

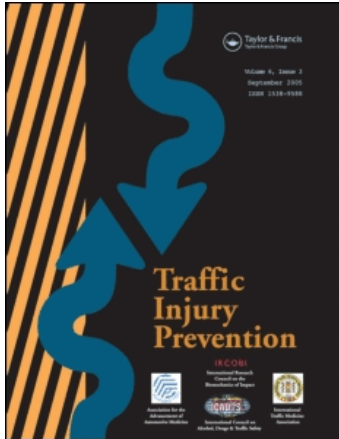
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## Driving Citations: Relationships With Criminal Behavior

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# Driving Citations: Relationships With Criminal Behavior

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*Objective:* The purpose of the present study was to examine relationships, if any, between the number of lifetime driving citations and the number of lifetime criminal charges.

*Methods:* Using a cross-sectional, consecutive sample of internal medicine outpatients and a self-report survey methodology, we queried participants about the number of past driving citations as well as charges for any of 27 criminal behaviors as delineated by the crime cataloguing schema of the Federal Bureau of Investigation.

*Results:* Scores on the measure of driving citations were positively correlated with scores on the measure of different forms of illegal behavior ( $r = .39, p < .001$ ). Additional analyses indicated that the relationship between driving citations and illegal behaviors did not vary by sex.

*Conclusions:* Though the receipt of driving citations is fairly common, an increasing number of driving citations demonstrates a relationship with criminal behavior. This relationship may be mediated by a number of psychological variables, including various Axis I and II disorders.

**Keywords** Criminal behavior; Driving citations; Illegal behavior; Traffic violations

## INTRODUCTION

According to data collected by the National Highway Traffic Safety Administration (NHTSA 2002), speeding is a “pervasive behavior” in the United States. In support of this conclusion, in a 2002 survey, the NHTSA found that more than 70 percent of respondents reported speeding in the past month. In addition, a number of respondents in this survey endorsed other risky driving behaviors at least “sometimes” or “often,” such as entering an intersection as the light turns from yellow to red (40%), slowing down but not stopping completely at a stop sign (30%), making illegal U-turns (7%), driving drunk (4%), running red lights (4%), and crossing railroad tracks when the light is flashing (3%). All of the preceding behaviors were more common in men compared with women. The conclusion appears to be that violating traffic laws is relatively common in the United States, particularly among males.

The violation of traffic laws can clearly contribute to fatalities due to traffic accidents. For example, Sivak et al. (2007) found that among fatally injured drivers, 54 percent did not use

seat belts, 30 percent were intoxicated, and 29 percent were speeding—all illegal behaviors.

In terms of the actual scope of traffic citations, the State of Florida, for example, reported approximately 4.4 million in the year 2004 (Division of Motor Vehicles Florida 2004). Florida’s population in 2004 was 17.4 million (Fact Monster 2010), suggesting that about 25 percent of the state population was cited for traffic violations in that year. (In all likelihood, a smaller percentage of drivers was cited for multiple offenses and a percentage of drivers may also have been from other states.) These data were collected from county courts and law enforcement agencies and reinforce the impression that traffic violations are relatively common.

Given that traffic violations, and in particular speeding tickets, are relatively common, Lawpoolsri and Braver (2007) examined a cohort of Maryland drivers to determine whether the receipt of a speeding ticket deterred speeding during the subsequent 12 months. At 1-year follow-up, drivers who received a speeding ticket were twice as likely to have received a second citation. The authors concluded that traffic citations may not deter future violations. Furthermore, findings suggest that certain drivers or driver characteristics heighten the risk for traffic violations.

From a psychological perspective, many types of traffic offenses (eg, speeding, running red lights) suggest the possibility

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of temperamental impulsivity as well as character pathology (eg, antisocial personality, borderline personality) in the driver. The focus of the present study was to further examine these associations by exploring whether traffic offenses are related to broader forms of problematic behavior, such as criminal behavior. In our review of the literature, we were unable to find a single empirical study that has examined this relationship. In a clinical population of primary care patients, we examined the relationship between traffic offenses and criminal behavior and speculated that such a relationship would exist and be more evident in males.

## METHODS

### Participants

Participants were males and females, ages 18 years or older, being seen at an outpatient internal medicine clinic for non-emergent medical care. The outpatient clinic, which is staffed predominantly by residents in the department of internal medicine, is located in a mid-sized, Midwestern US city. We excluded individuals with compromising medical (eg, pain), intellectual (eg, mental retardation), cognitive (eg, dementia), or psychiatric symptoms (eg, psychotic)—symptoms that would preclude the candidate's ability to successfully complete a survey.

