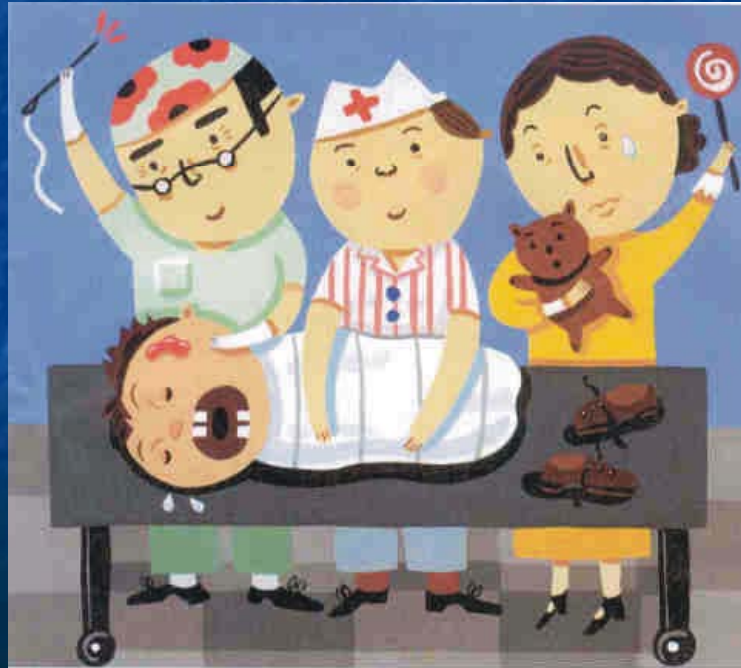


Supervision and Childhood Injury Risk

Barbara A. Morrongiello

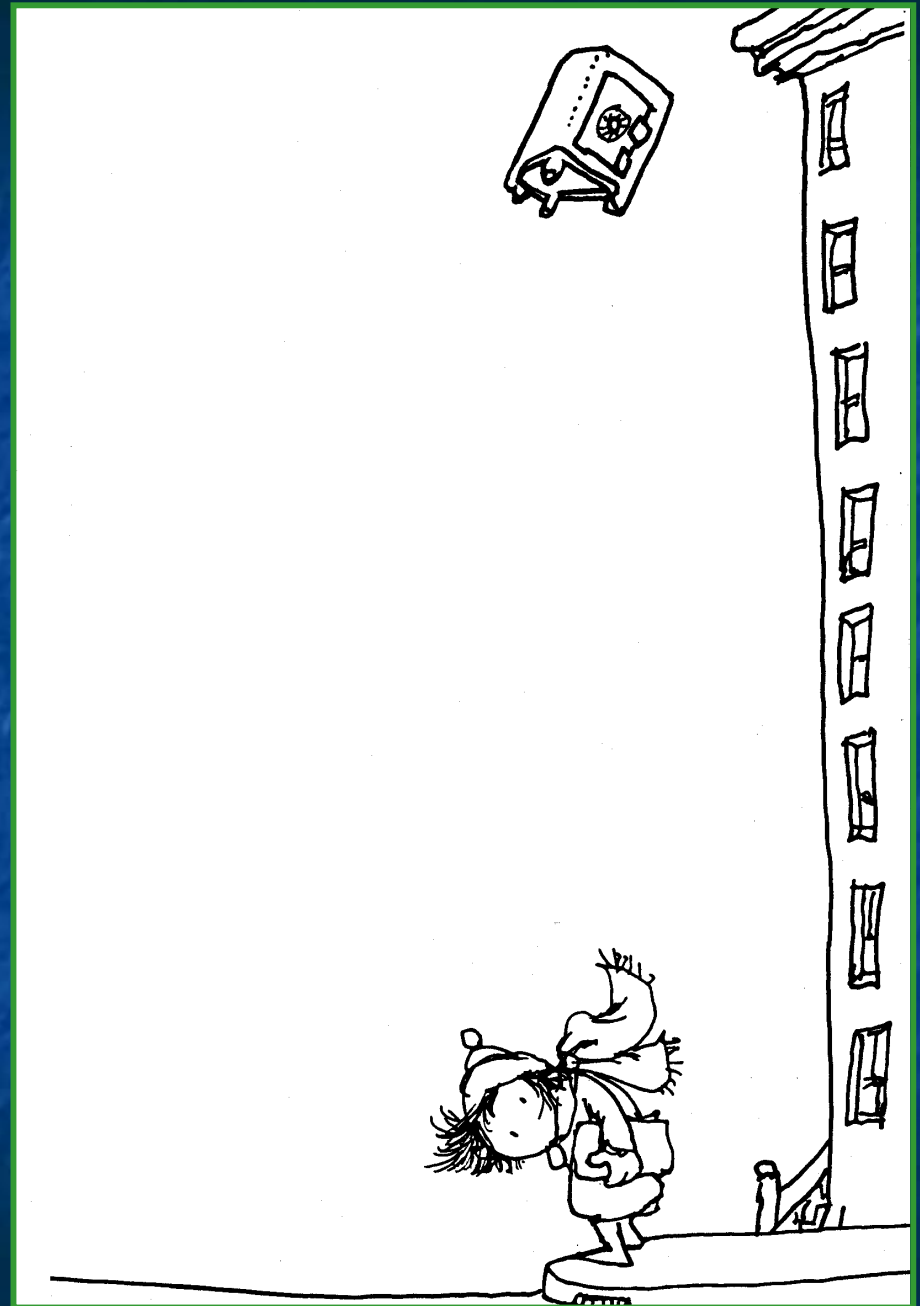


Department of
Psychology

UNIVERSITY
of GUELPH

Safe?

I look to the left,
I look to the right,
Before I ever
Move my feet.
No cars to the left,
No cars to the right,
I guess it's safe
To cross the street . . .



Scope of the Injury Problem

Injuries account for more deaths to children than the next 9 causes combined

1 in 4 children experience a medically-attended injury each year

Most injuries are preventable (91%)



Today I Will Discuss

