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Rethinking drivers of cultural consumption

Orian Brook is a freelance audience researcher, currently developing statistical models for performing arts attendance at the University of St Andrews. She is also a research associate for Audiences London where she has also held the post of research director. At Audiences London she was responsible for projects such as Snapshot (comparison of data from 35 London venues), CultureMap and the Diversity Monitoring project. Previously she has worked for Barbican Centre, Southbank Centre, ENO, Soho Theatre and harmonia mundi. She has published for Cultural Trends and was nominated for Market Research Society's Research Excellence and Effectiveness Awards in 2003.

This session was based on the statistical modelling that Orian has undertaken as part of a research project funded by the Economic and Social Research Council. The findings challenge some of our preconceptions about audience behaviour and the key indicators or drivers to attendance / participation.

Rethinking Drivers of Cultural Consumption

Orian is interested in undertaking a more robust analysis of box office data, that is more interpretive and builds on the collection of data by various audience development agencies. Some arts venues remain obsessed with ethnicity, whilst others obsessed about income/class; are these selected factors (which have been handed down to us) the real issue? We could do much if our box office data was more illuminating and surveys could be relied upon; we know that respondents want to give the most helpful answer, so it is very difficult to be able to rely on the answers we get from surveys.

<u>Theorising Cultural Consumption</u>

- Related to social class, education, ethnicity, income?

    - Sociologists: cultural capital (Bourdieu) or social status (Goldthorpe and Chan)
    - Arts venues: focus has been on ethnic diversity
    - Elsewhere: assumption is about income/class
    - ACE has targets to increase participation by three priority groups: lower Socio-Economic groups, Black and Minority Ethnic Groups, and Disabled People

- We can see that there are relationships with all these factors, but how to compare their significance?
- Would analysing sales instead of survey data tell a different story?

Previous research supposes that all demographic groups have equal opportunities to attend, but we know that communities are concentrated in different areas, with different characteristics including cultural provision.

Administrative data

- Growing use of 'administrative data' for policy-related research
    - Schools, Higher Education, Health
- Avoids issue of claimed cultural attendance
- Enables more detailed analysis of attendance
    - Different geographical contexts
    - Changes over time
    - Impact of policy change and provision
- Drawbacks include
    - Data represent purchasers not attenders
    - Proportions of data capture vary
    - Not all venues are included
- However, much of this can be accounted for

<u>Research</u>

The process of planning the research questions included consideration of these issues:

- What are the best geo-demographic and socio-economic predictors of arts attendance? Do they vary across:

    - Art forms (e.g. theatre versus dance, highbrow vs popular)?
    - Venue locations (Urban Centre vs edge of City)
    - Geographical areas? (regions, and areas within London)
    - Availability of venues/performances?

- Do some geo-demographic classifications give better discrimination than others when analysing arts attendance?

London dataset

- Only artforms with good rates of data capture (not Museum/Art Galleries, Cinema) were used

- No group bookings/comps, must have residential postcode

- Only from postcodes within London (c70%)
    - ~ 350,000 households
    - ~ 930,000 transactions
    - ~ 2 million tickets sold
    - ~ £51 million revenue

The project had a reasonable representation of ACE-supported performing arts attenders. There was also a good range of London venues (listed at the end of these notes), especially from the large national companies as well as a reasonable range of art forms.

Methodology

- Analysed Output Areas – c15 postcodes

- Compared unique addresses attending during 2005 to number of residential addresses according to Experian

- Compared to population data from census

London postcodes only were used because audiences have different characteristics outside London. All the major London Regularly Funded Organisations were included, as well as companies touring into London.

The Output Areas comprise around 125 households; the socio-economic indicators are not ABC1 (but NSSEC). Other weightings were also taken into consideration, such as the potential for developing more prestige.

Population data

Driven by previous research and hypotheses

- Ethnic Group
- Qualification Level
- Socio-Economic Classification (NSSEC)
- Age Group
- Religion
- Economic Activity
- Limiting Long Term Illness (usually used for Disability)
- Access to a Car
- Plus Income Deprivation from IMD 2004

Culture Accessibility Index

- Demographics alone don't take variations into account in each area's access to culture

- Created an Accessibility Index for venues for which we have data
    - Based on distance from each OA to each venue
    - Weighted by no of tickets sold, so being close to Greenwich Theatre isn't as the same as being close to the National Theatre
    - Potential for other weightings – prestige? Diversity of programme?

