## 4th year Honours in Psychology Thesis Defence

## The Development of a Motivational Assessment Scale for Young Piano Students

Presenter: Jaclynne Smith

Abstract: This study investigates the role of motivation in music education. The main goal was to develop an assessment scale to measure the motivational level of piano students. Interest levels and approach/avoidant behaviours were also measured. The framework for the scale was guided by Deci and Ryan's Theory of Motivation and Self-Determination. The questionnaire was administered to young piano students between the ages of 7-15. Results indicated that all the motivation regulations were significantly correlated with one another, demonstrating high internal consistency. The three criterion levels were also significantly correlated. These results are consistent with the predictions of Deci and Ryan's model of human motivation. Overall, participants were less likely to be amotivated or externally motivated and more likely to be internally or intrinsically motivated to learn to play the piano.

Objectives: The main objective of this research project was to develop a psychometric scale, in the form of a questionnaire, to measure the motivational levels of young children undertaking piano studies. The development of this instrument was guided by Deci and Ryan's (1985, 2000) theoretical model of motivation and self-determination. This model differentiates among types of motivation, types of behavioural regulation mechanisms, and regulation consequences. These considerations were taken into account in the development of the scale items. Anticipated applications of this instrument include the investigation of the relationship of motivation to persistence in piano studies, quantity and quality of practice, and experienced performance-related stress. Overall, this line of research is not only expected to add to the existing literature and research in human motivation studies, but it is also expected to contribute to the advancement of music psychology and music education.

Method: This project involved two distinct parts. First, a total of 36 individuals participated in focus groups and were asked to express their views on various aspects of motivation to study music in general and the piano in particular. The sample included 14 piano students, 12 parents of piano students, and 10 piano teachers. All interview sessions were recorded with the participants' consent. Second, we used Deci and Ryan's model and the interview data to formulate items to measure the different conceptual facets of motivation toward piano studies. These items were intended for young piano students aged from 8 to 12 years. The initial version of the assessment instrument was administered to a sample of 23 piano students recruited via the network of piano teachers in Ottawa.

Results: Results indicated that all the motivation regulations - amotivation, external motivation, introjected, identified, integrated and intrinsic motivation - were significantly related with each other. The three criterion levels- musical interests, approach and avoidance behaviours- were also significantly correlated. The pattern of correlations among the measures of motivation and among criterion measures are perfectly consistent with the predictions of Deci and Ryan's model. For instance, amotivation and external motivation are negatively correlated with integrated and intrinsic motivation.

Measures interest in music-related activity and approach to piano study are negatively correlated with avoidance measures.\* Moreover, integrated and intrinsic motivations are positively correlated with a high level of interest in music-related activities and approach behaviour toward piano studies. In contrast, amotivation and external motivations are negatively correlated with these criterion measures but positively correlated with avoidance behaviour toward piano studies.

Impact: The main contribution of this study is the development of theory-driven instrument to measure motivational attributes of young piano students. This instrument is expected to serve as a research tool to investigate the relationship between motivation and various aspects of piano studies such as persistence, performance-related stress, and enjoyment.