

04:2013 WORKINGPAPER

WOMEN'S PREFERENCE FOR HIGHBROW CULTURE
DOES NOT BEGIN IN THE FAMILY:
COMPARING CULTURAL PARTICIPATION AMONG BROTHERS
AND SISTERS

DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY, UNIVERSITY OF HAIFA
SFI – THE DANISH NATIONAL CENTRE FOR SOCIAL RESEARCH
DEPARTMENT OF SOCIOLOGY, UNIVERSITY OF COPENHAGEN

WOMEN'S PREFERENCE FOR
HIGHBROW CULTURE DOES NOT
BEGIN IN THE FAMILY:
COMPARING CULTURAL PARTICIPATION
AMONG BROTHERS AND SISTERS

Tally Katz-Gerro
Mads Meier Jæger

DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY, UNIVERSITY OF
HAIFA;
THE DANISH NATIONAL CENTRE FOR SOCIAL RESEARCH, COPENHAGEN;
DEPARTMENT OF SOCIOLOGY, UNIVERSITY OF COPENHAGEN

Working Paper 04:2013

The Working Paper Series of The Danish National Centre for Social Research contain interim results of research and preparatory studies. The Working Paper Series provide a basis for professional discussion as part of the research process. Readers should note that results and interpretations in the final report or article may differ from the present Working Paper. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including ©-notice, is given to the source.

Women's Preference for Highbrow Culture Does Not Begin in the Family:
Comparing Cultural Participation among Brothers and Sisters

Tally Katz-Gerro¹ and Mads Meier Jæger²

¹ Department of Sociology and
Anthropology
University of Haifa
Haifa 31905.
Email: tkatz@soc.haifa.ac.il

² Department of Sociology, University of
Copenhagen, and the Danish National
Centre for Social Research.
Øster Farimagsgade 5, Building 16,
1014 Copenhagen K.
Email: mmj@soc.ku.dk

14 November 2012

Abstract:

Research reports that women are more likely than men to participate in highbrow cultural activities, but we do not know whether this gap develops within the family at an early age or is the outcome of economic and positional differences between men and women later in life. We use a Danish data set to analyze cultural participation among brothers and sisters from the same family and report three findings: (1) gender differences in highbrow cultural participation are mostly unrelated to family-background characteristics; (2) there is little evidence that parents engage in gender-specific cultural socialization; and (3) socioeconomic position and family obligations account for less than 20 percent of brother-sister differences in highbrow cultural participation. Our results suggest that gender differences in highbrow cultural participation originate in factors outside the family.

Word count: 5,469 (three tables)

Keywords: gender, cultural consumption, highbrow culture, sibling analysis

Introduction

Research on cultural consumption documents persisting gender differences in cultural participation patterns. In particular, research shows that women are more likely than men to participate in traditionally highbrow cultural activities such as going to art museums and attending classical concerts, operas, live theater, and dance performances (e.g., DiMaggio 1982, 2004; DiMaggio and Mohr 1985; Cherbo and Peters 1995; Bryson 1996; Katz-Gerro and Shavit 1998; Cuadrado and Frassetto 1999; Katz-Gerro 1999; Bihagen and Katz-Gerro 2000; Dumais 2002; Katz-Gerro and Sullivan 2004; Chan 2010; Christin 2012). Gender differences are less pronounced with regard to other aspects of cultural consumption such as reading (De Graaf 1991; Prieto-Rodriguez and Fernandez-Blanco 2000; Lopez-Sintas and Garcia-Alvarez 2002; Torche 2010). In addition, in some composite measures of cultural consumption such as cultural omnivorousness and voraciousness (Van Eijck 2001; Katz-Gerro and Sullivan 2010), men are more active than women.¹ These results point to a particular preference for highbrow culture among women, which can then be translated into a particular set of cultural competencies and cultural capital (Dumais 2002).

Previous research has highlighted three explanations that might account for the gender difference in highbrow cultural participation. Two explanations of why women attend more highbrow cultural events than men include gender-specific cultural socialization and gender differences in socioeconomic position. The first explanation, which emphasizes gender differences in cultural socialization, argues that girls are raised to be more interested in culture than boys. Furthermore, some venues of highbrow culture are perceived as more appropriate for women than for men (e.g., DiMaggio 1982; Donnat 2004; Kaufman and Gabler 2004; Octobre 2005). The second explanation, which emphasizes gender differences in socioeconomic position, argues that women are increasingly likely to exhibit

¹ Cultural omnivorousness refers to an appreciation of and engagement in a variety of cultural tastes including highbrow, middlebrow, and lowbrow activities (Van Eijck 2001). Cultural voraciousness is frequent engagement in a diversified cultural repertoire (Katz-Gerro and Sullivan 2010).

socioeconomic traits such as higher education that are associated with a greater appreciation of highbrow culture (Buchmann and DiPrete 2006). A third explanation, which argues that women are *less* likely to engage in highbrow culture than men, argues that women traditionally have more family obligations than men and, thus, have less time for participating in cultural events (e.g., Bihagen and Katz-Gerro 2000; Christin 2012).

Although previous research documents that women are more likely to participate in highbrow cultural events than men, the data used in previous research is ill-suited for identifying the factors that account for this gender difference. This paper extends previous research by analyzing new data that enable us to distinguish among the three competing explanations described above: gender-specific cultural socialization, gender differences in socioeconomic position, and gender differences in family obligations. In addition, this data allow us to assess the extent to which these explanations account for observable gender differences in highbrow cultural participation.

