

Prevention of risk behaviour in transport for the elderly

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Abstract

The factors that influence the emergence of traffic accidents, are the technical condition of the motor vehicle, the technical condition of the infrastructure and not least the human factor. In particular the person of the driver is problematic not only from the perspective of the knowledge, skills and attitudes, but also of the psychological and physical condition of man. Post, beside the presentation of the exploratory investigation for the elderly, offers a possible solution to the preventive course for seniors, including experience with his pilot background check. In the framework of an exploratory investigation, they were compared drivers – women and men not only by their knowledge (knowledge in the area of rules of traffic on the road and the theory of safe driving), but also their practical skills in the management of the motor vehicle in the simulated driving skill. Exploratory investigation at the same time included the views of respondents – the elderly on the current situation in the transport sector.

Prävention von Risikoverhalten im Verkehr für ältere Menschen

Zusammenfassung

Die Faktoren, die die Entstehung von Verkehrsunfällen beeinflussen, sind der technische Zustand des Fahrzeuges, der technische Zustand der Infrastruktur und nicht zuletzt der Menschfaktor. Die Person des Fahrers ist insbesondere problematisch, und da nicht nur hinsichts der Perspektive der Kenntnisse, Fertigkeiten und Haltungen, sondern auch von den psychischen und physischen Zustand des Menschens. Der Beitrag bietet neben der Darstellung der explorativen Untersuchung für ältere Menschen eine mögliche Lösung in Form eines Präventions-Kurses für Senioren an. Das heißt einschließlich der Erfahrungen mit seiner Pilotüberprüfung. Im Rahmen einer explorativen Untersuchung wurden die Fahrer – Frauen und Männer, und ihre Kenntnisse der Regeln aus dem Straßeverkehr und die Theorie der sicheren Fahrt, verglichen. Nicht zuletzt wurden auch ihre fahrerischen Fähigkeiten in der Verwaltung des Kraftfahrzeuges in der simulierten Fahrt überprüft. Die Erkundungsuntersuchung zur gleichen Zeit hat die Ansichten der Befragten und der Senioren auf die aktuelle Lage im Sektor der Beförderung beinhaltet.

Keywords:

Risk behavior
 Practical training
 Traffic situation
 Traffic on the road
 The driver of a motor vehicle

Schlüsselwörter (German keywords, optional):

Das Risikoverhalten
 die praktische Ausbildung
 die Verkehrslage
 der Straßenverkehr
 der Fahrer eines Kraftfahrzeugs

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1 The Driver behavior in traffic

The driver in the system man - environment - vehicle – road plays a central role. It is important to recognize that the human factor is the biggest risk. To Drive a vehicle, it continually responds to changing traffic environment and fulfill its requirements (Schröter, 2014). The driver should have throughout driving the best qualifications to receive information from service, and should have quickly and accurately assess according to the control their travel behavior (Havlík, 2005).

The Driving requires a specific range of capabilities, there dominates the complete focus with association to the perception, attention and forethought. The Complete focus, it is connected with the internal and external environment (Havlík, 2005). For driving a motor vehicle there are for example, there are a mental components and processes associated with the analytical and logical thought processes, practical intelligence, memory (particularly visual) evaluation, solution, decision-making and responding required (including psychomotor), with movement coordination and spatial orientation (Olšan, 2009).

2 The seniors - drivers

The quantity of the motorists in a seniors human age is extended. It is not uncommon to meet an eighty or older motorist on the road today (Schmeidler, 2009). When a senior mentally and physically fresh, with an acceptable ability to respond and offsets some of the shortcomings and performance, why should he after the accomplishment of the traffic - psychological examination still ride? Most of seniors - motorists aware that her abilities are limited, and are by example replaced. The Foresight, choosing a safer route, subjecting the car with the own speed responsiveness and yet curb traffic and not more cautious than necessary (Havlík, 2005).

If we are assessing the transport capability to drive motor vehicles, it is important to realize that with age is deteriorating: visual acuity and peripheral vision to the side, the difficulty to see in dim light and may arise the night blindness, slowing down the transition from seen from a distance to close the aperture increases sensitivity, reduces the ability to respond promptly to the surprising and complicated situation reduces adaptability to stress conditions. Medical fitness to drive motor vehicles means not only physical, but also mental ability to drive a motor vehicle (Schmeidler, 2009, Olšan, 2009).

There is a requirement for the Seniors as for drivers the motor vehicles since the age of 65 , in the Czech Republic from the Act 361/2000 Coll., to undergo regular medical examinations . Furthermore, in 68 years, and every two years thereafter, unless the doctor interposes otherwise. The Senior examiner may be sent to another examination if he suspected another disease, which the elderly could hinder driving. Certificate of medical fitness to drive motor vehicles issued by the examining physician after evaluating the state of health of the applicant, a senior. Certificate of medical fitness must be in writing. In case of violation of this legal obligation there is established a financial penalty from CZK 5 000 to 10 000 CZK (§ 141, Law no. 361/2000 Coll.).