At the outset, 471 individuals were approached and 417 agreed to participate, for a participation rate of 88.5 percent. Of these, 352 completed all relevant study measures. These 352 respondents consisted of 123 males and 229 females who ranged in age from 19 to 97 years ( $M = 50.07$ ,  $SD = 15.39$ ). Most respondents (88.6%) were White, followed by African American (7.1%), Other (2.3%), Hispanic (1.1%), and Asian (0.8%). With regard to highest level of educational attainment, all but 5.7 percent of respondents reported having at least attained a high school diploma, with 15.2 percent of the sample attaining a bachelor's degree and 14.0 percent earning a graduate or professional degree.

### Procedure

During clinic hours, one of the authors (C.L.) positioned herself in the lobby of the outpatient internal medicine clinic, approached incoming patients, and informally assessed exclusion criteria. With potential candidates, she reviewed the focus of the project and invited each to complete a 5-page survey. Participants were then asked to place completed surveys into sealed envelopes and into a collection box in the lobby.

The survey consisted of 3 sections. In the first section of the survey, we queried participants about their demographic information (ie, sex, age, marital status, racial/ethnic origin, and educational level).

In the second section of the survey, we queried participants about their lifetime histories of driving citations (ie, "How many driving citations, not convictions, have you had in your lifetime?"). Response choices included numerals 0 through 10 and an additional choice of 10+.

In the third section of the survey, we queried participants about their histories of illegal behaviors ("Have you ever been

charged with, not necessarily convicted of, any of the following crimes?") using a 27-item, yes/no, author-developed inventory that is based upon the crime-cataloguing schema delineated by the Federal Bureau of Investigation (2010). Examples of specific items include aggravated assault, arson, simple assault, burglary, and disorderly conduct. Most items were followed by a brief definition. Importantly, this schema does *not* include routine traffic offenses.

The elements of informed consent were provided on the cover page of the booklet. Participants were informed on the cover page that completion of the survey functioned as their informed consent for participation. This project was approved by the institutional review boards of the affiliated community hospital and the university.

## RESULTS

### Driving Citations

On the measure of driving citations, the most common number of endorsements were 1 (25.9%), 0 (17.3%), 2 (15.6%), and 3 (13.6%), with 94.3 percent of respondents indicating 7 citations or fewer. Because only 19 (5.7%) respondents endorsed having received 8 or more driving citations, there was the possibility that these few relatively extreme respondents might have an undue influence on the results of subsequent analyses. To correct for this possibility, scores on the measure of driving citations were truncated at 8 (for those 19 respondents who endorsed 8 or more citations). Scores on the resulting measure of driving citations ranged from 0 to 8 ( $M = 2.54$ ,  $SD = 2.27$ ). Men reported a greater number of driving citations ( $M = 3.32$ ,  $SD = 2.50$ ) than did women ( $M = 2.13$ ,  $SD = 2.02$ ),  $F(1,350) = 23.43$ ,  $p < .001$ .

### Illegal Behaviors

Of the 27 listed illegal behaviors, the number endorsed by each respondent ranged from 0 to 13 ( $M = 0.57$ ,  $SD = 1.63$ ), with most participants (77.8%) reporting 0 of the listed behaviors. Because only 6 respondents endorsed 7 or more illegal behaviors, there was the possibility that these few relatively extreme respondents might have an undue influence on the results of subsequent analyses. To correct for this possibility, scores on the measure of illegal behaviors were truncated at 7 (for those 6 respondents who endorsed 7 or more behaviors). Scores on the resulting measure of illegal behavior ranged from 0 to 7 ( $M = 0.54$ ,  $SD = 1.35$ ). Men reported a greater number of different criminal behaviors ( $M = 0.88$ ,  $SD = 1.71$ ) than did women ( $M = 0.36$ ,  $SD = 1.07$ ),  $F(1,350) = 12.05$ ,  $p < .001$ .