Our main contribution relies on the novelty of analyzing gender differences in highbrow cultural participation within families. An important limitation in previous research is that it relied on cross-sectional data that included only one respondent per family and provided only limited information on individual characteristics and family background (an exception is Van Eijck 1997). These data make it difficult to control for all of the relevant early socialization factors that may account for gender differences in highbrow cultural participation. To overcome such problems, we analyze Danish data that include multiple siblings from the same family. These data allow us to compare the cultural participation of brothers and sisters. Moreover, we have information on the gender composition of the sibship, which allows us to address the gender-specific cultural socialization explanation. Our test of this explanation builds on the idea that if parents practice gender-specific socialization (for example, if girls are taught to be more interested in culture than boys are), we expect less

sibling similarity in highbrow cultural participation in mixed-gender sibships (i.e., families with both boys and girls) than in same-sex sibships (i.e., families with only boys or girls). In addition, we test the two alternative explanations--gender differences in socioeconomic position and gender differences in family obligations--by including observed variables that capture the socioeconomic traits and family situation of brothers and sisters. We then analyze the extent to which these variables account for residual brother-sister differences in highbrow cultural participation.

Our empirical results suggest that gender differences in highbrow cultural participation are substantial and are not readily explainable by the three accounts presented above. First, in addition to non-trivial sibling correlations in highbrow cultural participation, we find only little evidence that gender-specific cultural socialization explains women's greater propensity to participate in highbrow cultural events. Specifically, we find that sibling correlations in highbrow cultural participation are similar in same-sex sibships (brother/brother or sister/sister) and different-sex sibships (brother/sister). Second, we find that indicators that capture siblings' socioeconomic position and family situation account for approximately 20 percent of the total gender difference in highbrow cultural participation within families. Consequently, the two explanations emphasizing gender differences in socioeconomic position and in family obligations account for some, but not a great deal of the gender difference in highbrow cultural participation. Together, our results suggest that gender differences in highbrow cultural participation are substantial, do not originate in the family of origin, and that the explanations of these differences are yet to be theorized.

Theoretical Background

Several studies indicate that gender differences in cultural consumption are large and exist independently of education, occupational class position, age, family status, residential status,

and income (e.g., Bihagen and Katz-Gerro 2000; Lizardo 2006). Still, scholars agree that while ample attention has been directed at delineating the contours of cultural stratification along the axes of education, economic resources, and age, relatively little consideration has been paid to explaining gender differences in cultural consumption patterns (Erickson 1996; Lovell 2000; McCall 2001; DiMaggio and Mukhtar 2004; Katz-Gerro and Sullivan 2004; Lizardo 2006). Bourdieu's work, although influential, does not allow for a theory of distinction that is linked to gender or other bases of identity (Erickson 1996).

Gender differences in cultural participation and cultural capital are relevant for a number of reasons. First, if men and women compete for economic and cultural capital, and women are disadvantaged in the realm of economic capital, they may want to compensate in the realm of cultural capital and invest in legitimate culture (DiMaggio 2004). Second, because cultural reproduction occurs mainly in the family, understanding the negotiation of the patterns of deployment in the gendered division of household labor is critical to understanding the process of cultural reproduction as a whole (DiMaggio 2004; Kraaykamp and Van Eijck 2010). A third motivation comes from the general framework of studying consumption as a gendered process that plays a role in either reproducing or transforming gender inequality in access to resources (Costa 1994; de Grazia and Furlough 1996; Lubar 1998; Katz-Gerro 2006).

In the following, we discuss the three explanations of gender differences in cultural participation that have been proposed in previous research: gender-specific cultural socialization, gender differences in socioeconomic position, and gender differences in family obligations. Based on this discussion, we explain why we expect highbrow cultural participation to be more prevalent among women than among men, and test each explanation in the empirical analysis.

Gender-Specific Cultural Socialization

Scholars argue that early socialization processes and gendered expectations about the kind of cultural capital that boys and girls should have may account for gender differences in cultural participation. Gender-role stereotypes include perceptions of highbrow culture as associated more with women. During childhood socialization girls are encouraged more than boys to participate in cultural activities (Donnat 2004; Octobre 2005). For example, girls outnumber boys in art lessons, music lessons, dance lessons, library visits, concerts, and visits to art museums (DiMaggio 1982; Dumais 2002), and venues of highbrow culture are perceived as appropriate for women (DiMaggio 1982). Girls rely on artistic lessons to create networks of friends (Pasquier 2010), and social network characteristics, especially network diversity, emerge as much better predictors of women's cultural participation than of men's (Kane 2004). Finally, scholars also argue that it is more socially acceptable for boys to participate in sports, which promote skills associated with masculinity such as leadership and competitive or group-oriented behaviors (Ridgeway and Smith-Lovin 1999). Consequently, early socialization plays an important part in shaping the aesthetic tastes of boys and girls, which in turn may lead to gender differences in cultural participation patterns later in life.

Gender Differences in Socioeconomic Position

In the past, men tended to be better educated than women, and they also tended to have higher paying jobs. Today, this situation no longer prevails. In most countries women are now outperforming men in the educational system (Buchmann and DiPrete 2006), and social mobility among women has also rapidly increased in past decades. Most research on cultural participation documents that education and social class position are key correlates of highbrow cultural participation. Therefore, if women are better educated than men, this fact

might account for some of the gender difference in highbrow cultural participation (Katz-Gerro 2011).

