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Accessing community samples: the pros & cons of different methods

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HCHA Research Seminar: Accessing Community Samples – the Pros & Cons of Different Methods (June 1994)
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Sampling Sources Summary Sheet

Source	Strengths	Weaknesses	Who is missed?
Electoral Register	*allows selection of specific target groups, by age, sex, postcode, etc *representative of gen pop *allows access to large proportion of the population	*doesn't allow telephone survey	-non-citizens -more mobile people -under 20 yr olds
Telephone Numbers - White Pages - Random digit dialling	*representative of gen pop *allows various survey methodologies *allows access to large proportion of the population	*doesn't allow selection of specific target groups	-people without phones (low SES) -people with silent numbers
Households	*representative of gen pop *allows access to large proportion of the population	*allows only door-to-door survey methodology (ie: expensive)	-homeless people -institutionalised people
Workplaces	*allows selection of specific target groups *can collect data from groups of subjects at the same time	*not representative of gen pop *may have difficulty getting access to workers *may have low response if results are perceived to be "for management"	-women -over 65 year olds -unemployed people -people employed in diff companies/ industries
Shopping Centres	*allows selection of specific target groups	*not representative of gen pop	-people who don't shop in major shopping centres -people who rarely/never shop (elderly, disabled)
Medical Settings - GPs' surgeries - hospitals - specialist care units	*allows selection of specific target groups	*not representative of gen pop	-less frequent users of medical services -men -younger people
Health Insurance Commission	*provides objective data	*can take a long time to get *limited data set	-procedures that are not charged through Medicare

Task 2 Scenario: You wish to assess the prevalence of cigarette smoking in the general adult (18+) population. To do this, you have developed a short 10-item questionnaire.

Having considered some of the issues raised by one's choice of sample source, now we would now like you to consider the relative strengths and weaknesses of a number of data collection methods. There are 5 main data collection methods - mailout survey, telephone survey, face-to-face survey, computer survey & record search. Bearing in mind the above scenario, we would like you, as a group, to rank (1=worst, 5=best) the performance of each data collection method on each of the issues in the table below. A couple of columns have been left blank, in case you can think of any other major issues that should be considered.

Survey Method	Data collection costs	Time taken for data collection	Data quality (ie: % of missing or uncodable responses)	Social Desirability Response (ie: subjects feel obliged to respond in a certain way)	High Literacy Level Required to complete survey		
Mailout Survey							
Telephone Survey							
Face-to-face Survey							
Computer Survey							
Record Search							

Survey Methods Summary Sheet

Survey Method	Strengths	Weaknesses
Mailout Survey	<ul style="list-style-type: none"> * Relatively cheap data collection method. * Low social desirability biases. * Widely dispersed populations can be surveyed as cheaply & easily as denser populations. * No interviewer training required. 	<ul style="list-style-type: none"> * Suitable only for fairly short & straightforward surveys. * Suitable only for pre-coded questions. * Cannot control the order in which questions are answered. * Can result in higher amounts of missing data. * No information on non-consenters. * Data collection takes a long time. * Relatively low response rates. * Reminders required to increase response rates. * ID codes can be removed or interfered with. * High literacy level required.
Telephone Survey	<ul style="list-style-type: none"> * Widely dispersed pops can be surveyed cheaply & easily as dense ones. * Minimises missing data. * Can use open-ended questions & more complex interviewing schedules. * Can record reasons and characteristics of non-consenters. * Relatively quick method of data collection. * Relatively cheap method of data collection. * Does not require high level of literacy from respondent. 	<ul style="list-style-type: none"> * Can be hard to prevent consultation with/interference from others. * Need to keep questions fairly short and only a limited number of response options. * Can't ask questions requiring visual cues. * Requires interviewer training & monitoring throughout. * Some likelihood of socially desirable responses.
Face-to-face Survey	<ul style="list-style-type: none"> * Can record reasons and characteristics on non-consenters. * Allows much flexibility in length of survey & style of questions. * Minimises missing data. * Allows physical measurements & direct observations. * Does not require high level of literacy from respondent. 	<ul style="list-style-type: none"> * High likelihood of socially desirable responses. * Can be hard to prevent consultation with/interference from others. * Very expensive, especially if resps are widespread geographically. * Relatively time-consuming. * Requires intensive interviewer training & monitoring throughout.
Computer Survey	<ul style="list-style-type: none"> * Can be relatively cheap once the initial costs have been overcome. * Relatively quick method of data collection. * Minimises missing data. * Maximises data quality. * Minimises social desirability biases. * Can use more complex interviewing schedules. * No interviewer training required. * Can use questions requiring visual cues. 	<ul style="list-style-type: none"> * High initial setup costs, with hardware and programming. * Useful only for relatively large-scale surveys. * High level of literacy required from respondents. * Basic computer skills required from respondents. * Require access to good hardware, programming and support services. * No information on non-consenters. * Best suited to pre-coded questions. * Can be hard to prevent consultation with/interference from others.
Record Search	<ul style="list-style-type: none"> * No social desirability biases. * No literacy demands on the respondent. * It may not be necessary to seek respondents' consent. * Can be cheap (eg: pathology lab data is free) * Objective data. 	<ul style="list-style-type: none"> * Restricted to the data contained within the records. * Data quality may not be excellent. * Can take a long time (eg: HIC data, GP audits). * Can be expensive (eg: GP audits).

Accessing Community Samples: Reference List

This reference list aims to provide you with some sources of more detailed information in this area. It is not an exhaustive list, but one which raises many of the issues that should be considered when selecting samples. I have copies of all the journal articles and the books can be found in the Auchmuty library or in the Resource Centre.

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