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#### Arařtırma Makalesi

## IMPACT OF COMMUNITY ORIENTED TRAFFIC POLICING ON RED LIGHT VIOLATIONS: COMMUNITY RED LIGHT WATCH PROGRAM

**Dr. Yavuz ÖZBARAN**

Emniyet Genel Müdürlüğü

yozbaran@gmail.com

ORCID: 0000-0002-9897-9995

#### Abstract

Community-oriented policing is a philosophy that underlines the requirement of citizens' involvement in crime prevention activities. One of the major traffic crimes was red light running in Karakopru town of Sanliurfa Province of Turkey. Because of the inadequate enforcement resources, however, the police department couldn't succeed to prevent red light violations. The police department, hence, initiated a community red light watch program to decrease the violations. The purpose of this study was to quantify the effect of the community red light watch program, which was performed by the honorary traffic inspectors. To assess the effect of this program, we employed a pre/post-implementation design. For the current study, the camera records of the five program sites, two non-program sites, and two control sites were utilized. Findings of this study revealed that red light violations did not decrease at the beginning period; however, six months after the program commenced the violations decrease overall 27% at program sites. Friedman test results suggested a Chi-square value of 7,600 which was significant ( $p < .05$ ) for the program sites. The program did not yield a significant violation change for non-program and control sites. The results suggest that community-oriented policing programs can be implemented in traffic enforcement area successfully. However, to prevent traffic violations the programs need to be supported with tactics of deterrence theory, and other policing strategies.

**Keywords:** Red light enforcement, Community-oriented policing, Traffic management

### TOPLUM ODAKLI TRAFİK POLİSLİĞİNİN KIRMIZI IŞIK İHLALLERİ ÜZERİNDEKİ ETKİSİ

#### Öz

Toplum destekli polislik suç önleme çalışmalarına vatandaşların dâhil olması gerektiğinin altını çizen bir felsefedir. Şanlıurfa'nın Karaköprü ilçesinde başlıca trafik suçlarından biri kırmızı ışık ihlalleridir. Fakat yetersiz denetleme kaynaklarından dolayı emniyet müdürlüğü kırmızı ışık ihlallerini önlemede başarılı olamamıştır. Bu sebeple emniyet müdürlüğü ihlallerin sayısını azaltabilmek için toplum destekli bir kırmızı ışık denetim programı başlatmıştır. Bu çalışmanın amacı fahri trafik müfettişleri tarafından gerçekleştirilen toplum destekli kırmızı ışık denetim programının etkisini ölçmektir. Bu programın etkisini değerlendirmek için uygulama öncesi / sonrası ölçme yöntemi kullanılmıştır. Bu çalışma için beş program alanı, iki program dışı alan ve iki kontrol alanının kamera kayıtları kullanılmıştır. Çalışmanın bulguları, başlangıç döneminde kırmızı ışık ihlallerinin azalmadığını; ancak, programın başlamasından altı ay sonra ihlallerin, program alanlarında genel olarak % 27 oranında azaldığını ortaya koymuştur. Friedman test analiz sonuçları, program alanları için anlamlı olan ( $p < .05$ ) Ki-kare 7.600 değerini göstermiştir. Program, program dışı ve kontrol alanları için önemli bir ihlal değişikliği sağlamamıştır. Sonuçlar, toplum odaklı polislik programlarının trafik uygulama alanında başarıyla uygulanabileceğini göstermektedir. Bununla birlikte, trafik ihlallerini önlemek için, programların caydırıcılık teorisi taktikleri ve diğer polislik stratejileriyle desteklenmesi gerekmektedir.

**Anahtar Kelimeler:** Kırmızı ışık denetimi, Toplum destekli polislik, trafik Yönetimi

## 1. INTRODUCTION

Red light violations constitute an enormous problem for traffic safety and harmony. Traffic enforcement authorities try to overcome this problem by using police officers or red light cameras. However, due to the lack of resources, police departments have not been able to cope with this issue sufficiently. It is considered that community-oriented policing (COP) can be a remedy for inadequate police resources. Police departments have used community-oriented policing programs to prevent various crimes which are range from theft to drug dealing. Though it is not widespread, community-oriented policing is also used to prevent traffic violations in different countries. This study examines whether a community red light watch program can be successful in preventing red light violations.

