



Social Impact of
the Arts Project

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**Individual Participation and Community Arts Groups: A Quantitative Analysis of
Philadelphia**

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In recent years, urban policy makers have focused increased attention on the role of arts and culture in their communities. In the wake of the decline of manufacturing and the shift of many white collar industries to the suburbs, city leaders are now seeking economic development strategies that build on the remaining strengths of our aging cities. The "hospitality" industries--conventions, tourism, and arts and culture--have moved quickly to the top of the list.

Yet, this strategy has encountered resistance from a variety of groups within the cities. Most of the large cultural sites are located downtown. Although community arts groups and projects have flourished in the last several decades, they remain small and are dwarfed by the economic impact of a few large groups. Thus, if policy makers focus on the economic impact of arts and culture, they are likely to advocate policies that invest in the large, centrally located cultural organizations to the detriment of smaller, neighborhood groups. As a result, community groups and their political representatives have taken a fairly skeptical view of the major, downtown arts projects.

In short, arts and culture policy seem to be replaying a traditional conflict between an urban political-economic elite and the rest of the city's residents. This "growth machine" pattern--in which urban policy promotes economic shifts, displacement, rising real estate values, and profits for members of the elite--has dominated the urban political economy at least since World War II. In her book, *Loft Living*, Sharon Zukin extended this model to the role of the arts in Soho in New York City during the 1970s and 1980s. She argued that a new Artistic Mode of Production emerged which used artists as an opening wedge in the displacement of existing industries and the redevelopment of real estate in the area. Although the artists in Soho were themselves ultimately displaced by higher income groups, Zukin's work suggests that culture can fan the flames of urban social conflict if they are viewed simply as economic activity.

Yet, the arts are much more than economics. On the one hand, some scholars have argued that the arts are a central element of the division of social classes within the city. The "cultural capital" that elites gain from their knowledge of the arts that, it is argued, is as important as money and power in assuring their social dominance. On the other hand, other scholars have suggested that communities and individuals use arts and cultural activities as a means of strengthening social ties and community spirit. "Social capital" that derives from these relationships can be the basis for social and community revitalization.

This is to say that although we have a variety of theories about the non-economic role of the arts, we don't know very much about how these theories jibe with reality. The best data on individual participation we have--the surveys of public participation in the arts commissioned by the National Endowment for the Arts--have provided a wealth of data on individual behavior and attitudes, but the few attempts to link these data to larger social contexts have focused narrowly on the economics of arts consumption.

This paper uses the public participation data for one city--Philadelphia. Information on the arts and cultural behavior of a sample of 600 adults in 1992 has been linked with other data bases on cultural groups in the city. The purpose is to examine the role of *community context* on arts behavior. The findings are startling; some very simple information on the cultural environment in which individuals live is more powerful than traditional socio-economic variables like income and education in predicting participation in the arts. These findings, by challenging the narrow economic perspectives that have dominated the debate on arts and culture in the city, suggest that we need a much broader and more fine-grained appreciation of the role of the urban arts and their social impact.

Data and Methods

The data for this paper come from two sources. One source is a local survey of public participation in the arts conducted by Abt Associates under contract with the National

Endowment for the Arts in 1992. This telephone survey included a general sample of 400 adults in the Philadelphia metropolitan area and a secondary sample of 200 minority adults.¹

The survey asked each respondent about their cultural activity over the past year including attendance at cultural and arts activities, listening or watching cultural programs on radio or television, and a variety of opinion questions about the desirability of arts activities.

The zipcode of each respondent was also coded. As a result, the researcher was able to link the public participation survey with two data bases developed by the Greater Philadelphia Cultural Alliance. One data base included detailed information on a group of 160 cultural groups in the five Pennsylvania counties in the Philadelphia metropolitan area. Another data base included information on about 400 groups within the metropolitan area.

