

## **Ensuring the Physical Safety of the Client**

This section will include literature on factors related to exploration in children and risk taking in children.

**Morrongiello, B. A., & K, Major. (2002). Influence of safety gear on parental perceptions of injury risk and tolerance for children's risk taking *Inj Prev*, 8, 27-31.**

Objectives: Risk compensation theory has been shown to relate to how individuals behave in areas such as traffic safety and consumer product safety. The present study examines whether risk compensation theory applies to parents' judgments about school age children's permissible risk taking under non-safety gear and safety gear conditions for seven common play situations. The extent of the child's experience with the activity and parental beliefs about safety gear efficacy were examined as possible moderators of extent of children's risk taking allowed by parents. Method: A telephone interview was used to obtain each parent's ratings of permissible risk taking by their child (for example, speed at which child is allowed to cycle, height allowed to climb to on a climber) under safety gear and no gear conditions, and ratings of child experience and gear efficacy. Results: Results confirmed risk compensation operated under all seven play situations, resulting in parents reporting they would allow significantly greater risk taking by their children under safety gear than non-safety gear conditions. Children with more experience with the activities were to be allowed greater risk taking, even when not wearing safety gear. Parents who believed more strongly in the efficacy of the safety gear to prevent injuries showed greater risk compensation. No sex differences emerged in any analyses. Conclusion: Results highlight the need to communicate to parents that safety gear moderates injury risk but does not necessarily guarantee the prevention of injury, particularly if children are allowed greater risk taking when wearing safety gear.

**Morrongiello, B. A., Walpole, B., & Lasenby, J. (2007). Understanding children's injury-risk behavior: wearing safety gear can lead to increased risk taking. *Accid Anal Prev*, 39(3), 618-623.**

The present study examined whether school-age children show risk compensation and engage in greater risk taking when wearing safety gear compared to when not doing so when running an obstacle course containing hazards that could lead to physical injury. Because sensation seeking has been shown to influence risk taking, this child attribute was also assessed and related to risk compensation. Children 7-12 years of age were videotaped navigating the obstacle course twice, once wearing safety gear and once without safety gear, with reverse directions used to minimize possible practice effects. The time it took the child to run through the course and the number of reckless behaviors (e.g., falls, trips, bumping into things) that the child made while running the course were compared for the gear and no-gear conditions. Results indicated that children went more quickly and behaved more recklessly when wearing safety gear than when not wearing gear, providing evidence of risk compensation. Moreover, those high in sensation seeking showed greater risk compensation compared with other children. Implications for childhood injury prevention are discussed.

**Hillier, L. M., & Morrongiello, B. A. (1998). Age and gender differences in school-age children's appraisals of injury risk. *J Pediatr Psychol*, 23(4), 229-38.**

**OBJECTIVE:** To examine age and gender differences in children's perception of injury risk and to evaluate cognitive factors that relate to their appraisal of risk. **METHODS:** The participants were 120 children (6 to 10 years of age), who used a series of photographs, which depicted play activities that varied from no to high risk, to appraise injury risk. **RESULTS:** Children were able to distinguish varying degrees of injury risk. Boys rated risk as lower than girls, and 6-year-old children identified fewer risk factors and did so more slowly than 10-year-old children. For girls, perceived vulnerability to injury was the best predictor of injury risk ratings, whereas for boys it was judged severity of potential injury. **CONCLUSIONS:** Children's appraisal of risk and age and gender differences in related factors highlight important components for injury prevention programs.

**DiLillo, D., & Tremblay G. (2001). Maternal and child reports of behavioral compensation in response to safety equipment usage. *J Pediatr Psychol*, 26(3), 175-84.**

**OBJECTIVE:** To assess maternal and child risk compensation behaviors in response to several commonly used safety measures. **METHODS:** We administered a previously validated self-report measure of risk tolerance to a total of 151 mothers and their children in grades 3-7. Mothers indicated the level of risk they would permit their child to assume; children were questioned regarding the degree of physical risk they would typically assume while unsupervised by an adult. Participating families were randomly assigned to conditions in which safety equipment either was or was not present during assessments of risk tolerance. **RESULTS:** Mothers who viewed the stimulus materials depicting the use of safety precautions reported significantly higher levels of tolerance for risky behavior on the part of their children than did mothers who viewed identical materials without the safety precautions. No significant differences in estimated risk taking emerged between children in the two experimental conditions. **CONCLUSIONS:** These data may reveal a compensatory mechanism by which parents escalate their threshold for acceptable risk behavior in the presence of safety precautions for their children. Such tendencies have the potential to offset some of the protection provided by the use of safety equipment.

