

Reviewer Comments:

Reviewer #1: Manuscript Number: NRES-D 08-00191

Title: Changes in Childhood Risk Taking and Safety Behavior After a Peer Group Media Intervention

This manuscript presents the results of a prospective, randomized, 4-year longitudinal study to test a peer-group intervention aimed at decreasing physical risk-taking behaviors by influencing children's media behaviors, understanding, and choices. Few studies exist that explore these issues in a school-age population, when these behaviors may be more amenable to change. Specifically, this experimental study utilized a repeated-measures design to compare the effects of a behaviorally-based intervention on 122 White and Latino children (ages 8 and 9). Subjects were randomly assigned to an intervention group or wait-list group; the intervention group participated in four two-hour segments focused on thematic concepts of choices, media, personal risk taking, and peer group risk taking. Partial correlation coefficients were computed to examine variables related to risk taking and safety behaviors. Stepwise regressions were used to examine factors that contributed to children's safety and risk-taking behaviors. Linear mixed-effects models were used to examine the rate of change between groups at baseline, 1, 3, and 6 months after intervention. Major findings were that participants increased their safety behaviors, but risk-taking behaviors remained unchanged. Families in the intervention group increased their consistent use of media rules, yet decreased their use of media alternatives. The results of this study contribute to nursing involvement in injury science by fostering a child and family approach for primary and community settings. The following comments summarize this reviewer's impressions of the strengths of this manuscript, as well as a few areas that may warrant clarification/expansion.

Problem Statement: Morbidity and mortality related to childhood unintentional injury serves as a foundation for this work. The author(s) make a convincing argument for advancing nursing science within this realm, as according to the author(s), little existing nursing research has been devoted to this phenomenon. Author(s) then effectively link children's media consumption to risk-taking behavior and injury potential. The justification for this study is further strengthened by the author(s)' assertion that existing research fails to address the antecedents of risk-taking behavior, and instead, focuses on remediation of poor choices. As purported by the author(s), examining risk taking and safety behaviors in a younger school aged population would contribute to the body of nursing knowledge and would provide opportunities for nurses to intervene before risk-taking behaviors are firmly rooted. Overall, the author(s) build an excellent case for this study, and provide the background, justification, and significance to support it. The topic is relevant to nursing and other health professionals, and has the potential to impact risk-taking behavior and injury potential in school-aged children.

Literature review: The literature represents theoretical and empirical research with publication dates ranging from 1984 to 2008. Extant research is used to support the need for this study, and is contemporary in nature. In the Discussion section, author(s) do an excellent job of relating their findings back to extant research. They include studies whose findings are congruent with the findings of this study, and also include studies in which the findings were dissimilar. The author(s) provided rationale when findings diverged.

Theoretical Framework: The Interaction Model of Client Health Behavior (IMCHB) served as the theoretical basis for this study, and appears to be an appropriate/relevant selection. Theoretical concepts, inter-relationships, and outcomes are clearly explicated, and are further enhanced with visual presentation (Figure 1). While the author(s) do an adequate job of relating the connection of this theory to the study, they excel in their discussion (at the conclusion of the study) in identifying how the model "fit" with their findings and the findings of other studies. They offer sound explanation for divergent findings. Lastly, the author(s) recommend further refinement and testing of the IMCHD model in pediatric nursing research, and give specific strategies for modification.

Research Design: This is a prospective, randomized, 4-year longitudinal study. According to the author(s), this study "is the first to use a longitudinal design and repeated measures in children" [in studying these particular concepts]. As recognized by the author(s), this may have had some implications in the operationalization of some of the variables, in that measures may not have been sensitive to developmental change over time. The research design selection was appropriate for the purpose of the study, since it allowed for examination of group differences (intervention vs. control) and changes over time.

Data collection and analysis: Human subject protection was obtained. Details on the recruitment process were scanty, with no discussion on how randomization was achieved. Not clear about the statement p. 5, line 13 "groups were balanced in distribution by gender and ethnicity"---does this mean that the balanced distribution was achieved through randomization or that the researchers actively sought to balance the two groups? T-tests showed no pre-intervention differences between experimental and control groups in terms of demographic characteristics and major study variables. Interesting use of "interactive game on laptop with software designed for the study" (p. 6, lines 8 & 9) to collect the child's self-reported data--- but then how did this data make it into the hands of the researcher and how was it protected? Did data collection take place on-site, or were laptops provided to the children for home use---which seems like it could have impacted study variables. In terms of delivery of the intervention, was there some means to assure consistency in delivery among the various "research team nurse or health counselor" (p. 6, line 18) at the 16 sites? Any rationale for the selection of the data collection points of 1 month, 3 month, and 6 months? In regard to the participants, p. 5 line 14 and 15 states " all children completed

the baseline assessment and the three follow-up assessments"----was this true for the parents as well? Data analysis was appropriate for the purpose of the study and the data collected. Results were presented clearly, and the narrative portion was enhanced by the use of tables/charts. The data analysis steps are outlined in a logical and sequential manner.

Style of presentation: The style of presentation is organized and intuitive. The headings and subheadings provide structure and logical flow. There were minimal (if any) APA errors, verb-tense disagreements and grammatical errors to distract from the manuscript.

Organization: Logical, flows well. Tables and graphs enhance the narrative portion. Personally, I would have enjoyed a little more elaboration on the actual intervention.

Reviewer #2: This is an important study. The findings raise questions for further research. Instruction increases safety but doesn't change risky behavior. Ideally we would want to change the risky behavior, so the next step seems to be investigation of reasons for the lack of change.

The longitudinal design increased the importance of the findings. Congratulations on not losing any of the participants.

Findings from this study suggest that interventions influencing children's media experiences help prevent health-compromising behaviors and that strategies aiding parents in finding media alternatives are relevant to explore. If increased TV watching is associated with increased risk taking and parental beliefs of TV have no effect, then your conclusions seem logical. Parents need the attention.

Your report says there were no differences in risk taking over time (p12 line 1 and 2) so how do you support the conclusion above? Do you plan to work on the tool issues?

Again "self- determined health judgment decreased significantly in the 6 months" also contradicts your conclusion. It would be nice to see your thinking along these lines.

The problems with measuring seem even more important than your limited findings. Thanks for the labor

CHECKLIST FOR STYLE --

TABLES -- Define all abbreviations used in table(s) 2 and 4 in a note below each table. Also, use landscape formatting for tables.