YOUTH SPORT SPECIALIZATION AND INJURY STATUS IN INTERCOLLEGIATE SPORTS
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Introduction
In youth sport today, sport specialization is a hot topic. Researchers, coaches, athletes and parents alike, ask the question, “At what age should youth athletes specialize in sport?” Today’s youth seem to specialize earlier and earlier in their athletic careers. This trend towards early sport specialization is seen by some as a means to gain an edge by increasing time on task and ultimately, skill development. To many early sport specialization is a cause for concern, as there is a general hypothesis stating that early specialization will lead to increased risk of “overuse” or repetitive stress injury, over the course of an athlete’s career.

Purpose
The purpose of this study was to investigate the relationship between the age of sport specialization and the injury status of college Division I and III male athletes.

Hypothesis
Male college athletes that chose to specialize earlier in their high school careers will be more likely to have an “injured” status at the time of survey.

Methods
382 Division I and III male athletes from a variety of sports were asked to complete a survey aimed at determining the age at which they specialized in their current sport and their current injury status. (See handout for Questionnaire)

Results
Contradictory to our hypothesis, the odds of being currently limited by injury increased 3.7% with each additional year of multi-sport participation. While this increase was not significant, it does reveal that college athletes who specialized at younger ages are not reporting higher levels of injury limitations than their teammates that chose to specialize at a later age.

Discussion
The results of this study showed no significant relationship between injury status at the college level and age of sport specialization. It was interesting to find that there was a trend towards a negative relationship between the age of sport specialization and the odds of injury status (3.7%, C.L. 0.97-1.1). This relationship suggests, albeit weakly, that there may be a protective effect related to early sport specialization. This finding directly contradicts the general hypothesis that early sport specialization leads to an increased risk of overuse or repetitive stress injury. This protective effect could be related to a reduced total annual training volume of specialized athletes compared to the total volume of training carried out by athletes that participate in multiple competitive sports throughout the year. It is possible that the number of sports participated in is less important than the total volume of high intensity physical activity carried out by an individual athlete on an annual basis. Certainly, further research is needed to further investigate this hypothesis.

Limitations
1.) The population sampled was current Division I and III athletes and may not share the same likelihood to suffer from chronic overtraining related injuries as a typical youth athlete.
2.) The definition of the age of sport specialization is varied throughout the literature. In the case of this study, the age of sport specialization was defined as the time at which an athlete participates in only one sport. For many athletes, the age at which they participate in only one sport and the age at which they focus a majority of their time and resources on one sport, may not be congruent.

Does early sport specialization lead to overuse injuries?