Gender Differences in Family Obligations

The gender-specific cultural socialization explanation presented above does not pertain to boys and girls only in childhood, but also in adulthood. Collins (1988, 1992) provides an account of the gendered division of status labor. Women, more than men, are expected to have control over cultural consumption in the family for the purposes of status emulation and status presentation. While men specialize in the household's productive responsibilities, women are in charge of the family's status work. A family's status work involves public self-presentation, cleanliness of the home, cooking, and consumerism in working class families and highbrow cultural activities in upper class families (Collins 1988). Furthermore, within the family married women, mothers, and homemakers have less time for leisure than men. The dependent labor theory (Shaw 1985) suggests that men's leisure time is constrained mainly by the time devoted to paid work, while women's leisure time is constrained by paid work and housework. Women also have less control over the resources allocated to cultural consumption, and their leisure opportunities tend to be concentrated at home (Shaw, 1985, 1994; Green et al. 1990; Altergott and McCreedy 1993; Robinson and Godbey 1997; Phipps et al. 2001). Consequently, more family obligations mean that women would have less time to consume highbrow culture than men.

The theoretical arguments presented above address gender differences in cultural participation patterns. However, irrespective of gender, siblings from the same family also share a family environment that shapes their preferences and cultural participation. There is rich evidence that parents' cultural and economic capital affects children's cultural capital and preferences (e.g., Kraaykamp and Van Eijck 2010; ter Bogt et al. 2011; Yaish and Katz-Gerro

2012). Similarly, research that uses sibling data finds comparatively high correlations in siblings' cultural participation patterns (Van Eijck 1997). In this analysis we also control for the influence of family background factors shared by siblings that affect highbrow cultural participation.

Hypotheses

Based on the theoretical arguments above, and on results from previous empirical research, our main hypothesis is that women will engage in highbrow cultural activities more than men. Potential explanations of why women participate more than men are gender-specific cultural socialization (girls are taught to appreciate highbrow culture, boys less so) and the fact that women more often than men exhibit socioeconomic traits, in particular higher education, that are associated with highbrow cultural participation. One theoretical explanation works in the opposite direction and argues that women's family obligations lead them to be less active in highbrow culture. In the empirical analysis we attempt to distinguish among the different theoretical explanations and analyze the extent to which they account for baseline gender differences in highbrow cultural participation.

Data

We analyze data from the Danish Longitudinal Survey of Youth – Children (DLSY-C). The DLSY-C includes children born to participants in a long-running cohort study, the Danish Longitudinal Survey of Youth (DLSY). The original participants in the DLSY, the parents of the respondents whose cultural participation we study, were all born in or around 1954. The participants in the DLSY-C, the main respondents in this paper, were interviewed in 2010, and the mean age in the DLSY-C sample is 27.1 (the response rate was 81 percent, see Jæger 2011). We use the DLSY-C because, first, it includes multiple siblings from the same DLSY

family and, second, it includes a battery of questions capturing respondents' cultural participation patterns. Moreover, the DLSY-C includes rich information on individual characteristics such as education, family situation, and cognitive ability that might account for gender differences in cultural participation.

We restrict our DLSY-C sample to respondents age 18 or older, which yields a sample of 3,303 respondents nested within 2,012 families. Table 1 provides the descriptive statistics for all of the variables included in the analysis, as well as some additional information discussed below.

– TABLE 1 HERE –

Variables

Dependent Variables

The DLSY-C includes a battery of questions that capture respondents' cultural consumption patterns. In this paper we focus on cultural activities that are typically regarded as highbrow in the Danish context (e.g., Prieur, Rosenlund, and Skjott-Larsen 2008; Jæger and Katz-Gerro 2010). Respondents were asked whether, in the last year, they have gone to (1) the opera, (2) a ballet or dance performance, (3) classical concert, (4) theater production, (5) movie in a film club or art cinema, (6) art museum, and (7) jazz concert. All items were coded 1 = "yes" and 0 = "no."

We used the seven items to create an aggregate scale *capturing highbrow cultural participation* by summarizing the respondent's score on the seven items. A Principal Component Analysis (PCA) using polychoric correlations shows that the first component created from these binary items accounts for 50.2 percent of the total covariance between the

items.¹ This result suggests that the seven items can be meaningfully merged into a single scale.

Explanatory Variables

We include a range of variables intended to capture the differences between respondents in their socioeconomic position and family obligations.

Our basic *demographic variables* include a dummy variable indicating the respondent's gender (coded 1 for women and 0 for men), age in years, and a dummy variable for being a firstborn.

Our measure of socioeconomic position includes *education*, here a dummy variable measuring whether the respondent is enrolled in or has completed upper secondary education. Upper secondary education is the academic track in Danish secondary education (students usually enroll at around age 15-16 and complete their studies by age 18-19) and is the exclusive gateway to higher education. Given that the mean age in our sample is only 27.1, and that many of the respondents have not yet completed their final education, upper secondary education is our preferred proxy for the respondent's educational attainment.² In addition to educational attainment, we include a variable measuring the respondent's self-reported Grade Point Average (GPA) at the end of elementary school (a scale with six categories) and their score (0-20) on a measure of cognitive ability that is very similar in structure to the Raven Progressive Matrices test.

Our measures of *family situation* include a dummy variable for being married or cohabitating and a variable measuring the number of children under the age of 15 currently living in the respondent's household.

We do not include any measures of family background because, as we explain in more detail below, our empirical design implicitly controls for all of the family characteristics that are shared by siblings from the same family.

Empirical Design

The aim of the empirical analysis is to analyze whether men and women differ with regard to highbrow cultural participation and if so, to explain this gender difference. Our DLSY-C sample consists of 3,303 respondents nested within 2,012 families, and our analytical strategy relies on exploiting variation both within and between families.

