Advanced Poverty Research Methods Online Course

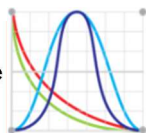## 22nd November to 9th December 2021

Course Materials

The purpose of this intensive online course is to provide a thorough technical and practical introduction to advanced quantitative poverty research methods, with a particular emphasis on multidimensional poverty theory and measurement. Upon completing the course, participants will have the knowledge and skills required to undertake poverty relevant research using cutting edge quantitative methodologies.

The course will cover both the theory and practice of poverty research and will provide a broad-based training concerning recent methodological developments in Africa, Europe and Latin America. It will show how to develop a poverty survey using quantitative methods and analyse the results as well as the advantages and disadvantages of current measurement methods. It will cover how to develop a comprehensive and effective research programme to achieve maximum impact.

This intensive course is being funded by the University of Bristol (UK), University of Cape Town (South Africa) and UNAM (National Autonomous University of Mexico). It is aimed at PhD students and academic staff who are interested in poverty-relevant research.

PROGRAMME

22nd November – 9th December

9:00 to 12:00 Mexico   15:00 to 18:00 UK   17:00 to 20:00 South Africa

Monday 22nd November: History of Poverty Measurement
- Opening Ceremony: Rolando Cordera (PUED), David Gordon (BPI) and Murray Leibbrandt (ACEIR)
- History of multidimensional poverty measurement: a global perspective (Professor David Gordon)
- History of poverty measurement in Latin America (Professor Luis Beccaria)
- Theories, definitions and measurement of poverty (Professor Fernando Cortés and Dr Héctor Nájera)

Wednesday 24th November: Poverty Theory
- Relative deprivation theory (Professor David Gordon)
- Human rights and child poverty: Past, present and future of child poverty measurement (Enrique Delamonica)
- Poverty as capability deprivation (Dr Rod Hick)

Friday 26th November: Approaches to Poverty Measurement
- Social rights and poverty measurement: A review of the ten years of the Mexican experience (Professor Fernando Cortés)
- A critical review of axiomatic approaches and multidimensional indices (Dr Curtis Huffman)
- Consensual method and relative deprivation around the globe (Dr Shailen Nandy)

## Monday 29th November: Principles for the Scientific Measurement of Poverty
- Debates on axioms, empirical scrutiny and poverty measurement (Dr Curtis Huffman and Dr Héctor Nájera)
- Reliability and poverty measurement (Dr Héctor Nájera)
- Validity and poverty measurement (Dr Héctor Nájera)

Wednesday 1st December: What are the needs of adults and children?
- Unsatisfied basic needs and consensual method: The experience in Buenos Aires (Ana Laura Fernandez)
- Child poverty and the consensual method (Dr Gill Main)
- Socially perceived needs across time and space (Joanna Mack)
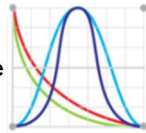
Thursday 2nd December: Computing and Analysis in R Practical Session

- How to calculate the validity and reliability of poverty measures (Dr Héctor Nájera)

Friday 3rd December: Measuring and Mapping

- Multiple malnutrition and food poverty (Dr Shailen Nandy)
- Small Area Estimation and mapping of poverty in Uganda: (Dr Marco Pomati)
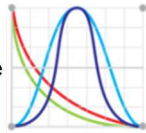- Comparability of poverty estimates across social groups and over time: (Dr Héctor Nájera)

Thursday 9th December: Frontiers of Poverty Measurement

- Poverty and assets, a gendered perspective (Professor Abena Oduro)
- Using AI and remote sensing for poverty measurement: (Dr Adel Daoud)
- Qualitative Comparative Analysis (QCA): (Dr Mary Zhang)

For practical information about how to join the sessions, please see below.

Practical Information

All sessions will be held via Zoom in the same meeting room. To access the meeting room please follow this link:

https://cuaieed-unam.zoom.us/j/84996449989?pwd=ZUNDbFdjSlBlbnF1dExDcXRtRm9GQT09

Alternatively, use the following information to join the room:

Meeting ID: 849 9644 9989
Passcode: 764891

Language
- The sessions will be delivered in the main language of the speaker.
- English-Spanish and Spanish-English translation will be provided -vía ZOOM.

Zoom
- Please do not share the Zoom link with other parties.
- The event will have simultaneous translation. The latest Zoom desktop version is required for this service to work properly, i.e. connections via browser do not support this function.
- Please mute your microphone during the presentations.

Q&A
Due to the large number of participants, the moderator will take ONLY written questions on the Chat. He will read up to five questions. Efforts will be made to answer them in writing.

Software
- The practical session (**2nd December**) will be conducted on R. We recommend that participants install R and RSTudio:
- Software R: https://www.r-project.org/
  R studio: https://www.rstudio.com/products/rstudio/download/

- It is not essential to know R. However, it is recommended to watch some introductory videos ahead of this session.
- https://www.youtube.com/watch?v=lVKMsaWju8w
- https://www.youtube.com/watch?v=_V8eKsto3Ug

- Ahead of this meeting, a handbook will be shared with the participants with the relevant scripts and annotations.
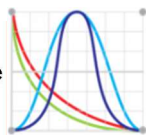
Monday 22nd November:

History of Poverty Measurement

History of multidimensional poverty measurement: a global perspective

Professor David Gordon (University of Bristol, UK)

Talk Overview

In September 2015, the governments of the world agreed to 17 Sustainable Development Goals (SDGs) which were designed to guide global economic, environmental and social policy in all countries over the next fifteen years. The primary SDG is to *"End poverty in all its forms everywhere"* during the 21st Century, leaving no-one behind. There have been over 400 years of both anti-poverty policy and poverty research in Britain which is one of the richest countries in the world and yet poverty both persists and is increasing in the UK, so are the SDG goals achievable or impossibly utopian?

This session will provide a brief history of the idea of poverty and how it has been measured. It will discuss what has been learned from poverty research about how to effectively and efficiently eradicate poverty.

Key Reading

Bagguley P, Mann K (1992) Idle, thieving bastards: Scholarly representations of the underclass. *Work, Employment and Society*, 6(1): 113-126.

George, H (1879) *Progress and Poverty: An Inquiry into the Cause of Industrial Depressions and of Increase of Want with Increase of Wealth; The Remedy.* W. M. Hinton and Company, San Francisco. https://progressandpoverty.org/

Gordon, D. (2006) The concept and measurement of poverty. In Pantazis, C., Gordon, D. and Levitas, R. (Eds) *Poverty and Social Exclusion in Britain: The Millennium Survey*. Bristol, Policy Press. pp 29-70.

Harrington, M. (1962) *The Other America: Poverty in the United States*. New York: Macmillan Publishing Co

Macnicol J (1987) In pursuit of the underclass. *Journal of Social Policy*, 16(3): 293-318.

Naoroji, D. (1901) *Poverty and Un-British Rule in India*. Swan Sonnenschein and Co. Ltd., London.

Shildrick T, MacDonald R, Furlong A, Roden J, Crow R (2012) *Are 'cultures of worklessness' passed down the generations?* York: Joseph Rowntree Foundation www.jrf.org.uk/sites/files/jrf/worklessness-families-employment-full.pdf

Stedman-Jones, G. (2004) *An End to Poverty: A Historical Debate.* London, Profile Books
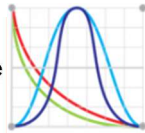
Stone, R. (1997) *Some British Empiricists in the Social Sciences 1650-1900*. Cambridge, Cambridge University Press.

Townsend P (2009) *Building decent societies. Rethinking the role of social security in state building*. Geneva, ILO

Townsend, P. & Gordon, D. (Eds.) (2002) *World Poverty: New policies to defeat an old enemy*. Bristol: Policy Press.

