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According to big data: Who are museums' visitors in Germany?

By Charles Willson Peale - www.vcdh.virginia.edu, Public Domain
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Background

- Audience Development as a relevant concept of museums work
  → Need to know its (non-)visitors → develop, design, communicate, and distribute educational programmes for both visitors and non-visitors
  ⇒ Museums undertake their own visitor-structure analysis
- But: general audience research for a whole city, a federal state/department/region or an entire country are missing (cause: costs, conducting difficulties, little interest in cultural activities)

Open questions

- Nevertheless, big data could be helpful to clarify who is the general (non-)audience in museums and what kinds of educational offerings are needed. Or could it not?
- What did big data say: In general, who visits museums in Germany?

Data

- NEPS - National Educational Panel Study
  (collect longitudinal data in Germany throughout the life span, focus: education)

Starting cohort 6 (**adults**), wave 7 (**2014/15**)

- ***N* = 9770** 49.2% male (*N* = 4804), 50.8% female (*N* = 4966)
  Average age: *M* = 52.07 years, *SD* = 10.85, Min = 28.75, Max = 72.17

- Cultural capital (one item):
  Now we want to address further activities one can do during one's spare time.
  How often have you done the following things in the past 12 months:
  ...visited a museum or an art exhibition?

Never • Once • 2 to 3 times • 4 to 5 times • More than 5 times

Non-visitors: 36.2% (*N* = 3532) **Visitors: 63.8% (*N* = 6232)**

Methods

Descriptive statistics, (non-)parametric comparisons, regression analysis (partly constructive replication of Kirchberg 2005) using SPSS and Stata

By Creator: Karl Louis Preusser - http://www.kunst-fuer-alle.de/deutsch/kunst/kuenstler/kunstdruck/karl-louis-preusser/17882/1/119150/in-der-dresdner-galerie/index.htm, Public Domain
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Following NEPS adult museums' visitors in Germany approximately tend to…

Socio-economic	...have a **higher educational level** (e.g. university degree). ...have an occupational status. ...have a **higher net household income** (above 3,000 Euro/month).
Demographic	...be one year **older.** (No significance: gender, marital status, number of children)
Cultural capital	...do **more reading** on average per day in their free time. …have a **higher number of (real) books** at their home. ...participate more often in - **opera, ballet, classical concert**. - **theatre**. - cinema. - rock-pop-concert.
Sports	...**do sports** (average per week) more often.
Satisfaction	...be more **satisfied with their life** in general. (no causal conclusions!)

	Socio-economic	Demographic	Cultural capital
N	7,259	9,764	9,732
Log Likelihood	-4337.44	-6372.15	-5195.67
Chi^2 (*p*)	677.29 (.000)	35.05 (.000)	2342.22 (.000)
Pseudo R^2	0.0724	0.0027	0.1839

Table: results of logistic regression analysis: sample size (*N*), dichotomous outcome variable (non-visitors/visitors)

Benefits of big data

- Generalizable data
- Could validate single museum visitor-structure analysis
- Stimulating thinking about existing opinions about (non-)visitors
- Basic knowledge for developing educational offerings for both visitors and non-visitors (Who are they?)
- Possibility to draw a sample of specific non-visitors → obtain more relevant information about this group → develop an offering

Limitations of NEPS (big data)

- No differentiation between different museum types
- Only a few variables relevant for visitor-structures are gathered (added and/or novelty value?)
- No relevant information about motives for visiting & used educational offerings
- Of course, data couldn't answer the question how to reach non-visitors

Conclusion

⇒ The **NEPS panel data confirm** our already existing **wide knowledge of museum audience for Germany as whole**

⇒ **Cultural capital predicts** the probability of visiting a museum or an art exhibition **the best**. → supporting regression analysis from Kirchberg (2005)

⇒ Further analysis are needed, e.g. taking a look at the differentiation between different numbers of visits (more significance?)

⇒ Replications or rather other representative surveys of (German) population are needed (upcoming study e.g.: "Cultural education and cultural participation in Germany", 2016-2019, Prof. Dr. Gunnar Otte, University of Mainz, funded by BMBF)

Such studies should think about relevant items needed, revising existing items (e.g. cultural capital question: books vs. e-books) as well as social change (e.g. migration).

References
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This poster uses data from the National Educational Panel Study (NEPS): Starting Cohort Adults, doi:10.5157/NEPS:SC6:7.0.0 . From 2008 to 2013, NEPS data was collected as part of the Framework Program for the Promotion of Empirical Educational Research funded by the German Federal Ministry of Education and Research (BMBF).
As of 2014, NEPS is carried out by the Leibniz Institute for Educational Trajectories (LIfBi) at the University of Bamberg in cooperation with a nationwide network.