



The effects of a traffic safety program on high school students' traffic safety behaviors and attitudes: A case from Norway

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Introduction

Young people are more prone to traffic accidents and thus are the target group of different traffic safety interventions. MIND center¹ in Bodø, Norway is a traffic safety center that aims to increase traffic safety awareness among young people by providing a traffic safety program. The present study was conducted by Nord University, in collaboration with the MIND center, by doing surveys with high school students who visited the MIND center to go through the traffic safety program. The main aims of the study were: 1) to examine the short-term and long-term effects of the traffic safety program on the student's traffic behaviors, attitudes, and risk judgments 2) to examine the differences in the students' traffic safety behaviors and attitudes across different topics (speeding, drinking and driving, seat belt use, distracted driving).

Research Methodology

A total of 101 high school students who visited the MIND center in 2019 participated in the study. The age mean was 17.3, and most (63%) were female. The students were coming from different high schools in different regions of Norway. A paper-based questionnaire was used to collect data from the students at three different time points. The first measurement was done when the students arrived at the MIND center, just before going through the program. The second one was done just after the program, and the third measurement was done after approximately 8 weeks at their schools with guidance from their teachers. The questionnaire included items related to traffic behaviors and attitudes in four different scenarios, which were speeding, drinking and driving, seat belt use, and distracted driving. Each part included a question asking about the probability of exhibiting that specific behavior in each scenario and items measuring attitudes towards that specific behavior. The same items were repeated for three different occasions, which were driving alone, driving with friends, and being a passenger in a car driven by another friend. In addition, there were items measuring risk perception and willingness to take risks related to different behaviors. Independent samples t-tests and repeated measures of ANOVA were used to analyze the data.

¹ <https://bodo.kommune.no/bratten-aktivitetspark/mind-senteret/>



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Results

Overall, the results indicate that going through the traffic safety program had a positive influence on changing the students' traffic behaviors, attitudes, perceived risk, and risk willingness more safely. For most of the measured variables, the biggest difference was observed between time 1 and 2, which means that the program had a stronger short-term effect on students' behaviors, attitudes, and risk judgments. On the other hand, the influence of the program tends to decrease slightly from time 2 to 3, while mostly the difference between time 1 and 3 is still significant. Thus, it seems that the program has a positive influence on students' traffic behaviors, attitudes, perceived risk, and risk willingness both in the short-term and long-term, while the short-term effect is stronger than the long-term effect. The results showed that the students reported relatively safe behavior and attitudes regarding drinking and driving and seat belt use; however, speeding and distracted driving appeared as the biggest risky behaviors that need to be focused on. Also, compared to female students, male students reported overall more unsafe traffic behaviors and attitudes, and higher willingness to take risks.

Discussion and conclusions

The study's overall findings indicate that the ongoing traffic safety program at the MIND center is successful at raising awareness about traffic safety among high-school students. Thus, the present findings are in line with some of the earlier studies showing the effectiveness of traffic safety programs for improving traffic safety among road users. There is especially a need for increasing safety awareness regarding speeding and distracted driving, which are two common traffic safety risks among young people. Although the present study examined the short-term and long-term effects of the program on traffic safety attitudes and risk judgments of the students, there is a need for follow-up studies to examine the effects of the program over a longer period.