

COMPASS Spring Seminar Series March-June 2016

Time: Friday 3.00 – 4.00 pm

Host: [COMPASS Research Centre](#)

Venue: Fale Pasifika Complex, Bldg 273, Level 1, Rm 104

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All welcome. Drinks and nibbles to follow.

Date	Presenter	Title & Abstract
Mar 4	Dr Martin Spielauer CONSULTANT, WORLD BANK	Dynamic microsimulation of programs and investments to reduce poverty and support development: Microsimulation is currently applied mostly in developed countries for the analysis and fine-tuning of policies with a longitudinal component like the sustainability of pension and health systems in the context of demographic change. This discussion aims at assessing the potential strengths and limitations of dynamic microsimulation in the context of applications for the developing world. With its ability to simultaneously handle distributional issues, population change, and the potentially strong demographic down-stream effects of policies, dynamic microsimulation can serve as a powerful tool complementing conventional data analysis and projections. Given the typically early stages in the design and implementation of social security systems, together with highly vulnerable populations, today's policy decisions potentially have huge impacts both on current living conditions and future development.
Mar 11	Liza Bolton COMPASS	Socioeconomic status and all-cause mortality: Testing life course hypotheses in New Zealand: Socioeconomic status (SES) has been shown to be related to mortality in a range of contexts. Low SES tends to increase mortality risk, but how exposure patterns across the life-course are related to mortality is not well understood, and have not been explored in the New Zealand context. This research uses New Zealand longitudinal census data to explore whether there is evidence of associations between mortality and cumulative exposure to low SES (accumulation hypothesis), changes in SES between life stages (social mobility hypothesis) and exposure to low SES during specific life stages (sensitive period hypothesis). Understanding these hypotheses in the New Zealand context may allow for better-targeted interventions to address mortality inequalities, for example, disparities between ethnic groups.
Mar 18	Dr Theresa Fleming PSYCHOLOGICAL MEDICINE A Prof Simon Denny PAEDIATRICS	Using data from Youth2000 to inform clinicians, research and policy: The Adolescent Health Research Group at the University of Auckland has been tracking the health and wellbeing of young people in New Zealand with the Youth2000 survey series in 2001, 2007 and 2012. The team has been using innovative and world leading technology to administer the survey, and has surveyed more than 25,000 young people to date. This presentation will discuss the results from these surveys, place the results in the context of global trends and discuss how the Youth2000 surveys have been used to examine social environments such as socio-economic deprivation, schools and communities, and their relationships with student health and wellbeing. There will be time to discuss plans for the next survey and opportunities for collaboration.
April 1	Dr Tom Robinson POPULATION HEALTH	Evaluating the outcomes of health services when you can't do an experiment - how about a quasi-experiment? Health services are constantly needing to change and in many cases the outcomes of these changes need to be evaluated. However usually RCTs cannot be undertaken. This presentation will consist of two parts. 1) A review of current NZ practice in health services non-experimental outcome evaluation. After searching 4 databases and the NZ Medical Journal, 52 health service outcome evaluations were found that used non-experimental methods and evaluated against the Cochrane's Collaboration's Effective Practice and Organisation of Care group guidance. Most studies did not meet the criteria for inclusion in Cochrane reviews because of their study design. Of those that could be included only a minority had no or few areas of potential bias. 2) A presentation of a quasi-experimental outcome evaluation which was completed in 2013 at Waitemata DHB. An outcome evaluation was undertaken of a programme that aimed to reduce readmission to hospital within a month of discharge. The results will be presented of a number of different evaluation designs including uncontrolled before and after, an interrupted time series, and a regression discontinuity design. Some of the issues encountered in carrying out quasi-experimental studies will be discussed.
April 8	A Prof James Oleson SOCIOLOGY	Criminal Genius: How We Know What Little We Know about High-IQ Crime: Intelligence is said to be the most studied human faculty, and within criminology, below-average intelligence (operationalized as IQ) is a well-established correlate of delinquency and crime. Nevertheless, even though the association between low IQ and crime has been studied for nearly a century, little is known about offenders with high IQ scores. A handful of studies have examined bright delinquents; virtually no criminological research has been conducted with gifted adults. This is an elusive population. The current research describes the self-reported offending of 465 high-IQ individuals (mean IQ = 148.7) and 756 controls (mean IQ = 115.4) across 72 different offences (ranging in seriousness from abuse of work privileges to homicide). This presentation will focus on the design and implementation of the study and the analytical work performed by COMPASS. It will also describe some key findings, such as the unexpected discovery that high-IQ respondents reported higher prevalence and incidence rates than did controls.
April 15	Grace Gordon, Dr Alice Mills SCHOOL OF SOCIAL SCIENCES	Homes for ex-prisoners: Housing provision and support after release in New Zealand: Re-offending by ex-prisoners is a significant problem in New Zealand with approximately 40 per cent being re-imprisoned within the first three years after release. Existing international studies have suggested that permanent, stable housing can reduce the risk of recidivism on release from prison by up to 20 per cent. Despite the potential importance of housing in prisoner reintegration, no comprehensive picture exists of specialist housing provision and support for people leaving prison in New Zealand, although such provision is generally thought to be patchy and inadequate. This presentation will draw upon telephone interviews with housing providers and other agencies in New Zealand to illustrate the strengths and weakness of existing housing provision for ex-prisoners. We argue that stable housing can represent more than just a roof over someone's head but can also be a crucial part of ensuring that ex-prisoners feel a valued part of the community.
April 22	Dr Mat Walton School of Public Health, MASSEY UNIVERSITY	Using complexity theory in policy work: more than a model but less than a revolution: What does the application of complexity theory mean for policy analysis and evaluation? A whole new paradigm with radical implications for methodology, or some interesting techniques within the evolution of policy work? Drawing upon recently completed research projects looking at the application of complexity theory within policy analysis and evaluation, this presentation will consider the implications of a complexity paradigm for programme design, governance and evaluation. It will argue that there are many opportunities for complexity to influence policy work, yet the most radical applications will come when complexity is coupled with other, sometimes older, approaches.
April 29	Dr Janine Paynter GENERAL PRACTICE AND PRIMARY HEALTHCARE	Evaluating the impact of vaccines – exploring a potential effect of the MeNZB™ vaccine on gonorrhoea: Observational data from Cuba and Norway suggest a limited effect of the use of a protein-based meningococcal B vaccine against gonorrhoea. <i>Neisseria gonorrhoeae</i> the bacteria that causes gonorrhoea and <i>Neisseria meningitidis</i> , a bacteria which causes meningitis are related. Based on DNA- DNA hybridisation there is between 80–90% homology of primary sequences between <i>N.gonorrhoeae</i> and <i>N. meningitidis</i> . Is there an effect? It is a tantalising question! New Zealand's immunisation against meningococcal B from 2004-2008 plus comprehensive documentation of immunisation with MeNZB™ for safety purposes, New Zealand's national health index, the Integrated Data infrastructure and good sexual health clinic records enable us to conduct both a retrospective case-control and cohort study which tests for an effect of the MeNZB™ vaccine on gonorrhoea in New Zealand. I'll be discussing the approach we have used for the case-control study and describing the cohort study as examples for assessing vaccine effectiveness in a country with world class national health data.
May 6	Prof Matthias Schonlau UNIVERSITY OF WATERLOO	Detecting adverse events in physician's notes using text mining: This talk has three goals: a) introduce text mining, b) introduce Stata programs for text mining and c) discuss the challenges in detecting adverse events in NZ physician's notes (joint work with Peter Davis and Roy Lay-Yee). This is work in progress.

