

CDRU

Child Development Research Unit



Psychology Department, University of Guelph

www.uoguelph.ca/~cdru

Greetings and thanks from Dr. Morrongiello and her staff!

This newsletter reports research findings from projects completed at the Child Development Research Unit over the past two years. Our staff and students are very grateful for the time and effort given by our valued participants! Our studies have involved a wide range of activities and efforts, and all have been very successful in furthering our understanding of issues related to children's health and safety. Thank you so much for your patience in waiting to receive the results of the project in which you, your child, and/or your family participated. Because of the large number of participants needed to ensure that our findings are reliable and apply generally to children and families, it sometimes takes longer than expected to complete our research.

I hope you enjoy the newsletter and that the findings we report demonstrate to you the value of the research that you are helping us to do. Without your efforts and support, our research would not be possible! If you know of any other families with children who may be interested in research, please pass the newsletter along to them and encourage them to contact us to find out more about getting involved. We are ALWAYS in need of participants!

Again, thank you for your participation and support!

Dr. Barbara Morrongiello, Director of CDRU and Professor in Psychology (bmorrong@uoguelph.ca)

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RECENTLY COMPLETED PROJECTS

Mothers' and Older Siblings' Reactions to Risk Taking by a Younger Child in the Family

Research has validated parental supervision as a preventive strategy for decreasing injury risk to preschool children. However, sibling supervision has actually been found to *increase* the risk of injury to young children. The current study explored how this differential risk of injury may arise by comparing the supervision behaviours of mothers to those of their older children when each was the designated supervisor of a young child shown on a videotape to engage in no risk, risk, and rude behaviours in a home situation. Supervisors (both parents and older siblings) were told to imagine the toddler was the young child in their own family, and to stop the tape and speak to the child whenever they would in real life. Results indicated that supervisees were allowed to engage in *more* risk behaviours when supervised by older siblings than by mothers. Sibling supervisors reacted to risk behaviours with more prohibitions, whereas mothers adopted a teaching orientation and gave more explanations and directions in response to risk behaviours by the supervisee. Clearly, there is no substitute for parental supervision in preventing injury to young children!



Behaviours by the Sibling Supervisor and Supervisee Both Contribute to Younger Children's Risk of Injury

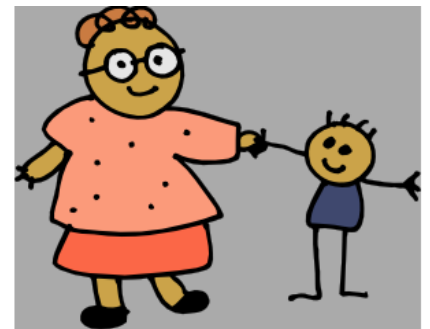
Although parental supervision reduces young children's risk of unintentional injuries, supervision by older siblings has been shown to *increase* injury risk. This research project explored if behaviours by both the older child supervisor *and* younger child supervisee contribute to this injury risk. The supervision behaviours

of mothers were compared to those of their older children, and the behaviours and reactions of the supervisee with each was measured. Mothers engaged in more proactive safety behaviours (e.g., removing hazardous objects), whereas older siblings more often modeled injury-risk behaviours by interacting with hazards. Supervisees displayed more injury-risk behaviours when supervised by a sibling, yet sibling supervisors were less attentive to supervisee risk behaviours than mothers. Supervisees also were more noncompliant with older siblings than mothers when requested to stop risk taking. Hence, supervisor and supervisees behaviour patterns *both* contribute to elevate risk of injury when older siblings supervise younger ones. Parents need to make it clear to both children what the expectations are (older sibling to be attentive when supervising younger one, younger sibling to comply with older child's requests to not risk take) in order to reduce risk of injury when children are supervising their siblings.

Can Mothers Accurately Predict School-Age Children's Risk Taking in Injury-Risk Situations?

If parents can accurately predict how likely their child is to risk take, then they can take precautions to keep their child safe by more closely supervising or developing rules to reduce risk taking. Little is known, however, about how well parents predict children's behaviours. This research project aimed to take a closer look at how accurate parents were in predicting their school-age child's general approach to risk and how the child would respond in a variety of potentially dangerous situations having hazards. The results indicated that parental accuracy depended on how children responded in risk situations.