Traffic signals are used for maximizing traffic capacity and minimizing accident occurrence at intersections. The signals, however, cannot be enough to create accident-free intersections because of drivers who disregard the red signal. Red light violation increases the odds of accidents by creating potential collision situations. The red light accidents emerge as a collision with another vehicle or pedestrian. Croft (1981) stated that red light runners are responsible for 18% of all casualty crashes occurring at intersections in Australia. The red light violation also disrupts the harmony of traffic flow at the intersections. Retting et al. (1995) reported that when drivers comply with traffic signals accident rate diminish and also traffic flow gets faster at the intersections.

Red light enforcement appears to be the most effective way to decrease the number of red light violations and related accidents (Chin, 1989). A high number of signalized intersection and limited enforcement resources, however, obstruct to deal with red light runners. Commonly, police officers or red light cameras are used to decrease the violation number. When they are visible, both of them create a deterrent effect on potential red light offenders. The studies revealed that the violation rate sharply decreases when drivers see uniformed police officers at signalized intersections (Thompson et al., 1989; Bankhead & Herms 1970). However, it is not possible to use a large number of police officers at many hundreds of intersections. The number of traffic officers is generally highly inadequate compared to the number of traffic rules and regulations they should enforce (Freedman & Peak, 1992). The studies about red light camera enforcement also showed that the cameras have a great potential to deter red light offenders (Chin, 1989; Lum & Wong, 1998; Retting et al., 1999). However, the cost of the camera systems is so high that police departments usually unwillingness to install these camera systems.

One way to overcome the red light violation problem may be to use the community-oriented policing movement. Community policing is a law enforcement philosophy that based on an idea that creating strong bonds between citizens and safety officers can prevent crime before happening (Skogan 2006). The COP aims at creating a safe environment by defining priorities of law enforcement agencies through the help of the public (Skolnick & Bayley, 1988 a) Community-oriented policing has four elements: Preventing and detecting crimes by organizing community; reorganizing patrol activities for the situations which are not required immediate action; improving police accountability to regional communities; delegating decision-making responsibilities (Skolnick & Bayley, 1988b). Philosophy of community policing encourages people to a partnership with law enforcement in order to keep their own society secure. Frank, Brandl, Worden and Bynum (1996) stated that neither law enforcement agencies nor the criminal justice system can overcome the public safety problems alone. The community-oriented policing, hence, requires the public to play a more active role in increasing public security.

Community-oriented policing is highly popular, especially in the United States and in European countries. Skogan (2004) stated that in the USA all of the police departments, which serve the population of over 100,000, have adopted community policing. One of the best known "community policing" partnership program is Neighborhood Watch, which was originally established as an initiative against house burglary. In this program, the residents assign an organizer who is in charge of keeping the other members of the program informed of safety issues and all members are requested to report suspected incidents in the neighborhood (Bullock & Sindall, 2014). Apart from this program police departments have used a variety of strategies under the guardianship of community policing including foot patrol, community meetings, door-to-door surveys, problem-oriented policing, and education programs in school (Mastrofski et al. 1995). Weisburd and Eck (2004) stated that these strategies have different impacts on crime. For instance, foot patrol and community meetings about crime preventions had a minor impact on crime, whereas door-to-door visits decreased crime and fear of crime.