We begin by specifying the following regression model for highbrow cultural participation

$$y_{if} = \alpha + sex_{if}\beta_1 + x_{if}\beta_2 + u_f + \varepsilon_{if}, \quad (0)$$

where y_{if} is highbrow cultural participation for individual i ($i = 1, \dots, N$) in family f ($f = 1, \dots, F$), sex is a dummy variable that takes the value 1 for women and 0 for men, and x is a vector of individual characteristics (education, marital status etc.). The regression coefficient β_1 captures the gender difference in highbrow cultural participation, while β_2 captures the effects of individual characteristics. Finally, α is a constant, u_f is a family-specific effect and ε_{if} is an individual-specific error term assumed to follow a normal distribution.

Our analytical objective is to estimate the baseline gender difference in highbrow cultural participation and to analyze the extent to which the three proposed theoretical explanations-- gender-specific cultural socialization, gender differences in socioeconomic position, and gender differences in family obligations--account for this difference. With regard to these

hypotheses, we capture the gender-specific cultural socialization explanation to some extent via the family-specific effect u_f . We also capture the explanations emphasizing gender differences in socioeconomic position and family obligations by means of the range of individual-level explanatory variables summarized in x .

The gender-specific cultural socialization explanation is difficult to test directly. This explanation argues that parents treat boys and girls in different ways, which leads girls to favoring highbrow cultural activities and boys other forms of culture. In order to test this hypothesis directly, we would need detailed information on the extent to which parents treat boys and girls differently within the family, and then relate this behavior to children's cultural participation in adulthood. We do not possess such data (and we are not familiar with any data set that would allow this type of analysis), so we take an indirect approach that exploits information on the gender composition of the sibship in each DLSY family. Families with two or more children have one of the following gender sibship compositions: mixed-sex sibships (boys and girls), girls-only sibships, and boys-only sibships. If parents treat boys differently than girls, we expect that the similarity in highbrow cultural participation among siblings is lower in mixed-sex (brother-sister) sibships than in same-sex (brother-brother or sister-sister) sibships. In order to test this hypothesis, we estimate the model in Equation (1) without any explanatory variables (i.e., $y_{if} = \alpha + u_f + \varepsilon_{if}$) for each of the three possible gender sibship compositions and decompose the total variance in highbrow cultural participation into components that lie within and between families respectively (e.g., Van Eijck 1997; Warren, Hauser, and Sheridan 2002). The Intraclass Correlation (ICC) expresses the mean correlation in highbrow cultural participation among siblings from the same family. Below, we present the empirical estimates of the ICC for the gender composition of each sibship, which suggests only little gender-specific cultural socialization in our data.

To test the two alternative hypotheses, we estimate the model in Equation (1) as a within-family fixed effect (FE) regression model. The main advantage of the FE approach is that it controls for all unobserved, fixed differences between families that may affect cultural participation. To see why, we re-arrange Equation (1) into a within-family model by subtracting the family means for all of the variables

$$(y_{if} - \bar{y}_f) = sex_{if} \beta_1 + (x_{if} - \bar{x}_f) \beta_2 + (u_f - \bar{u}_f) + (\varepsilon_{if} - \bar{\varepsilon}_f), \quad (0)$$

which, using a difference operator (Δ), can be expressed as

$$\Delta y_{if} = sex_{if} \beta_1 + \Delta x_{if} + \Delta e_{if}. \quad (0)$$

The FE model in Equation (3) eliminates the family-specific fixed effect u_f and is identified by differences *within families* in siblings' highbrow cultural participation, gender, and other individual characteristics (education, family situation, etc.). The FE model controls in a very effective way for cultural socialization within the family (although not for *gender-specific* cultural socialization). When estimated in mixed-gender sibships, this model compares the cultural participation of brothers and sisters, while at the same time holding constant all the family-specific factors that brothers and sisters share (for example, genes, socioeconomic characteristics, and cultural socialization).³

Results

We present the empirical results in three sections. In the first section we estimate baseline gender differences in highbrow cultural participation and sibling similarity in cultural participation. In the second section we test for gender-specific cultural socialization by

decomposing the total variance in highbrow cultural participation by gender composition of the sibship. In the third section we estimate the within-family FE models and analyze the extent to which the three competing theoretical explanations account for the observed gender differences in highbrow cultural consumption.

Table 1 shows the summary statistics for the different cultural consumption items in the DLSY-C survey. The table shows that women are much more likely than men to attend highbrow cultural events. The only exceptions to this trend are classical concerts and jazz concerts. These results are similar to previous research also showing that women are more likely than men to attend highbrow cultural activities.

Table 1 also shows the sibling correlations in the probability of attending each cultural event (as measured by the ICC). We find that sibling correlations in highbrow cultural participation are in the range of 0.21 to 0.44, which attests to a comparatively high level of sibling similarity or, stated differently, a fairly strong effect of family background on highbrow cultural participation (Van Eijck 1997).

Table 2 summarizes information on family size and the gender composition of the sibship and the ICCs for our measure of highbrow cultural participation for different gender compositions of sibships. We include the ICCs for the different gender compositions of sibships to test the gender-specific cultural socialization explanation. As explained above, our rationale is that if parents engage in gender-specific cultural socialization, the ICC should be lower in mixed-sex sibships than in same-sex sibships.⁴ The ICC for highbrow cultural participation among all DLSY families with at least two children is 0.358. Table 2 shows that the ICC in mixed-gender sibships is 0.330, while it is 0.366 for girls-only sibships and 0.399 for boys-only sibships. Although the ICC is marginally lower in mixed-sex sibships than in same-sex sibships, these findings provide little evidence of gender-specific cultural socialization in our data. Put differently, we do not find that parents treat boys and girls in

different ways that lead girls to prefer highbrow culture and boys other types of culture. Building on this finding, we now investigate whether gender differences in socioeconomic position and family obligations account for gender differences in highbrow cultural participation.