Children who were more consistent in their responses to risk situations had parents who tended to underestimate that child's level of risk-taking. Thus, when children were consistent in how they behaved, parents were 'optimistically biased' and assumed that their child was unlikely to risk take. On the other hand, as children became less consistent in their approach to risk taking (sometimes taking risks and other times avoiding risks), parents became more likely to overestimate that child's risk-taking. Thus, when children were inconsistent, parents responded cautiously and were more likely to be



biased towards assuming their child would risk take. Examining how these parent beliefs about children's risk taking relate to parent supervision practices and children's frequency of injuries is an important next step in this research. Call us if you would like to participate with your school age child (7-10 years old) in this upcoming project!

Parental Supervision of School-Age Children at Home

This research project examined parental supervision of school-age children and the relationship between supervision and injury. Mothers were asked to report on their child's history of injuries and record their home supervision practices over a 2-month period. The children independently completed diaries about events in their day, which included minor injuries. Results indicated that children spent approximately a quarter of their time at home alone, mostly supervised intermittently or not at all. Results also revealed that parents high in permissiveness showed less supervision, while children who scored higher in risk-taking were supervised more. Extent of direct supervision served a protective function and was associated with fewer injuries, while extent of indirect- and non- supervision times emerged as risk factors that were associated with more frequent injury. Thus, even though it is commonplace to allow school-age children more independence with age, caregivers need to continue to closely supervise because extent of caregiver supervision directly influences school-age children's risk of injury. Therefore the more children are directly supervised, the fewer injuries they experience!



Therefore the more children are directly supervised, the fewer injuries they experience!

Interested in learning more about our findings?

A listing of publications which have resulted from the work of the CDRU is available online!

To view this list, go to www.uoguelph.ca/~cdru and click on the link for publications!



Moving? Had a baby?

As your family grows and changes, we'd love to keep in touch and keep your file current!

**Please contact us at:
519-767-5033**

Playground Injuries and Parent's Appraisals of Injury Risk

The most common approach to preventing playground injuries involves modifying the physical playground environment. Few have considered how parenting practices and increased supervision may also influence injury risk. This research project explored whether having a child experience a fall-related medically attended playground injury made parents more sensitive to risk of injury and what can happen on playgrounds. Using telephone interviews, risk perceptions were compared between parents of children who had experienced a playground injury with those who had not.



Findings revealed that having a child injured resulted in parents showing a greater perception of children's vulnerability to injury and recognition of the potential severity of these injuries. Thus, making parents aware of the frequency and severity of injuries that occur to children on playgrounds may prove an effective approach to motivating enhanced supervision for injury prevention.

ONGOING PROJECTS

Development of the Sensation Seeking Scale for Young Children (SSSYC)

Sensation seeking is a personality attribute that is associated with frequent injuries in adolescents and adults. If we can identify children high in sensation seeking, then this can help us to determine who is at greatest risk of injury. Our objective in this project was to develop and evaluate a questionnaire measure of sensation seeking for young children 2 through 5 years of age. Items tapping sensation seeking were developed and content validation was completed by child development experts. Parents were then asked to

complete the Sensation Seeking Scale for Young Children (SSSYC). To ensure the measure was valid, scores were related to children's risky behaviours during a play session in an indoor playroom and to children's history of injuries. Results indicate

that children scoring high on the questionnaire measure showed more risky play behaviours and had more frequent injuries, providing support for the measure's validity. This scale can be useful for identifying high sensation seekers at young ages so that early intervention to prevent injuries can occur.