Commuting Index

- Hypothesis: commuting to an area of high Cultural Accessibility improves chances of attending, compared to working in area of low CA (although in surveys people deny this)

- Commuting varies by ethnic group

- Created a Commuting Index
    - Postcode that people work in is recorded in census, and a matrix is available to academics
    - Calculated % of adults in an OA that commute to each other OA
    - Multiplied the % by the Culture Accessibility Index for the destination OA & summed these for the OA of origin

In order to test hypotheses about the meeting because that was always a problem with drive time site reports for London, the research looked at how good each area's access to culture was adding this ingredient to the Output Area.

What's important in predicting attendance?

- Level of degree-level qualifications consistently important
    - Very closely predicts attendance
    - 10% increase in graduates > 45% increase in arts attenders (all other things being equal)
- Proportion in full-time education also important (32%)
- Commuting Index: 42%
- Cultural Accessibility: 21%
- % with no religion (28%) or Jewish (19%)
- % FT Students +ve (32%) but aged 16-29 –ve (31%)
- Socio-Economic group 4 (freelancers): 40%

Education comes out as being the most significant driver and is consistently important in predicting arts attendance (and also the amount of attendance). Income can make a difference to which tickets they buy, but not so much in whether they attend or not.

What's not important

- Income: not significant
- Socio-Economic Groups 5-8: not significant
- Socio-Economic Groups 1-3: significant but barely, and make little difference (NSSEC1 7%)
- Disability: barely significant, not strong

How much variation in attendance can be explained?

- 71% of variation explained by full range of Census variables, Accessibility and Commuting Indices
- 55% explained by Arts Council targets (non-White Ethnicity, Social Class groups, Disability)
    - All variables are significant, especially Socio-Economic
- Indices of Multiple Deprivation 2004 explain 47%
- Mosaic explains 59%
- Level of degree-level qualifications alone explains 58%

Odds ratios: 10% increase in graduates attending, which accounts for 45% arts attendance. Only having a degree makes this significant difference. It is also interesting to look at the role of attenders in full time education as well. Arts attenders are under-represented among lower social classifications not because of socio-economics, but for other reasons.

How do these change by artform?

- Plays - similar to all artforms, as Plays are highest proportion of audiences

- Children's events:
    - % graduates much less important (agrees with qual research)
    - % households with kids more +ve
    - No access to a car now significant and negative
    - Commuting still important

- Opera:
    - Age over 50 now significant
    - Income and Socio-Economic group no more important than for all artforms
    - % graduates even more influential (47%)

The overall model suggests that households with children are more positive for all art forms.

How do these change by venue?

- Model is more consistent for Central London venues

- Outer London venues vary much more
    - Commuting and accessibility are generally important
    - Importance of other factors much more variable, depending on local communities
    - % graduates not significant for some (100% increase in others)

Compared to Manchester

- Similar data collected for Manchester
- Same methodology (using 27km radius from Manchester)
- Full model explains 73% of variance
- Commuting and degree-level qualification still important, but not as strong
    - odds of attending increase 23% for a 10% increase in graduates
- Other explanatory variables somewhat different:
    - only strong predictor is commuting index
    - accessibility less significant and slightly negative – poss due to Lowry Centre
    - Socio-Economic groups all significant, and effects are stronger

Importance of Commuting

- Commuting – seems to be about more than the fact that commuters are already in the neighbourhood of a venue

    - Relationship with access to transport (tho just as important for outer London venues)
    - Route from home to work likely to be convenient
    - Also likely to be familiar – perceptually shorter
    - More likely to see info about the venue, be reminded of it
    - Know the location of convenient places to eat and drink, and be comfortable in the area of the venue

Importance of Higher Education

- Even more complex, though more was already known
- Doesn't really apply for lower qualifications
- Seen in other research eg social trust – broadmindedness?
- Related to academic <u>and</u> social distinction?
    - Going to Uni for many has meant a change of peer group, location, and personal reinvention – broadened horizons?
    - Or selection effect – personality of those that go (after social background)
    - How will it change with expansion in higher education?