Welshman J (2007) *From transmitted deprivation to social exclusion: Policy, poverty and parenting*. Bristol: Policy Press
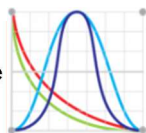
Key Resources: The Poverty and Social Exclusion website is the UK's national academic web-resource for Poverty Research – see https://www.poverty.ac.uk/world

Biography

Professor David Gordon is Professor of Social Justice and the Director of the Townsend Centre for International Poverty Research and the Bristol Poverty Institute at the University of Bristol, UK. He has written and edited over two hundred books, papers and reports on poverty, inequality and social exclusion, social justice and social policy. Professor Gordon was a member of the UN Expert Group on Poverty Statistics (Rio Group) and contributed to its '*Compendium of Best Practice in Poverty Measurement*'. He has acted as an external expert for the *European Union Working Group on Income, Poverty and Social Exclusion* and was a member of the *EU Task Force on Material Deprivation.* He was appointed as a scientific advisor to the European Union/Latin American *Network 10 - Fight against Urban Poverty*. He worked with UNICEF on its first ever *Global Study on Child Poverty and Disparities*, providing scientific advice and support to over 50 UNICEF country offices. Professor Gordon was also an international advisor for the development of the official multidimensional poverty measure in Mexico and has advised the New Zealand and UK governments on poverty measurement and anti-poverty policies. He led the *Poverty and Social Exclusion in the United Kingdom* project, which was the largest of its kind in UK history. In 2006 and 2007, he was given the tremendous honour of addressing the General Assembly of the United Nations about child and youth poverty. In 2018, he was elected as a Fellow of the British Academy for his work on poverty research.

History of poverty measurement in Latin America

Professor Luis Beccaria (University of General Sarmiento, Argentina)

Talk Overview

The talk will provide a general view of the development of official measurements of poverty in Latin America since 1970s. It will discuss how countries have resorted to different approaches and sources of information at different point of times. A panorama of the present situation will be discussed, including the main challenges and possible ways forward.

Key Reading

Altimir, O. (1979) "La dimensión de la pobreza en América Latina", Cuadernos de la CEPAL, N° 27, Santiago: Comisión Económica para América Latina y el Caribe (CEPAL).

CEPAL (2018) Medición de la pobreza por ingresos: actualización metodológica y resultados, Metodologías de la CEPAL, N° 2, Santiago: Comisión Económica para América Latina y el Caribe (CEPAL).

INDEC (1985) La pobreza en Argentina. Buenos Aires: INDEC.

Nájera Catalán, H. y D. Gordon (2020) "The Importance of Reliability and Construct Validity in Multidimensional Poverty Measurement: An Illustration Using the Multidimensional Poverty Index for Latin America (MPI-LA)", The Journal of Development Studies, Vol. 56, No. 9

Santos, E. (2014) Measuring Multidimensional Poverty in Latin America: Previous Experience and the Way Forward, OPHI Working Paper no. 66

Biography

Professor Luis Beccaria holds a PhD in Economics from the University of Cambridge. His work in the 1980s pioneered the measurement of multidimensional poverty globally with one of the first implementations of the Unmet Basic Needs approach. He was director of the Argentina's Institute of Statistics and Censuses, held senior positions at the Economic Commission for Latin America and the Caribbean (ECLAC) and was a member of the Rio Group (2006) of experts for poverty measurement.
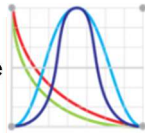
Theories, definitions and measurement of poverty

Professor Fernando Cortés and Dr Héctor Nájera (UNAM, Mexico)

Talk Overview

There are several theories, definitions and measures of poverty around the world. This has led to theoretical, conceptual, and methodological disputes about the merits and limitations of each approach. This, unfortunately, has created confusion of several kinds among the public interested in poverty measurement but also among scholars. The best way to frame and understand these disputes is through the scientific treatment of the concept and measurement of poverty. Drawing upon more than 100 years of academic work, the lecture clarifies the role of a theory in both the definition and measurement of poverty, describes the connections between an abstraction -concept- and the operation of measuring it and sets up key questions for the rest of the course.

Reading

Blalock, H.M (1968) "The measurement problem", in H.M. Blalock and A Blalock (Eds), Mehtodology in social research, McGraw-Hill.

Tal, Eran, "Measurement in Science", *The Stanford Encyclopedia of Philosophy* (Fall 2020 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2020/entries/measurement-science/>.
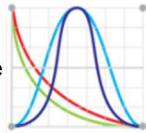
Zeller, R. A.& Carmines, E. G. Measurement in the Social Sciences: the link between theory and data. Cambridge: Cambridge University Press, 1980.

Biographies

Dr Héctor Nájera has a PhD in Social Policy from the Centre for Poverty and Social Justice Studies at the University of Bristol, UK. He currently is a Research Fellow at the Programme for Development Studies (PUED) at the National Autonomous University in Mexico (UNAM). He worked as a Senior Research Associate at the University of Bristol (2016-2019). He was a member of the team responsible for the creation, production and validation of the official multidimensional poverty measure of the European Union -EUROSTAT- considered the gold standard in poverty measurement. He has participated in various grants from the Economic and Social Research Council (ESRC) to collaborate with countries in Latin America, Africa and the South Pacific in the development of measures of adult and child poverty based on the Townsend approach and the consensual method. He has been a consultant for different international organizations, such as UNICEF and UNDP, for the demographic and spatial analysis of poverty and social exclusion. His main research interests are the implementation of advanced statistical methods for the study and measurement of poverty.

Professor Fernando Cortés has a PhD in Social Sciences with a specialisation in Social Anthropology from CIESAS-Mexico. He is the Head the area for the study of poverty and social inequalities at the Programme for Development Studies (PUED) at the National Autonomous University in Mexico (UNAM). His career has earned him the appointment of advisor to the United Nations Children's Fund (UNICEF). In 2005, he was appointed Professor Emeritus by Flacso and, since 2007, he has been Researcher Emeritus of the National System of Researchers of the National Council of Science and Technology in Mexico. One of his greatest contributions to Mexican social science has been its participation for the development of the methodology for measuring multidimensional poverty in Mexico, which has been implemented by the National Council for the Evaluation of Social Development Policy (CONEVAL).

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Wednesday 24th November

Poverty Theory

Relative Deprivation Theory

Professor David Gordon (University of Bristol, UK)

Talk Overview

One of the seminal contributions that Professor Peter Townsend made to science was the development of relative deprivation theory, which marked a paradigm shift in both our understanding of poverty and the practice of poverty measurement methodology. Over the past fifty years, researchers have built upon Townsend's theory and insights and made significant advances in the measurement and understanding of poverty.
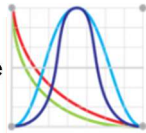
This session will discuss whether poverty can ever be measured scientifically or must always remain in the 'eye of the beholder'. Is it possible to measure poverty in a consistent and comparable manner in low-, middle- and high-income countries or are different measures of poverty needed in 'poor' and 'rich' countries?

Key Reading

Callan, T., Nolan, B. and Whelan, C. (1993), Resources, deprivation and the measurement of poverty, *Journal of Social Policy*, 22:2, 141–72.

Dermott, E. and Main, G. (2017) *Poverty and Social Exclusion in the UK Volume 1 - The Nature and Extent of the Problem*. Bristol, Policy Press

Gordon, D. (2000) The Scientific Measurement of Poverty: Recent Theoretical Advances. In Bradshaw, J. and Sainsbury, R. (Eds) *Researching Poverty*, Aldershot, Ashgate. pp37-58.

Gordon D & Spicker P (Eds) (1999) *The International Glossary on Poverty*. London, Zed Books.

Gordon, D., Pantazis, C. & Levitas, R. (Eds.) *Poverty and Social Exclusion in Britain: The Millennium Survey.* Bristol: The Policy Press.

Gordon, D. & Townsend, P. (2000) *Breadline Europe: The measurement of poverty.* Bristol: Policy Press.

Halleröd, B. (2006). Sour grapes: Relative deprivation, adaptive preferences and the measurement of poverty. *Journal of Social Policy*, 35, 371–390.

Halleröd, B., Larsson, D., Gordon, D., & Ritakallio, V. M. (2006). Relative deprivation: A comparative analysis of Britain, Finland and Sweden. *Journal of European Social Policy*, 16, 328–345.

Piachaud, D. (1981) 'Peter Townsend and the Holy Grail'. In *New Society* on September 10th 1981.

Ringen, S. (1988) Direct and indirect measurement of poverty, *Journal for Social Policy* 17: 351-65.