– TABLE 2 HERE –

Table 3 shows the results from our main regressions of highbrow cultural consumption on gender and individual characteristics. We display results from two model specifications: Ordinary Least Squares (OLS) Regressions and within-family FE Regressions. The difference between these two model specifications is that the OLS model relies on variation both within and between families, while the FE model relies exclusively on variation within families. Thus, the OLS models serve as benchmark models that do not control for family-background characteristics.

– TABLE 3 HERE –

The first column shows our baseline OLS estimate of the gender difference in highbrow cultural consumption. This estimated gender difference is 0.357 and is highly significant, demonstrating that women participate much more in highbrow cultural activities than men (the difference between men and women is equivalent to 0.23 standard deviations in the distribution of the scale measuring highbrow cultural participation). In the second column we add the variables measuring individual characteristics such as age, education, and family situation. By including these variables, we reduce the gender difference in highbrow cultural participation from 0.357 to 0.240, which is equivalent to a reduction of about one-third. In

other words, in the OLS model we can account for some – but not a great deal – of the gender difference in highbrow cultural participation.

Columns 3 and 4 show the results from four within-family FE models. The crucial difference between these models and the OLS models is that they compare brothers and sisters from the same family. Thus, these models disregard all between-family variations in the data and, in doing so, they control for all family-background factors shared by siblings. Surprisingly, our baseline FE estimate of the gender difference in highbrow cultural participation (which compares brothers and sisters) is almost identical to the one obtained from the OLS model (which compares random men and women) (0.357 vs. 0.352). This result is interesting and suggests that, even after we control for all of the family-background factors brothers and sister share (for example genes, resources, and socialization), a large and statistically significant gender difference remains with regard to highbrow cultural consumption. With regard to our theoretical explanations, this result shows that (non-gender) cultural socialization within the family accounts for almost none of the observed gender difference in highbrow cultural participation.

Column 4 shows estimates from a FE model in which we also include variables capturing the socioeconomic and family characteristics that vary among brothers and sisters. We find that including these variables reduces the gender difference in highbrow cultural participation from 0.352 to 0.293 (a reduction of approximately 17 percent). Again, our results suggest that, at least with the selection of variables that are available to us, we are able to account for less than one-fifth of the gender difference in highbrow cultural participation.⁵

We find that the variables intended to capture differences in siblings' socioeconomic position and family obligations matter to some extent. First, having completed upper secondary education is associated with greater participation in highbrow cultural participation. Furthermore, because sisters are more likely to complete upper secondary

education than their brothers (Table 1 shows that 76 percent of the women in our sample have completed upper secondary education while this is the case for only 54 percent of the men), differences in educational attainment within families account for some of the gender difference in highbrow cultural participation.⁶ One's GPA in elementary school (Table 1 shows that women also have a higher mean GPA than men) yields similar results. Together, these findings indicate that differences in socioeconomic position (particularly in educational attainment) account for some of the gender difference in highbrow cultural participation.

Second, we find that being married does not affect highbrow cultural participation, but having children has a statistically significant negative effect on highbrow cultural participation. Our result for having children is in line with the hypothesis that parenthood makes it more difficult for women to participate in highbrow cultural events than men. Consequently, sisters who have children participate less in highbrow cultural activities than their brothers who do not have children. However, sisters who are married do not participate in such events less than their brothers.

In summary, our analysis shows that we are able to account for only little of the baseline gender difference in highbrow cultural participation. Gender-specific cultural socialization explains little of this difference, as does (non-gendered) cultural socialization within the family. The variables intended to capture explanations about gender differences in socioeconomic position and family obligations account for less than 20 percent of the remaining gender difference in highbrow cultural participation. Consequently, despite the innovative research design of our study, most of the reasons why men and women differ with regard to highbrow cultural participation remain unexplained in our analysis.

Discussion

Why is it that women are more prone than men to consuming highbrow culture? Is this gender difference mainly due to family socialization that shapes girls' and boys' preferences, or is it a result of different positions men and women occupy in the social structure? We investigate this question by using data with information on the cultural participation patterns of siblings. By looking at the cultural practices of brothers and sisters who grew up in the same family context, we can ascertain whether differences between women and men can be explained by different expectations and socialization provided at an early age. Furthermore, by controlling for educational attainment and family situation we can determine whether the gender difference in highbrow cultural participation is related to the homology between social position and cultural position.

Our overall conclusion is that the baseline difference between men and women with regard to their highbrow cultural participation does not originate in the family. Furthermore, we are able to account for only a minor share of this baseline gender difference. We support these conclusions with several empirical findings. First, we replicate previous research by identifying a substantial gender gap in highbrow cultural participation in favor of women. Second, we demonstrate that this gap cannot readily be explained by gender-specific cultural socialization practices. Third, we also show that cultural socialization within families does not account for the gender difference. Finally, we demonstrate that differences between brothers and sisters with regard to their educational attainment and family obligations account for some, but not a great deal, of the gender difference in highbrow cultural participation.