1. A program to increase adult supervision of children on playgrounds
2. Findings showing an interesting 'twist' on how supervision relates to childhood injury risk

Injuries At School

Medically-attended injury:

over a 5 year period 8% of all injuries for 5-9 year olds and 17% for 10-14 year-olds occurred at school

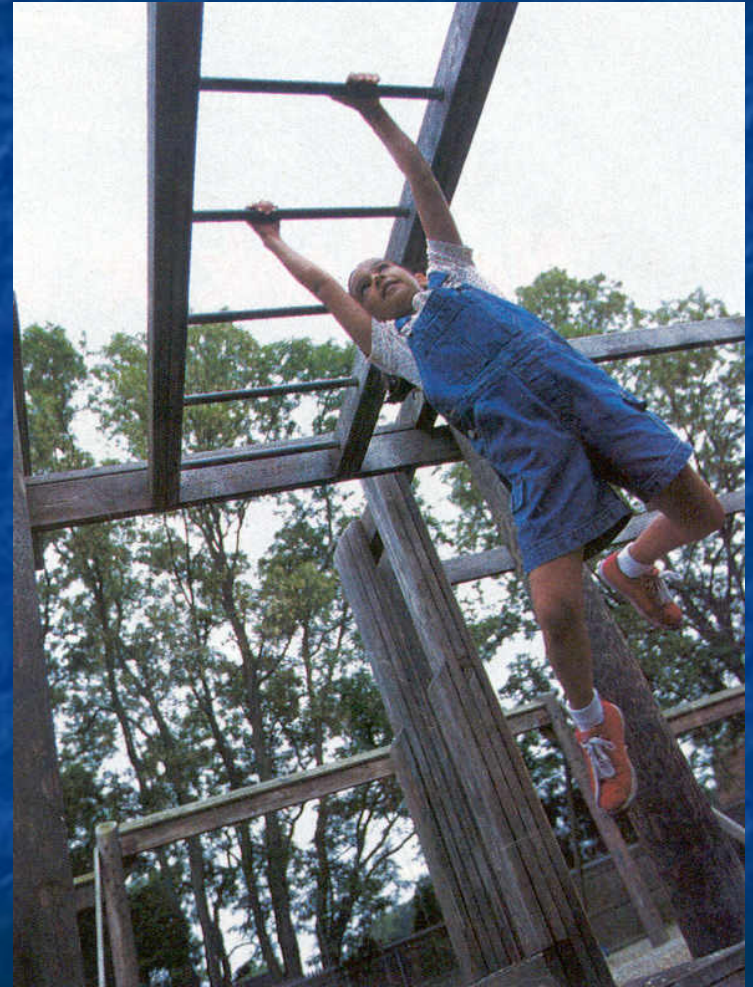
Non medically-attended injury:

over a 2 year period about 80% of elementary age children see a school nurse at least once

Injuries On Playgrounds

Leading location for injuries at school and child-care centers

Over 70% of child-care centers report at least one annual playground injury for a child



