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Title: PEDESTRIAN ROAD SAFETY IN THE ISRAELI ARAB MINORITY AND THE GENERAL POPULATION OF JORDAN

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Abstract:

Road accidents throughout the world, particularly within Arab communities in Israel and Jordan, have become one of the main causes of death among teenagers and children. In 2001, Israeli Arab drivers were involved in 26% of all severe and fatal accidents, although they constitute only 12 percent of the total driving population. The rate of death is 1.6 times higher among Israeli Arab drivers than among Jewish drivers. Furthermore, the rate of Israeli Arab children involved in traffic accidents is higher than that of Jewish children. Similarly in Jordan, traffic accidents are a major cause of death. Approximately 992 people died in car accidents in 2007 out of a total population of 5.7 million people. To address this problem, the proposed study will focus on two Arab communities in Jordan for comparison of pedestrian traffic accidents, one comprising the Israeli Arab minority, and the other, the general population of Jordan. The high rate of traffic accidents in both communities, in addition to the similar factors among the Israeli Arab minority and Jordanian society—culture, language, religions and sets of beliefs—make Jordan a unique country for comparison.

The objectives of the study are first, to understand the causes of pedestrian involvement in traffic accidents; second, to identify both common and contrasting accident causes between the two communities; third, to examine the relationship between the demographic and socio economic characteristics related to the risk of traffic accident involvement; fourth, to examine the effects of daily activity patterns on traffic accident risk; and finally, to examine the role of social and transportation policies in the improvement of pedestrian safety. This is the first study to address, in depth, comparison of pedestrian traffic accident causes between such communities. Based on data collected from various resources in Israel and Jordan—the Central Bureaus of Statistics, police files and surveys—a descriptive statistical analysis will be employed. The survey includes a household questionnaire in addition to trip diaries. The comparison between Israel and Jordan includes many variables, among those: road accident rate and severity, accident causes, road and traffic conditions at the accident location, and driver age, gender and experience. Additionally, the socio-economic characteristics and daily activity patterns of the drivers and pedestrians involved in traffic accidents will be analyzed.

Based on data analysis, there appear to be significant similarities between the characteristics of Israeli and Jordanian road users—both pedestrians and drivers—involved in road accidents, as well as similarities in the causes of these accidents. The results of this research show that in addition to the demographic and socio-economic characteristics of the pedestrian or driver, his or her daily activity and travel patterns also have an impact on the risk of being involved in a traffic accident.

Additionally, findings indicate that both communities suffer from inadequacies in urban planning, transportation systems, and traffic control, and improper engineering design. Furthermore, data analysis showed that pedestrian safety problems, particularly those related to children, are more severe in Jordan than among Israeli Arab communities.