Journal Article Review #30

Introduction

Due to the high rate of traffic accident deaths among young people in the United States, recent studies (Beck, Mack, Shults, 2004; Franks, Machala, Goodale & Gerberding, 2000; Wilkins, 2000) have focused on seat belt safety, and programs that support wearing seat belts as a way of reducing these fatalities.

The Stay Alive From Education (SAFE) Program is one such program that was evaluated to determine if its method (a 3-phased presentation) was effective in modifying the behavior of students who participate in irresponsible driving behaviors such as not wearing a seat belt and/or not driving “drug/alcohol” free (Wilkins, 2000). The following is a review of this summative evaluation.

Research Design

This descriptive, longitudinal study was quantitative, and sought to examine the change in stated behavioral changes from one point in time to another. Specifically, the researchers collected data from students upon arrival for the SAFE Program and then again 30 days after the SAFE Program was presented.

The design of this particular study of the SAFE Program was not as effective as it could have been. There was no formal hypothesis formed, although it was possible to do so. The threats to the internal validity of this study include: population validity, testing, differential selection, and maturation. In the case of population validity, the researchers measured only students who had completed the program. This seemingly exaggerates the effectiveness of the program. With testing, there was the possibility that because the time between pre- and posttest was so brief that they already anticipated the questions and
knew inherently that they were *supposed* to score higher. Differential selection was a concern because the researchers selected two high school classes based solely on the convenience of the SAFE presenters. An additional point of concern was maturation. The fact that the participants were from only two high school classes increased the chances that they may have experienced an emotional experience (e.g. classmate being injured or dying in a car accident), that may have made participants more willing to *engage* with the SAFE Program.

**Sampling**

The population studied consisted of 60 students that were regular attendees of two high school classes. It was not mentioned if these two classes were in the same high school, or what the particular classes were. As mentioned before, they were chosen for the convenience of the SAFE presenters. While the participation rate was 100%, the method of sampling and the size of the sample seemed inadequate.

**Measures**

Self-administered surveys were used to obtain quantitative data regarding the students’ stated behaviors. The questionnaire consisted of 6 questions pre-program. 30 days after the program, the questionnaire was administered with the identical 6 questions and one additional open-ended question. The authors did not discuss the validity of the instrument or how it was selected.

**Data Analysis Procedures**

The 6-question surveys were given to the 60 participants prior to their attendance of the SAFE Program. The same 6 questions were asked of the same participants on the post program survey and included an additional open-ended question. All questionnaires
were filled out anonymously, however, demographics such as the participant’s date and
birth, sex and race/ethnicity were asked in order to match the pre-program surveys and
post-program surveys.

Findings

SAFE participants reported a higher level of seat belt usage in the front and rear
seats on the post-program survey. Significant statistical differences were also found under
other questions that dealt with observation behaviors. The study findings were discussed
clearly.

While the results seem to support that attending the SAFE Program helps to
modify risky driving behaviors, there may have been unseen confounding variables, (i.e.
supportive/involved parents, discussion groups, or classroom assignments, etc.) outside
the scope of the study that may have helped to make the difference in pre- and post-
survey results.

The researcher could have decided on a causal-comparative design and may have
hypothesized that there would be an improvement in stated driving behaviors of
randomly assigned participants who attended the SAFE Program (treatment group) versus
those who had not attended (control group). This could have been conducted
longitudinally also.

Another option was to give 5 different groups (3 would have attended one
particular phase, the other would attend the whole program, and one would not attend the
SAFE Program), using the same pre and post-test and compare the results of the
participants that attended one particular phase of the training compared to participants
who attended the whole program, or those who did not have the intervention.
The combination of the following facts could be construed as a form of experimenter bias: the group was chosen as a matter of convenience, the study was conducted by someone associated with the program, and there was no evaluation/comparison of different groups,

There are several limitations to the generalizability of the findings. (1) The sample size seemed much too small to extrapolate the results to a larger population. Perhaps in further studies of the SAFE Program the sample size could be expanded to include participants from several high schools. (2) There was no control group to compare their results to that of the participants in the study who attended the SAFE Program. No comparison could be made. (3) Another shortcoming was that based on findings, we cannot generalize regarding the long-term effects of attending the program. A recommendation would be to have the longitudinal study include more points of time in the measurement.

_Ethical and Human Subjects Review_

The study did not pose any threats to the participants. The demographic information was used only as a means to match the pre-survey results to that of the post-survey results. Although the study states that it was unnecessary to gain parental consent to distribute the questionnaires, it is advisable to do so.

I don’t consider this a good study for many of the reasons noted previously. I would also advise that the paper be revised to include the following: how the evaluating tool was designed, chosen, and/or validated, the impetus for the study (i.e. stakeholders requested for budgetary concerns or complaints about the effectiveness of the program, etc.), and the identity/function of the evaluators.
References