Rio Group (2006), *Compendium of best practices in poverty measurement*, Rio de Janeiro: United Nations Expert Group on Poverty Statistics. https://ww2.ibge.gov.br/poverty/pdf/rio_group_compendium.pdf

Sen, A. (1983), Poor, Relatively Speaking, *Oxford Economic Papers*, *New Series*, 35(2): 153-69.

Sen, A. (1985), A Sociological Approach to the Measurement of Poverty: A Reply to Professor Peter Townsend, *Oxford Economic Papers*, 37: 669-76.

Townsend, P. (1954). Measuring Poverty, *British Journal of Sociology*, 5(2), pp. 130-137.

Townsend, P. (1962). The Meaning of Poverty, *British Journal of Sociology*, 13(3), pp. 210-227.

Townsend P (1979), *Poverty in the United Kingdom,* London: Allen Lane and Penguin Books

Townsend, P. (1981), Rejoinder to Pichaud, *New Society*. Reproduced in P. Townsend (1993), The International Analysis of Poverty, Hertfordshire: Harvester/Wheatsheaf.

Townsend, P. (1985). A Sociological Approach to the Measurement of Poverty. A Rejoinder to Professor Amartya Sen, *Oxford Economic Papers* 37 (4): 659-68.

Townsend, P. (1987). Deprivation. *Journal of Social Policy* 16 (02), 125–146.

Townsend, P. (1993), Theoretical Disputes about Poverty, in P. Townsend, *The International Analysis of Poverty*. Hemel Hempstead: Harvester Wheatsheaf.
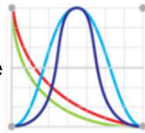
Human rights and child poverty: Past, present and future of child poverty measurement

Enrique Delamonica (UNICEF HQ, USA)
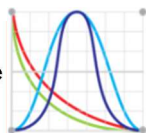
Talk Overview

The session sets out why it is important for any study of child poverty, be it conducted in high, middle- or low-income country settings, to develop and use indicators suitable for reflecting the needs and rights of children. It will show how definitions of poverty have evolved to include the needs of children and how this has shaped the measurement of child poverty today. Examples will be presented from around the world, showing how the measurement of child poverty has changed and is improving as international agencies and national governments realize the importance of tackling child poverty.

Key References

Alkire, S, and Roche, J.M., (2012) Beyond headcount: Measures that reflect the breadth and components of child poverty. Global Child Poverty and Well-Being: 103-133.

Barnes, H. and Wright, G., 2012. Defining child poverty in South Africa using the socially perceived necessities approach. Global child poverty and well-being: Measurement, concepts, policy and action, pp.135-154.

Bradbury, B. and Jäntti, M., 2001. Child poverty across the industrialised world: evidence from the Luxembourg Income Study. Child Well-Being, Child Poverty, and Child Policy in Modern Nations: What Do We Know, pp.11-32.

Burd-Sharps, S., Guyer, P., Lechterman, T. and Lewis, K., 2012. Child well-being in the US: proposal for the development of a 'Tots Index' using the human development conceptual framework.Global Child Poverty and Well-Being, p.155.

Cornia, G.A., Jolly, R. and Stewart, F., 1989.Adjustment with a human face. Oxford University Press.

Chzhen, Y., De Neubourg, C., Plavgo, I. and de De Milliano, M., 2014.Understanding child deprivation in the European Union: the multiple overlapping deprivation analysis (EU-MODA) Approach. UNICEF Office of Research-Innocenti.

De Neubourg, C., Chai, J., de Milliano, M. and Plavgo, I., 2013.Step-by-step guidelines to the multiple overlapping deprivation analysis (MODA) Innocenti Working Paper No.695.

Gordon, D. and Nandy, S., 2012. Measuring child poverty and deprivation.Global child poverty and well-being. Measurement, concepts, policy and action, pp.57-101.

Gordon, D., Nandy, S., Pantazis, C., Townsend, P. and Pemberton, S., 2003.Child poverty in the developing world. Policy Press.

Guio, A.C., Gordon, D., Marlier, E., Najera, H. and Pomati, M., 2018. Towards an EU measure of child deprivation. Child indicators research,11(3), pp.835-860.

Kim, E. and Nandy, S., 2018. Multidimensional Child Poverty in Korea: Developing Child-Specific Indicators for the Sustainable Development Goals. Child Indicators Research, 11(3), pp.1029-1050.

MacPherson, S., 1987. Five hundred million children. Poverty and child welfare in the Third World, Wheatsheaf, UK.

Main G. 2019. Child poverty and subjective well-being: The impact of children's perceptions of fairness and involvement in intra-household sharing. Children and Youth Services Review. 97, pp. 49-58

Main G. 2014. Child poverty and children's subjective well-being. Child Indicators Research. 7(3), pp. 451-472

Main G, Bradshaw J. 2016. Child poverty in the UK: Measures, prevalence and intra-household sharing. Critical Social Policy. 36(1), pp. 38-61

Minujin, A. and Nandy, S. eds., 2012. Global child poverty and well-being: Measurement, concepts, policy and action. Policy Press.

Minujin, A., Delamonica, E., Davidziuk, A. and Gonzalez, E.D., 2006. The definition of child poverty: a discussion of concepts and measurements. Environment and Urbanization, 18(2), pp.481-500.

Minujin, A. and Delamonica, E., 2003. Mind the gap! Widening child mortality disparities. Journal of Human Development, 4(3), pp.397-418.

Nandy, S. and Main, G., 2015. The consensual approach to child poverty measurement. CROP Poverty Brief, 16.

Nandy, S. and Gordon, D., 2009. Children living in squalor: Shelter, water and sanitation deprivations in developing countries. Children Youth and Environments, 19(2), pp.202-228.

Reddy, S.G., 2008. The New Global Poverty Estimates? Digging Deeper into a Hole, UNDP International Poverty Centre One Pager No.65.

Redmond, G., 2008. Child poverty and child rights: Edging towards a definition. Journal of Children and Poverty, 14(1), pp.63-82.

Rees, G. and Main, G., 2015. Children's Views on their Lives and Well-Being in 15 Countries: An initial report on the Children's Worlds survey, 2013-14. York, UK: Children's Worlds project.

Ridge, T., 2002. Childhood poverty and social exclusion: From a child's perspective. Policy press.

UNICEF., 2005. The state of the world's children 2006: Excluded and invisible. UNICEF.

Vandemoortele, J., 2000. Absorbing social shocks, protecting children and reducing poverty. The role of basic social services. New York: UNICEF.

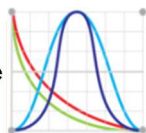UNICEF, 2000. Poverty reduction begins with children. New York: UNICEF.

Biography

Enrique Delamonica is an economist and political scientist and has previously worked as Chief of Social Policy and Gender Equality, UNICEF, Nigeria. He was educated at the University of Buenos Aires, Columbia University, and the New School for Social Research, New York. Since the early 1990's, he has worked as a consultant for UNICEF and UNDP and a policy analyst at UNICEF headquarters, focusing on the impact of macroeconomic policies on children, poverty-reduction strategies, financing of social services and budget allocations, the analysis of trends in socioeconomic disparities, child poverty measurement and social protection policies.

His books include "Eliminating Human Poverty - Macroeconomic & Social Policies for Equitable Growth" (CROP International Studies in Poverty Research, Zed Books, with Santosh Mehrotra.

Poverty as Capability Deprivation

Dr Rod Hick (University of Cardiff, UK)

Talk Overview

This lecture seeks to provide an overview to the capability approach, which was initially developed by the economist and philosopher Amartya Sen. The talk will be structured in five parts. The first will explain the origins and motivation behind the capability approach; the second, its key concepts. Third, while the capability approach can be applied in a variety of contexts, this section will consider the relevance of the approach for the purposes of poverty analysis specifically, before, fourthly, highlighting some empirical applications and theoretical and conceptual studies which have been inspired by the approach. The concluding fifth section will offer some reflections on the possibilities and limitations of working with the approach.