Community-oriented policing is not the first thing comes in mind when people are thinking about traffic problems. However, the range of possible options for community participation in traffic policing is wide with varying levels. For instance, local communities can provide police with information on road crashes and reasons for them, or people can take more active roles and serve as watchdogs for local traffic issues. In order to decrease the casualty rate of powered two-wheeler riders, the 'Bike Safe' program is performed in the United Kingdom with the collaboration of the police, local authority and health authority. In

this program, the riders are provided with free advice and experience. The Avon and Somerset law enforcement units have initiated a Community Speed Watch program in 1992. In this program, local volunteers are trained in the use of speed detection devices. The participants who wear reflective jackets observe the speeds of vehicles passing through their local area by radar guns. When speed violation detected for a vehicle, a warning letter is sent to the registered driver of it. The Delhi Traffic Police have introduced a Traffic Warden System in 1998. Traffic wardens must have certain qualifications to help the Traffic Police. Traffic wardens are volunteers and do not have any statutory powers. They are assigned to regulate traffic flow at the main roads for 3 hours at rush hours (Thomas, 2003).

In Turkey, to assist traffic enforcement authorities for combating traffic violation, honorary traffic inspectorate program was initiated. Turkish government enacted a pertinent law in 1996. According to the law people who have certain qualifications, such as being older than 40, having an undergraduate degree and being a good driver which was defined in the law, can join the program. Before joining the program honorary traffic inspectors have to get an education on their duties and responsibilities. This service is voluntary and free. Honorary inspectors do not wear uniforms or traffic jackets. There is no time and place limitation for honorary traffic inspectors to inspect traffic violations. They are authorized throughout the country. Honorary traffic inspectors cannot stop a car or issue a traffic ticket. They can only fill out an inspection report and give it to any traffic enforcement unit within one week. The traffic unit controls the report if it is correct in terms of registration data. If the report is valid the traffic unit issues a ticket which is sent to the registered owner of the vehicle. If any honorary traffic inspector is identified as abusing his/her duties, shall be jailed of up to six months.

## **2. METHOD**

The study was performed in the Karakopru town of Sanliurfa province, Turkey, which has an estimated population of 104,380 with 20,632 vehicle and 26,630 registered drivers in 2011. Sanliurfa Traffic Police Department introduced a community red light watch program for Karakopru. The reason for the program was increased complains about red light violations. To decrease red light running Sanliurfa traffic police department increased red light enforcement. The desired result on the red light violation, however, could not be achieved. It is discovered that when uniformed traffic personnel was seen at an intersection the violations decreased sharply, however, when officers left the intersection the violations increased again. The number of traffic officers was not sufficient to detect red light violations comparing to the number of signalized intersections. Moreover, the officers have to deal with other traffic issues such as driving under

influence, park violation and traffic crashes. Therefore, the police department decided to introduce a community red light watch program in 2011.

According to the highway traffic law, however, not every people can inspect traffic violation. The police department, therefore, decided to perform the program through honorary traffic inspectors. There were already 43 honorary traffic inspectors who were authorized by the law to inspect traffic violations without stopping drivers, live in Karakopru. The police department held a meeting with them to explain the planned program and find out who wanted to be volunteers for the red light watch program. Twenty-one honorary inspectors, all of them retired and live in Karakopru, became volunteers to participate in the program. The police department had chosen 5 signalized intersections to perform the program. The volunteers decided at which one of these intersections they can inspect red light violation. They were requested to be present at their intersection one hour a day to inspect red light violations. Thus, daily four hours of inspection were planned at each of program-sites. Volunteers decided themselves what time was suitable for them to be at the assigned intersection.

The study uses a quantitative research design including a control or comparison group and both before- and after-program measures of outcomes. The aim of the current study was to evaluate the effect of the community red light watch program which was performed by honorary inspectors on red light violations. For this purpose, we used the camera records of the 5 program sites, 2 control sites, and 2 non-program sites. To evaluate the effect of the program on red light violations, we counted red light violations through hidden cameras at these intersections. Records of a single intersection way at each site were used to count violation and vehicle numbers. The hidden cameras were installed on trees, poles or building. Traffic lights were in use between 6 am and 12 pm, however, the image of cameras were not clear after sunset, therefore, the cameras were active between 7 am and 7 pm. In all study periods, therefore, we used twelve-hour camera recordings to collect the data. The cameras we used do not have a feature to detect automatically red light violation, thus, after each observation period; we watched camera records and counted the violations. During the violation counting, we only counted a passing as the red light violation if a vehicle enters the intersection 1 second after the traffic light turned to red. The number of vehicles on the recorded approach was measured, at all sites, using computer software which can count the vehicle from video records. We used vehicle counting to eliminate the effect of changed vehicle number on the violation. We used "violation number/10,000 vehicles" formula to find out the changes in violation numbers at all sites. Alterations in violation rates were compared

for all sites in Table 1. In addition, to test whether there was a significant difference between the distributions of violation rates, a non-parametric Friedman test was performed (Table 2).

