The Effects of Sprint Interval Training on Performance in Team Sport Athletes: A Systematic Review

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Introduction
Sprint interval training (SIT) is a form of high intensity interval training (HIIT) in which intervals are performed in a maximal ‘all out’ fashion for 10 to 30 seconds with 2 to 4 minutes of recovery to ensure each bout is performed maximally [1]. SIT is a practical method of sprint training often used by team sport athletes as it does not require testing prior to prescribing training [2]. Due to its time efficient nature and ability to increase aerobic capacity, SIT is becoming a popular alternative to traditional endurance training among invasion team sport athletes. Aerobic capacity is key for team sport athletes, with a higher maximal oxygen uptake seen as vital for maintaining high intensity efforts without displaying fatigue, enhancing repeated sprint ability and maintaining power outputs and distance covered during match play [3, 4]. No SLR exists that examines the effects of SIT with team sport athletes.

Aim: To evaluate the effectiveness of SIT at improving aerobic capacity, repeated sprint ability and high intensity endurance capacity.

Methods
The search strategy and systematic review protocol was conducted following the “Preferred Reporting Items for Systematic Reviews and Meta-Analyses” (PRISMA) guidelines [5]. A comprehensive literature search of PubMed, SPORTDiscus and Web of Science in addition to manual searches of article reference lists was conducted to identify appropriate articles. Once duplicates were removed, all articles were screened by two reviewers to identify which studies met the inclusion criteria, including variables such as the duration of intervention, study design, and training status of the participants.

Expected Outcome
The aim of this review is to determine the effectiveness of SIT interventions, compared to traditional methods of training, at enhancing aerobic capacity in team sport athletes. The results of this review will demonstrate how effective SIT can be for these athletes with regards to improving aerobic capacity, repeated sprint ability and high intensity endurance capacity.

References