



Assessment of the Chinese driver licensing system implemented from 1 Jan 2013 to 30 Sep 2016



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ABSTRACT

Under the conditions of the driver licensing system implemented from 1 Jan 2013 to 30 Sep 2016, learners gradually obtained their full driving privileges in China, and the Chinese driver licensing system is largely a type of Graduated Driver Licensing system.

Comparative analyses were applied to identify the deficiencies of the driver licensing system (Edition of 2013). The Chinese driver licensing system primarily focuses on driver education/training, which is conducted in commercial driving schools. The learner stage is actually the driver training stage, and the length of the learner stage is not sufficient; i.e., supervised driving cannot be guaranteed, which is controversial with the principle of the GDL system. Learners' driving skills are primarily obtained by mass practice, which cannot be retained well; besides, many novice drivers do not own a car and live with parents who are experienced drivers in China and therefore seldom practice driving during the probationary period. Certain important restrictions to intermediate-stage driving – such as night driving, which has been demonstrated to be effective in reducing road accidents – are not applied.

The investigations of novice drivers were also conducted to assess the system, and the results indicate that most driving learners prepared for their driving knowledge test by mass practice, and the updated driving knowledge tests indicate that their driving knowledge faded over time. Only 66.9% of the participants passed the simulated test 3–5 months after being licensed. Investigations on in-vehicle training indicate that the average actual training time is shorter than the minimum legal requirement, although the research populations successfully passed the tests. In general, the driver licensing system of the 2013 edition cannot achieve its intended results based on the work presented in this paper. This work can be used as a reference for the driver licensing system reform in the future.

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1. Introduction

China has been experiencing a motorization process along with a rapid economic growth, and road safety has become a major public health problem; for example, there were 210,812 road crashes, and 62,387 people were killed in 2012 according to the nearest available official statistics ([National Bureau of Statistics of the PRC, 2013](#)). Thus, there is a large potential for

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China under poor traffic conditions to improve road safety, and the government has put considerable efforts toward engineering, education and enforcement to reduce the road crashes.

With the rapid increase in family car ownership, it has become a trend in recent years for young Chinese aged over eighteen years to learn to drive. It is reported that there were 100 million licensed drivers in 2003, 200 million in 2010, and 300 hundred million by the end of 2014 (Ministry of Public Security of the PRC, 2014), and the rapid increase in the number of young novice drivers is a notable challenge to road safety (Zhang et al., 2006). Young novice drivers are involved in a disproportionately large number of traffic crashes (Rhodes et al., 2005), and the accident risk of young novice drivers (18–24 years) is twice as high as that of older experienced drivers (The European Commission, 2012). Reasonably safe drivers on the road is one of the key factors for road crash reduction. Under the conditions of the Chinese driver licensing system implemented from 1 January 2013 to 30 September 2016 (Ministry of Transport of the PRC and Ministry of Public Security of the PRC, 2012), driving learners were required to take 30 h of classroom instructions and 48 h of supervised in-car practices; the learners can obtain their probationary driving licence at least two months after passing four tests, which is a comparatively short time. Gregersen et al. (2000) found that in increasing supervised driving from an average of 47.6 h to 117.6 h, there was a significant reduction in health risks after being licensed. It is reasonable to doubt that a minimum requirement of 48 h of in-car training is sufficiently long for beginners to learn how to drive safely. This doubt suggests that novice drivers' high level of crash involvement is mainly due to inexperience (Mayhew et al., 2003), and experience is critical to the development of any skill (Scialfa et al., 2011). To transform non-drivers into safe novice drivers, as much practical experience as possible in realistic conditions is necessary (Foss, 2007). Novice drivers need to increase their driving experience to reduce the risk of crash involvement, but the more they drive, the more they are exposed to high risks (Prato et al., 2010). A good system should solve the “experience paradox” (Gregersen et al., 2003).

As of 1 October 2016, the newest edition of the driver licensing system has been enforced in China (Ministry of Transport of the PRC and Ministry of Public Security of the PRC, 2016). Although there are several amendments in the new edition system (Edition of 2016), the framework of the new system is unchanged. The amendments to the system will be discussed in the last section of this article. In this paper, comparative analysis and investigations of novice drivers were applied to identify the deficiencies of the driver licensing system (Edition of 2013). First, the Chinese driver licensing system was compared with evidence-based research findings regarding the Graduated Driver Licensing (GDL) system; next, the effectiveness of driving knowledge education was investigated; and finally, the efficiency of supervised in-car training was assessed. Throughout the text, all mentions of the driver licensing system refers to 2013 edition and a driver's licence or licensing refers to a class C1 or C2 licence.

2. Chinese driver licensing system versus GDL system

Crash-based investigations demonstrate that the majority of young driver crashes are attributable to errors consistent with their inexperience (Curry et al., 2011). Novice drivers need to increase their driving experience to reduce the risk of crash involvement, but the more they drive, the more they are exposed to high risks (Prato et al., 2010). To tackle this problem, many jurisdictions have implemented the GDL system under which beginners first gain supervised driving experience on a learner's permit, subsequently progress to unsupervised but restricted driving on a provisional licence, and finally attain a full unrestricted licence (Hedlund et al., 2003). The GDL system, which extends the period of supervised driving and limits the novice's exposure to higher-risk conditions (such as night-time driving and the presence of young passengers), has effectively reduced crashes involving novice drivers (Fell et al., 2011). The crash risk of young drivers can be reduced by up to 40% through the use of a GDL (Shope, 2007). Similar to the GDL system, driving learners in China also gradually obtain full driving privileges (Ministry of Public Security of the PRC and Ministry of Public Security of the PRC, 2012, 2016). The driver licensing

Table 1
Steps to obtain full driving privileges (Class C1 and C2) in China (Edition of 2013).

Stage	Requirements
Learner Stage	Entry Age: 18 1. 30 h driving knowledge education 2. Pass the driving knowledge test 3. 24 h practice on driving around curves, driving around corners, parallel parking, back-in parking and hill starting 4. Pass the test 5. 24 h practice on road driving 6. Pass the test 7. Pass the theoretical test on hazard perception and how to drive courteously 8. Obtain the driving licence
Intermediate Stage	Length of probationary period: 12 months Restrictions to the driving: 1. A “Probation” plate displayed on the back of car 2. Being accompanied by a driver with three-year driving experience if driving on the highway/freeway 3. Penalty points: no more than 6
Full Licence	Obtain full driving privileges

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