

Sporting milestones and career progression of male Australian junior international level team sport athletes

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Introduction

- Athlete developmental histories are frequently collected to identify the factors associated with sport expertise
(E.g. Bloom, 1985; Baker et al. 2003; Côte, 1999; Gulbin et al. 2010; Helsen et al. 1998; Memmert et al. 2010, Moesch et al. 2011; Ward et al., 2007)
- Identification of the ages at which highly skilled athletes reach important sporting milestones:
 - contributes to our understanding of the ‘pathway to expertise’
 - assists in the creation of developmentally appropriate youth sport programs
 - provides a marker to assess athlete development

Aims

- To explore the ages at which athletes reach important milestones in their sporting careers
- To explore the time course of career progression from sport initiation to participation in junior international level competition

Methods

- Participants
 - Male, Australian, current junior national team members



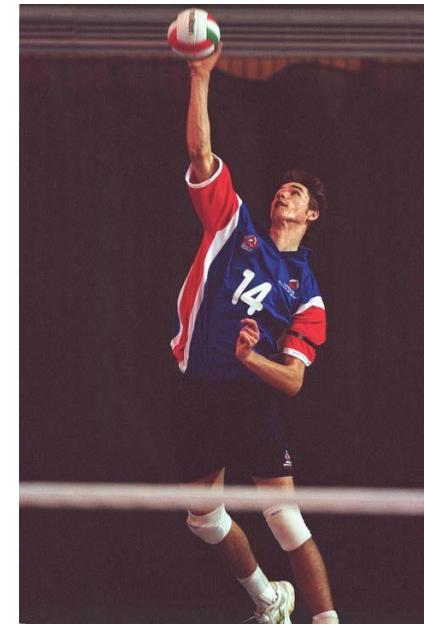
n = 24

Age = 16.8±0.9



n = 13

Age = 17.7±1.4



n = 6

Age = 18.1±1.8

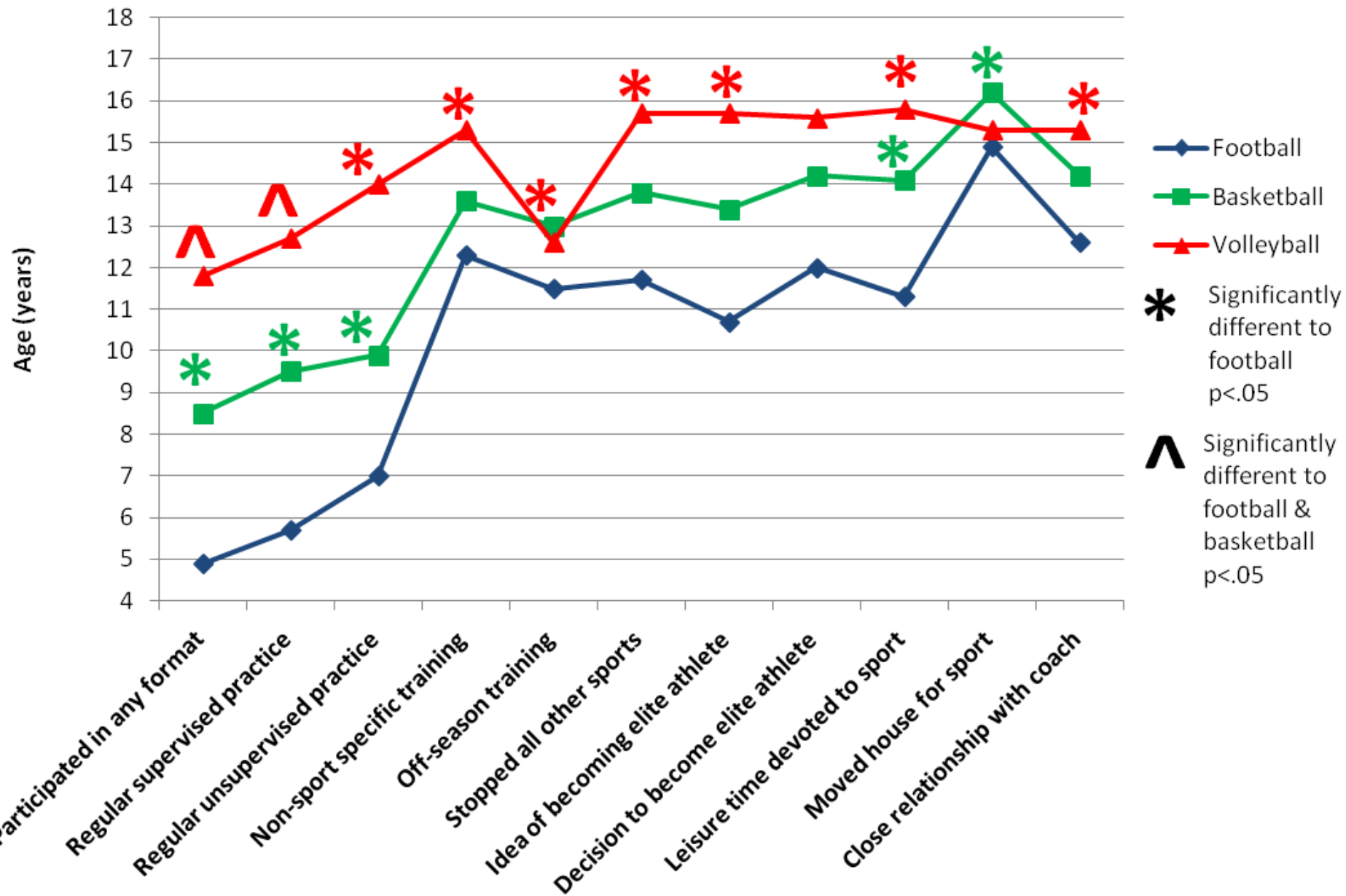
Methods

- Data collection
 - Developmental History of Athletes Questionnaire
(Hopwood et al. 2010, Hopwood et al. 2011)
- Statistical analysis
 - Separate one-way ANOVAs for sport-based differences in:
 - Age at attainment of career milestones
 - Number of years from sport initiation to each milestone
 - Post-hoc tests for significant findings
 - $p < .05$

