

Young drivers' accident patterns

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Abstract

The present study is concerned with the impact of psychological factors, particularly character traits and attitudes, on the traffic accident patterns of young drivers. 101 drivers completed a questionnaire consisting of 206 questions and statements. Factor analysis was used to identify and eliminate non-significant test items, leaving 70 statements defining 14 distinct traits. Age and sex were shown to affect the frequency of traffic accidents and offences, the youngest male drivers representing the highest risk group. The relation of psychological traits to other variables is described as referring to seven groups of drivers, four "safe" and three "unsafe", each defined by a combination of distinct characteristics. While superficially, a driver's age and sex may appear to be the chief determinants of the risk of accidents and offences, this risk is, firstly, determined by the driver's traffic exposure and experience, and secondly, by "chronic" and "tonic" traits, some of which are linked to age and sex.

Introduction

Traffic accidents are among the primary causes of injury and premature death in our society, representing a disproportionately large source of public expenditure. The frequency of serious traffic accidents is highest among young drivers (17-24 years of age), and when all accidents are taken into account, the accident rate in all the Nordic countries is highest among 17 to 19 year-olds (Alexandersson, 1998; Moe, 1991). In 1993, approximately 12% of those who held drivers' licences in Sweden were 18 to 24 year-olds. At the same time, this age group represented approximately 25% of Swedish drivers injured or killed in road accidents (SCB, 1994). Results presented by Thulin and Nilsson (1994) for 1990-92 show that drivers in this age group represent by far the highest proportion of Swedish road users injured or killed in traffic accidents per kilometres travelled.

In Iceland, where driving is legal from the age of 17, the accident frequency among 17 to 20 year-olds totalled 198 per 10,000 individuals in 1996, representing around 25% of the country's total accidents and fatalities (Umferdarrád, 1997). Moreover, the frequency of driver's licences in this age group has been estimated at around 90% (Thórdarson, 1998). Similar trends have been noted in many other countries, e.g. the United States (Evans, 1987) and Great Britain (Brown & Groeger, 1988).

Although the relationship between age and accident frequency is well-known, the connection to psychological factors has not yet been fully clarified. A number of