

SNOW SPORT INJURIES IN CHILDREN: ARE THERE SIGNIFICANT DIFFERENCES BETWEEN RESIDENTS AND NON RESIDENTS YOUNG USERS OF THE ANDORRAN SKI RESORTS


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- With that study we pretend to find objective data about the scholar skiing project of the Andorran Government
- Also we like to find the lacks of this project in the purpose of improving in the future

Andorra: the Pyrenean country

It is a mountainous country, with more than 10 peaks ranged between 2900mt and 3000mt high

2 of the 3 biggest areas in the Pyrenees, Vallnord and GrandValira



We have a long tradition of winter sports:

- first ski club was created in the 40s
- we are celebrating this year the 50 anniversary of the first ski lift in Pas de la casa
- the photo shows the inauguration of the first chairlift 40 years ago



- Because of the high pressure of the immigration, the knowledge of environment and winter sports by the population was seriously decreasing

Ski :

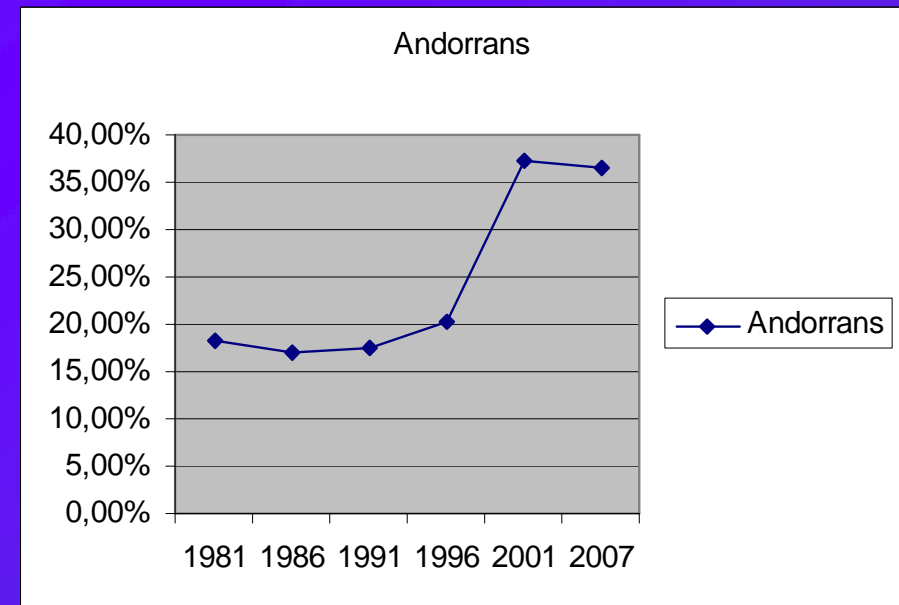
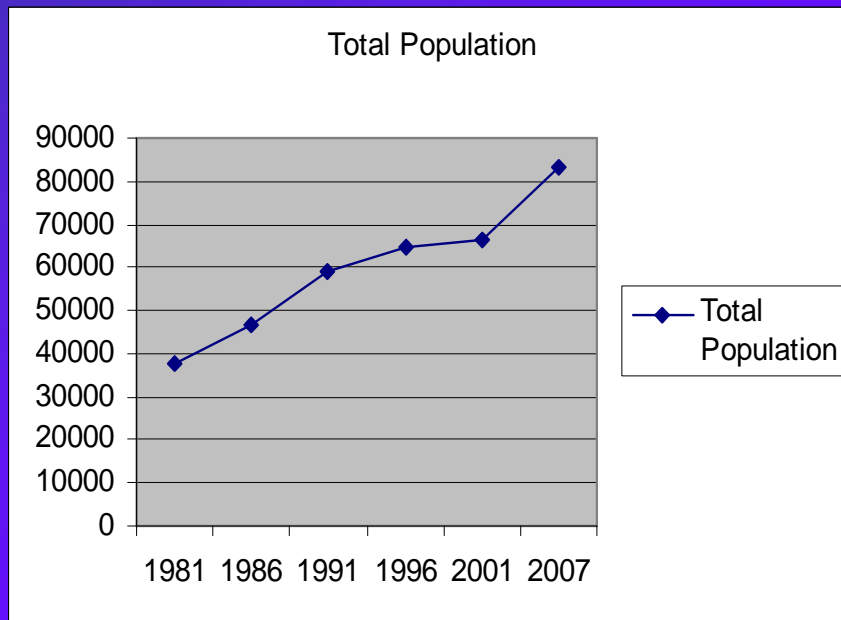
Considered by decree law as a matter of National Interest

- Ski industry: motive of economical rising.

	Total Population	Andorrans
1981	37.808	18,30%
1986	46.967	16,90%
1991	59.047	17,60%
1996	64.479	20,20%
2001	66.334	37,20%
2007	83.137	36,60%

As we see on the graphics Andorran population double-sided during last 25 years

Andorran nationals were no more than 20% of the total Population until 1996.



Esquí Escolar

Is a project who pretends to develop the practice of winter sports with a good technical progression, knowledge and respect of environment, and **security**.