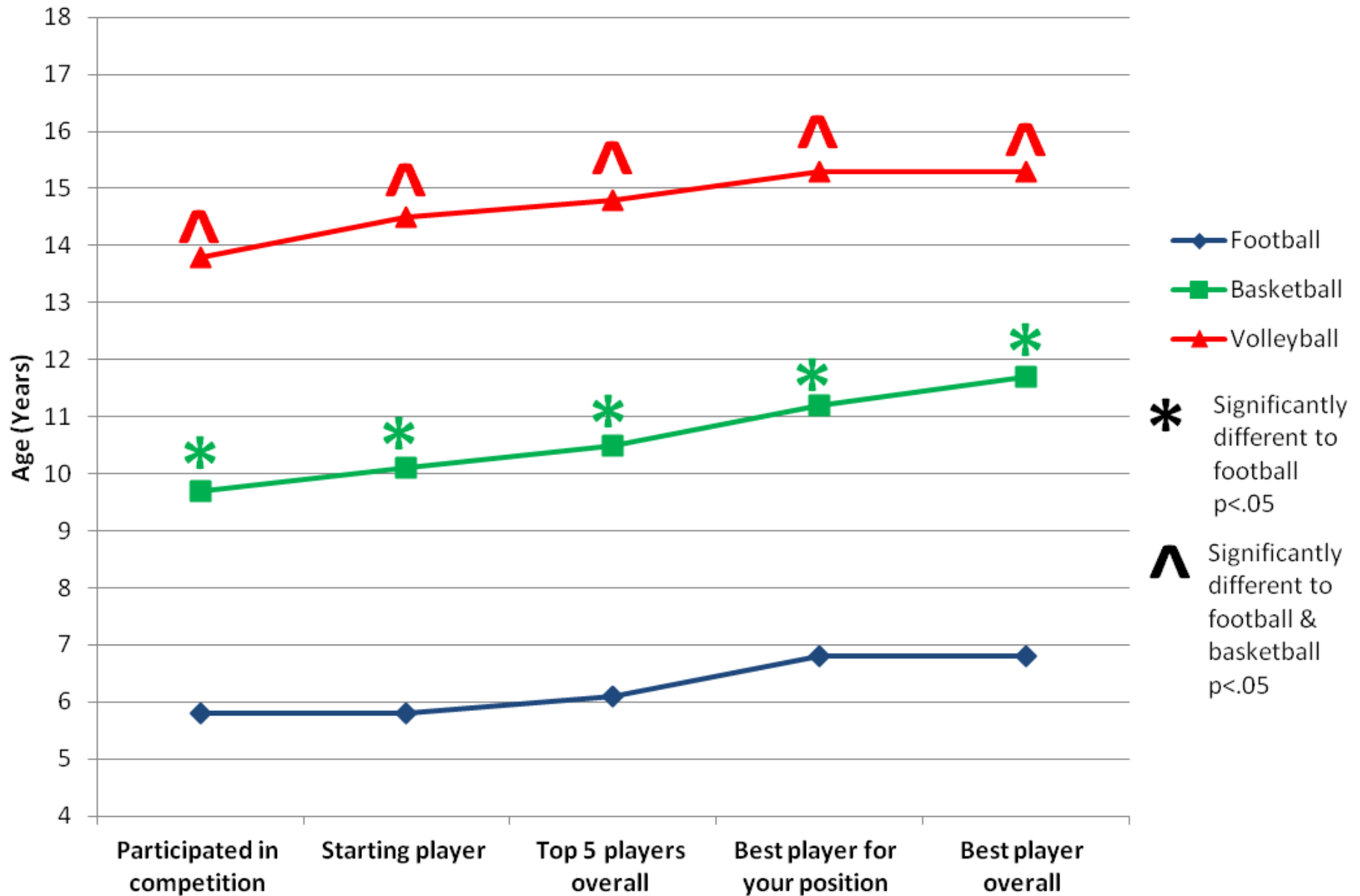
Results

- Age at attainment of important sporting milestones

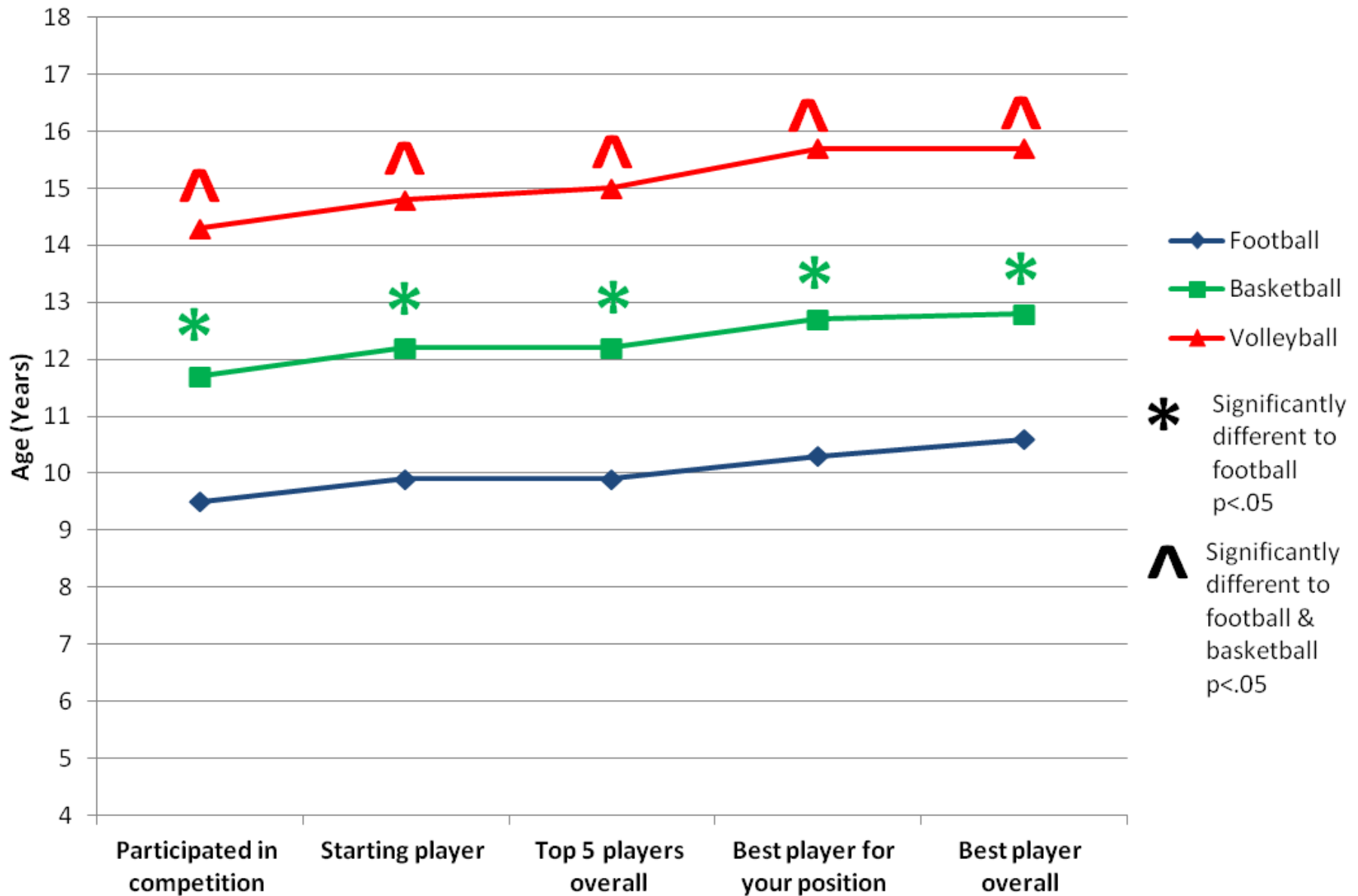