This study has three observation periods to assess the effect of the program on red light running: "Before" period, "beginning" period, and "six months after" period. The data of the beginning and six months after periods were used as the "after the program" data. We also used the data of before period as "before the program" data. Each observation period lasted one week. The first observation, which was between 07/03/2011 and 13/03/2011, began two weeks before the initiation of the program. During this period, which named "before", no information was given to the public about the program. During this period we got knowledge about the ongoing situation on the red light violations at nine intersections. The red light watch program began as planned on March 21, 2011. Two days before the beginning of the program, signboards, which warned that "red light violations are monitored by honorary traffic inspectors", were installed at the 5 treated intersections. Furthermore, a press release about the program was issued by the police department which appeared in local mass media. The second observation began two weeks after the beginning day of the program. This period, which we named it "beginning", was performed between 04/04/2011 and 10/04/2011. During this period we evaluated how drivers reacted to the program before receiving any red light violation ticket. At this period, honorary traffic inspectors had begun to inspect and report red light violations. However, because of the mailing time, no red light runners had received a ticket during the "beginning" period. The third observation was performed six months after the program initiation to understand the long term effect of the program. We used this period to examine how the violation rate changed six months after the program beginning. This observation period, which we named "after", was between 19/09/2011 and 25/09/2011. Until this period thousands of tickets had been issued to the drivers who violated red light at the intersections based on the reports of honorary traffic inspectors. Thus, we assume that most of the drivers were aware of the program at this period. During the study period, no red light enforcement activity performed by traffic police in Karakopru town.

The spillover effect of the red light watch program is also the subject of this study. Two signalized intersections of Karakopru were selected as non-program sites. These sites were selected to be representative of the program sites to test whether changes in red light violations found at program sites spilled over to other intersections. The distance between program sites and non-program sites was almost 1 km. During all periods hidden cameras recorded the red light violations between 7 am and 7 pm in both non-program and control sites. We used two control sites to make sure that the alteration for red light violation result

from the program. The control sites were in the Haliliye town of Sanliurfa province. The control intersections are 8 km away from the closest program site. During the study period, traffic police kept ordinary enforcement activities in Haliliye town.

### 3. FINDINGS

A summary of red light violation numbers that belong to the community red light watch program sites, non-program sites, and control sites was provided in table 1. The results indicated that at the beginning period there was not any decrease at program sites. Six months after the program began, however, red light violation rates decreased at all program zones. The total decline in violation rate at five road sections was almost 27 percent six months after the program activated.