	Nº Children	Alpine skiing	cross county	ice skating
6 to 12 years	5600	9 days	1 day	2 days
13 to 17 years	2800	7 days Optional Activity: They can choose the discipline		

Security and environment are worked with workshops at school

School workshops

- Dressing
- Nutrition
- Ski area signals
- Lifts



Scholar ski is a compulsory school discipline on primary school and during the winter time the children are not practicing other sports at school.

The total number of days skied during the primary school is 54 alpine, 6 cross country, 12 ice skating.

	N° Children	Alpine Skiing	Cross Country	Ice Skating
6 to 12 years	5600	9	1	2

After 3 years of scholar skiing:

-The average children acquires:

-Basic parallel skills on sporting children

-Elemental skills on non-sporting children

-They can in both cases ski on all slopes level (when good snow conditions)

But we observe, and that is a personal opinion, that in the majority of cases There's a stop on the progression.

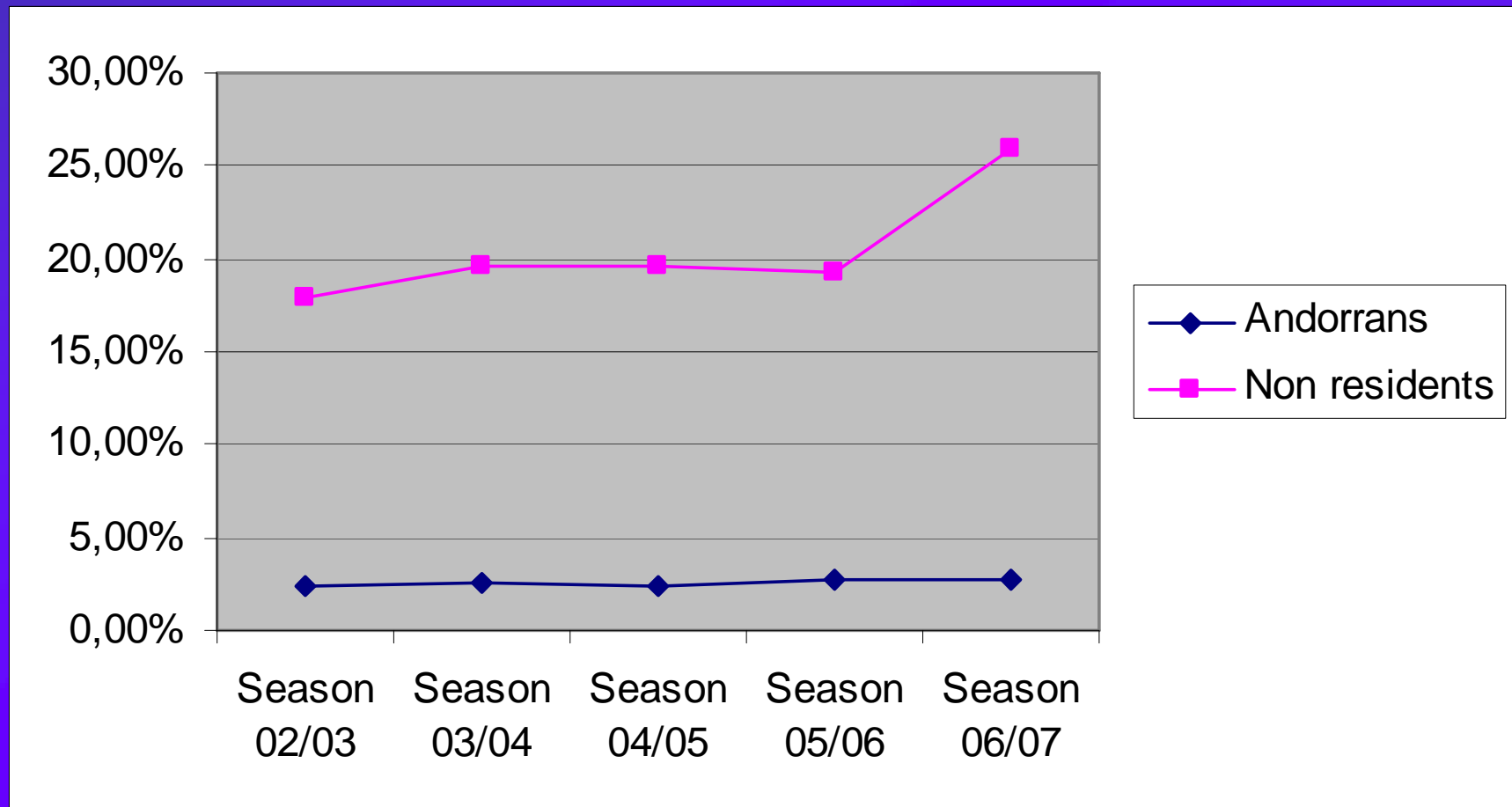


When we compare injuries reports between residents and non-residents, we can observe that the Andorran young skiers maintained the same percentage of the total reports for the last 5 seasons. At the opposite the non-resident experimented last season an important increase on the total percentage on injuries reports.

