Lecture 6 Summary: Quantitative research methods

Assistant Professor Papiya Mazumdar

Prepared by David Sparks, Queensland University of Technology

Dr. Papiya Mazumdar has over a decade of experience in research exploring the nexus between geography and demography. Her research focusses on developing evidence-based research outcomes that can be used to inform policy in the health sector. Her presentation, focussing on quantitative research methods, reflected both her considerable experience in policy-relevant research and the importance of understanding data collection and analysis.

Dr. Mazumdar emphasised the critical importance of using high-quality data for creating a strong backbone from which to draw conclusions. Whether relying on primary or secondary data she stressed the importance of being clear about exactly what the data is saying, and how the data will be used in the research. A key part of this entails understanding any local nuances of data. As an example, Dr. Mazumdar discussed national data on ‘electrified villages’ in India. Whilst the term ‘electrified village’ gives the impression that electricity is actually available in a village, the real definition simply requires that an electricity pole is erected. Without an appreciation of this distinction, any conclusions drawn from this data will be questionable.

Dr Mazumdar also reminded us that a primary reason for doing research is to communicate key insights gained through research in order to inform policy. Because academic research is so often used to inform policy decisions that have a tangible impact on communities, any study that does not use high quality data and employ appropriate quantitative data analysis techniques will produce outcomes that are inadequate at best, and dangerous at worst.