Comments from JABA Readers

THE AIRLINE LIFESAVER: IN PURSUIT OF SMALL WINS

Vehicle crashes are the single leading cause of death and injury to Americans between the ages of 4 and 35 (McGinnis, 1984) and were estimated to cost the nation approximately \$69.5 billion in 1984 (National Highway Traffic Safety Administration, 1985), ranking second only to cancer (Hartunian, Smart, & Thompson, 1981). The use of shoulder and lap belts is the single most protective measure that can be conveniently taken to reduce the risk of death or injury in a vehicle crash. It is estimated that 55% of all fatalities and 65% of all injuries from vehicle crashes would be prevented if safety belts were used (*Federal Register*, 1984); yet, nationwide observational surveys indicate that about 75% of adults and 50% of children (0 to 4 years) fail to use a vehicle safety belt or child safety seat (Ziegler, 1986).

The antecedent-behavior-consequence model has been applied frequently and successfully over recent years to increase safety belt use (e.g., see the Fall 1988 issue of *JABA* and the review by Geller, 1988). Indeed, behavior analysts have designed education, reminder, incentive, and reward strategies for effective safety belt campaigns that have been used nationwide by numerous traffic safety professionals and grass roots groups. Obviously, no single technique or program will be sufficient to buckle up a nation; but comprehensive large-scale applications of various behavior-change strategies can make a difference. In other words, it will take successive and simultaneous successes or "small wins" (Weick, 1984) of varied approaches to safety belt promotion in order to reap notable lifesaving and injury-prevention benefits.

This paper describes one of the potential components of a nationwide safety belt campaign. The

technique is simple, inexpensive, and rewarding to apply, and, once started, has natural reinforcing consequences that can maintain its application. The technique can be used by anyone who boards a commercial airplane. I call this buckle-up intervention the "Airline Lifesaver" and have been pursuing small wins with the procedure for more than 4 years.

This intervention is accomplished by handing the Airline Lifesaver card depicted in Figure 1 to a flight attendant or pilot of a commercial airline. The back of the card includes my name, university address, and office phone number. I have also prepared a data sheet for recording the date, airline, origin, and destination, number of cards distributed, and whether a safety belt reminder is given at the end of the flight. When deplaning, I verbally thank the flight attendant(s) if a buckle-up reminder has been given. If the reminder was not given, I ask "why no safety belt announcement?" and later record the verbal reply. To date, I have distributed the Airline Lifesaver on 359 flights (from November 1984 to March 1989), and on 33.7% of these occasions a buckle-up reminder was given at the end of the flight. Some airlines have been especially cooperative; two even added the buckle-up prompt to their regular end-of-the-flight announcements. On the other hand, another airline distributed a memo to its staff in November 1987 that stated specifically "to ignore the request of the Virginia Tech professor with the blue card." After that, I had Figure 1 printed on yellow cards and have continued to distribute the Airline Lifesaver to the flight attendants of this airline.

I have examined compliance percentages as a function of various factors (e.g., length of trip, number of passengers, size of plane, and whether the origin or destination state has a belt-use law) and found no consistent relationships. It is note-

Figure 1. The airline lifesaver.

worthy, however, that no flight attendant has ever refused the card, and most have verbalized positive regard (e.g., "Thank you," "Great idea," "I want an extra card for my supervisor") when reading the card. On many occasions, an airline attendant has sought me out during the flight to discuss the Airline Lifesaver and has suggested other ideas for promoting safety belt use. The bottom line is that the Airline Lifesaver has substantial social validity and promotes interpersonal interaction about the use of safety belts.

The direct buckle-up influence of the Airline Lifesaver is difficult (or impossible) to assess, but it is safe to assume that the beneficial large-scale effect of this antecedent intervention is a direct function of the number of individuals who deliver the reminder card to airline personnel. In this regard, it is encouraging that several large organizations (e.g., General Motors Insurance Corporation, Ford Motor Company, Tennessee Valley Authority, and Air Products and Chemicals, Inc.) have distributed Airline Lifesaver cards to their employees for their own use during air travel. If the delivery of an Airline Lifesaver does not influ-

ence a single airline passenger to use a safety belt during ground transportation, at least the act of handing an Airline Lifesaver card to another individual should increase the card deliverer's commitment to personal safety belt use. In other words, a person's own commitment to buckle up consistently is augmented when that person distributes the card and then is reinforced with positive regard from a flight attendant or with the small win of hearing the safety belt announcement at the end of the flight. When a company distributes Airline Lifesaver cards to its employees, the organization verifies its concern for vehicle safety belt use and boosts safety awareness in the process. Thus, I suggest that the act of delivering the Airline Lifesaver has more potential for increasing safety belt use than hearing the announcement at the end of a commercial flight.

During my behavior management addresses at various traffic and occupational safety conferences, I usually ask whether anyone in the audience has heard the Airline Lifesaver reminder. It has been a reinforcing small win to observe the increasing numbers of individuals who report hearing a vehicle buckle-up request from airline personnel. Once I observed a woman approach the driver of an airport bus and ask her to "please use your safety belt." The driver immediately buckled up. When I publicly thanked the woman for making the buckle-up request, she replied that she normally would not be so assertive but she heard a buckle-up reminder on her last flight, "and if a stewardess can request safety belt use, so can I." This was a direct behavior change effect of the Airline Lifesaver—another small win for me that helped to maintain many subsequent applications of the Airline Lifesaver. Natural reinforcing contingencies are available to maintain your continued use of this buckle-up reminder intervention. The pursuit of small wins with the Airline Lifesaver may lead to a very big win—the saving of a human life.

REFERENCES

- Federal Register*. (1984, July). Federal motor vehicle safety standards: Occupant crash protection, Final Rule, 48

- (No. 138). Washington, DC: U.S. Department of Transportation.
- Geller, E. S. (1988). A behavioral science approach to transportation safety. *Bulletin of the New York Academy of Medicine*, **64**(7), 632-661.
- Hartunian, N. S., Smart, C. N., & Thompson, M. S. (1981). *The incidence and economic costs of major health impairments: A comparative analysis of cancer, motor vehicle injuries, coronary heart disease and stroke*. Lexington, MA: Lexington Books.
- McGinnis, J. M. (1984). Occupant protection as a priority in national efforts to promote health. *Health Education Quarterly*, **11**, 127-131.
- National Highway Traffic Safety Administration. (1985, September). *The economic costs to society of motor vehicle accidents (1984 update)*. Washington, DC: Memorandum, Office of Plans and Policy, NHTSA, U.S. Department of Transportation.
- Weick, K. E. (1984). Small wins: Redefining the scale of social problems. *American Psychologist*, **39**(1), 40-49.
- Ziegler, P. (1986, January). Observed safety belt and child safety seat usage at road intersections: 19 city survey results. *Research Notes*. Washington, DC: Office of Driver and Pedestrian Research, NHTSA, U.S. Department of Transportation.

E. SCOTT GELLER

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Received October 28, 1988

Final acceptance April 23, 1989