	Season 02/03		Season 03/04		Season 04/05		Season 05/06		Season 06/07	
Andorrans	344	2,37%	415	2,50%	353	2,35%	366	2,69%	299	2,70%
Non residents	2611	17,96%	3244	19,55%	2948	19,6%	2623	19,29%	2879	25,96%
Total Reports	14.534		16.592		15.007		13.597		11.092	

That graphic shows the increasing, on the total average of the injury reports regarding non-resident skiers.

As we don't have control group that doesn't inform about accident rate over total skiers



We observe that resident skiers have 10% more possibilities than non-residents to have an injury on high difficulty slopes.

The non residents have a higher risk of injury on low difficulty slopes, but the difference is not significant.

HIGH DIFICULTY SLOPES

	Snow-park	Black	Red	Total
Residents	3,30%	2,70%	22,40%	28,40%
Non Residents	1,10%	1,50%	15,40%	18,00%

LOW DIFICULTY SLOPES

	Blue	Green	Lifts	Total
Residents	25,40%	12,40%	3,00%	40,80%
Non Residents	28,30%	13,20%	1,10%	42,60%

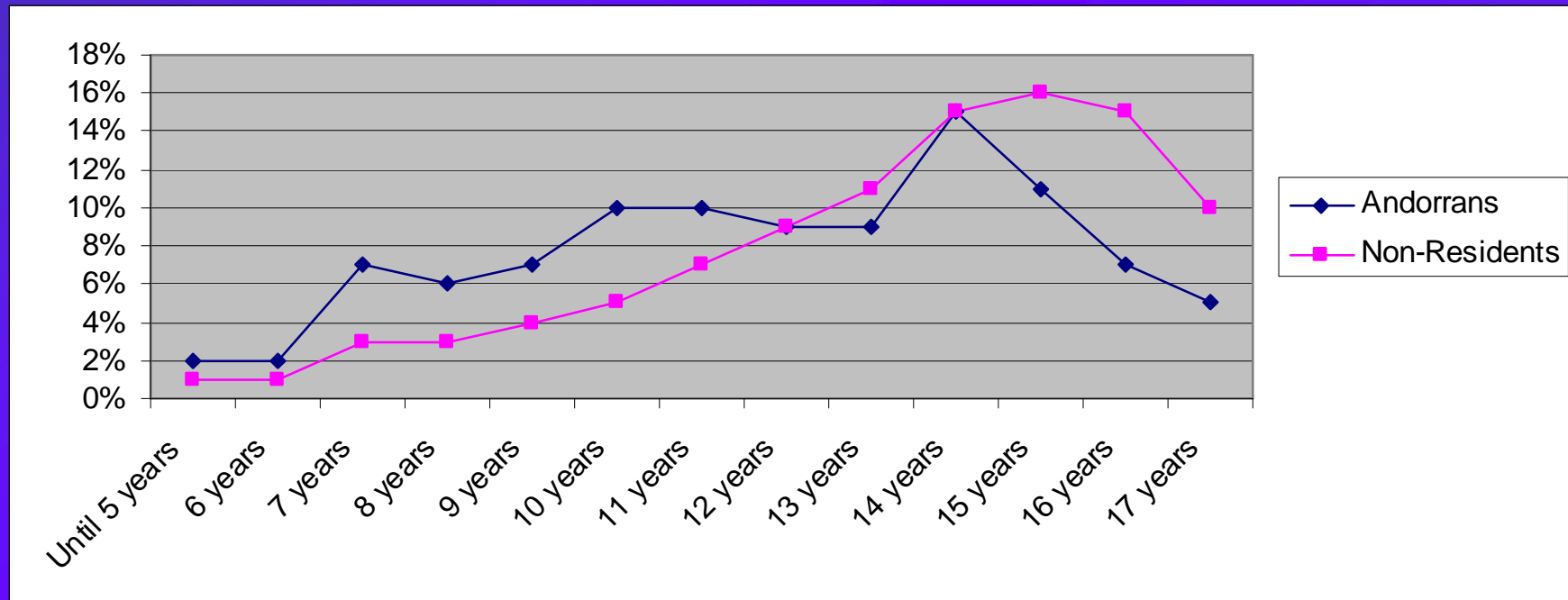
Surprisingly we observe that a high number of the injuries reports couldn't be able to describe the type of slope were the incident happened.

There's a point to improve by the persons in charge of the children, and by the ski patrol.

	Other places	Ns/nc	Total
Residents	4,70%	26,10%	30,80%
Non Residents	4,70%	30,40%	35,10%

We can observe that during primary school, the percentage of injuries report are practically the double on Andorran children.

Then in secondary school the tendency is inverted.



Conclusion

- The scholar ski is a project with a wide study possibilities
- Andorrans start skiing significantly earlier than non- residents
- Average skills are higher on Andorrans, but in accidentally effects there is no significant differences with non-residents

Conclusion

This is just a preliminary study were we pretend to collect information to compare with further studies