### Relationships Between Driving Citations and Illegal Behaviors

Scores on the measure of driving citations were positively correlated with scores on the measure of different forms of illegal behavior ( $r = .39$ ,  $p < .001$ ). We then investigated whether respondent sex demonstrated a statistical interaction with driving citations in the prediction of number of different forms of illegal behavior. Accordingly, we performed a multiple regression analysis in which the number of driving citations, sex, and the Sex  $\times$

Citations interaction term were entered simultaneously in the prediction of illegal behaviors. The resulting regression equation was statistically significant,  $R = 0.40$ ,  $F(3,348) = 21.75$ ,  $p < .001$ . However, only the number of driving citations was a uniquely significant predictor,  $\beta = 0.40$ ,  $t = 5.21$ ,  $p < .001$ ; sex,  $\beta = -.06$ ,  $t = -0.74$ ,  $p < .47$ , and the statistical interaction term,  $\beta = -.05$ ,  $t = -0.56$ ,  $p < .58$ , were not.

## DISCUSSION

In this study, we found that the number of driving citations was related to the number of reported different illegal behaviors. Although men reported greater numbers of both driving citations and illegal behaviors compared to women, the relationship between driving citations and illegal behaviors did not vary by sex—an unexpected finding. Specifically, if men have more driving citations and if men report more illegal behaviors, it seems logical that the 2 variables would then predict for male gender. This assumption was further reinforced by the overrepresentation of men with regard to criminal behavior (eg, the traditional prison personality, antisocial personality) and in jail populations. Given the lack of gender differences, for clinicians, these findings suggest that in the clinical presence of multiple driving offenses, criminal behaviors and associated psychiatric diagnoses need to be explored.

The finding that driving citations are related to criminal behavior is presaged by a number of earlier studies in the area of traffic accidents and violence. For example, as early as 1960, Porterfield reported correlations between death by motor vehicle accidents and suicide/homicide rates. In 1971, Whitlock described traffic accidents as an expression of wider social violence. In 1983, Sivak found empirical relationships between traffic accidents and societal violence and aggression. All findings indicate relationships between traffic accidents and violence.

As we previously indicated, there may be a number of possible psychological explanations for this relationship, and these may be interrelated. For example, temperamental impulsivity may partially explain the association between driving citations and illegal behaviors, particularly in the context of developmental or social immaturity. In addition, various Axis I psychiatric disorders (ie, major psychiatric disorders) may contribute to this relationship, particularly attention deficit/hyperactivity disorder

and alcohol/drug misuse disorders. Importantly, various Axis II psychiatric disorders (ie, personality disorders) may also be influencing this relationship, particularly the Cluster B disorders, such as antisocial and borderline personality disorders. These preceding factors are not exclusive of each other and clearly represent areas that warrant further investigation.

This study has a number of potential limitations, including the self-report nature of all data (eg, the accuracy of recollection of the number of traffic offenses). However, the sample was consecutive in nature, the sample was reasonably large in size, and the screening procedure for illegal behaviors was very detailed. Findings indicate associations between an increasing number of traffic violations and an increasing number of different illegal behaviors—a relationship that does not appear to vary by sex.

## REFERENCES

- Division of Motor Vehicles Florida. Florida traffic tickets 2004. Available at: <http://www.dmvflorida.org/traffic-tickets-2004.shtml>. Accessed December 21, 2010.
- Fact Monster. Population by state. Available at: <http://www.factmonster.com/ipka/A0004986.html>. Accessed December 21, 2010.
- Federal Bureau of Investigation. *Uniform Crime Reporting Handbook*. Available at: [http://www.fbi.gov/ucr/Cius\\_98/98cius05.pdf](http://www.fbi.gov/ucr/Cius_98/98cius05.pdf). Accessed March 24, 2010.
- Lawpoolsri S, Li J, Braver ER. Do speeding tickets reduce the likelihood of receiving subsequent speeding tickets? A longitudinal study of speeding violators in Maryland. *Traffic Inj Prev*. 2007;8:26–34.
- National Highway Traffic Safety Administration. *National Survey of Speeding and Unsafe Driving Attitudes and Behavior*; 2002. Available at: <http://www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Articles/Associated%20Files/HS809730.pdf>. Accessed December 21, 2010.
- Porterfield AL. Traffic fatalities, suicide, and homicide. *Am Sociol Rev*. 1960;25:897–901.
- Sivak M. Society's aggression level as a predictor of traffic fatality rate. *J Safety Res*. 1983;14:93–99.
- Sivak M, Luoma J, Flannagan MJ, Bingham CR, Eby DW, Shope JT. Traffic safety in the US: re-examining major opportunities. *J Safety Res*. 2007;38:337–355.
- Whitlock FA. *Death on the Road: A Study in Social Violence*. Oxford, England: Barnes & Noble, 1971.