Key Reading

Core ideas
Sen, A. (1982), 'Equality of what?', in A. Sen (ed.), *Choice, Welfare and Measurement*, New Delhi: Oxford University Press.
Sen, A. (1999), *Development as Freedom*, Oxford: Oxford University Press.
Sen, A. (1987), 'The standard of living: Lecture II: Lives and capabilities', in G. Hawthorne (ed.), *The Standard of Living*, Cambridge: Cambridge University Press.
Sen, A. (1987), *Commodities and Capabilities*, New Delhi: Oxford University Press.
Hick, R. (2014). Poverty as Capability Deprivation: Conceptualising and measuring poverty in contemporary Europe. *European Journal of Sociology*, *55*(3), 295-323.
Robeyns, I. (2017). *Wellbeing, freedom and social justice: The capability approach re-examined*. Open Book Publishers.

Applications
Deaton, A. (2013). *The great escape: health, wealth, and the origins of inequality*. Princeton University Press [see especially Chapter 1: The wellbeing of the world)
United Nations (2016), '*Human Development Report 2016: Human Development for Everyone*', New York, United Nations.
Nussbaum, M. (2003). Capabilities as fundamental entitlements: Sen and social justice. *Feminist economics*, *9*(2-3), 33-59.
Durand, M. (2015). The OECD better life initiative: How's life? and the measurement of well-being. *Review of Income and Wealth*, *61*(1), 4-17.
Burchardt, T., & Vizard, P. (2011). 'Operationalizing'the capability approach as a basis for equality and human rights monitoring in twenty-first-century Britain. *Journal of human development and capabilities*, *12*(1), 91-119.
Alkire, S., & Foster, J. (2011). Counting and multidimensional poverty measurement. *Journal of public economics*, *95*(7-8), 476-487.
Oxford Poverty and Human Development Initiative (2018), *Global Multidimensional Poverty Index 2018: The most detailed picture to date of the world's poorest people*, University of Oxford, UK.
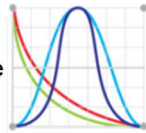
See also: The Human Development and Capability Association website https://hd-ca.org/

Biography

Dr Rod Hick is a Senior Lecturer in Social Policy at Cardiff University. His research interests are the conceptualisation and measurement of poverty, the analysis of social security and anti-poverty initiatives and the capability approach. He holds a PhD in Social Policy from the London School of Economics, is currently co-editor of the Journal of Poverty and Social Justice and, in 2015, won the Foundation for International Studies on Social Security prize for the best paper presented at their annual conference. In 2016-17, he led a study examining in-work poverty in the UK, funded by the Nuffield Foundation, the findings of which were reported in *The Guardian, The Independent* and in the UK House of Commons. He is currently working with Prof Gail Pacheco and Dr Alex Plum (Auckland University of Technology) on a project examining in-work poverty in New Zealand, funded by the NZ Human Rights Commission and, with Policy and Practice, on a Welsh Government-funded study of the impact of Universal Credit on Council Tax Reduction Schemes and on rent arrears.

Friday 26th November

Approaches to Poverty Measurement

Social rights and poverty measurement: A review of the ten years of the Mexican experience

Professor Fernando Cortés (UNAM, Mexico)

Talk Overview

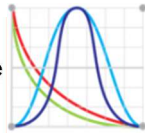This seminar sessions cover the following topics:

- The legal and institutional conditions within which the multidimensional measurement of poverty in Mexico was designed. These two are the bases, from a rights perspective, to establish the dimensions of the index, the levels of aggregation and the periodicity with which the results must be published.
- The process of consulting the academy, the population and government officials for the selection of the indicators.
- The different criteria used to determine thresholds.
- The methodology differentiates two domains: welfare and social rights. For both are different nature, the measure has a two-dimensional structure. The talk also presents the theoretical and logical arguments that support the index of social deprivation/rights and the definitions of multidimensional and multidimensional extreme poverty.
- The presentation ends by looking at some examples that give substance to the abstract definitions, and with the presentation of the results of poverty measurements, carried out every two years, between 2008 and 2020.

Key References

CONEVAL. (2012). "Construcción de las Líneas de Bienestar". México: CONEVAL.

CONEVAL. (2014). "Medición multidimensional de la pobreza en México". El Trimestre Económico, LXXXI (321), 5-42.

CONEVAL. (2018). "Metodología para la medición multidimensional de la pobreza en México" (3 ed.). México: CONEVAL.

Cortés, F. (2013). "La medición multidimensional de la pobreza en México". En CLACSO (Ed.), Multidimensionalidad de la pobreza. Propuestas para su definición y evaluación en América Latina y el Caribe (pp. 99-126). CLACSO: Buenos Aires.

Hernández Licona G., R. Aparicio, Mancini F. (coords.) (2018), Pobreza y derechos sociales en México, Consejo Nacional de Evaluación de la Política de Desarrollo Social, Universidad Autónoma de México, Instituto de Investigaciones Sociales, México.

Mora M (coordinador) (2010), Medición multidimensional de la pobreza en México, El Colegio de México/CONEVAL, México.

A critical review of axiomatic approaches and multidimensional indices

**Dr Curtis Huffman (UNAM, Mexico)**

Talk Overview

There seems to be some degree of confusion nowadays regarding what is meant by measurement in poverty research, as witnessed by recent exchanges in the field. It is obvious from these exchanges that different notions of central terms in the debate are being held (dimensionality, observability, model, replicability) to the detriment of understanding. In this talk we draw on the Epistemology of Measurement to bridge this conceptual gap.

Key References

Gordon, D. & Nájera Catalán, H.E. (2020) Reply to Santos and Colleagues 'The Importance of Reliability in the Multidimensional Poverty Index for Latin America (MPI-LA)', *The Journal of Development Studies*, 56:9, 1790-1794.

Nájera Catalán, H. E. & Gordon, D. (2020). The Importance of Reliability and Construct Validity in Multidimensional Poverty Measurement: An Illustration Using the Multidimensional Poverty Index for Latin America (MPI-LA). *The Journal of Development Studies*, 56(9), 1763-1783, DOI: 10.1080/00220388.2019.1663176.

Santos, M. E. & Villatoro, P. (2020). The Importance of Reliability in the Multidimensional Poverty Index for Latin America (MPI-LA). *The Journal of Development Studies*, 56(9), 1784-1789, DOI: 10.1080/00220388.2019.1663177.

Tal, E. (2015). Measurement in Science. In E.N. Zalta (Ed.), The Stanford Encyclopedia of Philosophy (Fall 2020 ed.) https://plato.stanford.edu/archives/spr2017/entries/measurescience (Accessed 11 November 2021)

Tal, E. (2017). A Model-Based Epistemology of Measurement. In Mößner, N., & Nordmann, A. (Eds.), *Reasoning in Measurement* (1st ed., pp. 245-265). Routledge, https://doi.org/10.4324/9781781448717

Biography

Dr Huffman has taught at The College of Mexico (Colmex), the National Autonomous University of Mexico (UNAM) and the Latin American Faculty of Social Sciences (FLACSO). In the Mexican public service, he held the position of Deputy Director in the Directorate of Impact Evaluation of the National Council for the Evaluation of Social Development Policy (CONEVAL). His publications include chapters in books on economics and philosophy of science, as well as articles published in Mexico and abroad. His most recent publications on theory and quantitative tools for causal analysis include, "Covariate Balancing Inverse Probability Weights for Time- Varying Continuous Interventions," co-authored with Edwin van Gameren, in the Journal of Causal Inference (2018). He is a member of the National System of Researchers (SNI).
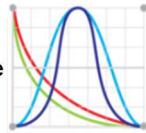
Consensual method and relative deprivation around the globe

Dr Shailen Nandy (Cardiff University, UK)

Talk Overview

Earlier sessions set out and explain the theory of relative deprivation and its importance for the assessment of poverty. This session builds on these, to explain how the theory has been operationalised by researchers in developing the Consensual Approach for assessing multidimensional poverty. The approach relies on agreement among the public to determine what constitutes an acceptable living standard and to identify whether an 'enforced lack' of socially perceived necessities is prevalent. Importantly, the approach allows for age-relevant indicators of deprivation to reflect the needs of children and older people, making it an effective means for reporting on progress towards the first Sustainable Development Goal. The Consensual Approach has been used successfully across high, middle, and low- income country settings, as shown by the readings below.

