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

of

JOHN SHEEHAN

BSc (University of Utah, 2011)

“A Tale of Two Towers: The Impact of Problem Difficulty on Task Equivalence Among Preschool Children”

Department of Psychology

Wednesday, September 30, 2015
3:00PM
Cornett Building
Room A228

Supervisory Committee:
Dr. Kimberly Kerns, Department of Psychology, University of Victoria (Supervisor)
Dr. Ulrich Mueller, Department of Psychology, UVic (Member)

External Examiner:
Dr. John Walsh, Department of Educational Psychology and Leadership Studies, UVic

Chair of Oral Examination:
Dr. Warwick Dobson, Theatre Department, UVic

Dr. David Capson, Dean, Faculty of Graduate Studies
Abstract

The Towers of Hanoi (ToH) and London (ToL), historically held as isomorphic measures of problem solving, have had their equivalence questioned in recent years. Adult studies that equalized administration and task structure have found increased correlation between Towers, but insufficient evidence exists regarding whether the same results would be found in young children. This study examined 29 typically developing preschoolers. Both Towers, along with four measures of executive function, were administered in two sessions. The Towers were strongly correlated, but the strength of this relationship was impacted by discontinuation type (i.e., quit vs. standardized), and analyses revealed differences in sustained attention and Tower correlations for those who quit. Complex Tower items showed stronger correlations, and Tower performance and visuospatial WM were also highly correlated. Overall, these results suggest that the Towers, when equated in administrative and structural features, are interchangeable measures of problem solving in preschoolers.