General milestones – Age when you first:



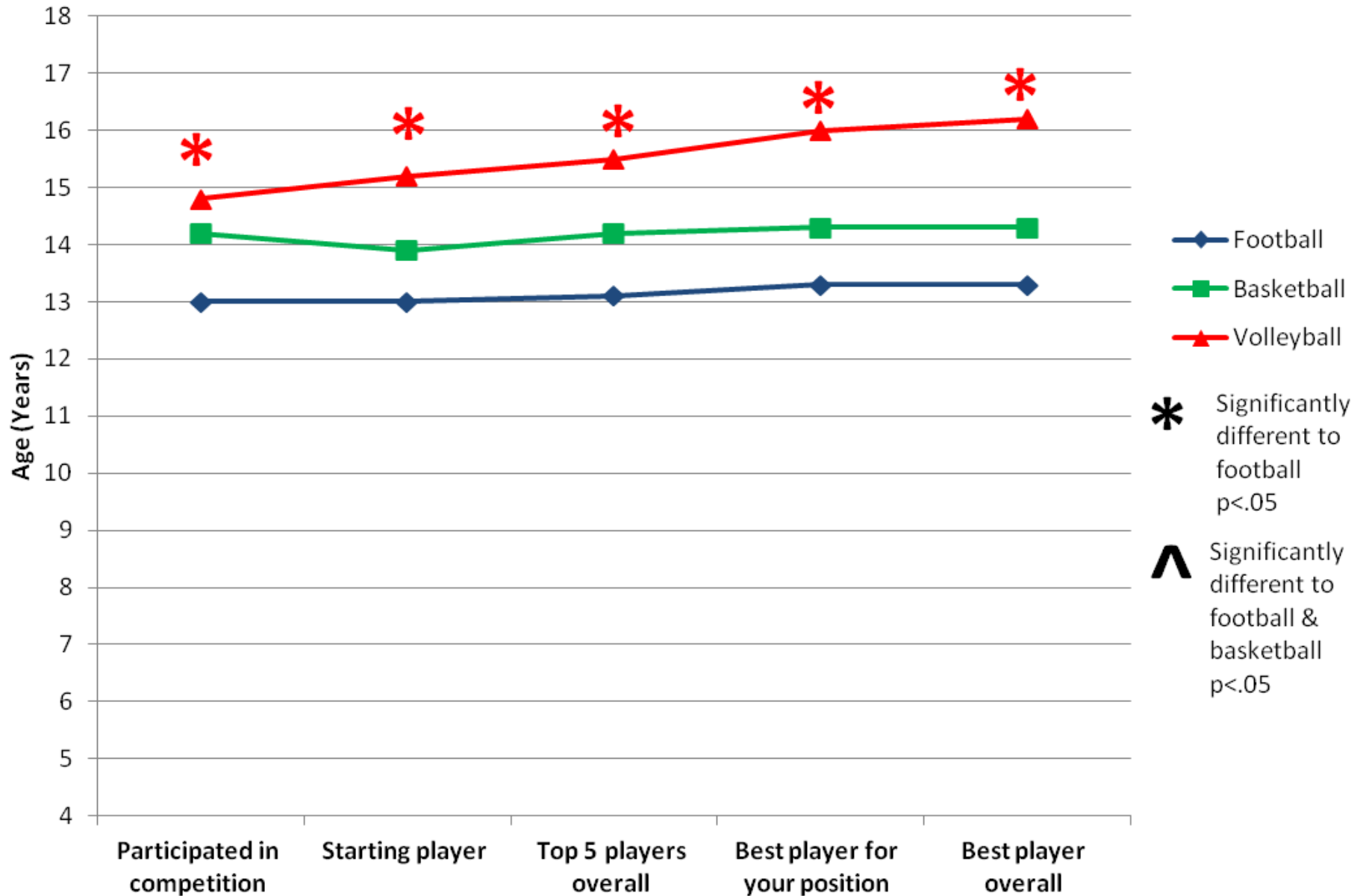
Junior local competition milestones - Age when you first:



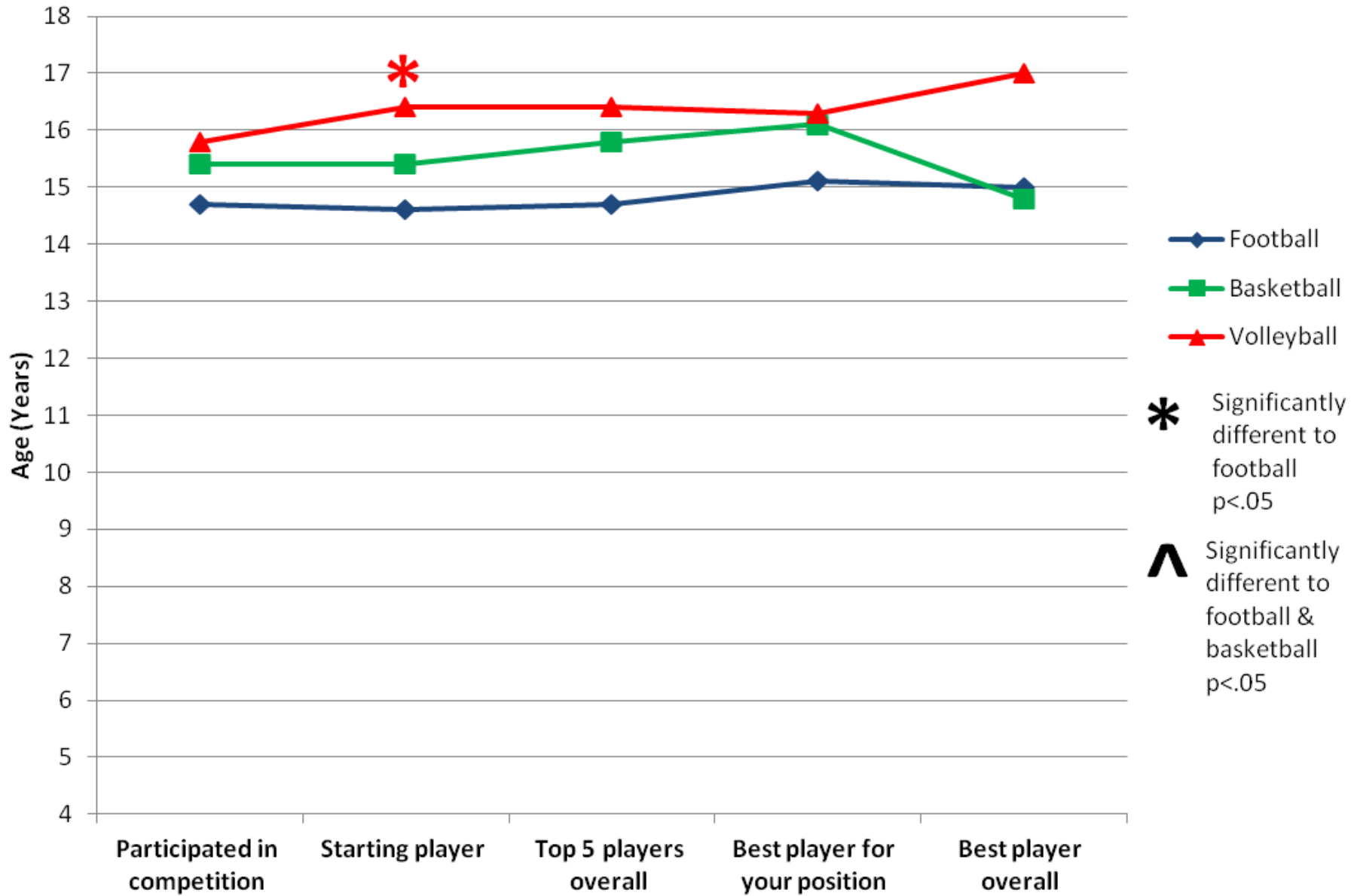
Junior state competition milestones - Age when you first:



Junior national competition milestones - Age when you first:



Junior internat. competition milestones - Age when you first:



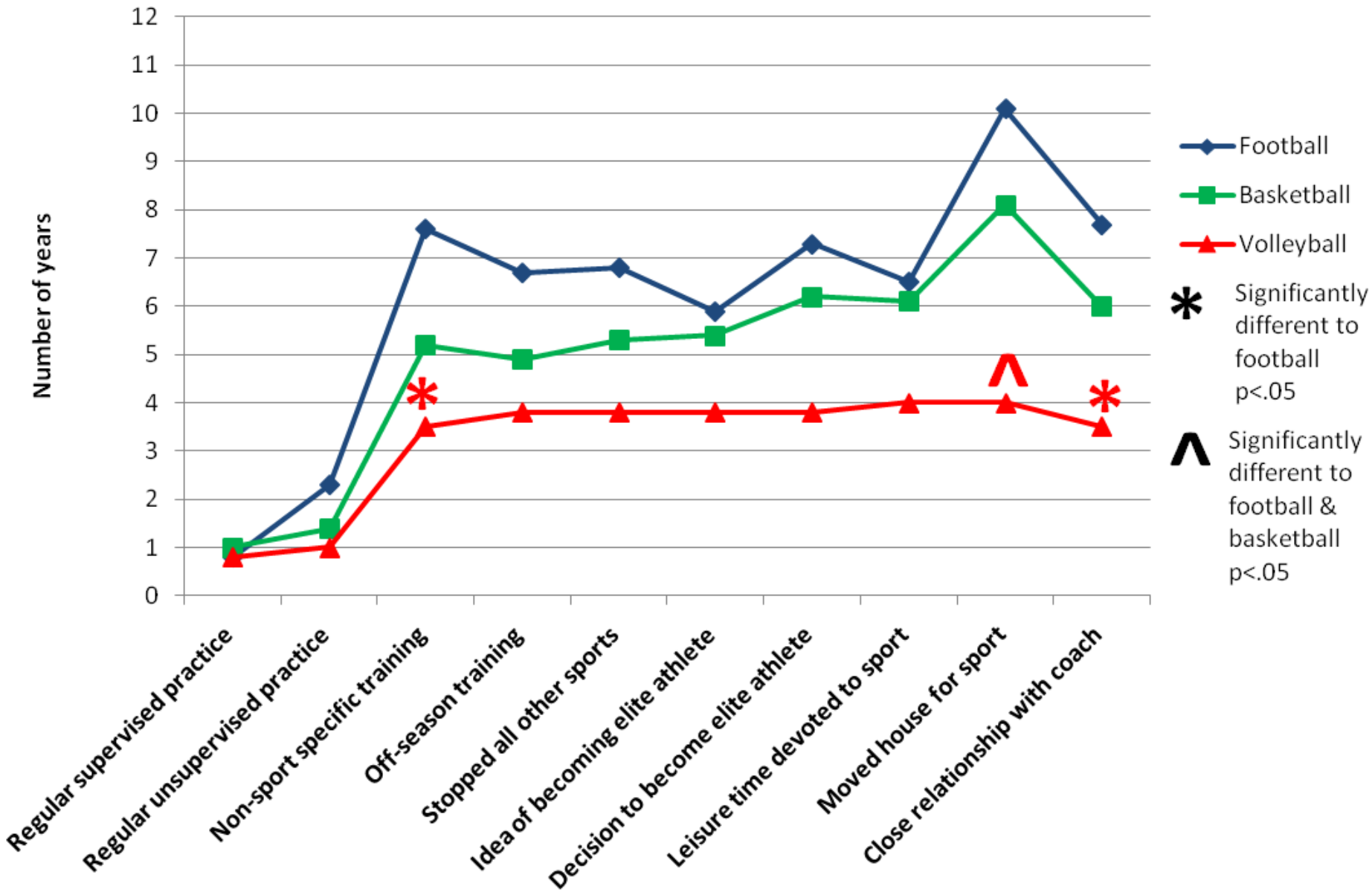
Results

- Age at attainment of important sporting milestones
 - Significant differences between sports for almost all milestones except those relating to participation at the junior international level of competition
 - Volleyball players reach almost all milestones up to and including becoming a starting player at the international level of competition significantly later than football players
 - Basketball players also reach a number of general milestones plus all milestones at the junior local and the junior state levels of competition significantly later than football players