Helpful Strategies Lead to a Healthier Lifestyle

Eating right and being active are very important in our efforts to lead happy and healthy lives. Enjoying a healthy lifestyle means better sleep, more energy, and feeling better about you! Although leading a healthy lifestyle is something we all want to do, sometimes it's just easier to grab a quick bite at the fast food restaurant or drive to pick up the children at school instead of taking the time to walk there. In this research project we

sat down with parents to discuss issues in their lives that make it difficult for them to provide their child with a healthy lifestyle. After identifying things that make it difficult for them, they brainstormed with the research assistant about ways in which they could better deal with barriers to a healthier lifestyle. For instance, many parents found 'time' was a major factor in their ability to provide healthy meals for their family after a long day at work. Some of the strategies we developed included: making larger batches of food when you do have time and freezing them for days when time is not on your side, using a crock pot so meals are easier and faster, and creating meal plans or meal journals to keep you organized when food shopping and planning for meals. These strategies were helpful in assisting parents to deal with common issues that make it difficult for them to provide their children with healthy foods and chances for physical activity! If you are interested in participating in this study please call or email us!



"The Great Escape": Fire Safety Intervention

Fire is the third leading cause of unintentional injury in children under the age of 14, with 40% of fire injuries and deaths in children occurring in those 5 years of age and younger. The current research project is an evaluation of a computer game called "The Great Escape" which was designed to teach children between the ages of 3.5 to 6 years about home fire safety. At the first visit to the Child Development Research Unit children are asked questions regarding fire safety so that we can identify what and how much they know about this important topic. They are then asked to play "The Great Escape" at home with a parent over the course of two weeks. At their second and final visit to the Child Development Research Unit they are again asked to answer questions pertaining to fire safety. We hope to



find that this computer game is an effective tool to teach children about fire safety! If you are interested in participating in this research project please call or email us! Helping children know what to do in the event of a fire at home could save their lives!

“The Blue Dog”: Dog Bite Intervention

Dog bites do not occur often but when they do they often produce very serious injuries, especially to young children. There are very few effective programs to teach children to understand dog behaviour and how to stay safe near dogs, including their own pet. The current study aims to address this issue by testing children aged 3.5 to 6 years on their knowledge about dog behaviour.



Following these questions children are given a computer game “The Blue Dog” and are asked to play it at home with a parent over the course of two weeks. The goal of the game is to increase children’s understanding of dog behaviour so they can more safely interact with dogs and avoid getting bitten. Results so far are very promising and

indicate that the game *is* helping children better understand dog behaviour and to distinguish what are safe vs unsafe things to do near dogs. If you are interested in participating in this study please call or email us!

An Examination of Parental Teaching Strategies Regarding Household Safety Issues

This research project examined how mothers teach home safety issues to three years olds and how these teaching strategies influence children’s behaviour. A contrived hazard (i.e., novel object that looked ‘hot’) was set up in the home and the parent and child were both video recorded as they interacted in and around this novel object, which was described as ‘hot’ to the child. An evaluation of these interactions revealed



that mothers used several primary safety strategies to keep their child from the ‘hot’ object (prohibitions to not touch, explaining about safety, testing the child’s understanding about the object, and redirecting/distracting the child from the hazard), and engaged in more reactive than proactive teaching overall. In other words the majority of teaching occurred in reaction to the child’s behaviour towards the ‘hot’ object, rather than anticipating the child’s interest in the object.

Mothers tended to use prohibitions with children who were reported to need close supervision, engage in challenging behaviour, or have difficulties controlling themselves. It seems that mothers of children who are more “difficult” to manage do not rely on their child’s understanding of a safety issue but use more forceful parenting strategies to prevent injury. On the other end of the spectrum, children who scored *lower* in risk-taking, behavioural intensity, and challenging behaviour received more explaining and teaching about the object. We are now extending this research to explore how these different parent safety strategies influence the likelihood children will actually touch the object. Phone us if you want to participate! We are in need of participants!



QUESTIONS? CONCERNS? COMMENTS?

We welcome your feedback! About the newsletter, a study you participated in... whatever you feel you would like to comment on!