Research on gender and cultural consumption consistently reports significant differences between men and women on a number of cultural consumption indicators. The reasons for these differences have not been systematically identified, but various connections to class position, family status, and educational attainment have been posited. We contribute

to this body of knowledge by demonstrating that there is little evidence that girls and boys start following different paths in their cultural preferences at an early age. The question for future research remains: is it socialization in adulthood or other mechanisms that account for the gap in highbrow cultural participation? For example, one significant factor that is linked to gender differences in cultural participation and merits attention in the future is the effect of spouses on each other. If there are systematic differences between men and women in cultural consumption, we can ask whether they influence each other when they share households and lifestyles. Some studies show that a spouse's artistic and social background influences the participation in the arts of his or her partner (Upright 2004; Silva and Le Roux 2011). Thus, individuals with a spouse with high levels of arts socialization and educational attainment are more likely to attend arts events. Moreover, Upright reports that the educational attainment of wives is often a better predictor of their husbands' cultural participation in the arts than their husbands' own education and arts socialization (Upright 2004: 139). These results are heavily shaped by marital homogamy.

Another feature in our analysis that needs improvement is the fact that the respondents in our sample are fairly young, so we cannot observe income and class gradients. This limitation means that we do not fully test whether differences in socioeconomic position and family obligations account for gender differences in highbrow cultural participation. We were also unable to control for participation in arts classes at an early age (Christin 2012).

This paper aimed at extending research on cultural stratification by linking gender as a social boundary to cultural participation as a symbolic boundary. This link is important because it helps us identify the mechanisms through which inequality, hierarchy, and exclusion, as well as identity, solidarity, and inclusion are created and maintained. If we thought that this process takes place in the context of the family – we were wrong, at least according to the findings reported here. Theoretical explanations of the gender gap in cultural

consumption are elusive because some scholarship argues that women are expected to engage in highbrow cultural consumption for status emulation reasons (Bihagen and Katz-Gerro 2000; Lizardo 2006), while other scholarship emphasizes the constraints of time, material resources, and legitimacy that women face (Jackson 1988; Jackson and Henderson 1994). Thus, more research is needed to determine the causes of gender differences in cultural participation.

Table 1. Summary of Descriptive Statistics, Gender Differences in Cultural Participation, and Sibling Correlation in Cultural Participation

	Descriptive Statistics		... by Gender		T-test on difference	ICC ^a	N
	Mean	SD	Women	Men	Diff		
Opera	0.07	0.26	0.09	0.06	0.03**	0.44***	3,303
Ballet or dance	0.13	0.34	0.17	0.10	0.07***	0.26***	3,302
Classical concert	0.09	0.29	0.09	0.10	0.01	0.35***	3,303
Theater (play)	0.37	0.48	0.42	0.32	0.10***	0.21***	3,302
Movie in film club/art cinema	0.16	0.36	0.17	0.14	0.03 [#]	0.26***	3,300
Art museum	0.49	0.50	0.54	0.44	0.10***	0.26***	3,303
Jazz concert	0.19	0.39	0.19	0.19	0.00	0.37***	3,302
Highbrow cultural participation	1.51	1.53	1.67	1.33	0.34***	0.32***	3,297
Sex (woman)	0.52	0.50					3,303
Age	27.80	5.09	27.89	27.70	0.19		3,303
Firstborn	0.42	0.49	0.44	0.41	0.03		3,303
Upper secondary education	0.66	0.47	0.76	0.54	0.22***		3,303
GPA in elementary school	4.13	0.97	4.27	3.97	0.30***		3,139
Cognitive ability	9.59	3.34	9.57	9.62	0.05		3,241
Married	0.57	0.49	0.62	0.52	0.10***		3,303
Children	0.62	0.95	0.72	0.50	0.22***		3,303

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, [#] $p < 0.10$. ICC = Intraclass Correlation. Probability of attending each cultural event modeled as a binary logistic regression model.

Table 2. Family Size, Gender Composition of Sibship, and Interclass Correlation (ICC) in Highbrow Cultural Participation

Family size	Marginal distribution	Number of observations	Gender composition of sibship		
			% mixed gender	% girls only	% boys only
1	29.5	973	-	-	-
2	49.6	1,638	49.3	28.8	21.9
3	17.7	585	71.3	15.4	13.3
4	2.3	76	89.5	5.3	5.3
5	0.7	25	100.0		
6	0.2	6	100.0		
Total	100.0	3,303			
ICC for highbrow cultural participation			0.330	0.366	0.399
<i>N</i> individuals/			1,323	565	440
<i>N</i> families			566	267	206

Note: Includes DLSY-C respondents age 18 and older.

Table 3. Regressions of Highbrow Cultural Participation. Parameter Estimates, Standard Errors in Parentheses, and Standardized Effects in Square Brackets

	Between-Family		Within-Family	
	(1)	(2)	(3)	(4)
Sex (woman)	0.357 (0.067)*** [0.230]	0.240 (0.064)*** [0.157]	0.352 (0.075)*** [0.230]	0.293 (0.075)*** [0.192]
Age		-0.012 (0.009)		0.008 (0.016)
Firstborn		0.146 (0.068)*		-0.057 (0.105)
Upper secondary education		0.497 (0.070)***		0.380 (0.121)**
GPA in elementary school		0.299 (0.036)***		0.173 (0.058)**
Cognitive ability		0.004 (0.009)		-0.020 (0.016)
Married		-0.227 (0.077)***		-0.146 (0.106)
Children		-0.284 (0.038)***		-0.194 (0.064)**
R ²	0.013	0.170	0.013	0.139
N	2,187	2,187	2,187	1,249

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$. OLS standard errors adjusted for clustering of respondents within families. Models estimated for families with sibship size 2 or larger.

