"Shotgun!"

by

Aaron T. Copeland, David J. Greiner, Brian D. McGregor, Laura W. Woodward and Paul M. Sommers

June, 2002

MIDDLEBURY COLLEGE ECONOMICS DISCUSSION PAPER NO. 02-25



DEPARTMENT OF ECONOMICS MIDDLEBURY COLLEGE MIDDLEBURY, VERMONT 05753

 $http://www.middlebury.edu/\sim\!econ$

"Shotgun!"

by

Aaron T. Copeland David J. Greiner Brian D. McGregor Laura W. Woodward Paul M. Sommers

Department of Economics Middlebury College Middlebury, Vermont 05753

"Shotgun!"

Aaron T. Copeland David J. Greiner Brian D. McGregor Laura W. Woodward Paul M. Sommers

"She's got a ticket to ride, but she don't care." John Lennon and Paul McCartney, 1965

Among young adults, "Shotgun" is the ritual of riding in the front (and hence most coveted) passenger seat of an automobile. Who gets to ride shotgun depends on a list of simple rules. (For a complete list of official shotgun rules, see www.theshotgunrules.com.)

But, do the rules by which people play "Shotgun" depend on the gender of the passengers or even where in the United States these riders are from? To answer this question, we surveyed 131 Middlebury College men and women who were familiar with this game, 52 (79) of whom live in states east (west) of the Mississippi River. All respondents were asked to choose one of the following three options that best describes the rule by which they and their friends back home play: (i) you must say the word "Shotgun" inside a building² as you are getting ready to leave to ride in the automobile (henceforth, Rule 1)³; (ii) you must be outside to call "Shotgun" (Rule 2); or (iii) you must be outside and see the car before calling "Shotgun", the so-called "Line-of-Sight Rule" (Rule 3). Students

were also asked their class and whether or not they were graduated from a public or private high school.

The results of one tabulation are summarized in the following contingency table:

	Rule of Choice		
	1	2	3
Home			
West	16	19	17
East	14	22	43

The chi-square technique is the one most frequently used to test the null hypothesis that there is no association, or in this example, that the proportion of students living in eastern (western) states who favor one rule is the same as the proportion of students living in the same region who favor any other rule. The overall χ^2 value in this case is 6.323, which is significant at better than the 0.05 level (p = .042). Examination of the cell-by-cell contributions to the calculated χ^2 value shows that the largest contribution, 1.951, comes from the "West" "Rule 3" cell. The observed count is 17, but the expected count if the null hypothesis were true is 23.82. Far fewer students living west of the Mississippi River than expected play by the "Line-of-Sight Rule", a rule favored more heavily by students living in eastern states. When these data are disaggregated by sex of the respondent, we discover that the regional difference is much stronger among males [men (n = 82), p = .013; women (n = 49), p = .948]. No other associations could be found between shotgun rules and some other student characteristic, neither by type of high school (p = .83) nor by class (p = .11).

CONCLUSION

Being forced to squeeze into the back seat of a car is not nearly as desirable as sitting in the front passenger seat with its advantages of a reachable dashboard and additional legroom. Survey results suggest that young adults in different parts of the country play "Shotgun" by different rules. Easterners and, principally men, prefer calling "Shotgun" only outside when the car is within sight. Interested readers are invited to investigate other "auto" correlations.

Notes

- 1. Riding "Shotgun" conjures up nineteenth century images of someone armed with a shotgun sitting next to the driver of a covered wagon.
- 2. You must say the word loud enough so that at least one other rider in your group can hear you.
- 3. Aficionados insist on a well-defined time frame before one can call "Shotgun". In particular, "Shotgun" may only be called when the next group activity is a ride in the automobile, that is, only after "the deed is done" (i.e., the activity that immediately precedes the car ride).