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Book Review

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Book Review

Erratum

The citation for this review is *3 RISK 259 (1992)* in most commercial databases.

LEONARD EVANS, TRAFFIC SAFETY AND THE DRIVER. (Van Nostrand Reinhold 1991) [404 pp.] About the author, author index, figures, notes, preface, subject index, tables. LC 90-44233, ISBN 0-4421-00163-0. [Cloth \$51.95. P.O.B. 668, Florence KY 41022-0668.]

Dr. Evans, a Principal Research Scientist at General Motors Research Labs in Warren, Michigan, begins by stating that:¹

Deaths, injuries and property damages from car crashes — their origin and nature, and ways to prevent their occurrence and reduce their severity — form the subject of this book. Traffic crashes are perhaps the number one public health problem...; almost half of the 19-year-olds who die do so as the result of traffic crashes. ...

Because at least one driver is involved in every traffic crash, there is considerable focus on the driver.

From there, Evans goes on to analyze and synthesize a vast body of research. Some of it is widely known, e.g.: motor cycle helmets and seat belts, when used, reduce the severity of injuries in crashes, age and sex affect the likelihood of a crash; drivers and passengers tend to be safer in larger cars than in smaller ones; and alcohol consumption is the most significant cause of traffic collisions. Other data is less well known, e.g., that risk of injury to people in cars struck by another vehicle is inversely proportional to the weight of their car, the effects of driver personality on crash frequency, the makes of cars involved in the most crashes, and the effectiveness of safety devices and drunk driving countermeasures.

Most early chapters discuss factors that affect the likelihood and consequences of vehicle crashes, but Chapter 3 presents a considerable amount of basic data on the frequency and severity of traffic fatalities in the U.S. Later chapters attempt to assess the relative importance of factors and examine traffic safety in broader contexts. Chapter 12, entitled, *How You Can Reduce Your Risk*, is likely to be of wide interest.

Chapters that present research results generally omit details concerning the methods used to obtain them but present conclusions

¹ *Preface*, at xiii.

drawn by the author. For example, in Chapter 9, entitled, *Effectiveness of Occupant Protection Devices When They Are Used*, Evans concludes in part:²

Nearly all of the lap belt effectiveness, and almost half of the lap/shoulder belt effectiveness, is due to the prevention of ejection.

By assuming that airbags do not influence ejection risk, and that they provide interior impact reduction effectiveness equal to that of lap/shoulder belts, effectiveness is estimated at 17%.... All of these results are for fatalities only, and cannot be extrapolated to lower levels of injury.

While the book's strength is its coherent presentation of hard data, the solutions suggested by the author are mostly soft and non-technology oriented. Evans suggests that changes in attitudes, particularly in regard to alcohol consumption by drivers, are most likely to improve traffic safety.

Given Evans' position, the certainty that anything he might say of possible benefit to plaintiffs' attorneys would be used in crash-worthiness³ suits against GM and other auto manufacturers, and the obvious impact of the research he presents on, e.g., regulatory requirements for additional safety-related hardware, this is not surprising. Nevertheless, its comprehensiveness and readability, coupled with its extensive references to the primary literature, make this book an excellent starting place for anyone interested in traffic safety research.⁴

Allan M. Wheatcraft[†]

² At 247-8.

³ See, e.g., 15 U.S.C. § 1901(14) (1982); see also, e.g., *Evans v. General Motors Corp.*, 359 F.2d 822 (7th Cir. 1966), cert. denied 385 U.S. 836 (1966).

⁴ See also, e.g., John D. Graham, *The Safety Risks of Proposed Fuel Economy Legislation*, 3 RISK 95 (1992).

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