Using Big Data to Study Development and Social Change

November 22-23, 2013

The Loyola Jesuit Hall & Conference Centre (RF-Building)
Concordia University, 7141 Sherbrooke St. W

Some data sets are gems; others are mountains. The "gems" are small and pure, containing no more than a few variables collected with extreme care on a carefully selected sample using precise methods. They are used to answer well-defined questions. The "mountains" are large and multifaceted. They include large numbers of participants who have been assessed on multiple variables drawn from different domains of functioning. They often have a hierarchical structure that brings together constructs from multiple levels of social complexity. "Gems" and "mountains" each present their own methodological challenges. When a research uses a "gem" the goal is to test a precise well-articulated hypothesis using very focused analyses. The purpose is to produce a clear, rich, pure and precise answer. The researcher who uses a "mountain" eschews a tight focus in favour of a view of the big picture. The goal is to grasp the complex processes by which a set of variables affects outcomes. Achieving this goal – that is, using "big data to study development and social change" – requires special methods and constructs.

This workshop is designed as a forum for the presentation and discussion of these techniques. It will explore available opportunities for students and researchers for conducting longitudinal research on large data sets and the challenges it poses for institutions and researchers. The workshop will start with an overview of the contribution of longitudinal research for social and developmental research and highlight its conceptual, methodological and statistical strengths and challenges. Supported by presentations and discussions of major longitudinal studies in Quebec, Canada and internationally as a background for in-depth discussions, attendees will acquire a knowledge of the (a) methodological challenges such as the balancing out of study time span and sample attrition, (b) promising statistical solutions to manage the complexity associated with large data sets, and (c) management of data access, security and confidentiality.

Workshop Program *(preliminary)*
Friday, November 22, 2013

Part 1: Opening session

09:00 - 09:10	Welcome
09:10 - 10:00	Dr Amélie Quesnel-Vallée (McGill University) - *Parents education and the risk of major depression in early adulthood*
10:00 - 10:30	**COFFEE BREAK**

Part 2: Methodological issues

10:30 - 11:15	Dr Ulla Romild (Swedish National Institute of Public Health, Sweden) - *Lessons learned from the Swedish Longitudinal Gambling Study, SWELOGS*
11:15 - 12:00	Dr William Bukowski (Concordia University) - *Longitudinal research in schools in Columbia*

Part 3: Data Access

13:15h - 14:00	Dr Réjean Tessier (Université Laval) - Overview of accessing data remotely using the "Accès aux *Données Administratives du Québec (ADAQ)"* platform
14:00 - 14:45	Dr Philip Merrigan (Université du Québec à Montréal) - *Aborder l'ELNEJ, l'EDTR et l'ENSP de manière efficace et pragmatique*

Part 4: Students experience with big data

14:45 - 15:45	Presentations:
	Joanna Rosciszewska (Concordia University) - *Using a multilevel approach to examine the association between childhood social behavior an adult criminality*
	Alexa Martin-Storey (Université de Sherbrooke) - *Concordia Longitudinal High Risk Project*
	Melisa Castellanos (Concordia University) - *Colombian Experience*
	Christelle Luce (Université de Montreal) - Trajectoires *des joueurs au Québec : défis et solutions*

Workshop Program *(cont'd)*
Saturday, November 23, 2013

Part 1: Opening session

09:00 - 9:15	Welcome
09:15 - 10:00	Dr Rachel Volberg (University of Massachusetts, USA) - *Longitudinal studies of gambling: methods, findings and planning for the future*
10:00 - 10:30	**COFFEE BREAK**

Part 2: Longitudinal studies across the world: Key learnings, contributions and future orientations for the study of gambling.

10:30 - 11:15	Dr Ulla Romild (Swedish National Institute of Public Health, Sweden) - *National epidemiological and health databases in Sweden*
11:15 - 12:00	Dr David Hodgins (University of Calgary) - *Leisure and Lifestyle Longitudinal Project*
12:00 - 13:15	**LUNCH**

Part 3: Discussion and wrap-up

13:15 - 15:00	Roundtables - small groups
15:00 - 15:45	Main conclusions and general discussion