## ERIN CHRISTINA MOON BA (Psychology), University of British Columbia, 2002

## DEPARTMENT OF PSYCHOLOGY

**TITLE OF THESIS:** Parent and Child Behaviour during Child Pain:

The Effects of Sex and Gender

**TIME/DATE:** 2:00 pm, Monday, July 26, 2010

**PLACE:** Room 2102, Marion McCain Arts and Social

Sciences Building, 6135 University Avenue

## **EXAMINING COMMITTEE:**

Dr. Catherine Lee, School of Psychology, University of Ottawa (External Examiner)

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

Dr. Anita Unruh, School of Health and Human Performance, Dalhousie University (Reader)

Dr. Christine Chambers , Department of Psychology, Dalhousie University (Co-Supervisor)

Dr. Patrick McGrath , Department of Psychology, Dalhousie University (Co-Supervisor)

Dr. Penny Corkum, Department of Psychology, Dalhousie University (Departmental Representative)

**CHAIR:** Dr. Melissa Furrow, PhD Defence Panel, Faculty

of Graduate Studies

## **ABSTRACT**

Sex differences in adult pain experiences are well-established. Women generally have lower pain tolerance and are at a greater risk of chronic pain than men. The feminine gender role supports pain expression whereas the masculine gender role emphasizes stoicism in response to pain. Sex and gender differences in pain are first evident in childhood. Parents' behaviour has a powerful impact on child pain and it is possible that parents respond differently to their sons' and daughters' pain in order to teach them to behave in accordance with gender roles. The primary objective of this dissertation was to investigate differences between mothers' and fathers' verbal behaviour during child pain. This research also examined the effects of child sex and parent sex (presence of mother versus father) on child pain outcomes. Furthermore, this study explored the impact of parent gender on parent behaviour during child pain and the relationship between child gender and child pain outcomes. Forty healthy children (20 boys; 20 girls) aged 8-12 years (M = 9.66, SD = 1.16), along with their mothers and fathers, participated. In Part 1, children completed an experimental pain task (the cold pressor task; CPT) – once with their mothers present and once with their fathers present in a counterbalanced order. In Part 2, parents responded to hypothetical vignettes depicting their children experiencing pain. Parent verbalizations were coded as Attending Talk (talk focused on the child's pain) and Non-Attending Talk (talk not focused on the child's pain). Results for Part 1 indicated that the proportion of child symptom complaints during the CPT was positively correlated with parent Attending Talk and negatively correlated with parent Non-Attending Talk. In addition, child pain tolerance during the CPT was negatively correlated with parent Attending Talk and positively correlated with parent Non-Attending Talk. Contrary to hypotheses, mothers and fathers did not use different amounts of Attending and Non-Attending Talk with their sons and daughters during the CPT. However, exploratory analyses of parent verbalization subcodes indicated that mothers used more nonsymptom-focused verbalizations whereas fathers used more criticism. Parents' gender scores did not add to the prediction of their use of Attending or Non-Attending Talk during the CPT. Overall, results for Part 1 indicated that there were no sex differences in child pain outcomes. However, two unexpected findings emerged in which children gave higher pain affect ratings for the CPT with mothers present and boys gave higher pain intensity ratings following the CPT with fathers present. Child gender was generally not associated with child CPT pain outcomes; however, for girls, higher femininity relative to masculinity was related to fewer symptom complaints for the CPT with fathers present. Results for Part 2 of the study were consistent with Part 1. There were no differences between mothers' and fathers' use of Attending and Non-Attending Talk in response to the vignettes and parent gender did not predict vignette responses. The findings of this study indicate that for both mothers and fathers, verbal attention is related to increased child pain and verbal non-attention is related to decreased child pain. The results also suggest that mothers' and fathers' verbal behaviour during child pain generally does not differ. In addition, the results indicate that there are few sex and gender differences in children's responses to experimental pain. These findings serve as a springboard for future longitudinal research examining the emergence and socialization of sex and gender differences in child pain. These findings can also be used to inform clinical recommendations for mothers and fathers to assist their children cope with pain.