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**DEPARTMENT OF PSYCHOLOGY AND NEUROSCIENCE**

**TITLE OF THESIS:** THE ROLE OF SIBLINGS IN PEDIATRIC PAIN  
**TIME/DATE:** 2:00 pm, Wednesday, February 14, 2018  
**PLACE:** Room 3107, The Mona Campbell Building, 1459 LeMarchant Street

**EXAMINING COMMITTEE:**

Dr. Maru Barrera, Department of Human Development and Applied Psychology, University of Toronto (External Examiner)

Dr. Penny Corkum, Department of Psychology and Neuroscience, Dalhousie University (Reader)

Dr. Sophie Jacques, Department of Psychology and Neuroscience, Dalhousie University (Reader)

Dr. Christine Chambers, Department of Psychology and Neuroscience, Dalhousie University (Supervisor)

**DEPARTMENTAL REPRESENTATIVE:** Dr. Tamara Franklin, Department of Biology, Dalhousie University

**CHAIR:** Dr. Rebecca Jamieson, PhD Defence Panel, Faculty of Graduate Studies

**ABSTRACT**

Sibling relationships are common and have an important influence on children's development. While family factors in pediatric pain have received considerable empirical attention, this work has largely focused on parents, not siblings. The current dissertation aimed to: summarize and map the type of research that has been conducted examining siblings and pediatric pain (Paper 1); examine associations between siblings' relationship quality and their behaviours during an experimental pain task, and relations between a sibling's behaviours and a child's pain outcomes (Paper 2); and determine the extent to which parents bring siblings to pediatric appointments, and explore parents' decisions surrounding this (Paper 3). Paper 1 describes the results of a scoping review on siblings and pediatric pain, which included 35 studies. Most of the identified research on siblings and pediatric pain used quantitative methods, examined siblings in the context of chronic and disease-related pain, and focused on the genetic influence of pain conditions. Paper 2 presents a lab-based study that included a sample of 92 healthy sibling dyads between 8 and 12 years of age. Siblings completed observational and questionnaire measures of sibling relationship quality, and took turns completing the cold pressor task (CPT) with their sibling present. Siblings' behaviour during the CPT was coded, and pain outcomes were recorded. Greater levels of warmth/positivity in the sibling relationship were related to children engaging in more non-attending (e.g., distraction) and less attending (e.g., symptom talk) behaviours while completing the CPT. Greater levels of attending behaviours by the observing child were related to the sibling who was completing the CPT having a lower pain tolerance. Paper 3 summarizes a questionnaire-based study that included responses from a sample of 95 parents. Approximately 98% of parents reported having brought siblings to medical appointments. Coding of open-ended responses revealed that parents most often cited convenience as their reason for bringing siblings (83.7%), and most frequently reported allowing their children to decide the order in which siblings received an appointment/procedure (53.3%). These findings suggest that siblings, through their relationships and actions, influence how children respond to pain and need to be considered in clinical pain contexts.