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AUDIENCE CROSSOVER: MEDIA PARTICIPATION
AND ATTENDING LIVE EVENTS

The final results of the 1982 Survey of Public Participation in the Arts
are now being analyzed in many different ways. One objective is to improve
audience development tools and a relevant question is:

Do media audiences also attend live arts events?

This Note compares 112 pairs of electronic media activities and live
activities in terms of a statistical technique known as the Pearson
Correlation Coefficient. This kind of statistic has not been used in
previous Research Division Notes, so a brief explanation may be helpful.

Technically speaking, correlation coefficients (Pearson's r) measure the
degree to which the relationship between two variables can be represented
by a straight line. In terms of this Note, they show whether attending a
live arts event goes along more or less closely with one of the kinds of
electronic media participation. The range of possible values is +1.000 to
-1.000. When the coefficient is positive, the two activities increase or
decrease together, but if one activity increases as the other decreases,
the coefficient is negative. The middle of the range is 0.000, and
describes a relationship that is totally nonlinear. A pair of activities
with this neutral coefficient do not go along with each other with any
consistency.

In the real world, perfect straight line relationships rarely occur, so the
values of coefficients are usually smaller than 1.000(+/-). As a guide:

Correlations of .400(+/-) or greater are "strong";

Correlations of .300(+/-) to .399(+/-) are "substantial";

Correlations of .200(+/-) to .299(+/-) are "moderate"; and

Correlations of +.199 to -.199 are "weak".

Keep in mind that the correlation coefficient values are not measurements
on a scale of equal units. A change in coefficients from .000 to +.200
shows less change in closeness to a straight line than a change from +.200
to +.400.

One use for correlation coefficients is to predict participation in one activity from knowing about participation in another activity. For example, the correlation coefficient of +.343 for listening to classical music records and attending live classical music concerts is a "substantial" predictor that the population doing one will also do the other. On the other hand, the correlation coefficient of +.098 for listening to jazz music on radio and attending live ballet performances is a "weak" predictor although it is positive . You can now read and interpret the table yourself, but to start, here are a few interesting observations:

All 112 correlation coefficients for pairs of media and live activities are positive. They show that when participation in one increases or decreases, so should participation in the other.

However, for the most part, the coefficients indicate moderate or weak correlations. Not one of the correlations in the table can be considered to be strong and only five are substantial with coefficients of between .300 and .399.

The correlation in the table closest to being strong is for listening to jazz music records and attending jazz music performances (+.351). The next two substantial correlations are for listening to classical music records and attending classical music concerts (+.343), and for listening to classical music records and visiting art museums (+.343).

There are seven negative correlation coefficients in the table. These are for the total of hours spent watching all TV and attending live arts events. Since they are negative, they show that as the amount of time spent watching all TV increases, attendance at live arts events decreases. However, all of these coefficients are weak, indicating that predictions about time spent watching TV and attendance at live events cannot be precise (doing one is a poor predictor of not doing the other).

For arts administrators engaged in audience development, the study of these correlation coefficients may suggest several possibilities to sharpen the focus of their efforts. At present, many development officers in arts organizations are finding that the returns are dropping from rapidly increasing development expenditures. While the study of the correlation coefficients table in this Note may not reverse this unhappy experience, it may suggest new strategies in a few areas.

For example, the audience for jazz music records correlates substantially with the audience for live jazz music concerts, but except for classical music no other pairing of listening to records and attending live performances comes close to being equally strong.

On the other hand, the table shows that the correlation between listening to classical music records and attending art museums is just as close as attending live performances of classical music. This suggests many possibilities, e.g., selling classical music records in art museum shops, especially when the music genre may be related to a special exhibit; and using art museum membership lists to promote symphony orchestra ticket sales or using lists of classical chamber music subscribers to promote art museum membership.

One surprise is that the correlation between attending art museums and participation via the media is often stronger than the correlation between attending live performances and media participation in a similar art form. For example, the correlation between watching ballet on TV with attendance at live ballet performances is not as strong as with attending art museums.

Awareness that many of the correlations are weak can also be useful. They caution against making broad generalizations about relationships that may not really apply across different art forms. This may help sharpen the focus of promotional efforts.

From a more global point of view, study of the table of correlation coefficients is very intriguing because it reveals some of the complexity in the relationships between audiences. Comparing such tables from one time period to the next, as we will do when the current 1985 survey is completed, should reveal patterns of change in audience crossover.

CAVEAT: The Pearson Correlation Coefficient is a mathematical analytical tool and useful as it may be, it is only an indicator of the great complexity of crossover relationships. There are also other techniques that also can be used to give additional perspectives. One of these is called Odds-Ratios Analysis. It gives results in terms of the probability that survey respondents attending one live event will also do one of the other activities in the table. Future Research Division Notes will examine some of these alternative analytical tools and the insights they may add.

Correlations between Media Activities and Attending Live Events in 1982
(Pearson's r)

| | Attending Live Events | | | | | | |
	Jazz Music	Classical Music	Opera	Musical Plays and Operettas	Plays	Ballet	Art Museums
Jazz							
Watched on TV	.260	.170	.062	.151	.115	.102	.208
Listened on Radio	.322	.152	.053	.111	.143	.098	.203
Listened to Records	.351	.141	.013	.152	.155	.132	.229
Classical Music							
Watched on TV	.104	.293	.156	.223	.167	.151	.283
Listened on Radio	.153	.307	.144	.197	.200	.160	.302
Listened to Records	.176	.343	.149	.216	.206	.210	.343
Opera							
Watched on TV	.053	.260	.205	.157	.147	.102	.216
Listened on Radio	.100	.265	.233	.133	.168	.134	.223
Listened to Records	.035	.248	.234	.144	.141	.158	.186
Musical Plays/Operettas							
Watched on TV	.110	.240	.122	.255	.183	.118	.231
Listened on Radio	.045	.207	.163	.087	.117	.096	.214
Listened to Records	.102	.251	.163	.219	.176	.183	.289
Plays							
Watched on TV	.141	.228	.132	.257	.233	.161	.282
Listened on Radio	.086	.133	.115	.084	.132	.091	.176
Ballet							
Watched on TV	.166	.271	.158	.219	.178	.224	.273
Art Museums							
Watched TV Programs about things in museums	.133	.200	.106	.157	.125	.110	.293
Hours Spent Watching all TV	-.037	-.124	-.047	-.093	-.104	-.077	-.132