Please call us at 519-767-5033 or email us at cdru@uoguelph.ca

The Influence of Peer Persuasion on the Risk Taking Decisions of School-Age Children

In this ongoing research project we are examining the impact on risk decisions of having a peer comment on a risky play activity. Past research has confirmed that friends can be persuasive and talk children into risk taking. However, we do not know whether peers can be persuasive to discourage children from engaging in risky activities. Children completed a video-based task in which they communicated their willingness to do risk and non-risk behaviours on the playground. After another unrelated task, they completed the video task again with audio of peers commenting negatively (discouragement) about the risk behaviours being shown. So far, results indicate that peer statements discouraging risk taking were highly effective in leading children to change their mind and avoid a risk behaviour they initially planned to do. Hence, developing programs in which children are exposed to peers' opinions discouraging risk taking may be quite effective to reduce children's risk of injury.



UPCOMING PROJECTS

Pedestrian Crossing Behaviour in Children – Virtual Reality

This exciting research project will be starting later this summer and will involve children between 7 and 12 years of age. We will be taking a virtual reality

approach and have children wear 3-D goggles so they experience simulated but highly realistic traffic conditions. Children will decide when they believe it is safe to cross the street based on the different traffic conditions presented to them. By examining when children 'would have gotten hit' we can identify traffic conditions they have difficulties with and then use the VR system to teach them how to cross more safely in these risky traffic conditions. Being hit by cars when crossing streets is a major cause of injury for school-age children, and we are the only team in Canada who is using this innovative approach to determine how to teach children to cross streets more carefully. If you are interested in participating in this research project please call or email us! We need participants!



Story Books To Teach Injury Prevention to Preschoolers

Young children are especially at risk of injury in their homes. It is imperative, therefore, that we develop effective ways to educate them about home hazards and injury risks! In this research project we are developing and testing if story books can effectively increase young children's safety knowledge and reduce risk behaviours at home. This new and exciting project will be starting up very shortly and will involve children between the ages of 4 and 6. If you are interested in participating in this research project please call or email us! We need participants!





FUN FACTS ON SAFETY!

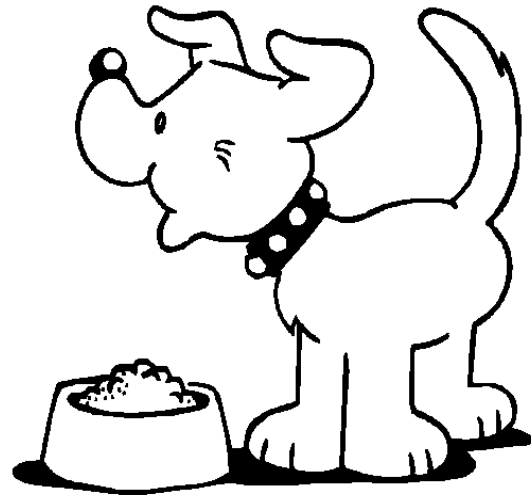
SAFETY WEBSITES

- Safe Kids Canada:
<http://www.safekidscanada.ca/safekidsCanada/>
- Health Canada: www.hc-sc.gc.ca/
- Traffic Injury Research Foundation:
www.trafficinjuryresearch.com
- Injury Prevention Across the Life Span:
<http://www.ipals.ca/>
- U.S. Customer Product Safety Commission:
<http://www.cpsc.gov/>
- Elmer the Safety Elephant:
www.elmer.ca

SAFETY GAMES

- Elmo's Fire Safety Game:
www.sesameworkshop.org
- Kid Safety:
www.cpsc.gov/kids/kidsafety/index.html
- USFA Kids:
www.usfa.dhs.gov/kids
- Life Safety Games:
www.firepals.org/KSN/games.htm
- Game Aquarium Safety Games:
www.gameaquarium.com/safety.htm
- Staying Alive:
<http://www.stayingalive.ca/index.html>

COLOUR ME!



WORD SEARCH

N	M	X	F	M	C	U	I	K
O	J	S	P	G	S	E	W	D
I	V	X	Y	K	Y	U	E	L
T	R	S	R	G	Y	C	R	R
U	E	E	U	F	T	S	I	Y
A	G	S	J	L	E	E	F	B
C	N	O	N	Z	F	R	Q	N
H	A	W	I	H	A	I	E	O
O	D	Q	C	B	S	H	T	H

Rescue Danger Injury
Safety Fire Caution

