John Hellström is a researcher in Sport Science at the School of Health and Medical Sciences at Örebro University. John has a University Diploma in Sports Science and Coaching (1999) and a Bachelor of Education in Physical Education (2002) from the Stockholm University College of Physical Education and Sports, and a Bachelor of Social Science majoring in psychology toward sports from the University of Stockholm (2002).

Golf teaching and coaching have been his occupation since 1989. John got his PGA golf teaching legitimation after education 1991-1993. In 1995, he started as an apprentice coach for the Swedish National Team and he has been associated to the elite development within the Swedish Golf Federation since then. PGA of Sweden awarded John the Teacher of the Year Award 2007.

The competition in elite golf is fierce. Players therefore often have psychological, physical, and technical experts supporting them. The associations between these experts focus areas and how they relate to the playing results are valuable to understand, in order to create more effective training programs. The aim of this thesis is therefore to investigate the relationships between physique, technique, and playing results in golf, and to integrate these findings with psychological research on elite golfers.

Two review studies (A and B) and three empirical studies (I, II, and III) are included. Study A and B provide a theoretical foundation where the relationship of psychological, physiological, and technical variables to playing results is reviewed. The empirical studies (Study I, II, and III) were selected based on the findings in the reviews and the applied needs.

Study I shows that some stability test results are strongly correlated to swing technique. Study II found that strength tests as measured in absolute strength or power are strongly correlated to clubhead speed for elite players, but relative strength (percentage of body mass) is not. Study III used PGA Tour ShotLink statistics collected over a year to investigate tee shot accuracy, striking distance, and hole scores. It was found that the ability to hit the ball with high accuracy and a long distance is strongly correlated with low hole scores. Furthermore, the type of fairway miss is relevant to consider as well as striking distance in relation to the distance of the hole. These results may be used to make gap and needs profiles. Task, personal, and environmental variables should also be considered before giving training advice based on test results. Future studies should further investigate the causality between key areas and playing results, and test the validity of models that may be used to analyze and set goals for elite golfers.