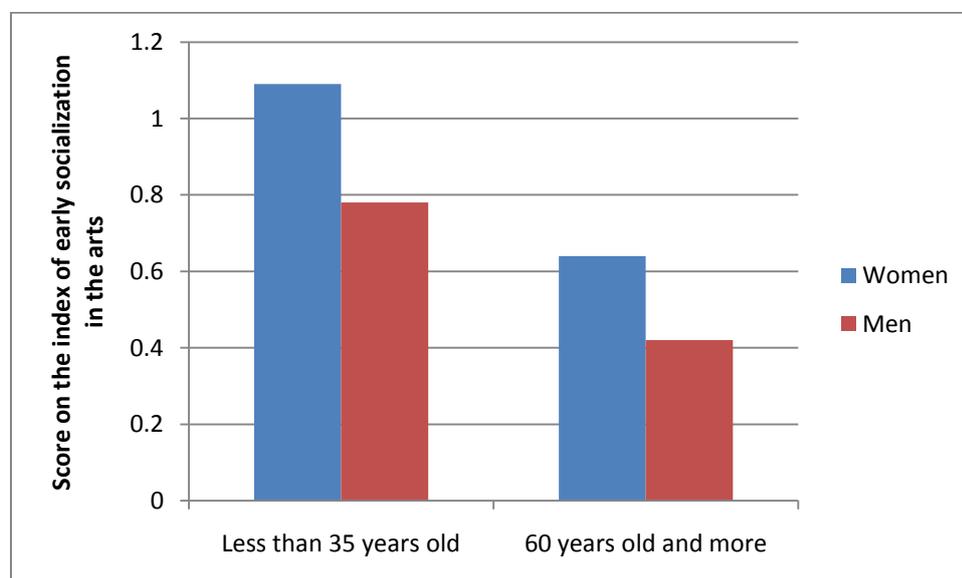
## Appendix A. Descriptive statistics and supplementary figures

**Table A-1**

Cultural Participation Index	Frequency	Percent
0	12457	68.44
1	2967	16.3
2	1443	7.93
3	795	4.37
4	337	1.85
5	157	0.87
6	42	0.23
Total	18201	100

Source: SPPA 2008. Weighted data.

**Figure A-1. Age group, gender, and early socialization in the arts**



## **Appendix B. Employment status and the gender gap in highbrow culture**

In this appendix I replicate one of the only empirical analyses of the topic (Lizardo 2006a) using a different data set. Once education is added as a control variable, I find different results.

According to Lizardo (2006a), “there is no such thing as “the” gender gap in highbrow cultural choice. Instead (...) a gender gap favoring women is only present among those who are active in the labor force, with men who are not in the labor force engaging in highbrow culture at similar (and for students at higher) rates than women” (p. 18).

Lizardo uses pooled data from the culture model of the GSS 1998-2002. He considers respondents to be active in the labor force if they are between 25 and 64 and report having been employed full or part time in the past year. He additionally distinguishes between respondents in the labor force who have been working more than 38 hours in the past week (the median number of hours) and respondents who have worked less than 38 hours. His dependent variable is a dummy variable equal to one if the respondent reports having consumed at least two of the following highbrow genres in the past year: visit to an art museum, opera or classical concert, live play, and live ballet or dance performance. He uses a logistic regression, and writes in the footnote: “Models including a more elaborate vector of predictors – i.e., age, education, parental education, marital status and number of children – did not appreciably change the size of the gender coefficients reported in the table.” (p. 15). Hence, his models only include gender as an independent variable, in addition to the survey year (because of his pooled data).

I replicate his analysis and I find that the control variables mentioned in the footnote do, in fact, matter. I use data from the SPPA 2008, and code variables in the same way than Lizardo. In the SPPA, the questions on participation in the labor force are not asked about the past year, but about the past month and the past week. In the following analyses, I rely on the monthly recode, but found similar results when using the weekly recode. In Table B-1, I replicate his model and find comparable results. In Table B-2, I add one control variable – education – and find that it changes significantly the coefficients. When other control variables are added (models not presented here), the difference between my findings and Lizardo’s conclusion are even more striking.