In other words, information on each respondent's zip code area was added to his or her record. The information included: the number of arts groups in the zip code area, the average size of the groups' budget, and the average total attendance per group in the area. Because the GPCA data base had focused on the Pennsylvania section of the metropolitan area, cases from New Jersey were excluded from the analysis.

Findings

The primary measure of participation used in the analysis was a measure of total number of arts events attended. This measure (NPERF) included the number of performances of ballet, other dance, jazz, opera, classical music, plays, and musicals the

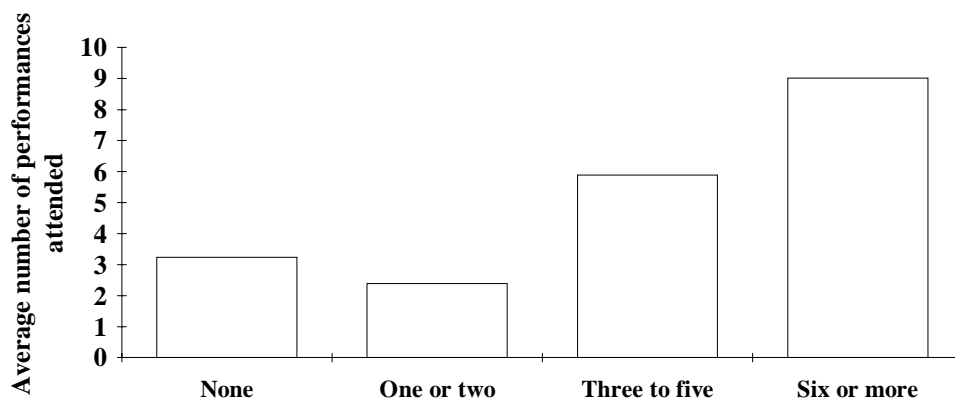
¹ The minority sample was drawn by using a set of phone exchanges in the city with high minority concentration. Although the intent was to increase the number of black, Latino, and Asian respondents, the lack of non-English language interviewers appears to have reduced the effectiveness of the strategy for groups other than African-Americans. For example, given their representation in the population, blacks were roughly 50 percent more likely to be in the sample than were Latinos or Asians.

individual had gone to in the previous year as well as the number of times he or she had visited a museum. Individual averages for each of the eight activities were also analyzed. Of the 478 respondents, over a third answered that they hadn't done any of these activities in the past year. Roughly another third said they had gone to between one and three activities, and the other third had gone more frequently. One indefatigable respondent had attended 107 events in the past year. Overall, the average number of events attended was 3.9 and the median was one event per year.

Number of Groups

The number of arts and cultural groups in the respondent's zip code area was the best predictor his or her participation in cultural events. Those respondents who lived in areas with less than two groups attended performances less than the population average of 3.9 performances per year. In contrast, those respondents living in areas with between 3 and 5 groups attended an average of 5.9 events per year and those in areas with over 6 groups attended 9 times per year. Overall, the *eta* between number of groups and average number of performances was .21 (Figure1, Table 1).

Figure 1. Average number of performances attended in past year, by number of cultural groups in individual's zipcode



Three of the eight examined activities--opera, plays, and museums--were particularly related to the number of local groups. Individuals living in communities with more than six groups went to the opera more than four times as often as individuals in other areas. Whereas individuals in communities with less than two arts' groups saw a play just over 0.35 times per year, an individual in a community with three to five groups attended a play .8 times and a individual in a community with more than six groups attended 1.5 times. Finally, individuals in communities with more than six groups went to a museum an average of 2.5 times during the previous year, more than twice the average for the entire population. Among the other five activities--jazz, classical music, musicals, ballet, and dance--the relationship of local groups and individual attendance was obvious, but the relationship was somewhat less strong.

