

An Observation of Traffic Violations at a Crossroad with an Installation of a Patrol Police Officer Model

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Abstract

Traffic violations have been observed at a crossroad at the sub-urban Bangkok area, four days before and four days after an installation of a full-size standing patrol police officer model with full police dress. Observation is made in the afternoon and in the evening, two hours each. Three violation types are observed, driving against traffic flow, traffic light violations, and no U-turn violations. We find that the puppet police works well during the first few days of the installation, and then its effectiveness decreases in later days. During four days of installation of the puppet police, the overall violations drop about twenty percent.

Keywords: Dummy Police; Driving against traffic flow; Red light violations; no U-turn violations; THAILAND.

1. Introduction

Violations of traffic law are frequently found due to slack law enforcement especially where no cops present. Traffic polices help control driving behaviors. However, traffic polices encounter lots of situations such as air pollution, noise pollution, also having stresses from long hours working in hot and humid tropical environment.

From situations of health, stress, and lack of manpower problems of polices as well as traffic law violations of road users, alternative choices should be experimented to alleviate and control driver to behave follow the law. Puppet police can be used, but there have been questions ask if the fake police can really help the real

traffic police. This work tries to find out effectiveness of a puppy police to make drivers follow the traffic law.

2. Literature Review

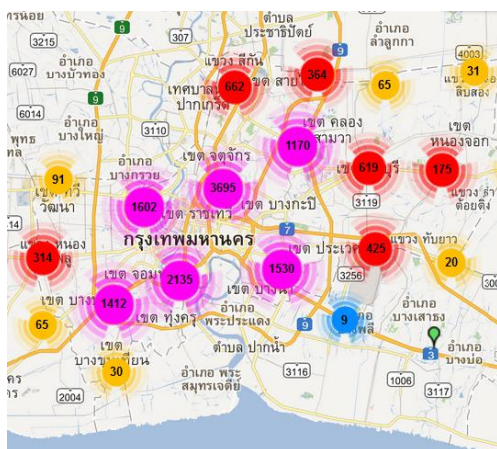
Some traffic measures such as hump and bump (Namee and Witchayangkoon, 2010) can be used to self-control driving speed on local streets. For main streets, on duties traffic polices encounter noise and air pollutions. Air pollutant exposure among traffic policemen were studied from medical examination (Priante, 1996). Crebelli *et al* (2001) reported an investigation on personal exposure to benzene of Rome traffic polices. Wiwanitkit (2005) reported cancer risk for Thai traffic police exposed to

benzene vapor from automobile exhaust. A study found that junior and middle supervisory police officers were adversely affected by lack of available manpower and long working hours (Cooper, 1982).

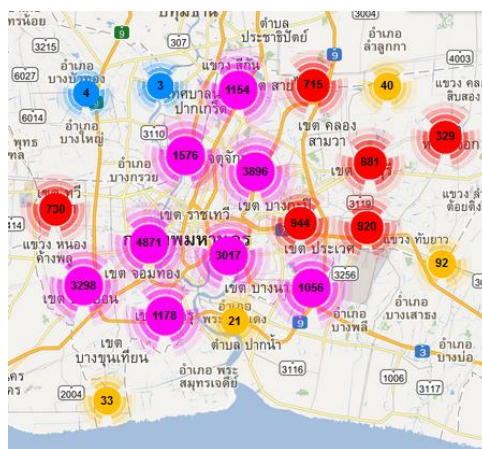
Violations of traffic law are the causes of most accidents as the apparent function of traffic law is to minimize conflicts among road users (Ross, 1960). Good evidence has shown that the presence of an enforcement vehicle can make drivers to reduce driving speeds, for up to 5 km (Armour, 1984). Puppet police models have been used for many years in Bangkok, but no research has been conducted.

