

Implicit Learning as a Design Strategy for Learning Games: Alert Hockey ☐ The educational approach we have taken in an attempt to reduce the incidence of concussion was to develop a sport—action video game. ☐ The game, named Alert Hockey, was specifically designed to modify the game playing behaviour of its participants by embedding an implicit teaching mechanism within the game play — and it did! ☐ The question now is, "does that change in behaviour during video game playing result in change in attitude?"

Unsportsmanlike Aggression in Youth Ice Hockey: Attitudes, Perceived Social Approval, Situational Temptation, and Role Models

Maureen R. Weiss,¹ Lindsay E. Kipp,¹ David Goodman²

¹University of Minnesota, ²Simon Fraser University



What We Know

- Attitudes and behaviours legitimize unsportsmanlike aggression in ice hockey (Sheldon & Aimar, 2001; Visek & Watson, 2005; Weiss et al., 2008)
- Perception of team norms influence players' approval of and intention to engage in aggressive acts (Stephens, 2000; Stephens & Kavanagh, 2003)



Social Learning of Violence in Minor Hockey (Smith, 1974, 1975, 1978, 1979)

- Players perceive that teammates, fathers, and coaches approve of body checking and fighting back, among other behaviours
- Players learned violent hits from watching professional hockey players and said they performed these actions during the season
- Players selecting more violent professional role models received more assaultive penalties over the season

"...the increase in danger on the ice has other implications...what about the impact of increased injury and danger on those who are watching...who might be interested in playing hockey themselves? What does this make kids and parents think? Do they wonder about the wisdom of playing at all, do fewer sign up, and do injuries...along with the danger of the game, come to distance more and more Canadians from it? Simply does it jeopardize hockey's place in Canadian life?"

(Dryden, 2004)



Study Purposes

- Competitive league and gender differences in unsportsmanlike aggressive attitudes and perceived social approval
- Relationship between perceived social approval and unsportsmanlike attitudes



Study Purposes

- Whether specific hockey situations influence variations in players' attitudes
- Whether selection of NHL role model is related to youths' attitudes about unsportsmanlike aggressive play



Participants

- 278 players (192 male, 86 female)
- Atom (10.9 yrs), Peewee (12.6 yrs), Bantam/Midget (14.8 yrs)
- Organized hockey experience (M = 5.3, SD = 2.3)
- White (70%), Asian (11%), Multiethnic (6%), First Nations (2.6%), African-Canadian (.7%), Hispanic (.7%), Other (9%)



Scenarios

Sam is defending against Alex, who is on a 2-on-2 break. Alex makes a brilliant pass and tries to outskate Sam. Sam notices that Alex is still admiring the pass and not paying attention to Sam. To prevent Alex from outskating Sam, Sam could deliver a late hip-check on Alex. Sam knows that a late hip-check on an unsuspecting player is dangerous and Alex will probably get hurt. Sam has to decide whether to deliver a late hip-check on Alex.

Questions about Scenario

- 1. Do you think it's OK to deliver a late hip-check on an opponent? (legitimacy)
- 2. How likely do you think you would be to deliver a late hip-check on an opponent? (intention)
- 3. Does your: Coach / Dad / Mom / Teammates think it's okay to deliver a late hip-check on an opponent? (perceived social approval)

Questions about Scenario

- Is it OK if:
 - there is no risk of getting caught by an official?
 - the game is close with only 2 min left?
 - it would help your team win the championship game?
 - your opponent did it first?
 - it results in a serious injury to the opponent?
- Which situation is the most tempting for you to do?



Role Model Selection

- "Who is your role model in the NHL?"
- Three player categories derived:
 - Aggressive, Fighter
 - -Hardworking
 - -Gentlemanly, Skillful





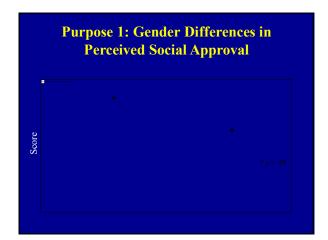


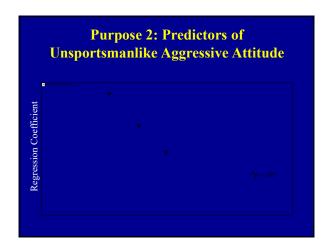
Purpose 1: League Differences in Perceived Social Approval

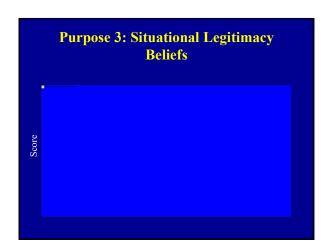


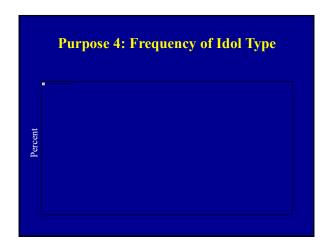
Purpose 1: Gender Differences in Unsportsmanlike Aggressive Attitude



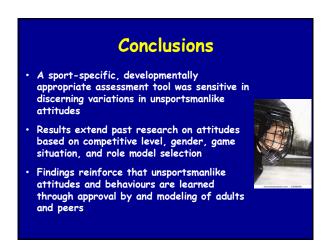








Incidence of Injuries and Concussions		
Number	Injuries	Concussions
None	145	239
1	47	16
2	46	9
<u>></u> 3	31	11



Implications for Participation

- Unsportsmanlike aggression in hockey remains a concern for the physical and psychological well-being of participants
- 47% and 13% experienced injuries and concussions that caused them to miss at least one game
- As Dryden (2004) implored, increased injury and danger on the ice may "come to distance more and more Canadians from it."



Implications for Policymakers, Practitioners, and Future Research



- Policies could target strategies for league administrators, coaches, officials, and parents in preventing and reducing unsportsmanlike aggressive behaviours
- Workshops and educational materials might include strategies such as emotion regulation, anger management, and empathy skills to ensure the health and well-being of participants

Implications for Policymakers, Practitioners, and Future Research

- Coaches and parents should promote learning and improving skills and strategies and discourage attitudes and behaviours promoting unsportsmanlike aggression
- Research could implement and evaluate interventions designed to change attitudes and behaviours of youth players and significant others regarding unsportsmanlike aggression



Thank You!