**Table 1.** Karakopru Red Light Watch: Violation Rates

Locations	Total Number of Violation (For One week)			Total Number of vehicles (For One week)			Violation/ 10,000 vehicle			Percent Change: Violation/10,000	
	Before	Six Months		Before	Six Months		Before	Six Months		Beginning	After
		Beginning	After		Beginning	After		Beginning	After		
<b>Sites</b>											
Menderes Int.	163	157	105	23790	23319	24138	68,5161	67,3270	43,4998	-1,7355	-36,511
Narlik Int.	274	282	226	34237	34529	34104	80,0303	81,6704	66,2678	2,0493	-17,196
M. Hafiz Int.	305	293	228	36439	35892	36731	83,7015	81,6337	62,0729	-2,4703	-25,840
R. Direkli Int.	172	183	112	24691	24902	24849	69,6610	73,4880	45,0722	5,4938	-35,297
Osman Y. Int.	245	238	195	28532	28396	28673	85,8685	83,8146	68,0082	-2,3918	-20,799
<b>Total</b>	<b>232</b>	<b>231</b>	<b>173</b>	<b>29538</b>	<b>29407</b>	<b>29699</b>	<b>77,5555</b>	<b>77,5868</b>	<b>56,9842</b>	<b>0,1890</b>	<b>-27,129</b>
<b>Non treated sites</b>											
Kızılyer Int.	167	171	159	24175	23980	24289	69,0796	71,3094	65,4617	3,2278	-5,237
Yesiloglu Int.	137	146	132	21682	21831	22048	63,1860	66,8773	64,4049	5,8419	-6,684
<b>Total</b>	<b>152</b>	<b>159</b>	<b>145</b>	<b>22929</b>	<b>22906</b>	<b>23169</b>	<b>66,1328</b>	<b>69,0934</b>	<b>62,212</b>	<b>4,5349</b>	<b>-5,960</b>
<b>Control Sites</b>											
Zafer Int.	227	274	256	26207	26458	26782	86,6180	103,5604	95,5865	19,5597	10,354
Cumhuriyet Int.	249	236	254	30428	29879	30691	81,8325	78,98524	82,7604	-3,4794	1,133
<b>Total</b>	<b>238</b>	<b>255</b>	<b>255</b>	<b>28318</b>	<b>28169</b>	<b>28737</b>	<b>84,2253</b>	<b>91,2728</b>	<b>89,1735</b>	<b>8,040175</b>	<b>5,743</b>

We conducted a non-parametric Friedman test of differences among repeated measures. The test yielded a Chi-square value of 7,600 which was significant ( $p < .05$ ) for the program sites. Friedman test results of the program sites showed that Mean Rank "Before" the program 77.55, "Beginning" of the program 77.58, "Six months after" the program 56.98, Test statistics  $N = 5$ , Chi-Square 7.600,  $df = 2$ , Asymp. Sig .022 (Table 2). However, the test results of the Control sites indicate that there is not a statistically significant difference between the mean ranks of the related periods ( $p > .05$ ).

After the Friedman test analyses, in order to control type I error, we conducted pairwise comparisons using a Wilcoxon Signed Rank Test (Table 3). Test result showed that the median concern for "beginning of the program" was not significantly greater than median

concern for “before the project”  $p > .05$ , the median concern for “six months after the project” was significantly greater than median concern for “before the project”  $p < .05$ , and the median concern for “six months after the project” was significantly greater than median concern for “beginning of the program”  $p < .05$ .

**Table 2.** Summary of Friedman’s Test Analysis for Red Light Violation (%)

Site	Periods	Mean	SD	$X^2$	df	p
Program sites	Before the Program	77,55	8,01	7,600	2	0,022
	Beginning of the Program	77,58	6,96			
	Six Months After the Program	56,98	11,80			
Control sites	Before the Program	84,22	3,38	1,00	2	0,607
	Beginning of the Project	91,27	17,37			
	Six Months After the Program	89,17	9,06			

\*  $p < .05$

**Table 3.** Summary of Wilcoxon Signed Ranks Test

		N	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
Beginning – Before	Negative Ranks	3 <sup>a</sup>	2,67	8,00	,893
	Positive Ranks	2 <sup>b</sup>	3,50	7,00	
	Ties	0 <sup>c</sup>			
	Total	5			
Six months after- Before	Negative Ranks	5 <sup>d</sup>	3,00	15,00	,043
	Positive Ranks	0 <sup>e</sup>	,00	,00	
	Ties	0 <sup>f</sup>			
	Total	5			
Beginning- Six months after	Negative Ranks	5 <sup>g</sup>	3,00	15,00	,043
	Positive Ranks	0 <sup>h</sup>	,00	,00	
	Ties	0 <sup>i</sup>			
	Total	5			

a. Beginning < Before b. Six months after < Before c. Six months after < Beginning  
d. Beginning > Before e. Six months after > Before f. Six months after > Beginning  
g. Beginning = Before h. Six months after = Before i. Six months after = Beginning

The findings of control sites showed that there was a 5.7% increase in red light violations six months after the program began. The results of control sites suggested that the decrease in red light violation rate in Karakopru resulted from no other reason than the Red light watch program. This study also assessed the spillover effect of the program. We examined red



light violation rates at two non-program sites. The findings indicated that the violation rate decreased by 5.9% at non-program sites after six months. This result beckoned that the program did not generate a significant spillover effect on the red light violation. In other words, red light watch program was only effective where the program signboards installed.

