**The knowledge and self-efficacy of health care professionals regarding autism spectrum disorder across Ontario: A cross regional study.**

**Nathaniel Davin, Dr. Shelley Watson & Golnaz Ghaderi**

**Laurentian University**

**1)** **Objectives:** ASD’s prevalence rate is rising and is described as one of the fastest growing disabilities in children and its prevalence rate has been estimated at one in 68. Concerns have been raised pertaining to lack of information about services (Rhoades, Scarpa, & Salley, 2007), differences in age of diagnosis (Jo et al., 2015), and health care professionals' knowledge specific to geographic regions (Ouellette-Kuntz et al., 2009). A diagnosis can be made reliably by the age of two years old, but a diagnosis does not typically happen until the age of four, potentially interrupting treatment at a critical developmental period where treatment can be more effective (Daniels & Mandell, 2013). To the researcher’s knowledge there is a paucity of research regarding medical professionals' knowledge and self-efficacy in Ontario. Therefore, this study will assess medical practitioners’ knowledge and self-efficacy pertaining to ASD. The current study examines the following research questions:

•What do Ontario medical practitioners know about ASD diagnosis? Specifically, what are the levels of knowledge and self-efficacy and what are the differences in geographic regions?

•What contributes to increased knowledge and self-efficacy across disciplines?

**2)** **Method:** Participants will consist of medical professionals such as family physicians, pediatricians, psychiatrists, developmental pediatricians, and emergency physicians. It is expected that at least 20 medical professionals will be drawn from northern Ontario and 20 medical professionals will be drawn from southern Ontario.

Phase one of the research will involve the distribution of The Healthcare Professional Questionnaire. Which is adapted from the Health Care Student Questionnaire (Isaacs, Minnes, Burbidge, Loh, & Versnel, 2012; Minnes, Isaacs, Burbidge, Loh, & Versnel, 2012). Quantitative Analysis will be used for the first phase of the study and paired samples t-tests using SPSS will be conducted to compare differences in regions (northern vs southern Ontario; rural vs urban Ontario). One way analysis of variance will compare differences in levels of knowledge and self-efficacy across professions, as well as differences across disabilities such as, Down syndrome, Fragile X syndrome, hearing and/or visual disabilities, and acquired brain injury.

Phase two of the research will be comprised of a semi-structured interview​. Participants will be invited to participate in the 14 question interview which will take approximately 40 minutes to conduct. Qualitative analysis​ will be used to analyzed the data retrieved from the interview using thematic analysis (Braun & Clarke, 2006) ​which will identify recurring themes and evaluate similarities and differences.

**3)** **Results:** Data collection is ongoing, therefore there are no results at this time. Based on previous literature, it is expected that lack of knowledge and self-efficacy regarding ASD of medical professionals in Ontario will be revealed. However, due to the increased prevalence and awareness of ASD specifically, some professionals may report higher knowledge and self-efficacy regarding ASD as compared to some of the other disabilities. It is expected that medical professionals with more experience will have greater knowledge and self-efficacy. Some professions are expected to have increased knowledge and self-efficacy such as developmental pediatricians, pediatricians, and psychiatrists compared to family physicians and emergency physicians. Furthermore, literature suggests that rural medical practitioners may have lower levels of self-efficacy and knowledge than urban medical practitioners. Additionally, increases in knowledge and self-efficacy may be found in southern Ontario, especially in urban centers, as there are more medical education opportunities and potentially increased exposure to individuals with ASD as compared to rural and northern Ontario.

**4)** **Discussion/Conclusions:** This study will help to inform medical school curricula especially concerning which areas in Ontario may need additional training. Additionally, the findings will assist medical professionals in gaining the education needed to improve self-efficacy and knowledge. Furthermore, this study will increase awareness of ASD in general and what services are available. Lastly, it will help to uncover what areas of education were most helpful and what experiences resulted in the greatest awareness of ASD.

**Correspondence:**

Nathaniel Davin

Laurentian University

ndavin@laurentian.ca