SOS POLITICAL & PUBLIC ADMINISTRATION

MA POLITICAL SCIENCE IV SEM (403)

SUBJECT NAME- RESEARCH METHODOLOGY

**TOPIC NAME- PANEL STUDY** 

#### Introduction

Panel studies are a particular design of longitudinal study in which the unit of analysis is followed at specified intervals over a long period, often many years. The key feature of panel studies is that they collect repeated measures from the same sample at different points in time. Most panel studies are designed for quantitative analysis and use structured survey data. Panel studies can also use qualitative methods for the data collection and analysis. They may also be constructed from register data, an approach that is common in some countries. This entry concentrates on household panels collected by surveys. Cross-sectional surveys are based on a sample of the population of interest drawn at one time point. In contrast, panel surveys follow the population of interest over an extended time period and are concerned with measuring change over time for the units of analysis within the population. The unit of analysis is typically an individual, but it could also be a firm or a dwelling or any other unit of analysis required by the research design. Panel surveys typically collect data at relatively frequent intervals depending on the design requirements of a given study. Some run over many years and others are short term, such as short panels conducted around elections. Panel surveys are distinct from cohort studies, which often sample an age cohort born in a particular month and year and follow that cohort at infrequent intervals, often with a focus on early childhood development. While the difference between cohort and panel designs can be overstated, panel studies typically sample from the entire age range and collect repeated measures across the age range and throughout the life course. Panel studies have been used extensively to monitor the dynamics of poverty, movements into and out of the labor market, and the process of demographic change. Longitudinal data generated from panel studies can be analyzed to understand the short-term dynamics of change, including movements into and out of employment or transitions into and out of poverty. Panel studies can also be used to examine long-term effects such as children's education and labor market outcomes in the context of their family background, or later life health outcomes in the context of earlier health behaviours. Panel studies are therefore suited to the analysis of the life course and understanding the interrelationships between life events, , preferences, and later outcomes that affect people's life chances and well-being and provide data which enhances our ability to make causal inferences through controlling unobserved heterogeneity.

#### **General Overviews**

The works in this section provide a combination of overviews to survey methods and longitudinal studies in general, as well as panel studies in particular. They provide an introduction to the range of issues to be considered when designing, implementing, and analyzing longitudinal data sets, which tend to be more complex than surveys done in a cross-sectional context. Groves, et al. 2009 and de Vaus 2002 are essential survey methodology texts for those unfamiliar with survey methodology. The principles of high-quality data collection that apply to cross-sectional surveys also apply to longitudinal surveys, but there are additional issues to consider due to the longitudinal design. The concept of "total survey error," comprising error from sampling and non sampling sources, has become central to assessing data quality within survey methodology, and it has particular implications for longitudinal studies (Groves 2005). Rose 2000 and Ruspini 2002 introduce the principles that apply to high-quality data collection for panel studies and are accessible introductions for those unfamiliar with how panel data can be used in analysis. They provide helpful examples of research using panel data to illustrate how these data can be exploited in analysis. The first major volume to synthesize the complexities involved in designing and managing a panel study was Kasprzyk, et al. 1989, covering particular aspects in the collection of the data, the implications for data quality of the longitudinal design, and analysis techniques for panel data. Menard 2008 and Lynn 2009 are up-to-date edited volumes, with contributions by experts in the field, on the methodology of longitudinal surveys, including new developments in the field. They highlight the advantages and disadvantages of panel studies for analysis, statistical adjustments such as weighting and imputation, and panel data analysis techniques.

Panel research is a method for collecting data repeatedly, from a pre-recruited set of people. These individuals generally provide demographic, household and behavioural data, which can make conducting future studies easier. Technology, primarily the internet, has transformed panel research methodology by the ease of which we can access larger numbers of respondents. Panel research provides many advantages for companies including faster turnaround, higher participation rates, and cost savings. The quantitative data can provide companies with insights into pricing, effectiveness and sales projection of their products or brand.

# Why is a Research Panel important

Building a quality research panel is very important because your data depends on it. With a research panel, you are able to build rich profiles of your members, which will help to ensure that your reporting provides quality responses. If you are looking to launch a new mobile phone, you would want to target panelists who are interested in mobile phones and technology to yield more informed responses. Additionally, a well-managed panel of pre-recruited respondents allows for a faster response rate, as the participants have shown interest in participating in surveys by joining the panel.

#### How to Recruit for a Research Panel

We use many different channels to recruit members who will be active participants in our panel research. The one we've found most effective is via the internet, specifically email and social media. Once we've recruited a member, we have them fill out a short survey with profile information, which we use to create a better understanding of our target audience.

Build your own Research Panel or "Rent" one

In cases where your customers are considered niche, it makes sense to invest the time into building out your own online panel of respondents. While it obviously takes more effort than using an outsourced panel provider ("renting"), the quality of the respondents is generally higher in self-recruited panels, and in the long term, the cost is cheaper than using external vendors for all your market research initiatives.

At Question Pro, we understand the importance of panel research. We provide power to your research with an incredible sample consisting of 22 million panelists, from over 32 countries with 300+ profile data points. We provide our customers with 360-degree survey solutions. We understand our customers and their needs and provide the answers accordingly.

### Panel Research Example

Let's take an example to understand how panel research is executed at an organizational level and how it helps derive meaningful insights.

In market research, the most commonly used panel is that of consumer panels. This panel type is used by organizations to get an understanding of buyer/customer psychology, personality and purchasing habits that extend to the type of product/service preference, features, and influence of cost factors. Typically used in qualitative market research studies, the panelists are usually localized and sourced from specific geographic regions and are rarely generalized.

Let's take a hypothetical instance where, say, Apple intends to understand the scope of improvement or feature enhancement in comparison to a competitor, say, Samsung. In this case, Apple can get effective consumer insights by conducting online community research on a sample of "smartphone customers who use Samsung products". This way, Apple can gather actionable feedback on what it needs to do to attract Samsung users by potentially implementing the collected feedback. The success of such panel research is highly dependent on the quality of the sample with multiple determining factors such as concept and question understanding, honesty and willingness to provide active feedback.

### Advantages of Panel Research:

The rate of research response is amplified as panel members have willingly signed up to participate in the research process.

Different aspects of a particular subject can be discussed with panel members, unlike other research methods where a single topic needs to be discussed at a time. This makes panel research effective and less expensive.

A panel consisting of a sizeable number of participants makes it easy for marketers to record changes across demographics due to the diversity of panel members.

Capturing better details in panel research insights as panel members have a more sophisticated understanding of the research subject since they are profiled, screened and validated during recruitment.

Qualitative market research methods such as focus groups, discussions, online interviews can be far more effective if they're conducted with well-recruited panel.

Quantitative market research can be conducted to muster data and metrics-based inputs for survey research by sending out online surveys and online polls to a panel.

Disadvantages	of	Panel	Resear	ch:
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There are cases where certain members of the panel may not intend to honestly help you out as they register for every panel they come across for the perks. Evaluate your panel on basis of authenticity at regular intervals and remove members you have a hunch about.

Over a course of time, response rates of tenure members who've been a part of the panel for an extended time frame may decrease.

Frequent panel management is required to deal with problems regarding attritionl

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