Key Readings

**Mack, J. (2017), The Consensual Method, PSE Website, available at: www.poverty.ac.uk/definitions-poverty/consensual-method.

 **Mack, J. and Lansley, S., (1985). *Poor Britain*. London: G. Allen & Unwin. Available online at: www.poverty.ac.uk/free-resources/poor-britain

Over the past 40 years the Consensual Approach has been used around the world. These readings are only a selection of a much wider body of work and are intended as an introduction to the approach and its application.

Abe, A. and Pantazis, C., 2014. Comparing public perceptions of the necessities of life across two societies: **Japan** and the **United Kingdom**. *Social Policy and Society*, 13(1), pp.69-88.

Barnes, H. and Wright, G., 2012. Defining child poverty in **South Africa** using the socially perceived necessities approach. in Minujin, A and Nandy, S (eds), *Global child poverty and well-being: Measurement, concepts, policy and action*, pp.135-154. Bristol: Policy Press.

de Oliveira, F.U., Nandy, S., Fernandez, G.F., Del Vecchio, V., Assis, A.E.S.Q. and Vedovato, L.R., 2021. O que os brasileiros pensam ser necessário para que se tenha um padrão de vida digno em seu país?. *Revista Jurídica Trabalho e Desenvolvimento Humano*, 4. http://www.revistatdh.org/index.php/Revista-TDH/article/view/87 **[Brazil]**
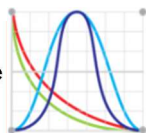
Gordon, D and Pantazis, P (1997), Breadline **Britain** in the 1990s, Avebury, Aldershot. Available at:
www.poverty.ac.uk/sites/default/files/attachments/Breadline%20Britain%20in%20the%20199 0s%20%28Gordon%20%20Pantazis%201997%29_0.pdf

 Lanau, A., Mack, J. and Nandy, S., 2020. Including services in multidimensional poverty measurement for SDGs: modifications to the consensual approach. *Journal of Poverty and Social Justice*, 28(2), pp.149-168. http://oro.open.ac.uk/70248/

Lanau, A., Fifita, V (2020). Do Households Prioritise Children? Intra-Household Deprivation a Case Study of the **South Pacific**. *Child Ind Res* **13,** 1953–1973. https://doi.org/10.1007/s12187-020-09729-5

Mtapuri, O., 2011. Developing an asset threshold using the consensual approach: Results from Mashonaland West, **Zimbabwe**. *Journal of International Development*, *23*(1), pp.29-41. https://onlinelibrary.wiley.com/doi/abs/10.1002/jid.1605

Nandy, S., Pomati, M. and Lenoël, A., 2016. L'approche consensuelle de mesure de la pauvreté: une application au cas du **Bénin**. *Stateco*, *110*, pp. 71-89. Available at: https://tinyurl.com/36ucbwf4

Noble, M.W., Wright, G.C., Magasela, W.K. and Ratcliffe, A., 2008. Developing a democratic definition of poverty in **South Africa**. *Journal of Poverty*, *11*(4), pp.117-141.

Pomati, M. and Nandy, S., 2020. Measuring multidimensional poverty according to national definitions: Operationalising target 1.2 of the sustainable development goals. *Social Indicators Research*, *148*(1), pp.105-126. [**West Africa**]

Nandy, S and Pomati, M, Applying the consensual method of estimating poverty in a low-income African setting, *Social Indicators Research* 124(3): 693-726, https://link.springer.com/article/10.1007/s11205-014-0819-z [**Benin**]

Saunders, P. and Bradbury, B., 1991. Some **Australian** evidence on the consensual approach to poverty measurement. *Economic Analysis and Policy*, *21*(1), pp.47-78.

Recent examples of the Consensual Approach used in Uganda

2019 Government of Uganda, UNICEF Uganda, Cardiff University and Bristol Poverty Institute, Multidimensional child poverty and deprivation in Uganda, Volume 1: The extent and nature of multidimensional child poverty and deprivation, report).
www.unicef.org/esa/sites/unicef.org.esa/files/2019-10/UNICEF-Uganda-2019-Child-Poverty-Report-Vol1.pdf

2019 Government of Uganda, UNICEF Uganda, Cardiff University and Bristol Poverty Institute, Multidimensional child poverty and deprivation in Uganda, Volume 1: The extent and nature of multidimensional child poverty and deprivation, appendices.
www.unicef.org/uganda/reports/multidimensional-child-poverty-and-deprivation-uganda-appendix-one

Government of Uganda, UNICEF Uganda, Cardiff University and Bristol Poverty Institute, Multidimensional child poverty and deprivation in Uganda, Volume 2: Views of the public, report.
www.unicef.org/uganda/reports/multidimensional-child-poverty-and-deprivation-uganda-report-volume-2

Useful sites

www.poverty.ac.uk/pse-research

Biography

Dr Nandy is Reader in Social Policy in the School of Social Science at Cardiff University. He teaches on several undergraduate and post-graduate modules and convenes modules on International and Comparative Social and Public Policy. Over the past 20 years, his research has focused on different aspects of international development and on poverty analysis and anti-poverty strategies. He is interested in
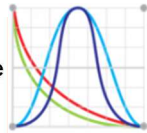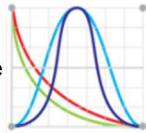
social policy and its role in national development strategies in the era of the Sustainable Development Goals.

Dr Nandy's recently completed projects include an ESRC-GRCF-SDAI research project looking at the problem of multiple malnutrition in young children in West and Central Africa, a national situation analysis of child poverty and deprivation in Uganda with UNICEF Uganda, an examination of child poverty among refugee-hosting communities in Uganda with the Economic Policy Research Centre (Uganda) and a British Council Newton Fund grant with colleagues at the CRONICAS research centre in Lima on nutrition dynamics and the double burden of malnutrition in Peru.

Monday 29th November

Principles for the Scientific Measurement of Poverty

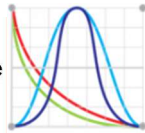## Debates on axioms, empirical scrutiny and poverty measurement

Dr Curtis Huffman and Dr Héctor Nájera (UNAM, Mexico)

Talk Overview

There is no such thing as a perfect or correct poverty index. All indices, even those based on axioms, are befouled by measurement error. However, measurement error is rarely estimated and reported when producing poverty indices. The talk focuses on the meaning, implications, and importance of measurement error and how it differs from sampling error. It will show that measurement error is intrinsic to any measure, regardless of the theory and definition underlying the index in question.

Key Reading

Alkire, S., Roche, J. M., Ballon, P., Foster, J., Santos, M. E., & Seth, S. (2015). Multidimensional poverty measurement and analysis. Oxford University Press, USA.

Gelman, A and Loken (2017) Measurement error and the replication crisis. Science. 355(6325) http://www.stat.columbia.edu/~gelman/research/published/measurement.pdf

Hanson, Norwood Russell. 2018. Perception and Discovery: An Introduction to Scientific Inquiry. Vol. 389. Springer. Capítulo 3 "Measuring and counting: More boundaries"

Kyburg, Henry E. 1984. Theory and Measurement. Cambridge University Press. Chapter 1.

Vessonen, Elina. 2020. "The Complementarity of Psychometrics and the Representational Theory of Measurement." The British Journal for the Philosophy of Science 71 (2): 415–42.

World Bank. (2020). Monitoring Global Poverty.

Dr Héctor Nájera (UNAM, Mexico)

Reliability and poverty measurement

Talk Overview

Reliability is a governing principle in science and is a necessary condition for good measurement. Unreliable poverty scores affect population orderings and hinders the capacity of identifying the poor from the not poor. The talk provides the basic definition of reliability, underlines its importance and describes the different ways in which it can be estimated for any poverty index.

Key Reading

Bandalos, D. L. (2018). *Measurement theory and applications for the social sciences*. Guilford Publications. Reliability Chapter.

Nájera. H (2019) Reliability, Population Classification and Weighting in Multidimensional Poverty Measurement: A Monte Carlo Study. *Social Indicators Research* 142.3: 887-910.