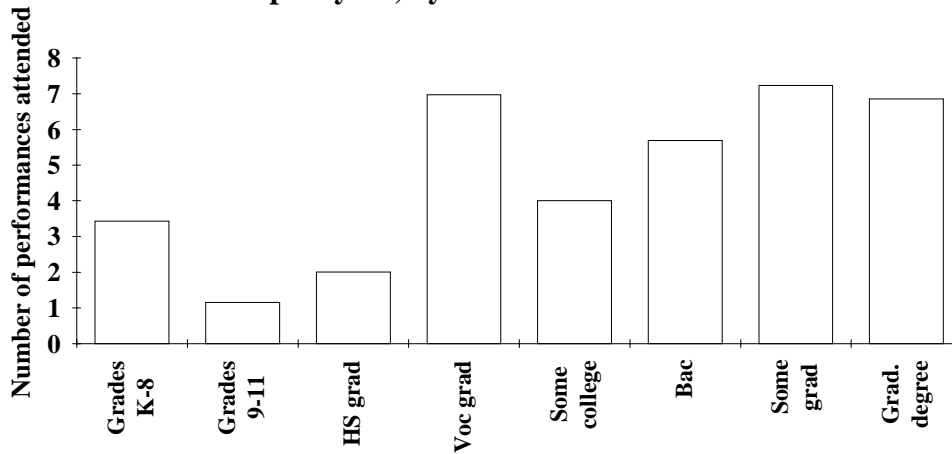
The communities with both many arts' groups and high participation rates were scattered across the city (Table 2). Although Center City was well represented, the list was primarily composed of neighborhoods outside of the center. The neighborhoods were diverse with respect to race, income, and distance from Center City. Only three of the top sixteen zipcodes were outside of the city of Philadelphia.

Education and Income

Given previous research on public participation in arts and cultural activities, we would expect education and income to be important predictors of total participation. Indeed, both of these variables are important, although less important than the number of groups. For example, those with a high school education or less attended roughly two events per year and those with a college degree or more attended more than six events per year (Figure 2, Table 3). Similarly, it was only among individuals with annual incomes above \$40,000 that the average number of performances attended was greater than the

population average (Figure 3, Table 4). The *etas* for number of performance with education and income were .20 and .16, respectively.

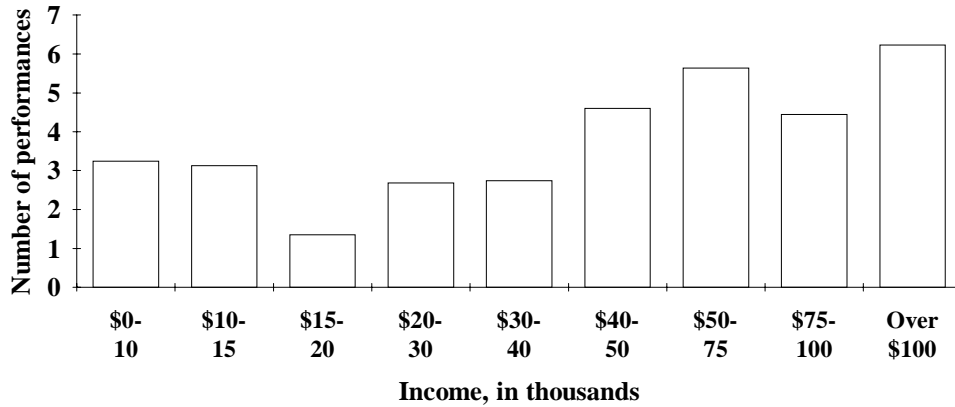
Figure 2. Average number of performances attended in past year, by educational attainment



In contrast to the number of local arts groups, education and income were weakly related to some arts' activities. For example, individuals with annual incomes of less than \$15,000 attended classical music concerts about as often as those with incomes over \$50,000. Income and education also had a weak relationship with attendance at jazz performances, musicals, and dance other than ballet.

On the other hand, income was highly correlated with ballet; those with incomes over \$100,000 attended the ballet more than eight times the population average and went to museums more than 60 percent more often. Those with a college education were much more likely to attend the opera and visit museums than the rest of the population.