3. Traffic Accident Records for Bangkok

Being the capital city of Thailand, Bangkok is serving over eight million people, or 12.6 per cent of the country's population. Over fourteen million people (22.2 per cent) live within the surrounding Bangkok Metropolitan Region (Wikipedia, 2013). Having substantial private car usage causes traffic and accident problems. Figure 1 shows 2011 and 2012 road accidents for Bangkok, Thailand. Numbers of accidents in 2011 have drastically increased compared to 2012 (ThaiRSC, 2013).



2011



2012

Fig.1. Records of road accidents for Bangkok, Thailand for 2011 and 2012. (ThaiRSC, 2013).

4. Methodology

4.1 A Puppet in Police Officer Dress

A standing life-size male puppet has been procured. Full police officer khaki clad dress is borrowed from a real police. We put the puppet in police officer full dress, also with police helmet, and gloves. Puppet police officer model carry steel handcuffs on the utility left-side belt, in a handcuff cloth case. Empty gun holster is also attached to the belt on the right side. Puppet police officer model is put with a black police vest (made with polyester/nylon

mesh) with two reflective strips on front and back with "POLICE" white mark, see Figure3.



Fig .3. Life-size puppet police officer.

4.2 Observation

Observations are made before and during the installation of the puppet police for the violation of traffic law:

- driving against traffic flow
- traffic light violation
- no U-turn violation

Puppet fake police officers have been installed on a major crossroads in outskirt of Bangkok at Ko Por Aor crossroad. Observations are made 4 days before and 4 days during the installation, each day for two periods: 13.00-15.00 and 19.00-21.00. Violations are counted for motorcycles and four-wheel vehicles at each crossroad leg.

5. Result and Discussion

The observation for Ko Por Aor crossroad is as followed. The number of accumulated motorcycle traffic violations over four days before and four days during installation of the puppet police are decreased by about 20% (see Figure 4).

For Four-wheel vehicle, no violation for driving against traffic flow as it is a main street with fast traffic. Accumulated number of red light violations and no U-turn violations decrease more than 20 per cent.

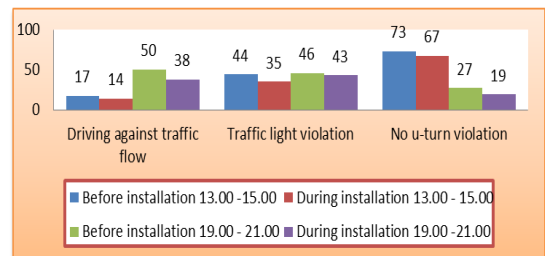


Fig.4. Number of Motorcycle traffic violations for Ko Por Aor crossroad, observed four days before. (22-25 January 2013) and four days during installation of Puppet Police (29 January – 1 February 2013)

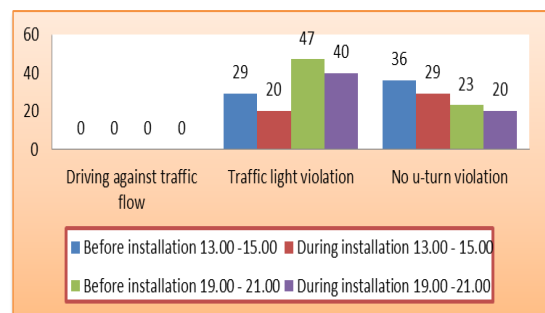


Fig .5. Four-wheel vehicle traffic violations for Ko Por Aor crossroad observed four days before (22-25 January 2013) and four days during installation of Puppet Police. (29 January – 1 February 2013)

6. Conclusion

Traffic violations have been observed at the Ko Por Aor crossroad, at the sub-urban Bangkok areas, four days before and four days after installation of full-size standing model with full police dress. Observations are made in the afternoon and in the evening, two hours each. Three violation types are observed, driving against traffic flow, traffic light violations, and no U-turn violations. We find that the puppet police works well during the first few days of installation, and then its effectiveness decreases in the following days. During four days of

installation of puppet police, the overall violations drop about twenty percent.

7. References

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