

AN EVALUATION OF THE EFFECTIVENESS OF TELEVISED,<sup>27</sup>  
LOCALLY ORIENTED DRIVER RE-EDUCATION

by

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Television, with its ability to reach large audiences, has been used extensively in driver education efforts, but its effectiveness has never been measured.

The purpose of this research was to measure the effectiveness of a televised, locally orientated, "candid camera" type of driver re-education program. The measures of effectiveness include a study of changes in driver errors at eight local intersections and an analysis of changes in accident involvement rate for 48 local intersections.

The televised program, entitled "Traffic Madness," consisted of an 18-month series of two to three minute locally oriented traffic safety films, produced by research project staff. These showed local drivers in the process of making errors at both rural and urban locations throughout Lexington-Fayette County, Kentucky. In sequence with each type of driver error shown, the corresponding correct driving procedure was illustrated.

The televised films were effective in reducing driver errors and accidents. Statistically significant reductions of 17.4 percent ( $p < 0.01$ ) in driver errors per 1000 vehicles and 12.5 percent ( $p < 0.01$ ) in total accidents were achieved.

The magnitude of driver error change varied considerably with the eleven types of driver errors according to 1) the amount and type of television coverage of each error, 2) the extent to which local intersection conditions encouraged driver habit adjustments related to each error, and 3) the amount of exposure of various segments of the driver population to the televised films.

In consideration of the traffic safety potential of this driver re-education technique, it should be adopted in every major urban area in this country as rapidly as available resources will permit.

The annual cost of operation of this program in 5000 cities across the nation would be less than 150 million dollars. This is considerably less than the costs involved in many of the questionably effective current approaches to driver education.\* Negotiations are now under way with the National Transportation Safety Bureau for a simultaneous trial implementation of this program in three or four Kentucky cities.

\*Tarrant, W. E., *Myths and Misconceptions in Traffic Safety*, Highway Research News No. 31, Highway Research Board, 1968.

\*McGuire, F. L. and Kersh, R. C., *An Experimental Evaluation of Driver Education* (1968 Metropolitan Life Award of Honor for Research in Accident Prevention), *Traffic Safety Research Review*, Vol 12, December 1968.



Figure 40. Automobile-Mounted Aiming Device and Remotely Controlled 16 mm Camera Used in Filming Driver Errors for Use in the Televised "Traffic Madness" Driver Re-education Program

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Type of Erratic  
Movement

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Lane Hopping

Run Red Light

Run Yellow Light

Letting Pedestrians in/out

Turn Signal Violations

Conversing with Occupants  
of Other Cars

Turning from improper lane

Straight from turn lane

Poor Mechanical Condition

Turn into improper lane

Over Stop Line

Totals

Figure 41. Driver Errors Emphasized in the Televised Films

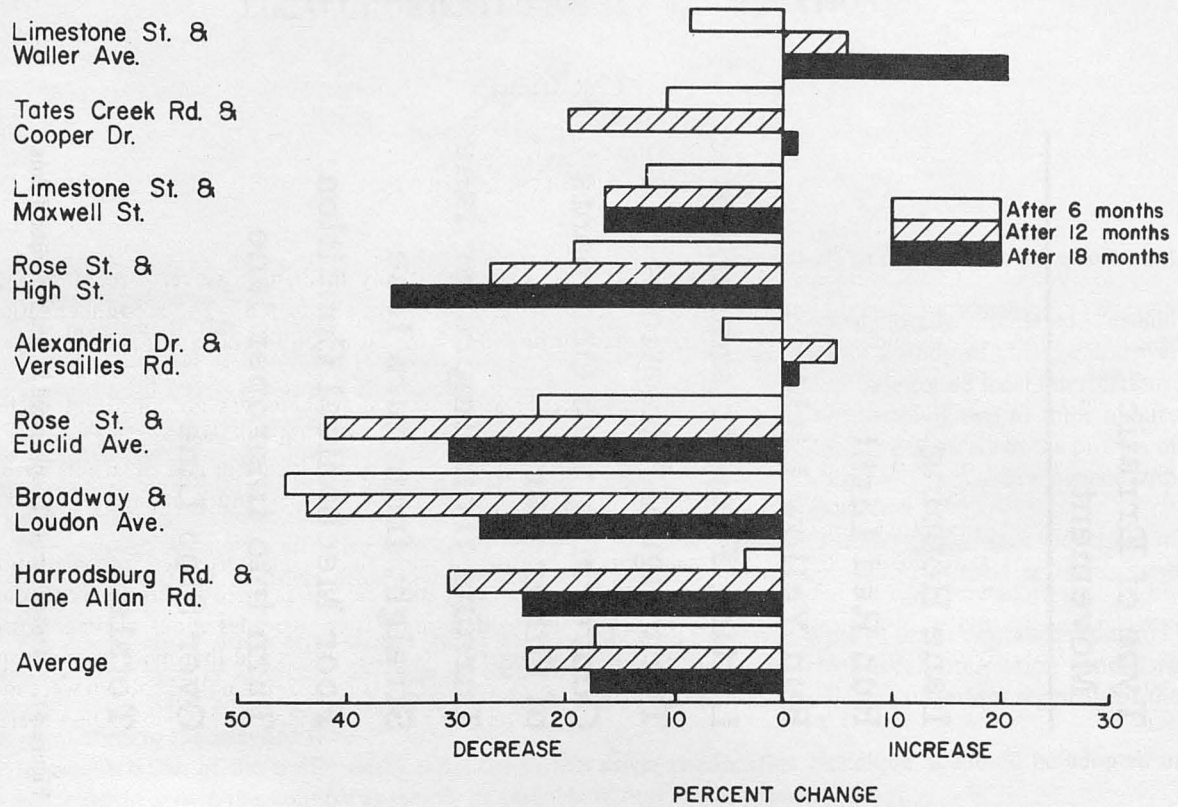


Figure 42. Effect of the Televised Films on the Number of Driver Errors Per 1000 Vehicles at Each of Eight Sample Intersections in Lexington, Kentucky

MEASURE	BEFORE (Nov. '65-Apr. '66)	AFTER (Nov. '67-Apr. '68)	DIFFERENCE (percent)	STATISTICAL SIGNIFICANCE
Total Accidents	489	428*	-12.5	yes (p<0.01) (Poisson)
Accidents per 10 <sup>6</sup> Vehicles	115	100	-13.0	no (p=0.09) (Poisson)
	BEFORE (Oct. & Nov. '66)	AFTER (April '68)		
Driver Errors per 1000 Vehicles	310	256	-17.4	yes (p<0.01) (Chi Square)

\*Adjusted for volume changes<sup>(3)</sup>

Figure 43. Effect of the Program on Accidents and Driver Errors in the Lexington-Fayette County Area