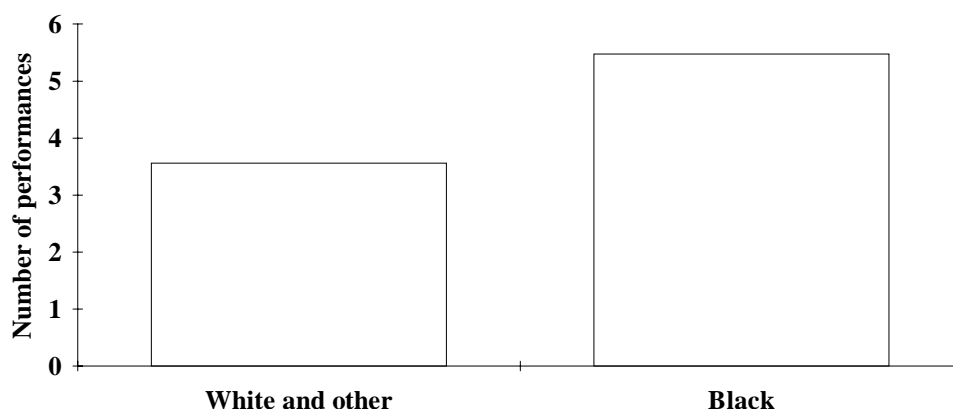
Figure 3. Average number of performances attended in past year, by annual income



Race

Given the relationships of frequency of attendance to income and education, we would expect that African-Americans would attend fewer arts performances than whites. However, the data show just the opposite (Figure 4, Table 5). The average African-American respondent attended 5.5 events during the previous year compared to only 3.6 events for the non-black respondents to the survey. In addition, we found that black Philadelphians were more likely to live in areas with more than the average number of arts groups. For example, the average non-black resident lived in an area with only 2.1 groups, but black respondents lived in neighborhoods with 2.9 groups.

Figure 4. Average number of performances attended in past year, by race



African-Americans were much more likely to attend jazz performances and musicals than members of other races, but they also attended classical music concerts about fifty percent more often than the rest of the population. On the other hand, African-Americans' participation in opera, plays, and ballet was much less frequent than the averages for the rest of the population.

Correlation Analysis

The strength of the relationship between number of neighborhood groups and average attendance is confirmed by correlation analysis. The Pearson's r between number of performances attended and number of organizations in the community is .227, which was significant at less than the .0005 level. By comparison, the correlation coefficients for income, education, and race were only, .09, .18, and .08, respectively. In other words, this very rough measure of community cultural activity did a better job of predicting arts participation than did the usual "big guns" of social analysis.

In contrast, the role of size of cultural group does not appear to be strong. The average budget size of the groups in the area was not significantly correlated with participation. Although total attendance per group had a correlation coefficient of .08

with number of performances attended, this relationship was sharply weaker than that of number of groups. Thus, the presence of groups, not the size of their budgets or activities, was the most important predictor of individual's participation.

We know that the variables we have used to examine number of performances-- number of organizations, income, education, and race--are correlated with one another. Therefore, in order, the control for the correlations between them, I performed two types of multivariate analyses; a multiple regression analysis including the variables already mentioned as well as age and sex (neither of which had a significant zero-order correlation with number of performances attended) and a multiple classification analysis.

Multiple Regression

Because some of the demographic variables in the survey had a large proportion of missing values,² the mean of the variable was entered in place of missing data. Four of the variables remained significantly related to number of performances when controlled for all of the other variables. (Table 6) Number of organizations was the most strongly related (beta of .22), followed by education (.14), race (.11), and income (.10). Overall, the analysis explained 9.8 percent of the variance in number of performances attended.

Another measure of number of organizations' importance is its contribution to total explained variance. When it is removed from the analysis, the multiple R-square drops to .062. In other words, number of organizations uniquely accounted for more than a third of all explained variance--even when attendance and budget of the average group are included. By contrast, education only uniquely accounted for less than a fifth of all explained variance.