#### 4. DISCUSSIONS

The current study evaluated the effect of community red light watch program which was performed by honorary traffic inspectors. Although there are a number of community-oriented traffic programs such as neighborhood speed watch program, we could not find any community-oriented traffic program which is in the scope of the current study in the literature search. Therefore, it is not possible to exactly compare the result of the current study with any other study. However, during the literature search, we detected many “neighborhood speed watch programs” which was supported by local U.S.A cities. In these programs, local governments provide speed guns to the residents to detect the speed of the vehicle in their residential area. When residents submit a speeding vehicle's plate-number to the local government, a warning letter is sent to the owner of the speeding vehicle by the local officers. The studies about this program revealed that the program was successful to reduce vehicle speed and community complaints about speed (for example, Womble, 1990; Mazzella, 1995). The results of the studies are consistent with the current study because the results of the current study, also, suggest that community policing can produce demanded outcomes for traffic safety.

The results of this study showed that at the beginning period the red light violation rates did not change (0.18%). However, six months after the program commenced the violation rates decreased overall 27% at program sites (Table 1). The assessment of the findings indicated that the program could not prevent red light violations until drivers, who violate the red light, started to receive violation tickets. In other words, drivers did not take into account the program until they received a violation ticket or heard from the public that honorary traffic inspectors were really inspecting the violation at defined intersections. We believe the deterrence theory can explain in this situation. Deterrence theory suggests that sensible people are inclined to prefer not to commit crimes when they perceive that the certainty and severity of punishments outweigh the benefits of their actions (Zimring & Hawkins, 1973; Apel & Nagin, 2011). In the current study drivers only started to choose not to violate red light when they perceived that certainty of getting a violation ticket is high. We, therefore, believe the community-oriented policing program should benefit from strategies of deterrence theory, such as the publication of programs' results and increase the visibility of programs' activities.

The study also suggests that community-oriented policing need something more to prevent crime. After reviewing community-oriented policing strategies Gill et al. (2014) stated that community policing increases citizens' satisfaction with law enforcement units and their perceptions of disorder. On the other hand, their analysis indicated that community-oriented policing have no effect on officially recorded crimes. They concluded that connecting simply more with the community cannot be enough for preventing crime. Instead, they stated that defined strategies like problem-oriented policing may help to set a connection between community engagement and crime prevention. This statement can elucidate the changing situation in red light violations at the program sites. In Turkey, people have known that honorary traffic inspectors could inspect traffic violations, including red light running, throughout the city. The red light violations, however, did not decrease at the program sites until the program commenced. Furthermore, even during the program, the existence of honorary traffic inspectors did not affect the violations at control sites. That is, honorary traffic inspectorate has not been effective to prevent red light violations until the beginning of the red light watch program which was based on problem-oriented policing. For the program, the police department identified the crime and developed a response for it at specific intersections. These intersections were publicized by media and installing signs. In these intersections, as a result, the program succeeded. We believe, thus, one of the reasons behind the successful result is a problem-oriented strategy which mediated the relationship between community engagement and red light violation prevention in specific locations.

## **5. CONCLUSION**

In this research, we examined the effects of a community-oriented red light watch program on red light violations. The observations in the treated intersections were performed by honorary traffic inspectors who live in the neighborhood. The study found a 27% decrease in red light violations six months after the commencement of the program. The results have three suggestions: First, community-oriented policing can be successfully employed for creating more secure traffic environment. Second, community-oriented traffic policing programs should be publicized by every means to create a deterrence effect among the drivers who violate rules. Third, to achieve successful results the community-oriented traffic programs should be implemented as problem-oriented in defined locations. We suggest that future researchers should conduct a public opinion survey to examine what the public feels about such programs.

