## NANCY F. BANDSTRA BSc Honours (Psychology), Michigan State University, 2004

## DEPARTMENT OF PSYCHOLOGY

**TITLE OF THESIS:** The Behavioural Expression of Empathy to

Others' Pain versus Others' Sadness in Young

Children

**TIME/DATE:** 9:00 am, Wednesday, May 19, 2010

**PLACE:** Room 1130, Marion McCain Arts and Social

Sciences Building, 6135 University Avenue

## **EXAMINING COMMITTEE:**

Dr. Tracy Spinrad, School of Social and Family Dynamics, Arizona State University (External Examiner)

Dr. Chris Moore, Department of Psychology, Dalhousie University (Reader)

Dr. Patrick McGrath, Department of Psychology, Dalhousie University (Reader)

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

Dr. Sean Barrett, Department of Psychology, Dalhousie University (Departmental Representative)

**CHAIR:** Dr. Mary Anne White, PhD Defence Panel,

Faculty of Graduate Studies

## **ABSTRACT**

Empathy for others' pain is an important human capacity. Despite this, little is known about how children develop or express their empathy for another individual's pain. Thus, this dissertation aimed to accomplish two primary objectives: 1) to describe and compare children's expressions of empathy toward others' pain and others' sadness, and 2) to examine whether developmental (i.e., age and sex) or interindividual variables of interest (i.e., temperament, social-emotional variables, language abilities) predict children's expressions of empathy for pain and empathy for sadness. To this end, 120 children (60 boys, 60 girls) between the ages of 18 and 36 months (M = 26.44 months; SD = 5.17months) were assessed for their empathy-related behavioural responses to lab-based simulations of pain and sadness. Children's responses were coded for: prosocial behaviours (e.g., sharing), attempts to understand the distress (e.g., hypothesis testing), self-distress behaviours (e.g., self-soothing), unresponsive/inappropriate responses (e.g., ignoring, showing anger), and miscellaneous responses (e.g., imitation). Children were also given an overall rating of global concern. Differences emerged when individual behavioural codes were compared between pain and sadness simulations. Specifically, children were more likely to be distressed by, but also more likely to be prosocially responsive to, another's sadness. Interestingly, children were more likely to actively play during another's pain. Two principal component analyses were conducted: one for the pain simulations and one for the sadness simulations. Three components emerged both for pain (Empathic Concern for Others' Pain, Personal Distress to Others' Pain, and Unresponsiveness to Others' Pain) and for sadness (Empathic Concern for Others' Sadness, Personal Distress to Others' Sadness, and Social Referencing in Response to Others' Sadness). While there was some overlap in the conceptualization of the first two components for both pain and sadness, the behaviours that loaded onto these components were different. Additionally, the third component for each analysis described very different phenomena. For pain, this final component described general unresponsiveness to the other's distress. For sadness, the final component described a tendency to gauge one's response on the reaction of a parent. Hierarchical regression analyses examining the influence of developmental (i.e., age and sex) and interindividual variables of interest (i.e., temperament, social-emotional variables, and language abilities) in children's empathy-related responses were also conducted for each pain and sadness component. In general, age or sex differences only emerged for empathy-related responses to pain. Temperament, and to a certain extent social-emotional variables, showed some predictive value in how children would respond to another's pain or sadness. Language showed very little predictive value in children's expressions of empathy. While the findings of the current study indicate some conceptual similarities across children's empathic responses to pain and sadness, they also show interesting and important differences in the behavioural expression of children's empathic responses to pain and sadness. Additionally, developmental and interindividual variables predictive of children's empathic responses to pain and sadness emerged. A developmentally appropriate model of empathy is proposed highlighting all of these influences on children's expressions of empathy.