EDMONTON
SPORT COUNCIL

ALL THINGS
SPORT IN
EDMONTON
GET INVOLVED!
go to
edmontonsport.com
780.497.7678

Funding support by
THE CITY OF Edmonton

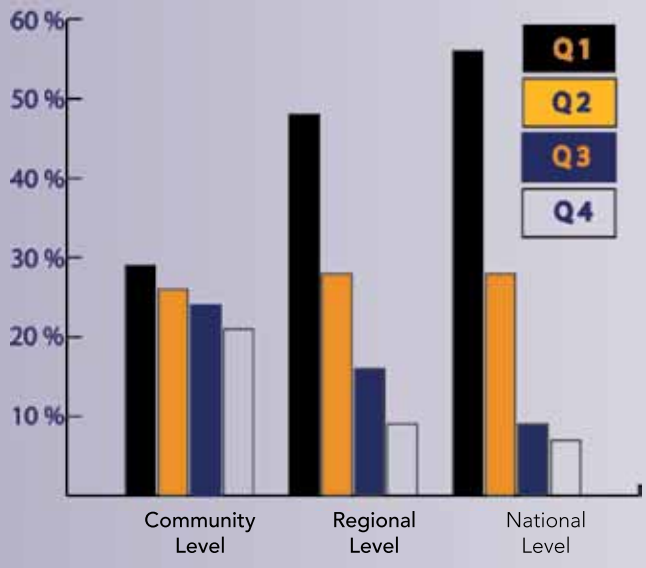
CANADIAN SPORT FOR LIFE

Relative Age Effect

The term "relative age" is used to describe age differences within an annual age group in sport. For example, Atoms in Canadian ice hockey are under 11 as of December 31 of the current season. Players who turn 10 years old in January are 11 months older than their teammates with a December birthday. The term "relative age effect" (RAE) emerged from the observation that athletes born early in a selection year are over-represented in elite squads compared with what might be expected based on national birth rates.

In youth sport, this RAE is demonstrated as relatively older youth are more likely to get picked for school and club teams. It is evident in activities that are competitive and where performance is highly correlated with age and maturity. It would appear that the RAE, certainly in some sports, crucially influences the opportunities to achieve high-level sporting performance.

This table (adapted from Till et al., 2009) shows the relative age distribution of English junior rugby league players in the Under-13 & 15 divisions (combined) according to performance level. It clearly shows the influence of players' birthdays on their chances of being selected to higher competition levels. The same distribution is also found in European youth soccer Under 15, 16, 17 and 18 divisions and in England, where 72% of school soccer players are born in the first four months of the selection year.



The RAE is generally seen in sports where competition exists for available positions on teams (i.e. Soccer – Worldwide; Ice Hockey – Canada; Rugby Union – Australia). It is also seen when there is pressure to identify and develop talent at young ages and in sports where size and strength underpin "talent" and performance. Selected players then get better practice environments, enhanced competitive opportunities, superior coaching, etc.

As size, speed, and coordination are highly correlated with age, older players within the age-group will, on average, show superior performance. Potentially talented athletes are likely being overlooked because of initial maturational disadvantages related to the possible 12 month age difference. These differences may also be increased by differing rates of physical maturation, with late maturing individuals at an even greater disadvantage.

An inclusive sport system would provide late-born athletes (and late maturing athletes) with suitable training and competitive programs to ensure their optimum development and continued participation in sport.

This information is a summary from past Canadian Sport for Life Forums.