The estimates of *b* produced by the multiple regression allow us to estimate the increase in number of performances attended associated with an increase of one unit of the independent variable. These estimates confirm the importance of number of organizations and the social variables. For example, the *b* of 2.86 for black indicates that when controlled for the other variables in the analysis, black respondents attended almost three more performances per year than non-blacks. This confirms that the small difference we found in the bivariate analysis understates the relationship between race and performances attended. Similarly, the *b* for number of organizations of .42 suggests that--when other variables are controlled--an increase in the number of organizations from 3 to 6 is associated with an increase of about 1.3 performances attended per year.

² Only 382 of the 478 cases in the survey had data on income. Other variables had fewer than five percent of cases with missing data.

Multiple Classification Analysis

In contrast to the multiple regression, which measures only the linear relationships between the variables, multiple classification analysis (MCA) allows us to make a more detailed examination of individual categories of the independent variables. Overall, it confirms the previous results. Number of organizations and education remain the best predictors of number of performances attended.

The multiple classification analysis confirms the importance of race as well. When adjusted for individual education and income categories--rather than the overall linear relationship, race emerges as a stronger predictor of performance attended. The 2.8 performance difference between blacks and non-blacks predicted by the regression analysis increases in this analysis to a difference of 3.0 (3.1 versus 6.1). In other words, when controlling for the other variables in the analysis, blacks attended nearly twice as many performances as other ethnic groups.

In short, although this analysis confirms that education, race, and income are important determinants of participation in the arts, it suggests that community cultural activity is more strongly correlated with participation than are these other variables.

Discussion

This study presents a number of important insights into the social context of arts activities. It suggests, as the cultural capital theorists would expect, that arts participation is embedded in the structure of inequality, with better educated and higher income residents more likely to attend concerts, plays, and museums than are low income residents. At the same time, at least in Philadelphia, African-Americans are much more likely to live in neighborhoods with many local arts groups and to attend arts and cultural events than are other racial groups.

However, the truly startling result of this analysis is the role of the number of cultural groups in a community in predicting analysis. However the data are analyzed, the number of groups--unlike their budget or audience size--is the variable most strongly correlated with number of performance attended. Clearly, the ecological context in which individuals live is related to their participation in the arts.

But what is the nature of this relationship? At least four theories present themselves.

1. Availability: It could simply be the case that individuals in communities with many groups take advantage of these groups, that is, the availability of groups increases participation.
2. Arts groups move to high participation areas: In contrast to the supply side explanation based on availability, it could be that the relationship is driven by demand; groups make the decision to be near their market.
3. Individuals move to areas with people with similar taste: The relationship between local groups and individual participation might be an artifact of neighborhood homogeneity, individuals who like to attend performances and have local groups in their community may all move to the same neighborhoods.
4. Living in an area with a lot of arts groups leads to more involvement: This would account for the strongest relationship between the variables; individuals living in neighborhoods with many local groups are socialized to a pattern of heavy attendance at cultural events.

The first two theories fit well with the current *economic* bias of the analysis of arts attendance patterns. If the arts are a simple consumer good, it would hardly be surprising that supply creates its own demand. Although availability may explain participation when we compare city-to-city, the present analysis suggests that these two

theories do not persuasively explain the neighborhood variation in attendance. If they did, we would expect the total attendance of groups to have a stronger relationship with participation. Yet, neither size of group nor total attendance of local arts' groups was significantly related to participation. Thus, it seems likely that the performances individuals are attending are not exclusively in their neighborhood.

It is difficult to choose between the other two theories. Certainly we know individuals self-select their neighborhood when they move and the pressures toward homogeneity are very strong in a "hyper-segregated" city like Philadelphia.³ However, if this self-selection of high participants into areas with a lot of groups is present, it apparently is not strongly correlated with income, education, and race, as the "cultural capital" theorists might have predicted.