References

- Altergott, Karen, and Christine Cornell McCreedy. 1993. "Gender and Family Status across the Life Course: Constraints of Five Types of Leisure." *Society and Leisure* 16:151-180.
- Bihagen, Erik, and Tally Katz-Gerro. 2000. "Cultural Consumption in Sweden: The Stability of Gender Differences." *Poetics* 27:327-349.
- Bryson, Bethany. 1996. "Anything but Heavy Metal: Symbolic Exclusion and Musical Dislikes." *American Sociological Review* 61:884-899.
- Buchmann, Claudia, and Thomas DiPrete. 2006. "The Growing Female Advantage in College Completion: The Role of Parental Education, Family Structure, and Academic Achievement." *American Sociological Review* 71: 515-541.
- Chan, Tak Wing. 2010. *Social Status and Cultural Consumption*. Cambridge: Cambridge University Press.
- Cherbo, Joni Maya, and Monnie Peters. 1995. *American Participation in Opera and Musical Theatre, 1992*. Carson, Calif: Seven Locks Press.
- Christin, Angèle. 2012. "Gender and highbrow cultural participation in the United States." *Poetics* 40: 423-443.
- Collins, Randall. 1988. "Women and Men in the Class Structure." *Journal of Family Issues* 9(1): 27-50.
- , 1992. 'Women and the Production of Status Cultures', in M. Lamont and M. Fournier (eds) *Cultivating Differences*. Chicago, IL: University of Chicago Press.
- Costa, Janeen (ed.). 1994. *Gender Issues and Consumer Behavior*. London: Sage.
- Cuadrado, Manuel, and Marta Frasquet. 1999. "Segmentation of Cinema Audiences: An Exploratory Study applied to Young Consumers." *Journal of Cultural Economics* 23:257-267.
- De Graaf, Nan-Dirk. 1991. "Distinction by Consumption in Czechoslovakia, Hungary, and The Netherlands." *European Sociological Review* 53:103-112.
- De Grazia, Victoria, and Ellen Furlough. 1996. *The Sex of Things: Gender and Consumption in Historical Perspective*. Berkeley: University of California Press.
- DiMaggio, Paul. 1982. "Cultural Capital and School Success: The Impact of Status Culture Participation on the Grades of U.S. High School Students." *American Sociological Review* 47:189-210.
- , 2004. "Gender, Networks, and Cultural Capital." *Poetics* 32: 99-103.
- DiMaggio, Paul, and John Mohr. 1985. "Cultural Capital, Educational Attainment, and Marital Selection." *American Journal of Sociology* 90:1231-1261.

DiMaggio, Paul, and T. Mukhtar. 2004. "Arts Participation as Cultural Capital in the United States, 1982–2002: Signs of Decline?" *Poetics* 32: 169–94.

Donnat, Olivier. 2004. La Feminisation des Pratiques culturelles. In: Blö T. (Ed.), *La Dialectique des Rapports Hommes-Femmes*. PUF, Paris, pp. 423–431.

Dumais, Susan. 2002. Cultural Capital, Gender, and School Success: The Role of Habitus. *Sociology of Education* 75,1: 44-68.

Erickson, Bonnie. 1996. "Culture, Class and Connections." *American Journal of Sociology* 102,1: 217–51.

Green, Eileen, Sandra Hebron, and Diana Woodward. 1990. *Women's Leisure, What Leisure?* London: Macmillan.

Jackson, E. L. 1988. 'Leisure Constraints: A Survey of Past Research', *Leisure Sciences* 10: 203–15.

Jackson, E. L. and K.A. Henderson. 1994. "Gender-based Analysis of Leisure Constraints." *Leisure Sciences* 17: 31–51.

Jæger, Mads M., and Tally Katz-Gerro. 2010. "The rise of the eclectic cultural consumer in Denmark, 1964–2004." *The Sociological Quarterly* 51: 460–483.

Kane, Danielle. 2004. "A Network Approach to the Puzzle of Women's Cultural Participation." *Poetics* 32:105-2007.

Katz-Gerro, Tally. 1999. "Cultural Consumption and Social Stratification: Leisure Activities, Musical Tastes, and Social Location." *Sociological Perspectives* 42,4: 627-646.

-----, 2006. "Comparative Evidence of Inequality in Cultural Preferences: Gender, Class, and Family Status." *Sociological Spectrum* 26:63-83.

-----, 2011. "Cross-National Cultural Consumption Research: Inspirations and Disillusions." *KölnerZeitschriftfürSoziologie und Sozialpsychologie* 51: 339-360. (in English)

Katz-Gerro, Tally, and Yossi Shavit. 1998. "The Stratification of Leisure and Taste: Classes and Lifestyles in Israel." *European Sociological Review* 14,4: 369-386.

Katz-Gerro, Tally, and Oriel Sullivan. 2004. "Loisirs, Goûts et Appartenance Sexuelle en Grand-Bretagne: Évolution entre les Années 1960 et 1990." *Sociologie et Sociétés* XXXVI: 165-186.

Katz-Gerro, Tally, and Oriel Sullivan. 2010. "Voracious Cultural Participation: Reinforcement of Gender and Social Status." *Time and Society* 19,2: 193-219.

Kaufman, Jason, and Jay Gabler. 2004. "Cultural Capital and the Extracurricular Activities Of Girls And Boys In The College Attainment Process." *Poetics* 32: 145–168.