Nájera Catalán, H. E., & Gordon, D. (2020). The importance of reliability and construct validity in multidimensional poverty measurement: An illustration using the multidimensional poverty index for Latin America (MPI-LA). *The Journal of Development Studies*, *56*(9), 1763-1783.

Guio AC, Gordon DA, Najera HE, Pomati MA. (2017) *Revising the EU material deprivation variables*. Luxembourg: European Union.
2017. https://ec.europa.eu/eurostat/web/products-statistical-working-papers/-/KS-TC-17-002

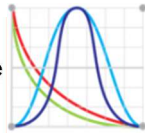# Validity and poverty measurement

Talk Overview

Validity is a second key principle in science as it allows investigations to make meaningful interpretation of the results. In the case of poverty indices, validity concerns with all the evidence that we can put forward to justify that the scores of our index have the meaning we think they have, i.e., that the poverty index measures poverty and not something correlated with poverty. The talk focuses on the different types of validity and the methods to assess it.

Key Reading

Bandalos, D. L. (2018). *Measurement theory and applications for the social sciences*. Guilford Publications. Validity Chapter,

Nájera Catalán, H. E., & Gordon, D. (2020). The importance of reliability and construct validity in multidimensional poverty measurement: An illustration using the multidimensional poverty index for Latin America (MPI-LA). *The Journal of Development Studies*, *56*(9), 1763-1783. Cheryl Doss, Caitlin Kieran & Talip Kilic (2019): Measuring Ownership, Control, and use of Assets, Feminist Economics, DOI: 10.1080/13545701.2019.1681591

Wednesday 1st December

What Are the Needs of Adults and Children?

Unsatisfied basic needs and consensual method: The experience in Buenos Aires

Ana Laura Fernandez (National University of General Sarmiento)

Talk Overview

This talk will provide a discussion on the shortcomings of the use of information drawn from existing household surveys on UBS for measuring multidimensional poverty and the experience of the City of Buenos Aires in Argentina in using the consensual method for the construction of a multidimensional poverty measure.
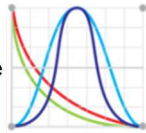
Key Reading

Beccaria, y and A.L. Fernández "Measuring multidimensional poverty using households surveys", Problemas del desarrollo, vol. 51, no. 200, pp. 129-156, 2020

Dirección General de Estadística y Censos de la Ciudad de Buenos Aires (2021) "La pobreza multidimensional en la Ciudad de Buenos Aires. Año 2019" Informe de Resultados 1531, febrero.

Biography

Ana Laura Fernandez has a Master's Degree in Political Science and Sociology from the Latin American Faculty of Social Sciences and a Degree in Economics from the University of Buenos Aires. She currently works as a researcher-teacher in the Economics Department of the Institute of Sciences of the National University of General Sarmiento. She is a postgraduate professor at the Latin American Faculty of Social Sciences, the National University of San Martín and the National University of Tres de Febrero. She is a regular attached professor at the University of Buenos Aires and the National University of General Sarmiento.

Ana specialises in labour market, income distribution and poverty. Her research focuses on the structure and dynamics of the labour market and on the effects of labour dynamics and social policy on income distribution and living conditions.

Child poverty and the consensual method

Dr Gill Main

Talk Overview

This session examines how children have been included – and excluded – in efforts to understand, measure, and address child poverty. Most measures of child poverty – especially income-based measures – treat children as passive adjuncts to parents and as net drains on the household economy. Even studies which include child-specific items tend to decide on these items based on adult perceptions of children's needs and rely on parents or other adults as proxy respondents for children.
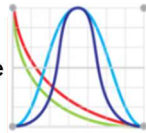
Childhood Studies, as an academic discipline, challenges the assumptions behind these approaches. We know that, rather than being passive, children are actively involved in interpreting their situation and responding to it and this includes children's understandings of what poverty is and what the experience of poverty is like. After outlining the theoretical basis for including children more fully in all aspects of poverty research, studies from Australia, Hong Kong, Indonesia and the UK which have developed theoretical knowledge, statistical measures and anti-poverty agendas in partnership with children and young people will be discussed. A case will be made not only that we can include children in theorising, measuring and addressing child poverty, but that, if we are serious about eradicating poverty in all its dimensions, we must do so.

Key Reading

Bessell, S. (2019) 'Money matters… but so do people: Children's views and experiences of living in a 'disadvantaged' community'. In *Children and Youth Services Review* vol.97 pp59-66.

Bessell, S. (2009) 'Indonesian Children's Views and Experiences of Work and Poverty'. In *Social Policy and Society* vol. 8 no.4 pp527-540.

Lau, M. K. W., Gordon, D., Zhang, M. F. and Bradshaw, J. (2019) 'Children's and adults' perceptions of child necessities in Hong Kong'. In *Social Policy and Administration* vol.53 no.6 pp835-853.

Main, G. and Bradshaw, J. (2016) 'Child poverty in the UK: Measures, prevalence and intra-household sharing'. In Critical Social Policy vol.36 no.1 pp38-61.

Main, G. (2018) 'Money Matters: A nuanced approach to understanding the relationship between household income and child subjective well-being'. In Child Indicators Research.

Main, G. and Mahony, S. (2018) Fair Shares and Families: Rhetoric and reality in the lives of children and families in poverty. London: The Children's Society.

Redmond, G. (2009) 'Children as Actors: How does the child perspectives literature treat agency in the context of poverty?'. In *Social Policy and Society* vol.8 no.4 pp541-550.

Saunders, P., Brown, J. E., Bedford, M. and Naidoo, Y. (2019) 'Child deprivation in Australia: A child-focused approach'. In *Australian Journal of Social Issues* vol.54 pp4-21.

Biography

Gill Main is Professor of Childhood, Youth and Social Justice in the School of Education at the University of Leeds. She has worked on a range of projects investigating child poverty, including the ESRC funded projects, UK Poverty and Social Exclusion UK study and Fair Shares and Families study; the Australian Research Council funded projects, Material Deprivation and Social Exclusion among Young Australians: A child-focused approach and Social Exclusion in Adolescence: Risks, assets, experiences and policy action. She works in close partnership with a range of national (to the UK) and international charities and public sector organisations to translate her research into societal impact. For example, she has worked with Leeds City Council in the UK to rewrite their child poverty strategy, putting children's participation in the design and development of policies at the centre of the Council's work.

Socially Perceived Needs Across Time and Space

**Joanna Mack (Open University, UK)**

Talk Overview

This session explores public attitudes to the necessities of life, looking at which items remain constant and which items change according to time and place. It starts with the Breadline Britain surveys of 1983 and 1990, the Poverty and Social Exclusion in Britain survey of 1999, the PSE survey in Northern Ireland in 2002/3 and PSE UK 2012 survey, which all used the same methodology to investigate the public's perception of necessity and therefore allow changes in people's perceptions to be tracked over a thirty-year period. Looking at the items seen to be necessities, that is, those that a majority of people felt that no-one should have to do without, it discusses the extent to which there is a core of items seen to be essential for an acceptable standard of living in the UK that remain constant over time and what those items have in common.   It then examines which items changed from being seen as necessities to items that maybe desirable but were not necessities and which moved in the other direction, examining how this reflects changes in the nature of society over this period. The session then moves on to look at surveys across the world that have used this methodology to explore attitudes to necessities in those countries. Drawing on surveys in a range of high-, mid- and low-income countries, it looks at how attitudes to what is essential to live in that country vary across countries, and why. It finally asks whether a core set of items seen to be necessities can be identified that are common across all countries.

Key Reading

Abe, A. and Pantazis, C. ' Comparing Public Perceptions of the Necessities of Life across Two Societies: Japan and the United Kingdom', Social Policy and Society, Volume 13, I

Gannon, M and Bailey, N. 'Attitudes to the 'Necessities of Life': Would an Independent Scotland Set a Different Poverty Standard to the Rest of the UK?', Social Policy and Society, Volume 13, Issue 03, July 2014, pp 321 – 336.

Lanau, A., Mack, J. and Nandy, S. 'Including services in multidimensional poverty measurement for SDGs: modifications to the consensual approach', Journal of Poverty and Social Justice, pp. 149-168, vol 28, No. 2, June 2020, pp. 149-168

Lansley, S. and Mack, J. Breadline Britain: The rise of mass poverty, One World, London, 2015.

