Workshop Title: Mediation and Moderation Analysis Techniques

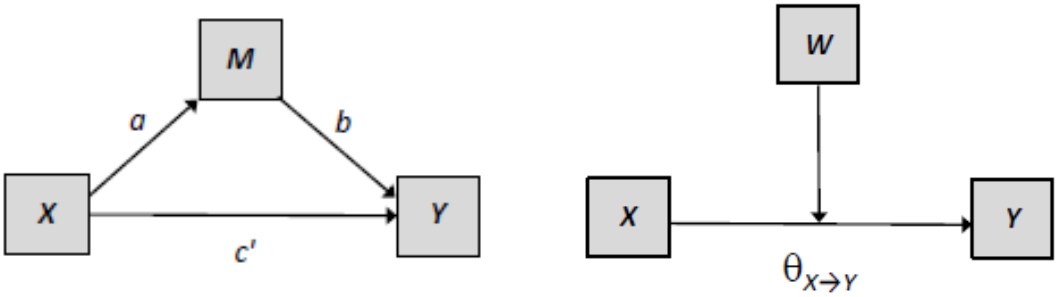
Date/Time: Thursday October 17th, 1:00pm – 4:00pm

Location: Room at the Conference Hotel (to be confirmed)

Cost: $25 (snacks and refreshments are included in workshop registration fees)

Workshop Organizers: Denver Brown, Emily Bremer, Jeffrey Graham

Background: Examining the underlying pathways that explain relationships between variables is central to many research questions in psychomotor learning and sport/exercise psychology. However, statistical limitations of bivariate analyses techniques (e.g., ANOVA) do not account for individualized measurements. Causal analysis techniques, such as mediation and moderation, are one way to facilitate a better understanding of the underlying pathways between two variables of interest. For example, mediation refers to the indirect effect of an independent variable (X) on a dependent variable (Y) through an intermediary variable (M). On the other hand, moderation is when the effect of X on Y varies in size or strength as a function of W. This workshop will introduce attendees to these closely related and often confused analysis techniques.



Workshop Objective/Purpose: The goal of this workshop is to provide attendees with an understanding of the underlying principles and practical applications of mediation and moderation analysis. The basis of this workshop will center around how to partition effects into direct and indirect components, and how to quantify and test hypotheses about indirect effects. We will illustrate when specific causal analysis techniques are appropriate and provide examples of how to compute techniques such as simple mediation and moderation as well as more complex mediation models involving multiple mediators (i.e., parallel and serial mediation) and categorical variables (Iacobucci, 2012). Participants will leave this workshop with a working knowledge of how to use the PROCESS macro in SPSS to run a variety of mediation and moderation analysis techniques as well as Iacobucci's step-by-step approach to conduct mediation analysis regardless of whether X, M/W and/or Y variables are continuous or categorical.

This workshop will consist of a mix of lecture, hands-on activities and an open panel discussion. This workshop is ideal for graduate students, postdoctoral fellows and faculty members in any field who want to learn how to apply the latest methods in mediation and moderation analysis using readily-available, easy to use software packages.

Pre-Workshop Reading: Participants will be sent a brief set of readings prior to the workshop. These readings will provide an overview of mediation and moderation techniques and will serve as a basis for this workshop.

Required Software: All examples and hands-on activities will be completed using the PROCESS macro (https://www.processmacro.org/download.html) for SPSS, therefore it is preferable that participants have SPSS and the PROCESS macro installed on their computer to benefit most from this workshop.

Please direct any questions to denver.brown@utoronto.ca