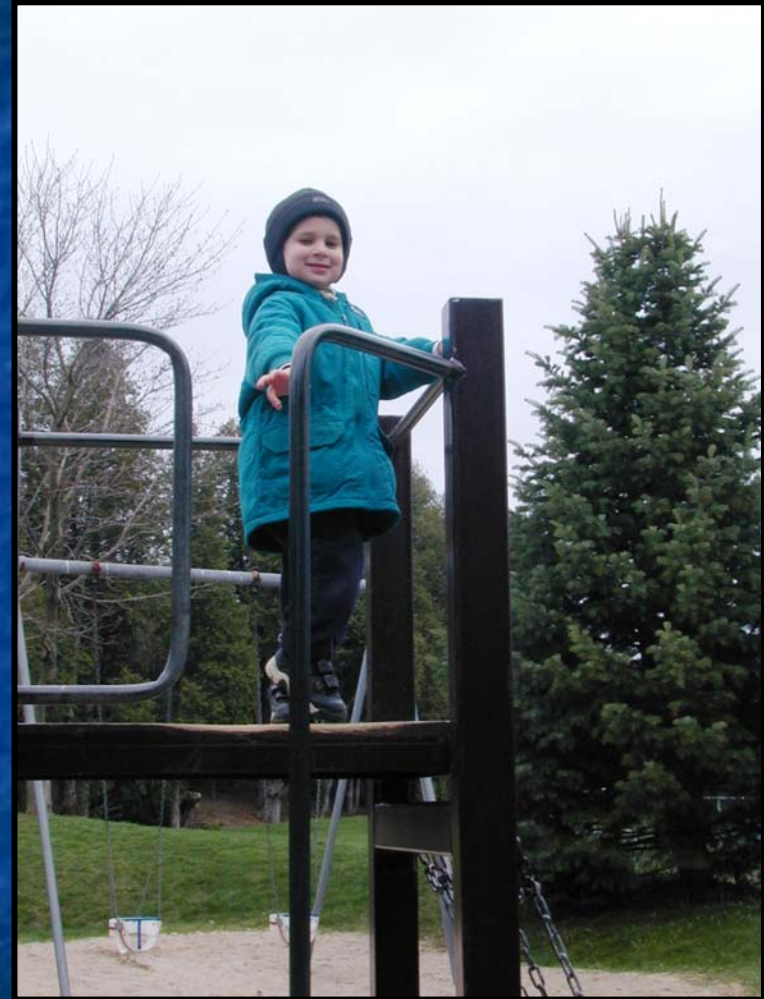
What strategies are recommended to reduce injury risk on playgrounds?

1. Age- appropriate equipment design
2. Energy-absorbing material on ground
3. Maintenance of equipment
4. Increase adult supervision

Aim of the Study

Test an intervention program designed to reduce risk of injury on playgrounds by increasing the quality and quantity of adult supervision:

Stamp-in-Safety Program



How To Define "Supervision"?

1. *Attention* to child
(watching, listening)
2. *Proximity* to child
(within vs beyond reach)
3. *Continuity* of supervision
(continuous vs discontinuous)



