



Perceptions of local area as predictors of injury and physical activity among school children in Ireland:

Findings from the Irish HBSC study

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Injury and physical activity

- Unintentional injury and physical inactivity together are the leading causes for disability and chronic illness in young people.
- Involvement in physical activity increases the risk for injury.
- Fear from injury may act as a barrier to active lifestyle.

Study aims

- To investigate perceptions of local area that could provide safe environment that is both associated with decreased risk for injury and increased level of participation in physical activity.
- The study is based on the Health Behaviour in School-Aged children (HBSC) data.

Health Behaviour in School Aged Children (HBSC) study

- A cross-national research study conducted in collaboration with the WHO Regional Office for Europe
- HBSC was initiated in 1982 and is conducted every 4 years. Ireland has been involved since 1998
- HBSC 2006 involves more than 180,000 children from 41 countries

HBSC - background

- The study aims to gain new insight into, and increase our understanding of young people's health and well-being, health behaviours and their social context
- The findings are used to inform and influence children's policy and practice at national and international levels
- The target age-groups are 11, 13 and 15 year olds attending school (n=4500)

Methodology - Data

- 2006 HBSC Ireland
- N= 10,334 schoolchildren (aged 10 to 18 years) from 215 primary and post-primary schools.
- Study was carried out in May-June and Sept.-Oct. 2006

Measures

- Daily moderate-to-vigorous physical activity (MVPA);
- Two or more weekly hours of vigorous physical activity (VPA);
- Injury requiring medical treatment P12M;
- Injury during physical activity
- Severe injury by type of treatment;
- Severe injury by days of activity lose;
- All analyses were controlled for age, gender and FAS.

Findings

- MVPA: 27.6%
- VPA: 54.3%
- Injured P12M: 42.7%
- Injury requiring further treatment (of injured): 43.3%
- Lose of activity due to injury: 38.2%

Findings

- Injury among those participating in MVPA: 51.9% ($p < 0.001$)
- Injury among those participating in VPA: 46.8% ($p < 0.001$)
- Further treatment among those participating in MVPA: 46.6% ($p < 0.01$)
- Further treatment among those participating in VPA: 44.0% (n.s)

Injury and physical activity in context

(Odds Ratios)

<i>Perception of local area</i>	<i>MVPA - daily</i>	<i>VPA - frequent</i>	<i>injury</i>	<i>Severe injury</i>
well off	0.99	1.14**	0.98	0.96
feels safe	1.24***	0.98	0.91*	0.91
good place to be in	0.93	1.08	0.84***	1.35**
safe to play	1.06	1.06	0.89	1.20
I can trust people	0.97	1.08	1.04	1.04
good places to go	1.40***	1.07	1.17**	0.90
I can ask for help	1.09	1.23***	1.00	1.10
N	9,074	9,113	9,153	3,801

Conclusions

- Too few adolescents are adequately active;
- A sizable proportion of children are injured every year;
- Risk for injury increases with level of physical activity;
- However, severe injuries are similar in active and non-active children;
- Safe environments could potentially increase participation in physical activity and decrease injuries.

Limitations

- The study is based on self-reported injuries;
- Measures of injury do not distinguish properly between minor and major injury;
- Exposure is not investigated, hence risk cannot be calculated;
- Types and settings for physical activity not examined;
- The study is based on perceptions of local area.

Key messages:

- Some positive perceptions of local area are associated with more PA and fewer injuries:
 - Promote initiatives in the local area that will create a safer and a more friendly environment for children's daily activity
- Active children are likely to be injured during PA and in sport facilities
 - children and adolescents need to be provided with safe conditions to fully reap the health benefits of physical activity
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- Physical activity related injuries are not more severe than other types of injuries
 - the benefits of active lifestyle 'worth the risk' of minor injuries

Team members

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Further details available....

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