

# Notice of the Final Oral Examination for the Degree of Master of Science

of

## **ELNAZ MIRJAFARI**

BSc (Shahid Beheshti University of Medical Sciences, 2011)

"The Relationships between Motor Skills, Perceptions of Competence, and Participation in Active Recreation and Physical Activities"

School of Exercise Science, Physical and Health Education

November 27, 2015 9:00 A.M. David Turpin Building Room A137

## **Supervisory Committee:**

Dr. Viviene Temple, School of Exercise Science, Physical and Health Education, University of Victoria (Supervisor)

Dr. PJ Naylor, School of Exercise, UVic (Member)

#### **External Examiner:**

Dr. Joannie Halas, Faculty of Kinesiology and Recreation Management, University of Manitoba

#### Chair of Oral Examination:

Dr. Gina Harrison, Department of Education, Psychology and Leadership Studies, UVic

Dr. David Capson, Dean, Faculty of Graduate Studies

### <u>Abstract</u>

There is growing interest in determining the nature of children's activity profiles. Recreational activities are considered to be a vital part of the development of children (King et al., 2003). Participation in recreation positively influences the development of skills and competences, social relationships, and long-term physical health (Law et al., 2006). Recently, the importance of fundamental motor skills and perceived physical competence towards lifetime participation in movement and physical activity has gained increased attention (Robinson, 2011). Stodden et al. (2008) proposed a model in which the reciprocal and dynamic relationship between motor skill competence and physical activity was the central. Stodden and colleagues' posited that in middle-childhood motor skill proficiency directly influences participation and also indirectly influences participation via perceptions of physical competence. The aim of this study was to examine the relationship between motor skill proficiency (MS), perceptions of physical competence (PPC) and participation in active recreation and physical activities by boys and girls in grade 2. Participants were 398 grade 2 children (mean age= 7 years 8 months, girls = 201) from eight elementary schools. Locomotor skills (LM) and object control skills (OC) were assessed in physical education using the Test of Gross Motor Development-2 (TGMD-2). Participation in recreation and physical activities was assessed using the Children's Assessment of Participation and Enjoyment (CAPE). Perceptions of physical competence were assessed using the Pictorial Scale of Perceived Competence and Social Acceptance (PSPCSA). Descriptive statistics were calculated for five dimensions (diversity, intensity, with whom, where, and enjoyment) of participation, PPC, OC, and LM; and analyses of variance (ANOVA) were used to examine differences between boys and girls for all variables. Pearson product moment correlation coefficients were computed to examine the relationships between motor skills, perceptions of physical competence, and participation in CAPE activity categories of all children and boys and girls separately. Linear regression was used to predict the participation from motor skills and PPC. Overall children participated in more recreational activities and social activities than active recreational pastimes and organized sports. There were no differences between the rate of boys' and girls' participation in recreational activities, physical activities, organized

sport, and active physical recreation. Girls participated in social activities, skill-based activities, and self-improvement activities more than boys. Girls' locomotor proficiency and PPC were significantly higher than boys, while boys' object control proficiency was significantly higher than girls. The relationships between motor skills and participation in CAPE activity categories was consistent and notable for boys, particularly between object control skills and the more active categories of participation. Whereas, there were only two significant relationships between motor skills and participation for girls; object control skills was significantly associated with participation in physical activities and active physical recreation. For boys, PPC was positively associated with all CAPE activity categories except for engagement in self-improvement activities. For girls, PPC was positively associated with participation in social activities, skill-based activities, and active physical recreation. Regression analysis revealed that PPC accounted for 4% of the shared variance in girls' participation in active physical recreation. For boys, PPC and object control skills accounted for 12.3% of the shared variance in participation in active physical recreation, and object control skills accounted for 5% of the variance in organized sport. These findings illustrate that children participated most often in less physically active recreational activities. There were notable sex-based differences in the relationships between MS, PPC, and participation in CAPE activities. For girls there were few significant relationships between motor skills, perceptions of physical competence and CAPE activity categories. In this study findings suggest that for boys grade 2, participation in leisure activities is affected by motor skills directly. But this model was not significant for girls. For girls, only perceptions of physical competence predicted active physical recreation. However, findings of the present study suggest that childhood object control proficiency and perceptions of physical competence predicted subsequent time spent in leisure activities, at least for boys. In relation to the Stodden et al. model of developmental mechanisms influencing physical activity trajectories, this study suggests that object control skills may be playing both a direct and indirect role in boys' participation in active physical recreation and a direct role in their participation in organized sport. For girls in grade 2, the influence of motor skill proficiency is less evident, but their perceptions of competence may play somewhat of a role in their participation in active physical recreation.