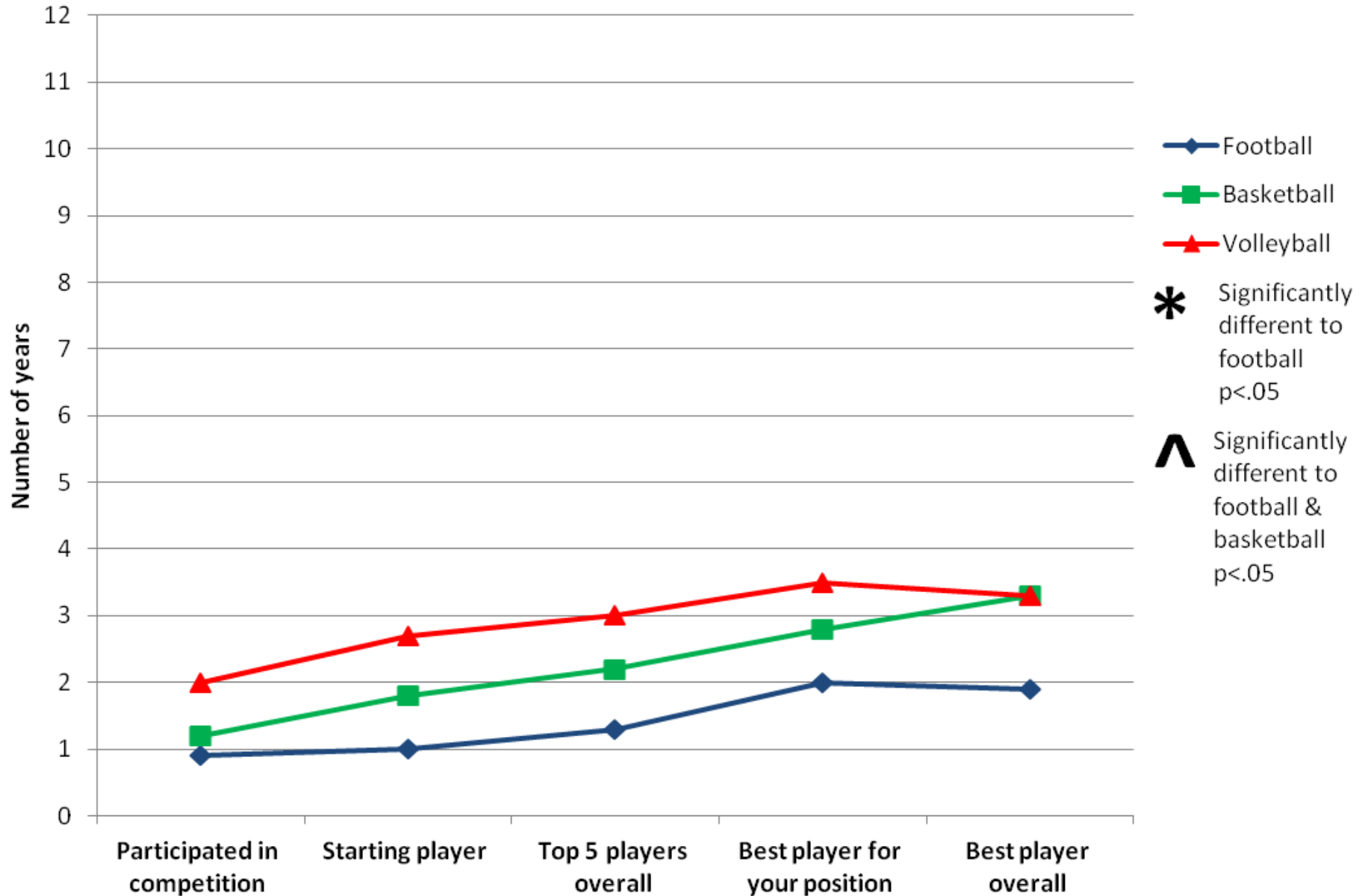
Results

- Time course of career progression

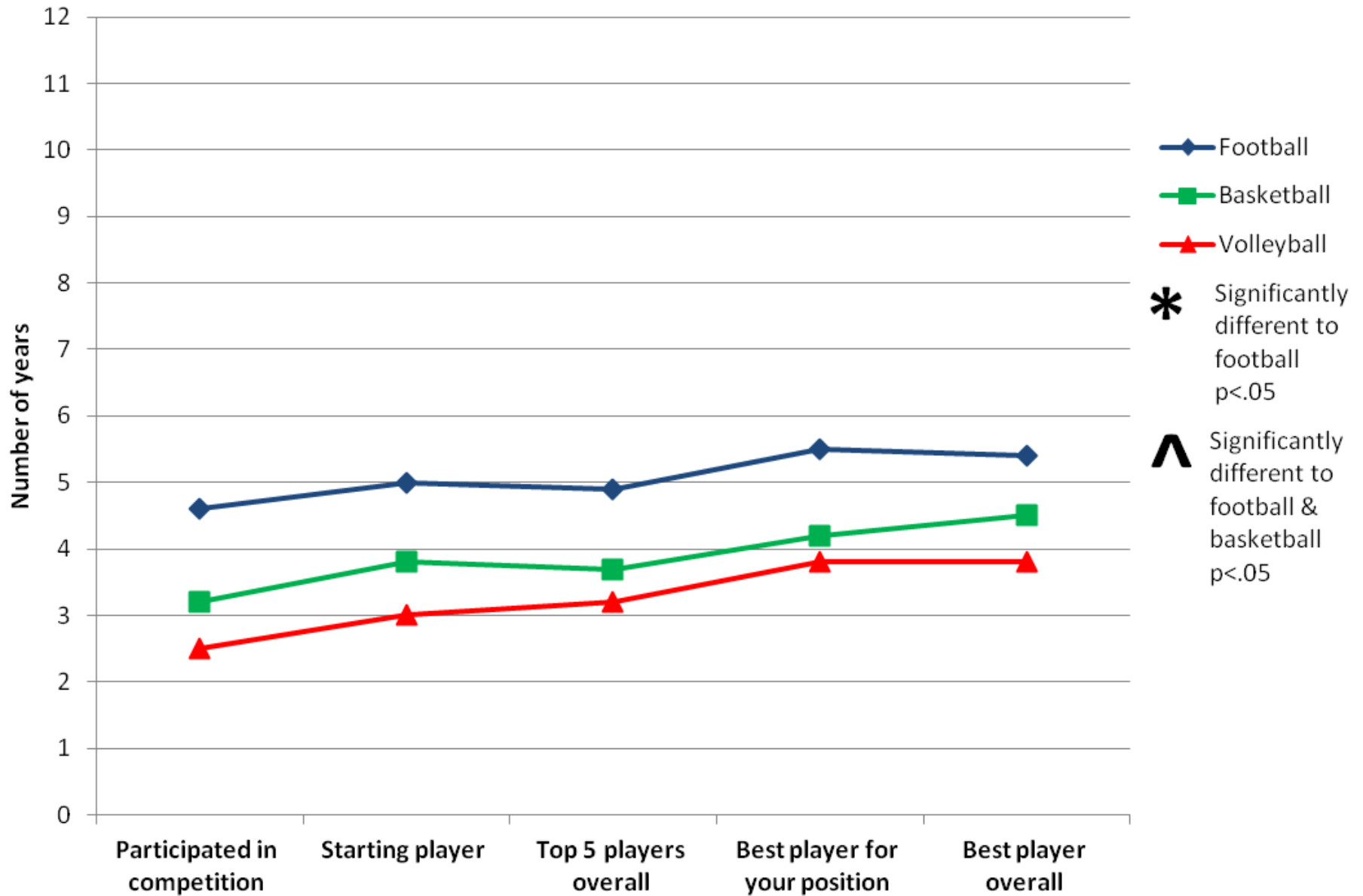
General milestones – Number of years from first participation to first:



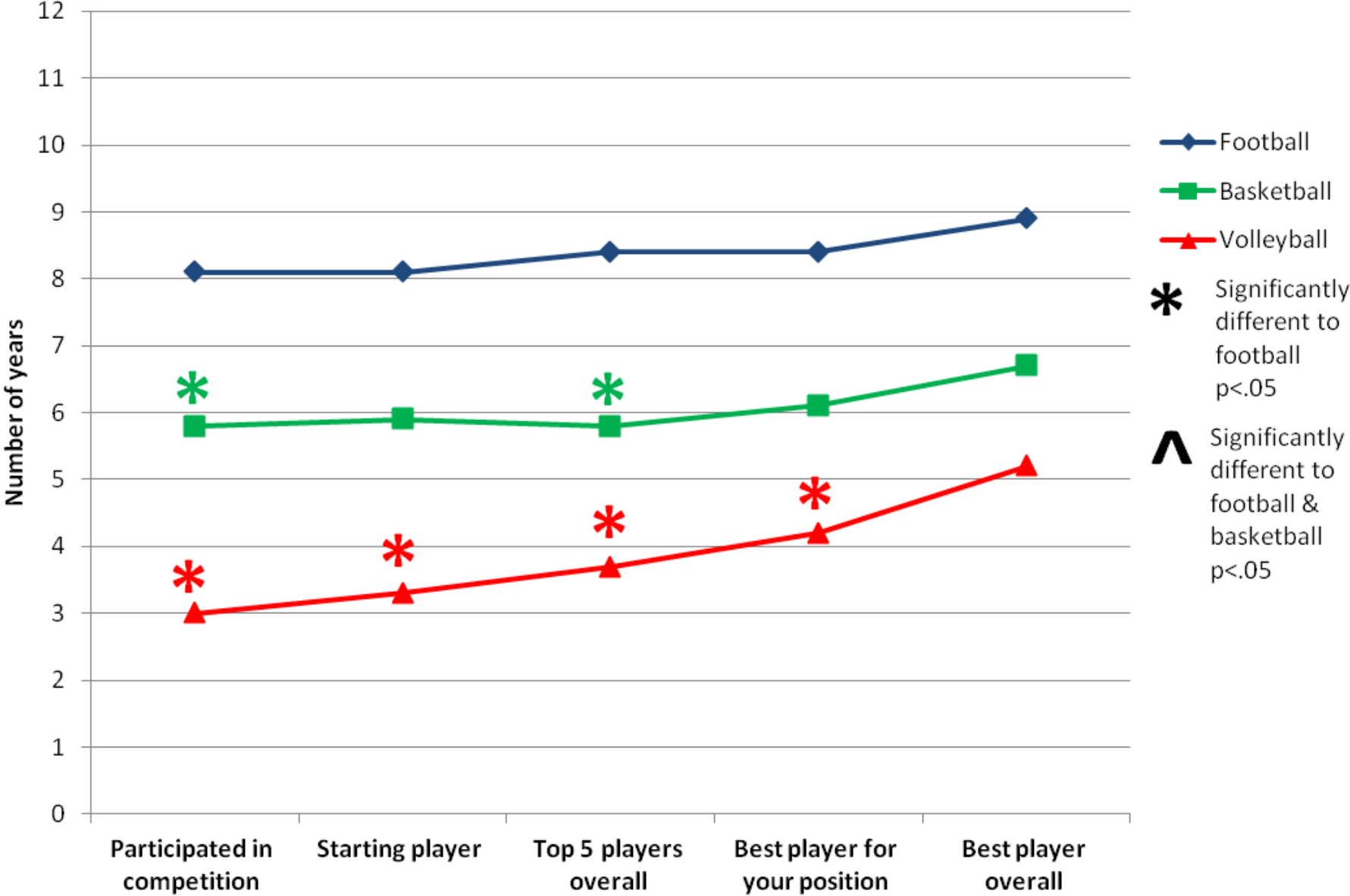
Junior local competition milestones – Number of years from first participation to first:



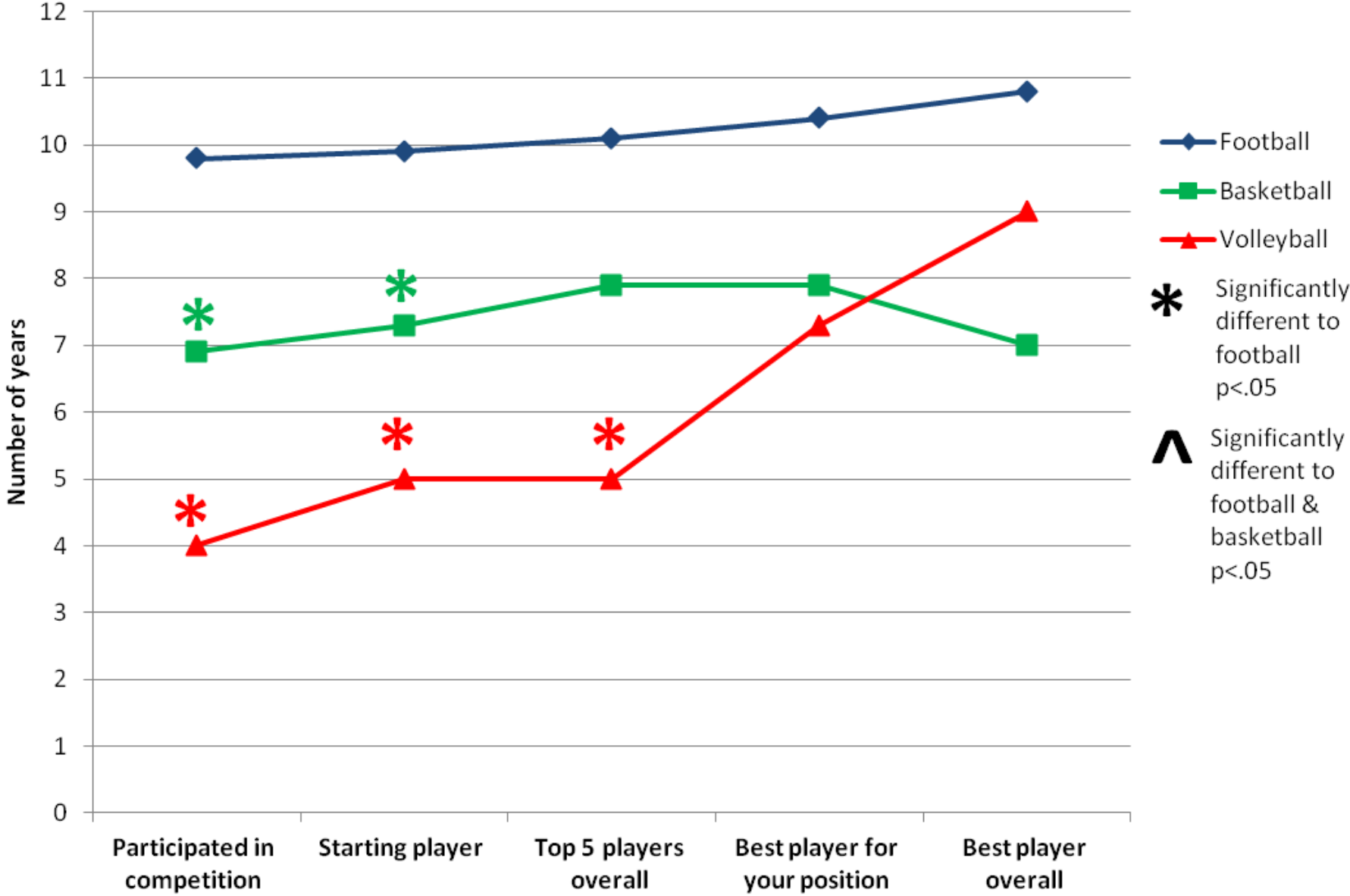
Junior state competition milestones – Number of years from first participation to first:



Junior national competition milestones – Number of years from first participation to first:



Junior international competition milestones – Number of years from first participation to first:



Results

- Time course of career progression
 - Few significant differences between sports for general milestones and milestones relating to participation at the local and state levels of competition
 - Volleyball players and basketball players appear to reach the national and international levels of competition with significantly less years of experience in their sport than football players

Discussion

- Absolute ages at reaching important career milestones appear to be different between sports
 - Football as an early specialisation / early engagement sport?
(Ward et al. 2007; Ford et al. 2009)
 - Necessity or availability of developmental programs?
- The relative time course of career progression is similar for sub-elite levels of competition however the duration of the transition from sub-elite to elite levels of competition varies
 - Competition structure?
 - Depth of competition?

Implications

- Training
 - Need for developmentally appropriate programming during the transition from state level competition to national level
- Competition
 - At what age should national and international competitions commence?
- Skill acquisition research
 - 10 year rule not uniform across all sports

Future research

- More athletes
- More sports
- More countries
- Females
- Senior / open level competition
- Practice / competition hours
- Skill level differences

Acknowledgements

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Questions



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