**Schwebe, I D. C., & Bounds, M. L. (2003). The role of parents and temperament on children's estimation of physical ability: links to unintentional injury prevention. *J Pediatr Psychol*, 28(7), 505-516.**

**OBJECTIVE:** Unintentional injuries, the leading cause of pediatric mortality, are caused by a complex set of intrapersonal and environmental factors. The role of three critical variables—parental supervision, children's temperament, and estimation of children's physical abilities—was examined. **METHODS:** Sixty-four 6- and 8-year-old children completed a laboratory experiment with a parent. Both children and parents judged the child's ability to complete

reaching, stepping, and crouching tasks. Parents also completed a parent-report measure of children's temperament. RESULTS: Both children and parents overestimated children's ability, although children did so more than parents. Parents of temperamentally impulsive and undercontrolled children judged that their children could complete tasks that were actually beyond the child's ability. Temperament also affected children's judgments while parents were known to be present or absent: Temperamentally impulsive and undercontrolled children were more accurate in their judgments when parents were standing next to them than when parents were hidden from view behind a one-way mirror. CONCLUSIONS: The mechanism by which parental supervision might protect children from injury appears to be at least twofold: (a) Parents overestimate children's ability less frequently than children themselves, suggesting supervising parents could intervene to prevent children from attempting dangerous activities; and (b) children judge their physical abilities more cautiously when parents are present. Implications for temperament theory and for injury prevention are discussed.

**Morrongiello B. A., & Heather Rennie, H. (1998). Why Do Boys Engage in More Risk Taking Than Girls? The Role of Attributions, Beliefs, and Risk Appraisals. *Journal of Pediatric Psychology*, 23(1), 33-43.**

Objective: Assessed for age and sex differences in school-age children's reporting of injury-risk behaviors, ratings of injury-risk in various play situations, attributions for injuries (self, other, bad luck), and beliefs about their vulnerability to injury in comparison to their peers (more, less, comparable vulnerability). Methods: We used a structured interview and drawings that depicted children showing wary or confident facial expressions when engaged in injury-risk play activities. Results: Children's reported risk taking could be predicted from their risk appraisals, beliefs about the likelihood of injury, and attributions of injuries to bad luck, and these factors resulted in 80% correct assignment of cases by sex in a discriminant analysis. The wary affect display resulted in higher injury-risk ratings than the confident display, with this effect being greater for girls than boys. Conclusions: Cognitive-based factors differentiate boys from girls and contribute to sex differences in children's injury-risk behaviors.

**Morrongiello, B. A., & Shawn Matheis, S. Addressing the Issue of Falls off Playground Equipment: An Empirically-Based Intervention to Reduce Fall-Risk Behaviors on Playgrounds. *Journal of Pediatric psychology*,**

**Objective:** The present study evaluated the impact of an intervention to reduce fall-risk behaviors on playgrounds among children 6–11 years of age.  
**Methods** Children completed posters indicating risky playground behaviors they would and would not do. In the intervention group, video and audio presentations were used to expose children to injury occurrences so that injury vulnerability was communicated in a fear-evoking way. In the control group, children only completed the pre- and post-intervention measures.  
**Results** Significant decreases in intentions to risk-take were obtained in the intervention, but not the control group. Effectiveness did not vary with children's age or sex, but was greater for those scoring high in sensation-seeking.  
**Conclusions** A fear-appeals approach proved successful to reduce intended fall-risk behaviors, particularly for children high in sensation-seeking whose risk-taking is motivated by affect arousal.

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Also see <http://www.journal.naeyc.org/btj/200505/06Resources.asp>