



**University
of Victoria**

Graduate Studies

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

of

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BPAS (University of Regina, 1991)
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**“Researching Network Analysis for Elite Rugby Team coaching: A
CBAR case study”**

Department of Exercise Science, Physical & Health Education

Friday, April 1, 2016
12:30 pm
David Turpin Building
Room A136

Supervisory Committee:

Dr. Tim Hopper, Department of Exercise Science, Physical & Health Education, University of Victoria
(Supervisor)

Dr. John Meldrum, Department of Exercise Science, Physical & Health Education, UVic (Member)

External Examiner:

Dr. Jesse Rhoades, Kinesiology & Public Health Education, University of North Dakota

Chair of Oral Examination:

Dr. Helga Hallgrimsdottir, Department of Sociology, UVic

Dr. David Capson, Dean, Faculty of Graduate Studies

Abstract

This study sought to understand how the application of a network analysis of rugby gameplay could inform coaches of their teams' patterns of play in an effort to aid their teams' performance. A qualitative methodology formed an understanding of the interactions that occurred between the researcher and two participants as they performed a practical implementation of a network analysis (NA) based method of analyzing rugby. The study used open-ended interviews, where the meanings around participants' experiences were co-created using my first-hand knowledge of the sport of rugby as well as my relationships that formed with each participant. The study utilized inductive reasoning through a process of evaluation and constant comparison as a guiding framework to allow categories and themes to develop.

Results of the study identified four key findings. First, incorporating elements of community based action research into the design of a case study provided the researcher with an opportunity to build effective working relationships with both participants. Through these relationships, it was possible to dissolve barriers that would normally prevent coaches from seeking knowledge from sports scientists. Second, providing coaches with effective feedback that informed them of their player's performance was critical to the performance analysis (PA) process. To accomplish this, the network analysis process needed to incorporate elements of other forms of performance analysis such as the team's ability to win rucks, lineouts, restarts and scrums. Third, modifying the network analysis process to meet the participant's needs was key in providing applicable analysis during the cases study. Fourth, performance analysts and coaches, like those in this case study, require video feedback, linked to the network analysis, if the network analysis process is to be considered informative by them. Finally, creating a PA process that is able to adapt to the coaches changing needs as well as the work cycles the organization proceeds through is a benefit of the NA process that we developed.

Keywords: Network analysis, coaching, performance analysis, qualitative research