Size matters at hockey camps

Players born in second half of year and late developers being filtered out of sport

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SPECIAL TO THE STAR

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Your 14-year-old, December-born son has a gifted set of hands and a wrist-shot that gives opposing goalies nightmares. But, despite his larger-than-average parents, he hasn't hit his growth spurt yet and is dwarfed by some of the behemoths he plays against. He keeps getting cut from elite teams because coaches say, "He's too small."

The scenario is far from theoretical.

A new study shows that kids born later in the year are more likely to be filtered out of hockey at a young age, even though they will end up being as big and strong as the players who have birthdays earlier in the year. That latter fact is critical, because it suggests potential full-size stars of the future are skating out of hockey while still young and growing.

The study, conducted by University of Saskatchewan researcher Lauren Sherar, will be published in next month's issue of the *Journal of Sports Sciences*.

"All coaches would agree they want to pick the best team but they also need to consider how best to foster future talent," Sherar said in an interview. "By selecting only the biggest kids they are possibly ignoring the smaller, more talented kid who is small because they are late maturing or have a birthday late in the selection year."

Sherar, a PhD student in kinesiology working under pediatric researcher Adam Baxter-Jones, studied 619 boys aged 14 and 15 who participated in the Saskatchewan provincial team selection camps in 2003.

At that age, some boys have already had their adolescent growth spurt and are significantly bigger than their peers. An early bloomer could be perceived as being more talented at a selection camp, Sherar says, because their size gives them an advantage in strength, speed and endurance.

The study compared boys who made the first cut, made the second cut and finally made the Saskatchewan team. Players selected for the team were taller, heavier and had birthdays earlier in the selection year than players who didn't make the cut. Thirty-one of 40 boys who made the final cut had birthdays in the first half of the year.

Sherar also calculated the predicted adult height of boys who made the team with those who did not. The predicted average height at adulthood was the same (1.75 metres or 5-foot-9), meaning
that the late-maturing and younger players who got cut will likely catch up to their peers in size upon reaching full maturity.

Interestingly, this trend is consistent with older boys competing in elite level hockey elsewhere. More than 75 per cent of players who made the Canadian national under-18 teams in the last five years had birthdays before July.

"This is more than a hockey issue," says Paul Carson, head of player development for Hockey Canada. "There is a general bias in sport toward early matures.

"The contention is that late matures are at a disadvantage and as a result decide to drop out, eliminating the opportunity for these potential Gretzkys to be discovered. I think the system has to address that possibility every year."

But, Carson says, provincial and national team coaches still select their elite teams based on the skill of the players.

"I don't think any coach walks into a room, takes a look at the birthdates on a sheet and says, hey, those are the kids that are going to be on the team. They pick the best players regardless of where their birthday is."

Still, Carson says Hockey Canada has begun to examine if anything can be done to help equalize the development of late-developing and late-birthday kids.

At a player development summit last year, the organization discussed rotating the cut-off date for age classification, which is currently Dec. 31. This would ensure that the same players are not always the youngest or oldest in their age division. Hockey Canada is still looking into this possibility but Carson says it poses a massive administrative challenge.

Sherar says under the current system, minor hockey in Canada is not providing late bloomers the opportunity to play at a high level while they develop. "They may not be exposed to the same top-level coaching, become known to selectors or experience international competitions and tournaments from an early age."

Sherar says coaches should look at where a player is in terms of their biological maturity and potential adult height. This will ensure the late-maturing player isn't dropping the sport before they realize their potential.

The lab where Sherar studies at the University of Saskatchewan has developed an easy-to-use tool (available online at http://athena.usask.ca/growthutility/) to predict a child's adult height after taking a few standard measurements.

"If a child is destined to be small, perhaps he should be focusing on a different sport," says Sherar. "But if he's going to be five inches taller and weigh a lot more, maybe we should consider keeping this child around, or having a second team for these kids."