Mack, J. (2018). Fifty years of poverty in the UK. In G. &. Bramley, Poverty and Social Exclusion in the UK: Volume 2 - The dimensions of disadvantage (pp. 27-55). Bristol: Policy Press.

Mack, J., & Lansley, S. (1985). Poor Britain. London: George, Allen and Unwin. Chapter 3: To live or exist (https://www.poverty.ac.uk/system/files/poor_britain_book/poor-britain-chap03-Mack-Lansley.pdf)

Mack, J,; Lansley S; Nandy, S.; Pantzasis, C. Attitudes to necessities in the 2012 PSE survey- are minimum standards becoming less generous', PSE analysis paper NO 4., (https://www.poverty.ac.uk/pse-research/pse-uk/results-analysis)
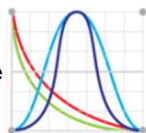
Main, G. and Bradshaw, J. 'Children's necessities: trends over time in perceptions and ownership', Journal of Poverty and Social Justice, Volume 22, Number 3, October 2014, pp. 193-208.

Main, G. Bradshaw, J. 2014 'The necessities of life for children'. PSE Working Paper: Analysis Series No. 6. ((https://www.poverty.ac.uk/pse-research/pse-uk/results-analysis))

Nandy, S. and Pomati, M. 'Applying the Consensual Method of Estimating Poverty in a Low Income African Setting', Social Indicators Research (2015) 124:693–726

Nandy, S. Main, G. 2015 The consensual approach to child poverty measurement. CROP Poverty Brief 29.

Patios, D. 'Trends in older people's perceptions of necessities and deprivation in Great Britain and Northern Ireland: what difference did a decade (or so) make?', Journal of Poverty and Social Justice, Volume 22, Number 3, October 2014, pp. 227-251

UNICEF, The extent and nature of multi-dimensional child poverty in Uganda, UNICEF, Geneva, 2019

Wright, G., 2011. Socially-perceived necessities in South Africa: patterns of possession, Working Paper 10, Oxford: CASASP.

See also: https://www.poverty.ac.uk/world for an overview of consensually-based poverty measurement in countries across the world.

Biography

Joanna Mack is an Honorary Senior Research Fellow in the School of Policy Studies at the University of Bristol and a Visiting Fellow in the Faculty of Social Sciences at the Open University. She is currently co-editor of *The Journal of Poverty and Social Justice.*
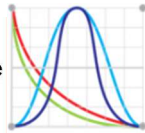
She was the Open University's lead for the ESRC-funded Poverty and Social Exclusion research project (PSE UK) which ran from 2010 to 2015 and was the largest ever research project in the UK into poverty. Joanna was in charge of dissemination for PSE UK and, in 2012, she set up the Poverty and Social Exclusion website - www.poverty.ac.uk which has become an important source of information on poverty and social exclusion in the UK and is now extensively used by researchers, educators, students and the campaigners.

In 1983, she produced and directed '*Breadline Britain*' 1983 (ITV network) which conducted the first survey of attitudes to necessities and is co-author (with Stewart Lansley) of *Poor Britain* (George, Allen & Unwin, 1983) which wrote these findings up and set out the theoretical basis of the consensual method.

Joanna is co-author (with Stewart Lansley) of *Breadline Britain: The rise of mass poverty*, (One World, London, 2015) and contributing author to *Poverty and Social Exclusion in the UK, Volume 2: The dimensions of disadvantage*, Ed. Bramley, G. and Bailey, N. (Policy Press, 2018); *The Violence of Austerity*, Ed. Cooper, V. and Whyte, D. (Pluto Press, 2017); and 'Factual television: inequality, the rich and the poor' in '*The Media and Inequality*', Ed. Schifferes, S. and Knowles, S., (Routledge, forthcoming).

Thursday 2nd December:

Computing and Analysis in R Practical Session

How to calculate the validity and reliability of poverty measures

Dr Héctor Nájera (UNAM, Mexico)

Talk Overview

This is a practical session that will introduce the computation of the different reliability estimators -*alpha, beta and omega*- using the R-software. After a brief introduction to R, the participants will see a live computation of reliability using different datasets. In additions participants will have access to a handbook to perform and reproduce the computations.

The second part of the session focuses on the methods to estimate criterion and construct validity using structural equation modelling. Most of the calculations will be based on the lavaan R-package.

Key Reading

Flora, D. B. (2020). Your coefficient alpha is probably wrong, but which coefficient omega is right? A tutorial on using R to obtain better reliability estimates. *Advances in Methods and Practices in Psychological Science*, *3*(4), 484-501.

Gana, K., & Broc, G. (2019). *Structural equation modelling with lavaan*. John Wiley & Sons.

Rosseel, Y. (2014). The lavaan tutorial. *Department of Data Analysis: Ghent University*.
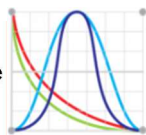
Friday 3rd December

Measuring and Mapping

Multiple malnutrition and food poverty

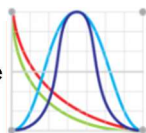**Dr Shailen Nandy (University of Cardiff, UK)**

Talk Overview

Poverty manifests in many ways and commonly in the form of malnutrition. When children and their families lack the resources to secure sufficient and nutritious food or adequate living conditions, the results can literally be life threatening. This session looks at this most persistent and pressing of global challenges. It will introduce and explain data sources that researchers can use to analyse sub-national, national and international food insecurity and malnutrition and discuss the limitations of conventional indicators used to measure the extent and nature of child malnutrition.

Key Reading

DeRose, L., Messer, E. and Millman, S., 1998. Who's hungry? and how do we know?: Food shortage, poverty, and deprivation. UNU Press. Available at: http://collections.unu.edu/view/UNU:2380#viewAttachments

McDonald, C.M., et al., 2013, The effect of multiple anthropometric deficits on child mortality: meta-analysis of individual data in 10 prospective studies from developing countries. American Journal of Clinical Nutrition, 97(4): p. 896-901.

Nandy, S., Daoud, A. and Gordon, D., 2016. Examining the changing profile of undernutrition in the context of food price rises and greater inequality. Social Science & Medicine, 149, pp.153-163.

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Nandy, S, and Pomati, M., 2020, Progrès vers la réalisation de l'ODD 2: évaluation de la malnutrition multiple chez les enfants de moins de 5 ans en Afrique occidentale et centrale, STATECO Numéro spécial ODD 2 Édito, 43Popkin, B.M., Corvalan, C. and Grummer-Strawn, L.M., 2020. Dynamics of the double burden of malnutrition and the changing nutrition reality. The Lancet, 395(10217), pp.65-74.

Shrimpton, R. and Rokx, C., 2012. The double burden of malnutrition: a review of global evidence. World Bank. Available at: https://openknowledge.worldbank.org/handle/10986/27417

https://sdg-tracker.org/zero-hunger
https://ourworldindata.org/hunger-and-undernourishment
https://www.statcompiler.com/en/
https://mics.unicef.org/surveys

Small Area Estimation and mapping of poverty in Uganda

Dr Marco Pomati (Cardiff University, UK)

Talk Overview

Poverty research uses survey data to produce estimates of the prevalence rates at national level. Sometimes household survey data have a sample frame that enables researchers to estimate poverty at regional level. However, these data are limited in that survey data is not designed to produce estimates of poverty for small areas such as counties, districts or municipalities. Thus, for policymakers is impossible to pinpoint the location of poverty and assign resources accordingly. Small-area estimation is a field that proposes a series of methods to model poverty and produce estimates using both survey and ancillary data. The course will introduce the literature and some of the methods involved in small-area estimation.
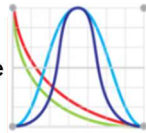
Key reading

Gordon, D. et al (2019) *Multidimensional Child Poverty and Deprivation in Uganda: Volume One, The Extent and Nature of Multidimensional Child Poverty*. Kampala, Government of Uganda & UNICEF**.** https://www.poverty.ac.uk/world/uganda

Molina, I., Nandram, B., & Rao, J. N. K. (2014). Small area estimation of general parameters with application to poverty indicators: a hierarchical Bayes approach. *The Annals of Applied Statistics*, *8*(2), 852-885.