May 13	Prof Gavin Brown FACULTY OF EDUCATION & SOCIAL WORK	Socio-demographic differences in the impact of beliefs upon achievement - Non-invariance by sex, age, and ethnicity in conceptions of assessment upon achievement: Student beliefs about the purposes and nature of assessment have been examined using the Student Conceptions of Assessment inventory (SCoA-Version 2). The four beliefs (i.e., assessment makes students accountable, assessment evaluates schools, assessment is enjoyable, assessment is irrelevant) have substantial impact upon test scores ($R^2 \approx .25$). In a survey of New Zealand secondary (Years 9-12) students ($N=3,506$), the factor structure of the SCoA-2 inventory was equivalent across student sex, year-level, and ethnicity. However, using multiple group invariance testing in a structural equation model, statistically significant differences for sex, year, and ethnicity were found for how the four conceptions of assessment related to academic performance in reading. It is argued that these differences do not indicate a deficiency in the SCoA inventory but, rather, demonstrate sensitivity to real-world differences among subgroups. The structural differences can be understood in terms of sex differences in approaches to learning, year differences in experience with the New Zealand national qualifications assessment system, and ethnic differences in experience of bias and prejudice in schooling.
May 20	Dr Melissa Wong UNIVERSITY OF NEW SOUTH WALES	Child poverty and wellbeing in Australia: Until recently little was known about how young people in general, and those who are disadvantaged in particular, conceptualise and perceive their own wellbeing and how this relates to other aspects of their lives. The Australian Child Wellbeing Project, conducted by researchers in Flinders University and the University of New South Wales between 2012 and 2015, is a child-centred study in which young people's views have been used to investigate the wellbeing of Australian children in their middle years. This seminar draws on data collected from the Australian Child Wellbeing Project and presents evidence relating to the deprivation status of young people in Australia and how this correlates with wellbeing measures in the areas of health, family and school satisfaction.
May 27	Dr Daniel Exeter EPIDEMIOLOGY & BIostatISTICS	Introducing Lower Zones for analysing neighbourhood patterns of health and social outcomes across New Zealand: There is growing interest in the influence a neighbourhood has on health and social outcomes. Researchers and policy analysts have used geographical boundaries constructed for national censuses to report small-area, or 'neighbourhood' patterns. In New Zealand, we commonly use Meshblocks (MB) or Census Area Units (CAU) in our analyses. While users can easily associate MBs with 'a street' and CAUs with 'a suburb', the considerable variation in their population distributions can be problematic for small area research. In this presentation, we outline the development of an intermediary geography for New Zealand, in which the 45,989 MBs from the 2013 Census were aggregated into 5,958 'Lower Zones' (LZs), as an intermediary in size between MBs and CAUs. We then demonstrate the application of these new geographical boundaries using data from the 2013 Census and from routine health databases.
June 3	Dr Barry Milne COMPASS	The Integrated Data Infrastructure: New Zealand's bold data experiment: The Integrated Data Infrastructure (IDI) is a collection of de-identified administrative datasets (e.g., on health events, justice contacts, education enrolments, tax paid) that have been linked at the person-level for the whole New Zealand population. IDI is made available for research purposes only. Initial users of the IDI have tended to come from the government sector, though an increasing number of academic researchers are beginning to explore its use. In this talk I will describe the IDI, its construction, its legal and ethical underpinnings, the development of protections against privacy and confidentiality breaches, its uses, and its future.