



University
of Victoria

Graduate Studies

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

of

KRISTEN SILVEIRA

BA (Queen's University, 2014)

“The Impact of Musical Affect and Arousal on Older Adults’ Attention”

Department of Psychology

Thursday, September 22, 2016

1:00pm

Cornett Building

Room A228

Supervisory Committee:

Dr. Colette Smart, Department of Psychology, University of Victoria (Supervisor)

Dr. Catherine Mateer, Department of Psychology, UVic (Member)

External Examiner:

Dr. Gina Harrison, Department of Educational Psychology & Leadership Studies, UVic

Chair of Oral Examination:

Dr. Peter Golz, Department of Germanic & Slavic Studies, UVic

Abstract

Selective attention is a specific area of executive control that declines in older adulthood and may be amenable to cognitive rehabilitation. This study explored background music as an accessible and typically enjoyable tool that may exogenously facilitate attention. Two particular properties of a musical piece – (1) *mode* (i.e., major, minor, or atonal), and (2) *tempo* (i.e., stimulative or sedative) – influence affect, arousal, and cognitive function, ultimately enhancing or hindering cognitive performance on attention-demanding tasks. Six musical pieces were selected to represent different combinations of mode and tempo. Older adults (i.e., 65-80 years-old; n=16) were recruited from Victoria, BC. Participants completed the Multi-Source Interference Task (MSIT) assessing selective attention at baseline and under the six counterbalanced musical conditions. In each condition, participants reported motivation and task difficulty, as well as affect and arousal on the Activation-Deactivation Checklist (AD ACL). Musical affect impacted reaction times on MSIT control and interference trials for the first block, but had no influence during the last block. Musical arousal did not significantly impact attention. AD ACL responses, as well as task-difficulty and motivation to succeed on the task did not vary as a function of the music. The results illuminate older adults' allocation of executive resources between competing goals of regulating musical affect and succeeding on an attention task. Implications are discussed for selecting music specifically to facilitate older adults' attention in everyday life.