3 The exploratory enquiry

3.1 The selection of respondents

In the month of December 2014, there was held exploratory enquiry dealing with the knowledge and skills of motorists of the „third age“. The survey was conducted within the municipality of the town Moravský Krumlov, which is located approximately 40 km south of the city of Brno. The exploratory research had been auspiced of the Municipal Office of Moravský Krumlov. Condition of the possibility, to participate in the exploratory investigation. As respondent were choose the Seniors in age - over 65 years of age and over, the holders of a driving license category „B“. In the examined lives cadastre registry records by 1649 seniors aged 65 and over. Of these plenty there were 851 women and 798 men over there. To an exploratory investigation a total of 368 respondents. For the character of the investigation, it was selected 38 women and 38 men, according to the order first entered (Doubek, 2015).

3.2 The methods have used for an exploratory investigation

The Methods exploratory survey was conducted in two stages. For the first stage we have used the standardized test widely used to teach in driving schools. In the second stage was used the method of observation. For both parts were then drawn up recording sheets, which were recorded in the individual results of the investigation. The Respondents for exploratory surveys were identified by a code.

3.3 The course of the enquiry

The procedure exploratory of the investigation the Reconnaissance survey was divided into two phases. The aim of the first stage was a questionnaire method to determine what is the level of the knowledges about the road rules. To assess knowledge were all the time used tests commonly used to teach in driving schools. The maximum number of points was 50, but this number but no one of respondents have reached. The maximum number of points gained among women was 35 points (12 respondents) and for men 45 points (5 respondents). The minimum number of points among women was 12 points (4 respondents) and for men there was 16 points (2 respondents) (Doubek, 2015). The very low level results of the first stage of the investigation, confirmed the assumption that the senior drivers don't repeat their knowledges acquired before.

Based on the analysis of the mistakes committed by the respondents, there was conducted a training. It was mainly ride intersection, speed, rotation and reversing operation in residential and pedestrian zone, etc. There wa underwent a follow up survey, which confirmed the assumption that the knowledge gained drivers in the past, were not enough over time consolidated. Subsequent survey conducted weekly with a time delay. This means that respondents had the opportunity to spend preparing for the subsequent test sufficient attention within self. The maximum number of points gained among women was 45 points (8 respondents) and for men 50 points (5 respondents). The minimum number of points among women was 25 points (1 respondent) and in men 40 points (2 respondents) (Doubek, 2015).

The second phase of the exploratory survey was designed as a driving skill between the cones. Riding skills were implemented to the exercising ground to accomplish their parameters requirements of Act no. 247/2000 Coll., on the acquisition and improvement of professional competence to drive motor vehicles. Exploratory investigation was focused on driving skill between cones , reversing the cones (longitudinal and inclined to) and the hill starts. On the track of objects around cones best two women rode for 2.5 minutes. The longest interval of 5 minutes 5 women benefited. 3 men of this plenty went through the same path every 2.4 minutes. The longest time interval of 5 men was 4.5 minutes.

In reversing the longitudinal and oblique was not accurate parking between the cones, but also the time needed for this task. Longitudinal backing was for both groups of respondents more difficult than reversing oblique. By comparing the times it was possible to conclude that the longitudinal reversing both groups took on average 2.5 to 3.0 minutes (Doubek, 2015). On the other hand, pitched backwards respondents took an average of 1.5 to 2.5 minutes . In conclusion, respondents drivers seniors tried to control the vehicle when starting off uphill. The vehicle was built on a slope, under the rear wheel was placed in a cardboard box . The test consisted in whom it will start up the hill without breaking box. Of the 38 women, 7 women managed to pull off without breaking box. Of the 38 men - respondents drove off without breaking the boxes 18th (Doubek, 2015).

3.4 Conclusion

Exploratory investigation had confirme that there are some differences between male and female character in the transport and traffic behavior. Responsibility for this can be attributed to the programmed personal foundation and uneven psychosomatic processes taking place in the central nervous system of both sexes (Havlik , 2005) .

Based on the findings, the question remains whether it would be appropriate to carry out an exploratory investigation as a possible prevention of the risky behavior in traffic. Prevention to be effective, however, had

to be systematic rather than sporadic. According to the interests of drivers older persons is a theme actual traffic behavior and they feel the need to deepen and consolidate their prior knowledge and skills. The Story exploratory survey could be used as part of a preventative program for drivers - seniors. It can be realized in a different location.

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- Zákon č. 361/2000 Sb., o provozu na pozemních komunikacích a o změnách některých zákonů ve znění pozdějších předpisů.