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Nájera H., Fifita, V.F. and Faingaanuku, W. (2019) Small-Area Multidimensional Poverty Estimates for Tonga 2016: Drawn from a Hierarchical Bayesian Estimator*. Applied Spatial Analysis and Policy* https://doi.org/10.1007/s12061-019-09304-8

Pomati, M. and Nandy, S. 2020. Measuring multidimensional poverty according to national definitions - operationalising target 1.2 of the sustainable development goals. Social Indicators Research 148, pp. 105-126

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Rao, J. N. (2014). *Small-Area Estimation*. Wiley StatsRef: Statistics Reference Online, 1-8.

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Biography

Dr. Marco Pomati is a Senior Lecturer in the School of Social Sciences, Cardiff University, UK. His main research focus is the exploration and validation of policy-relevant living standards measures in Europe, the UK and Africa. His most recent work focuses on measures of material deprivation in Europe and Sub-Saharan Africa, the extent and severity of malnutrition in West and Central Africa and the dynamics of economic wellbeing and housing in the UK.

Comparability of poverty estimates across social groups and over time

Dr Héctor Nájera (UNAM, Mexico)

Talk Overview

Poverty researchers face the daunting task of making comparisons of poverty scores across groups, regions, countries and different time points. This begs the question: to what extent are those comparisons are fair, meaningful and valid. Do we need the very same indicators to make poverty comparisons? What if one indicator is useful in one country but not in another one? Or, instead, could we use different indicators to compare different countries in that their standards are different? How does this relate to relative and absolute poverty? The talk answers these questions using recent advancements in latent variable modelling.

Key Reading

Borsboom, D. (2006). When does measurement invariance matter?. *Medical care*, *44*(11), S176-S181.

Guio AC, Gordon DA, Najera HE, Pomati MA. (2017) *Revising the EU material deprivation variables*. Luxembourg: European Union. 2017. https://ec.europa.eu/eurostat/web/products-statistical-working-papers/-/KS-TC-17-002

Meredith, W., & Teresi, J. A. (2006). An essay on measurement and factorial invariance. *Medical care*, S69-S77.

Najera, H. E. (2017). Does measurement invariance hold for the official Mexican multidimensional poverty measure? A state-level analysis 2012. *Quality & quantity*, *51*(3), 1217.
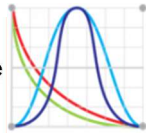
Thursday 9th December

Frontiers of Poverty Measurement

Poverty and assets, a gendered perspective

Professor Abena Oduro (University of Ghana)

Talk Overview

Assets are important to households and individuals for several reasons including the potential of some assets to generate income and to be sold or pawned as a coping strategy in response to shocks. This presentation will examine issues surrounding the collection of individual-level asset data and the use of assets in the coping strategies of women and men.

Key References

Cheryl Doss , Abena D. Oduro, Carmen Diana Deere, Hema Swaminathan, William Baah-Boateng & Suchitra J. Y. (2017): Assets and shocks: a gendered analysis of Ecuador, Ghana and Karnataka, India, Canadian Journal of Development Studies / Revue canadienne d'études du développement,

Cheryl Doss, Caitlin Kieran & Talip Kilic (2019): Measuring Ownership, Control, and use of Assets, Feminist Economics, DOI: 10.1080/13545701.2019.1681591
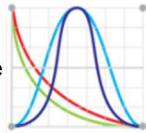
Biography

Abena D. Oduro is an Associate Professor in the Department of Economics, University of Ghana.

Her main areas of research are poverty and inequality analysis, gender and assets, unpaid care work, international trade policy and WTO issues.

She is the Board Chair and President of the International Association for Feminist Economics (IAFFE). She is associate editor of Feminist Economics.

Using AI and remote sensing for poverty measurement

Dr Adel Daoud

Talk Overview

About 900 million people globally—one-third in Africa and another one-third in India—live in extreme poverty. Operating on the assumption that impoverished communities are trapped in poverty, major global donors have deployed a stream of development programs to break these traps. Despite the scale of programs, scholars have little knowledge about the distribution of global poverty historically and geographically. To address these knowledge gaps, scholars must first tackle a data challenge: the lack of historical and geographical poverty data. The newly founded *AI and Global Development Lab* is innovating global-poverty research by combining deep-learning, satellite technologies, and knowledge on human development to overcome the data challenge. The Lab is recreating historical and geographical human-development trajectories from satellite images from 1984 to 2022. This new data will measure poverty at unprecedented temporal and spatial granularity. Among other things, this data will enable the Lab (and other scholars) to start examining — with a high precision — the causal effects of foreign aid on poor communities' chances of breaking poverty. This talk will discuss key scientific challenges and early findings.

The AI Human Development Lab is primarily based at the Institute for Analytical Sociology (IAS), Linköping University, and the Division of Data Science and Artificial Intelligence (DSAI) of the Department of Computer Science and Engineering, Chalmers University of Technology, Gothenburg, Sweden. The Lab is led by Adel Daoud (Primary Investigator), Associate Professor in analytical sociology, IAS, and Affiliated Associate Professor in Data Science and Artificial Intelligence for the Social Sciences, DSAI. Other key partners are based at the University of Gothenburg and Harvard University.

The vision of the Lab is to "combine AI and earth observation to estimate sustainable and human development globally." The Swedish Research Council funds this Lab through a Research Environment Program and a Consolidator Grant. Chalmers AI Research Centre (CHAIR) is supporting the Lab in partnership with IMCG. Google, in partnership with the Group on Earth Observations, provides mentorship and in-kind technical support for the Lab.

Biography

Adel Daoud is an Associate Professor at Institute for Analytical Sociology, Linköping University and Affiliated Associate Professor in Data Science and Artificial Intelligence for the Social Sciences, Department of Computer Science and Engineering, Chalmers University of Technology, Gothenburg, Sweden. Previously he held positions at Harvard University, University of Cambridge, Max Planck
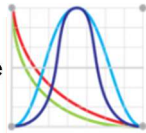
Institute for the Studies of Societies and the Alan Turing Institute. He researches the impact of economic, political and natural shocks on global poverty. Daoud implements novel methodologies in machine learning and causal inference to analyze the causes and consequences of poverty. He has published in journals such as PNAS, World Development, Cambridge J of Economics, Food Policy, Epidemiology, International J of Epidemiology, and Ecological Economics.

(More information is provided at www.adeldaoud.se)

Qualitative Comparative Analysis (QCA)

Dr Mary Zhang (University of Bristol)

Talk Overview

Qualitative comparative analysis (QCA) has been designed to identify patterns of multiple conjectural causation and simplify complex data structures in a logical and holistic manner. This session introduces this mixed-method approach to analysing the necessary and sufficient causalities between variables of interest, with a focus on crisp set QCA. Demonstrations will be performed to guide you through the process from calibrating the crisp dataset to testing and interpreting the causal patterns in the data. It is expected that this session will provide a useful analytic tool for those who are interested in case- or variable-oriented research.

Key Reading

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Harriss-White, B., Olsen, W., Vera-Sanso, P. & Suresh, V. (2013). Multiple shocks and slum household economies in South India. *Economy and Society*, 42(3), 398–429. https://doi.org/10.1080/03085147.2013.772760

Krook, M. L. (2010). Women's Representation in Parliament: A Qualitative Comparative Analysis. *Political Studies*, 58(5), 886–908. https://doi.org/10.1111/j.1467-9248.2010.00833.x

Rihoux, B. & Ragin, C. C. (2008). *Configurational Comparative Methods, Qualitative Comparative Analysis and Related Techniques*. SAGE Publications.

Biography

Dr Mary Zhang is a Senior Research Associate of the School for Policy Studies at the University of Bristol. Her research focuses on the social and political aspects of poverty, social exclusion and sustainable development in low- and middle-income countries. She has contributed to a range of research projects with funding from the Economic and Social Research Council, the Natural Environment Research Council and UNICEF. Her studies use a range of quantitative and qualitative methods.

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