A behavioral reward system

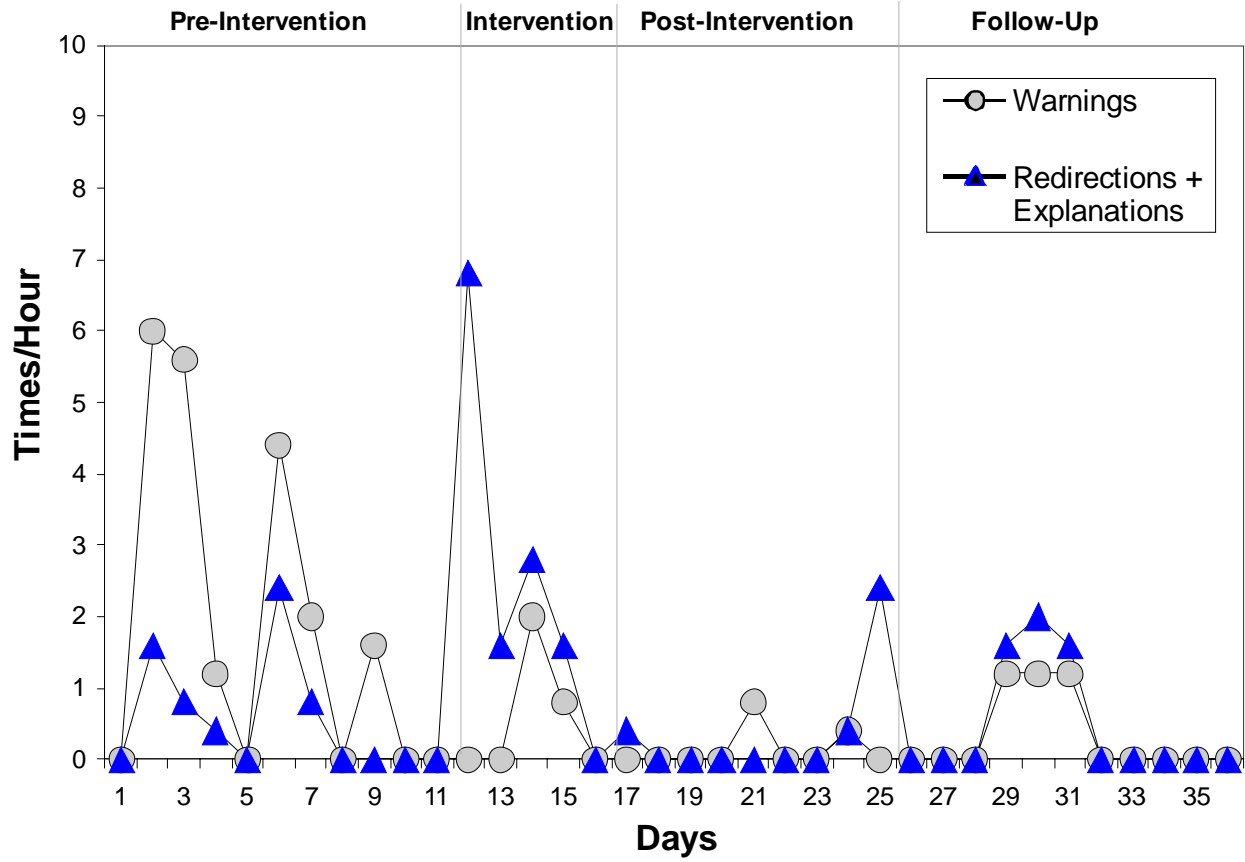
- Teachers give out attractive ink-stamps to children for *safe* playground play
- This also led to greater attention to unsafe behaviors by children (+ intervene to stop these)

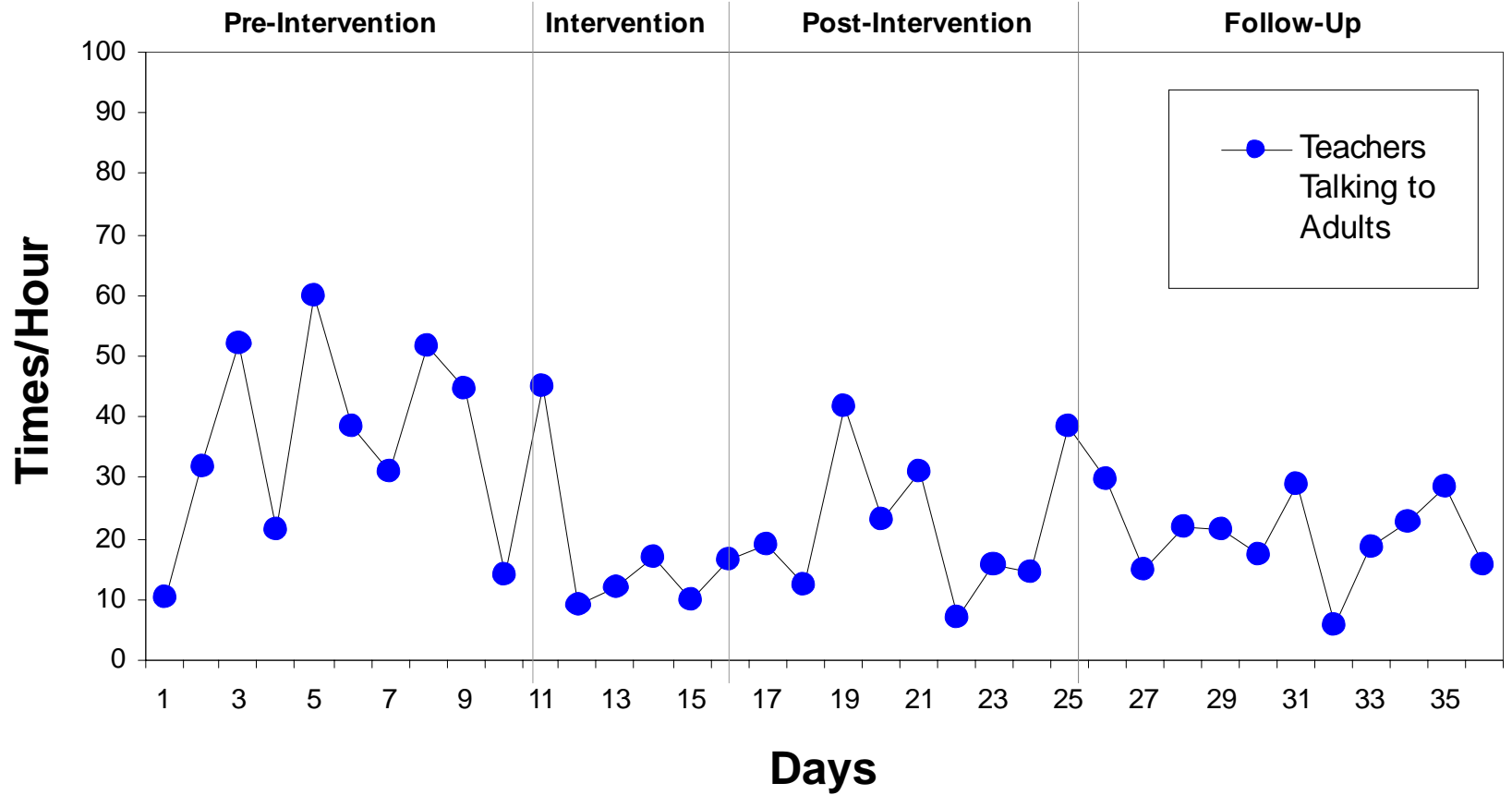
Thus, the program aimed to *decrease* children's risky play behaviours on the playgrounds by *increasing* teachers' supervisory behaviours