- Kraaykamp, Herbert, and Koen van Eijck. 2010. "The Intergenerational Reproduction of Cultural Capital: A Threefold Perspective." *Social Forces* 89: 209-231.
- Lizardo, Omar. 2006. "The Puzzle of Women's "Highbrow" Culture Consumption: Integrating Gender and Work into Bourdieu's Class Theory Of Taste." *Poetics* 34:1-23.
- López-Sintas, J. L. and Garcia-Alvarez, E. 2002. "Omnivores Show up Again: The Segmentation of Cultural Consumers in Spanish Social Space." *European Sociological Review* 18,3: 353–68.
- Lovell, Terry. 2000. "Thinking Feminism with and Against Bourdieu." *Feminist Theory* 1,1:11-32.
- Lubar, Steven. 1998. "Men/Women/Production/Consumption." Pp. 95-112 in *His and Hers: Gender, Consumption and Technology*, edited by R. Horowitz and A. Mohun. Charlottesville: University Press of Virginia.
- McCall, Leslie. 2001. *Complex Inequality: Gender, Class, and Race in the New Economy*. New York: Routledge.
- Octobre, S. (2005). "La Fabrique Sexuée des Goûts Culturels." *Développement Culturel* 150: 1-10.
- Pasquier, Dominique. 2010. *Le Théâtre, Une Sortie Sociale: Rapport au Département des Etudes, de la Prospective et des Statistiques (DEPS)*. Paris: Ministère de la Culture.
- Phipps, S., Burton, P. and Osberg, L. 2001. "Time as a Source of Inequality within Marriage: Are Husbands More Satisfied with Time for Themselves than Wives?" *Feminist Economics* 7,2: 1–21.
- Prieto-Rodriguez, Juan, and Victor Fernández-Blanco. 2000. "Are Popular and Classical Music Listeners the Same People?" *Journal of Cultural Economics* 24:147-164.
- Prieur, Annette, Lennart Rosenlund, and Jacob Skjøtt-Larsen. 2008. "Cultural Capital Today: A Case Study from Denmark." *Poetics* 36: 45-71.
- Ridgeway, Cecilia, and Lynn Smith-Lovin. 1999. "The Gender System and Interaction." *Annual Review of Sociology* 25:191-216.
- Robinson, J.P., and G. Godbey. 1997. *Time for Life: The Surprising Ways Americans Use Their Time*. University Park: Pennsylvania State University Press.
- Shaw, Susan M. 1985. "Gender and Leisure: Inequality in the Distribution of Leisure Time." *Journal of Leisure Research* 17:266-282.
- , 1994. "Gender, Leisure, and Constraints: Towards a Framework for the Analysis of Women's Leisure." *Journal of Leisure Research* 26:8-22.
- Silva, Elizabeth B. 2005. "Gender, Home and Family in Cultural Capital Theory." *British Journal of Sociology* 56: 83–103.

Silva, Elizabeth, and Brigitte Le Roux. 2011. "Cultural Capital of Couples: Tensions of Elective Affinities." *Poetics* 39:547-565.

Ter Bogt, Tom F. M., Delsing, Marc J.M.H., van Zalk, Maarten, Christenson, Peter G., and Wim H.J. Meeus. 2011. "Intergenerational Continuity of Taste: Parental and Adolescent Music Preferences." *Social Forces* 90: 297-319.

Torche, Florencia. 2010. "Social Status and Cultural Consumption: The Chilean Case in Comparative Perspective" in T.W. Chan (ed.) *Social Status, Lifestyle and Cultural Consumption*. Cambridge: Cambridge University Press.

Upright, Craig B. 2004. "Social Capital and Cultural Participation: Spousal Influences on Attendance at Arts Events." *Poetics* 32: 129-143.

Van Eijck, Koen. 1997. "The Impact of Family Background and Educational Attainment on Cultural Consumption: A Sibling Analysis." *Poetics* 25:195-224.

Van Eijck, K. 2001. "Social Differentiation in Musical Taste Patterns." *Social Forces* 79:1163–84.

Warren, Robert E., Hauser, Robert A. and Jennifer T. Sheridan. 2002. "Occupational Stratification across the Life Course: Evidence from the Wisconsin Longitudinal Study." *American Sociological Review* 67: 432-455.

Yaish, Meir, and Tally Katz-Gerro. 2012. "Disentangling Cultural Capital: The Consequences of Cultural and Economic Resources for Taste and Participation." *European Sociological Review* 28:169-185.

Notes

¹ Cronbach's alpha for the scale, although not strictly valid with binary items, is 0.647.

² The DLSY-C includes a variable measuring the respondent's monthly gross income and a variable measuring social class position using the Erikson-Goldthorpe-Portocarero (EGP) scale (for those who report an occupation). However, none of these variables are related to highbrow cultural consumption in a statistically significant manner, probably because the respondents in our sample are still quite young.

³ The FE model can be conceptualized as a regression model that includes an intercept for each family. In this model, we can identify the effect on highbrow cultural consumption of characteristics that vary across siblings (for example, gender and education), but we cannot identify the effect of family characteristics that do not vary within families (for example, parents' education). However, by including an intercept for each family, we control much more thoroughly for the effect of family background than by including a limited range of observable family-background variables (as is done in most previous research).

⁴ The gender composition of the sibship is completely unrelated to the respondents' family background characteristics such as parents' education and income.

⁵ The DLSY-C also includes information on respondents' personality traits (self-esteem and locus of control) and risk attitudes (risk aversion and time discounting preferences). We have experimented with including these types of variables (which are known to vary by gender) in our models, but none were found to have any impact on highbrow cultural participation.

⁶ The gender differences in the explanatory variables listed in Table 2 pertain to the full DLSY-C sample. FE regressions of gender differences in these variables *within families* show that sisters are more likely than their brothers to have completed upper secondary education, to be married, to have children and to have a higher GPA. By contrast, there are no gender differences within families with regard to mean age, birth order, and cognitive ability.