Table B-1. Logistic regression without control variable

	Respondents active in the labor force			Respondents not in the labor force		
	All	More than 38 hours per week	Less than 38 hours per week	All	Students	Retired
Gender (women=1)	0.32*** (0.06)	0.28*** (0.07)	0.64** (0.19)	0.15 (0.11)	-0.01 (0.30)	0.14 (0.13)
Constant	-1.99*** (0.04)	-1.98*** (0.05)	-2.24*** (0.18)	-2.24*** (0.09)	-1.65*** (0.21)	-2.26*** (0.10)
Observations	9838	7603	1582	3543	324	2725
Chi2	30.13	17.62	12.11	1.66	0.00	1.18

Source: SPPA 2008

The coefficients in Table B-1 support Lizardo's main conclusions. The gender gap in highbrow cultural participation is strong and significant for respondents active in the labor force (0.32) and small and not significant for other respondents (0.15). Overall, the chi-squares in these models are comparable to Lizardo's. Like Lizardo, I find that the gender coefficient for student is negative (but not even slightly significant) and the gender coefficient for retired respondents is positive and not significant.

I find slightly different results regarding respondents in the labor force. According to Lizardo, "the gender gap is strong and significant among those who work at least 38 hours a week, but declines in strength and significance among those who participate in the labor force with a lower level of intensity" (p. 15). In my model, there is indeed a slight decrease in significance but also a noticeable increase in strength (from 0.28 to 0.64) between respondents working more than 38 hours a week and respondents working less than 38 hours a week.

Overall, Table B-1 supports Lizardo's main conclusions.

However, when I add control variables (education, age, income, father's education, marital status, children), my results are strikingly different from Lizardo's. Actually, only controlling for education alters the main results. For the sake of parsimony, I only include education in the models presented in Table B-2. The variable measures the number of years of schooling completed and goes from 0 to 21. Similar results were found using dummy variables for educational attainment.

Table B-2. Logistic regression with education as a control variable

	Respondents active in the labor force			Respondents not in the labor force		
	All	More than 38 hours per week	Less than 38 hours per week	All	Students	Retired
Gender (women=1)	0.31*** (0.06)	0.23** (0.07)	0.65** (0.21)	0.47*** (0.12)	-0.04 (0.30)	0.59*** (0.15)
Education	0.37*** (0.01)	0.37*** (0.01)	0.38*** (0.03)	0.36*** (0.02)	0.09 (0.11)	0.39*** (0.03)
Constant	-7.50*** (0.21)	-7.44*** (0.24)	-7.76*** (0.54)	-7.24*** (0.34)	-2.80* (1.31)	-7.95*** (0.42)
Observations	9838	7603	1582	3543	324	2725
Chi2	991.62	741.54	174.38	311.88	0.79	291.11

Source: SPPA 2008

As can be seen in Table B-2, Lizardo's conclusions are not supported by the data once education is included in the models. The gender gap in highbrow cultural participation is in fact stronger for respondents who are *not* active in the labor force than for those who are (0.47 against 0.31). Both coefficients are highly significant. Additionally, among respondents who are not active in the labor force, the gender gap among retired respondents is very strong (0.59) and significant. It indicates a possible effect of age and/or cohort belonging that should be explored more carefully. Among respondents active in the labor force, the gender gap is almost twice as strong for individuals who work less than 38 hours per week compared to respondents who work more than 38 hours a week (0.65 against 0.23). As could be expected, years of education are a strong positive predictor of highbrow consumption and the coefficient is stable in all the models except when students are concerned.

This difference in the results probably stems from the different sample sizes. While in the SPPA sample there are 2725 retired respondents, Lizardo's results on the GSS data set rest on a much smaller sample (412 retired respondents).

The replication of Lizardo's analysis of the gender gap in highbrow cultural consumption on the data used in this research indicates that education and age/cohort belonging are important factors modifying the influence of gender on participation in highbrow culture.

### **Appendix C. Retrospective questions on early arts lessons**

A methodological issue regarding the use of the retrospective questions on early socialization to the arts should be noted. Recent research using several waves of the SPPA (1982, 1992, and 2002) has shown that these retrospective questions on early socialization should be considered with caution: respondents seem to forget about early music lessons as they grow older (DiMaggio and Christin, in preparation). If this finding is robust, then it would not mean much that early socialization account for all of the gender gap for younger respondents and not for older respondents, except that older respondents have forgotten about arts lessons they took when they were kids.

However, two points strengthen my analysis. First, unlike the analysis mentioned above, I do not focus only on music lessons, but instead pool together seven types of lessons, which broadens the spectrum: it is possible to forget about one type of early lessons, two types of early lessons, but most probably when respondents are asked seven questions in a row about early classes, they remember eventually that indeed they took lessons when they were young.

Second, the pseudo R-squared increases significantly between Model 1 and Model 2 for the oldest age group (0.1193 to 0.1480, a 25% increase), even if not as much as for the youngest age group (0.0867 to 0.1210, a 38% increase). It indicates that introducing early socialization in the model is as relevant for older respondents as for the younger ones, but that socialization increased participation comparably for both men and women in the oldest cohort.