- Probably combination of
    - cultural capital
    - intellectual tools and confidence
    - sense of entitlement
    - peer group

Marketing Implications

- Consider commuting patterns around your venue(s)

- Consider issue of identity
    - Attenders choose to associate with audience rather than venue (esp younger people)
    - Market your audience, use media/other partnerships for positioning
- Assume (depending on venue) that your audience is educated, not that it is White
    - Increasingly will not be true of graduates
    - But ethnic minority audiences most likely to be graduates

What is statistical modelling?

Relationship between smoking and dying (invented!)
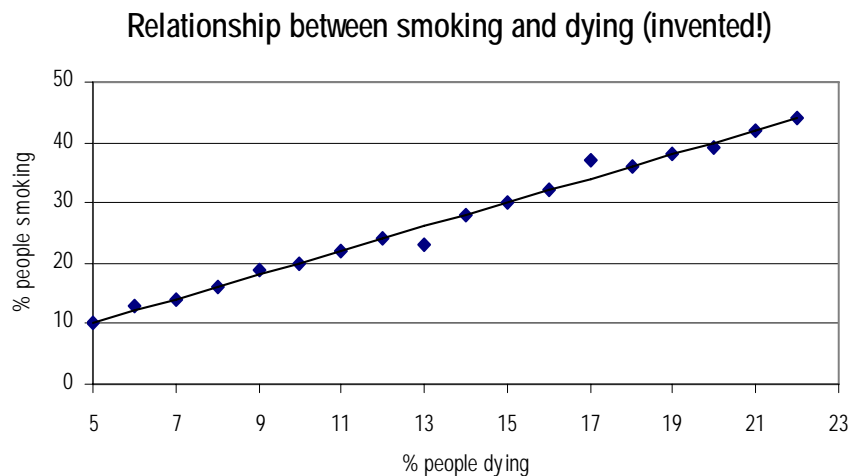
- Regression: steepness of slope (how much of a difference it makes)
- Correlation: how good a fit it is
- Simple regression
    - Deaths = unexplained bit + (X × smoking)
- Multiple regression
    - Deaths = unexplained bit + (X × smoking) + (Y × deprivation) – (Z × exercise)
- If you don't include deprivation, you will over-estimate deaths due to smoking
- Still requires subjective decisions about what to include and how to interpret

London venues that provided data

Albany, Deptford	Almeida Theatre
artsdepot	Barbican Centre
Battersea Arts Centre	Bush Theatre
Croydon Clocktower	Drill Hall
English National Ballet	English National Opera
Greenwich Theatre	Hampstead Theatre
London Philharmonic Orchestra	London Symphony Orchestra
Lyric Hammersmith	National Theatre
Open Air Theatre	Philharmonia Orchestra
The Place	Polka Theatre
Queens Theatre, Hornchurch	Royal Albert Hall
Royal Court	Royal Festival Hall
Royal Opera House	Sadler's Wells
Shakespeare's Globe	Soho Theatre
Theatre Royal, Stratford East	Watermans

Questions

Are there any plans to explore these areas further?

- AL are undertaking multilevel modelling, simultaneously running models across artform, type, etc

- AL is also looking at spatial interaction (flow) modelling. This looks at those people who are living here but attending there. They are different people and there are different flows; they would like to look at how they change in very different venues

- AL are building on the accessibility and commuting indices, based on available data, and a database that Orian would like to extend to all venues in London. But they might find accessibility and commuting and demographic variables that might predict whether people attend own individual characteristics, such as age.

- Finally, AL are already looking at more regions, and they would like to include less urban regions, as they often tend not to have regular data exercises. It would also be interesting to look at the move from rural to urban.

Class works at some levels, but did do you think about occupation for classification e.g. health, education?

No, AL did not, because that tends to use professionals separately from other things, small/large wage, weekly/monthly pay, etc. However, it would be interesting to look at what types of degree graduates have. Interestingly, AL found that in Manchester the percentage of full-time students was more important than in London.