This leaves the final hypothesis as the most likely. These results suggest that individuals who live in area with many groups are more involved in the arts. Some of this is may be a self-selection effect, but apparently more of it is ecological, an effect of living in a particular area of the city. Although the connections are far from clear, something of the cultural milieu of these areas is related to arts participation. The effect could be direct, that is, the number of groups might encourage individuals to become involved in the arts. Or it could be indirect, there might be another feature of these areas--for example the social commitment of community residents or "social capital"--that lead to *both* the creation of more groups and greater attendance.

The results of the analysis of African-American respondents reinforces the centrality of community structure in understanding the social impact of the arts. One of the central concerns of urban analysis in recent years has been the decline of social institutions in urban African-American communities. Certainly there is much persuasive

³ The phrase is Doug Massey and Nancy Denton's. *American Apartheid* (New York: Oxford U. Press, 1993).

evidence that schools, churches, and voluntary organizations do not play as vital a role in poor communities as they once did. Still, the current analysis underlines that the black respondents to this survey attend cultural events much more frequently than other members of other ethnic groups. At the same time, they are more likely to live in areas with more cultural groups. Whatever the broader trends, cultural groups are an vital contributor to the institutional structure of Philadelphia's black community.

It is far too early to fine-tune a theory consistent with these data. The data themselves need to be examined in greater detail. In addition, we need to know much more about the areas with high participation and those with low participation before we can draw any clear conclusions. However, they pose some important questions about our emerging understanding of how arts and cultural activities are embedded in a particular community.

On a policy level, the most important implication of these results is that we should not see downtown and community investment in the arts as a zero-sum game. We know that the large downtown groups make up the vast majority of the economic impact of the arts. However, it appears that a vibrant community arts scene contributes to the audience that will support these groups. Thus, this analysis suggests that a wise urban policy would see the support of local arts and cultural groups as an intrinsic part of its economic development strategy. More than we have appreciated earlier, the fate of the large groups that contribute most of the economic might of the arts is linked to that of the small groups.

As we come to better understand how arts and cultural activities affect the everyday lives of ordinary citizens--their life-cycle and family, individual ambitions and hopes, the development of skills and insights, the structure of neighborhoods and communities--we will place ourselves in a position where we can relate the obvious economic needs of our cities to the social role played by arts and culture.

Table 1. Average Number of Performances Attended during Previous Year, by Type and by Number of Local Arts' Groups in Zipcode

	Number of Local Arts' Groups				Eta	Statistical Significance
	None	1-2	3-5	6 +		
Jazz	0.24	0.38	0.52	1.18	0.0996	ns
Classical	0.65	0.53	0.93	1.49	0.0705	ns
Opera	0.06	0.09	0.08	0.37	0.179	0.0015
Musicals	0.59	0.26	1.40	1.08	0.09511	ns
Plays	0.50	0.18	0.83	1.53	0.1937	0.0004
Ballet	0.20	0.02	0.12	0.28	0.1328	0.0377
Dance	0.16	0.25	0.15	0.40	0.0811	ns
Museums	0.90	0.68	1.84	2.55	0.2073	0.0001
All Types	3.24	2.39	5.89	9.02	0.2172	0.0001
N	191	164	82	40		

Note: ns=not statistically significant
Source: See text

Table 2. Zip Codes with High Average Attendance and Above Average Number of Local Arts' Groups

<i>ZIP</i>	<i>Location</i>	<i>Average Number of Performances Attended</i>	<i>Number of Arts' Groups</i>
19106	Center City	37.00	35.00
19130	Fairmount S.	21.45	5.00
19123	Spring Garden S.	20.94	4.00
19102	Center City	19.00	20.00
19118	Chestnut Hill	16.00	6.00
19103	Center City	14.10	39.00
19119	Mt. Airy	13.48	6.00
19141	Logan	11.59	3.00
19143	Kingsessing	10.83	4.00
19104	W. Phila	9.41	20.00
19034	Ft. Washington	8.00	4.00
19063	Media	7.33	3.00
19144	Germantown	7.08	11.00
19087	Wayne	5.65	6.00
19131	West Park	4.70	4.00
19147	Southwark	4.60	16.00
Citywide Average		3.65	1.79