- Measures of teachers' (N=12) behaviors were taken on the playground:
 - Before the intervention (*Pre-intervention*)
 - During the intervention (*Intervention*)
 - After the intervention (*Post-intervention*)
 - 6-months later (*Follow-up*)
- Inter-rater reliability = 88% agreement

Results

Applied behavior analysis techniques
+ inferential statistics were applied to
the data





Conclusion

- Stamp-in-Safety program
 1. low-cost
 2. easily implemented
 3. effective to increase supervision, thereby reducing pediatric playground injury risk at childcare centers



For further information



- The Stamp-in-Safety Program: A behavioral intervention to increase supervision and reduce behaviors that can lead to unintentional playground injury in a pre-school setting
- *Journal of Pediatric Psychology* - published in 2006

Sibling Supervision

Older child is supervising younger
one

(parent is elsewhere in the home)

Ages of older sib supervisors?

- Older siblings as young as 3 years of age were supervising still younger siblings!

[No agreement across parents in 'how old' a child has to be to supervise adequately]

How often do sibs supervise?

- 12% of mutual awake time at home

[We only assessed 'at home' supervision]

What are children/parents doing when sibs supervise?

CHILDREN:

Playing (50%)

Playing + watching TV (39%)

PARENT:

Doing chores (80%)

Do Maternal Personality Factors Relate to Sib Supervision?

- Neuroticism = MORE sib supervision
- Conscientiousness = LESS sib supervision

Does time with older sib as supervisor relate to younger child's frequency of injuries?

- YES !
 - More time = More frequent injuries

Do Older Children Supervise in Different Ways than Parents Do?

- NO !
 - No differences in strategies used to manage the behavior of the younger child:
 - Explanations
 - Prohibitions
 - Negotiations
 - Threats

So what explains the increased frequency of injury with siblings as supervisor?

- Behavior of the YOUNGER SUPERVISEE !
 - More noncompliant with requests made by the older sibling than requests made by parents

Risk Factor for injury.....

Child noncompliance in response to supervisory efforts ALSO can increase risk of childhood injury in the home.

BABY STEPS



MOM, WHEN I WAS LITTLE, DID YOU LET ME CLIMB ON THE FURNITURE LIKE WREN DOES?

WELL, NO.



YOU HAVE TO REMEMBER—YOU WERE MY ONLY BABY THEN, SO I DEVOTED EVERY MOMENT TO YOUR NEEDS AND ENTERTAINMENT.



THEN WHEN HAMMIE CAME ALONG, THINGS GOT A LITTLE MORE COMPLICATED, AND YOU ACTUALLY HELPED ME KEEP AN EYE ON HIM.



AND NOW THAT WREN IS HERE, I COUNT ON YOU AND HAMMIE TO HELP ME KEEP HER OUT OF DANGER.



YOU BET!

REALLY?



WOW!



GOOD NEWS, WREN! WE'RE HERE TO PROTECT YOU!

I DON'T THINK SHE CAN HEAR YOU WAY UP THERE.

www.babysteps.com

© 2005 Gannett Co. Inc. All rights reserved. DINK BY JAMES BEEBE/48 YEARS

Kelly Jones
5-2005

Supervision and Childhood Injury Risk

Barbara A. Morrongiello



Department of
Psychology

UNIVERSITY
of GUELPH