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HHMI Proposal – Summer 2013

The proposed project stems directly from my program of research on injuries and injury risk. More specifically, I am proposing an empirical project that will test questions that I raise in a theoretical/review paper that is currently under review (Karazsia & Brown Kirschman, Under Review). Although injuries are considered preventable (Sleet et al., 2004), they are the leading cause of death to children in most industrial countries (Baker et al., 1992; National Safety Council, 2004). At present, methods of assessing pediatric injury risk are limited and overlap substantially with methods for assessing more general pediatric behavior problems (e.g., Karazsia & Brown Kirschman, Under Review).

In my recent research, I have argued that clinical interventions to treat and prevent behavior problems in children may simultaneously prevent pediatric unintentional injuries (i.e., more effect parental discipline strategies may lead to the child behaving in a more safe manner; Karazsia, Guilfoyle, & Wildman, 2012). The next step in this line of research is to refine assessment methods to answer the following questions:

- Do injury risk behaviors (as assessed with a widely used measure such as the "Injury Behavior Checklist") represent a unique construct, or do they overlap substantially with more general behavior problems (as assessed with a widely used measure such as the "Child Behavior Checklist").
- Are there general parenting behaviors that predict both injury risk behaviors and general behavioral problems (such as "effective parental monitoring"), or must parenting behaviors be assessed in manners more specific to risk factors for pediatric injuries ("injury-specific supervision strategies").

To answer these questions, I am proposing a study in which we will collect and analyze original data from parents and their children during the summer of 2013. The research assistant will assist me in leveraging an online data collection mechanism to recruit parents of young children into the study. Parents will be asked to report on general and injury-risk specific dimensions of parenting and child behavior. In addition to gaining experience collecting data on the intended population, the assistant will learn advanced statistical analyses (factor analysis, hierarchical regression, structural equation modeling) as we examine the aforementioned hypotheses.

Outcomes from this study will have direct implications for injury prevention efforts. For example, if we demonstrate that dimensions of parenting and child behavior are unique to injury prevention, then community-based interventions may need to include specific injury prevention components to prevent injuries (i.e., training in safety behaviors and injury specific supervision). Conversely, if we demonstrate substantial overlap between general and injury-specific constructs, then it may be more efficient to target general dimensions of parenting and child behavior to prevent pediatric injuries (e.g., Prinz et al., 2009).