Table 3. Average Number of Performances Attended in Past Year, By Type and By Educational Attainment

	Educational Attainment								Statistical	
	Grades K-8	Grades 9-11	HS grad	Vocational	Some college	Bachelors	Some grad	rad. degree	Eta	Significance
Jazz	.15	.10	.23	.29	.29	.80	2.19	.47	0.1268	ns
Classical	2.94	.32	.15	4.77	.69	.79	.62	1.31	0.2175	0.0022
Opera	.00	.00	.09	.17	.01	.16	.00	.34	0.1872	0.0211
Musicals	.00	.11	.39	.01	.56	1.42	1.17	.51	0.1088	ns
Plays	.00	.05	.32	.51	.77	.60	.17	1.24	0.1509	ns
Ballet	.00	.01	.02	.00	.25	.20	.04	.21	0.1502	ns
Dance	.06	.19	.23	.35	.20	.20	.00	.32	0.0592	ns
Museums	.29	.39	.57	.88	1.24	1.55	3.05	2.46	0.2162	0.0026
All Types	3.43	1.16	2.01	6.98	4.01	5.69	7.23	6.86	0.2029	0.0075
N	14	26	147	12	110	117	7	33		

Note: ns=not statistically significant
Source: See text

Table 4. Average Number of Performances Attended in Past Year, By Type and By Household Income

	Household Income (in thousands)									Statistical	
	\$0-10	\$10-15	\$15-20	\$20-30	\$30-40	\$40-50	\$50-75	\$75-100	\$100+	Eta	nificance
Jazz	.21	.12	.19	.46	.59	.54	.81	.54	1.01	0.0856	ns
Classical	1.29	.75	.21	.18	.06	.21	1.12	.79	.47	0.1276	ns
Opera	.19	.00	.03	.00	.03	.01	.06	.10	.19	0.2505	0.002
Musicals	.40	.55	.20	.40	.49	2.40	.56	.85	.42	0.1343	ns
Plays	.15	.44	.16	.51	.45	.61	.54	.89	.53	0.1126	ns
Ballet	.11	.02	.00	.05	.05	.02	.08	.00	1.11	0.3989	0.0001
Other Dance	.13	.24	.06	.10	.34	.09	.28	.29	.69	0.1493	ns
Museums	.74	.98	.56	.99	.73	.72	2.19	.99	1.79	0.1988	0.0576
All Types	3.24	3.13	1.35	2.69	2.74	4.60	5.64	4.45	6.23	0.159	ns
N	51	36	28	69	70	44	54	13	16		

Table 5. Average Number of Performances Attended during Previous Year, by Type and by Race

	Race		Eta	Statistical Significance
	White and other	African-American		
Jazz	.30	1.00	0.1014	0.0267
Classical	.67	1.04	0.0366	ns
Opera	.11	.03	0.0684	ns
Musicals	.46	1.66	0.1043	0.0225
Plays	.57	.34	0.0436	ns
Ballet	.15	.05	0.0545	ns
Other Dance	.20	.26	0.0254	ns
Museums	1.12	1.10	0.0032	ns
All Types	3.56	5.48	0.079	0.086
N	400	78		

Note: ns=not statistically significant

Source: See text

Table 6. Multiple Regression, Predicting Number of Performances Attended in the Past Year, By Age, Educational Attainment, Race, Income, and Number of Local Arts' Groups in Zipcode

Variable	B	Beta	Sign.
Age	0.04	0.08	0.06
Education	0.73	0.14	0.005
Race (Black, not Black)	2.77	0.11	0.01
Income	0.44	0.10	0.06
Number of Local Groups	0.36	0.22	0.0001

Multiple R--.313

Multiple R-square--.098

Adjusted multiple R-square--.083

Source: See text