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## TÜRKÇE GENİŞ ÖZET

Kırmızı ışık ihlalleri trafik güvenliği ve düzeni için önemli bir tehdit oluşturmaktadır. Trafik denetleme birimleri bu sorunu çözmek için klasik olarak polis memurlarını ya da kırmızı ışık kameralarını kullanmaktadırlar. Yapılan çalışmalar her iki tedbirin de kırmızı ışık ihlallerini engellemede başarılı olabileceğini göstermektedir. Fakat trafik güvenlik birimlerinin bu tedbirleri kullanmak için gerekli kaynağı bulmaları her zaman olası değildir. Polis memurlarının sayısı kırmızı ışık denetimi yapılacak kavşak sayısına oranla çok düşük kalmaktadır. Dahası polis memurlarının uğraşması gereken aşırı hız, yasak park, alkollü araç kullanımı, kazalar ve trafik

sıkışıklığı gibi pek çok trafik sorunu vardır. Kırmızı ışık kameraları da ihlalleri önlemek için etkinliği değişik çalışmalarda kanıtlanmış bir tedbirdir. Bununla birlikte kameraların kurulum maliyetleri, kurulması gereken kavşakların sayısının çokluğu ve kurulum sonrası bakım maliyetleri emniyet birimleri için kaynak bulma sorununu ortaya çıkarmaktadır.

Trafik birimlerinin, önemli bir kaynağa ihtiyaç duymadan, toplum destekli polisliği (TDP) kullanarak kırmızı ışık ihlalleriyle mücadele edebileceği varsayımı bu çalışmanın temelini oluşturmaktadır. Toplum destekli polislik suç önleme çalışmalarına vatandaşların dâhil olması gerektiğinin altını çizen bir felsefedir. Bu düşünceye göre ne emniyet güçleri ne de hukuk sistemi kamu güvenliği sorununu tek başlarına çözemezler. Bu sebeple kamu güvenliğini artırmak için halkın daha çok rol alması gerekmektedir. Toplum destekli polislik Amerika Birleşik Devletlerinde ve Avrupa ülkelerine oldukça popülerdir. “Mahalle Gözlem” (Neighborhood Watch) programı en çok bilinen TDP programlarından biridir. Bu programda mahalle sakinleri seçtikleri bir irtibat görevlisi vasıtasıyla mahallede gördükleri şüpheli durumları polise bildirmektedirler ve oluşabilecek suçları önlemek için polisle birlikte çalışmaktadırlar. Bu program haricinde yaya devriye, halk toplantıları, ev ziyaretleri ve okul eğitim programları da TDP uygulama stratejilerindedir.

Toplum destekli polislik denince akla ilk olarak trafik polisliği gelmese de TDP trafik polisliği için pek çok uygulama alanı bulabilmektedir. Mesela vatandaşlar polise kaza yerleri ve sebepleri hakkında bilgi verebilmekte ya da trafik konularında gözetleme görevi üstlenebilmektedir. İngiltere Avon ve Somerset’te 1992 yılından itibaren devam eden “Toplum Hız Gözleme” programı bunlardan biridir. Bu programla eğitim verilen vatandaşlara hız tespit cihazları (el radarları) verilerek bölgelerinde hız yapan araçların tespit edilmesi sağlanmaktadır. Dünyanın değişik yerlerinde trafikle ilgili değişik TDP faaliyetleri yürütülmektedir. Türkiye’de de trafik denetimlerinde halktan yararlanmak düşüncesiyle fahri trafik müfettişliği kurumu kanunla kurulmuştur. Kanunla ve yönetmelikle düzenlenmiş şartlara haiz kişiler trafik müfettişi olabilmekte ve yine kanun koyucunun belirlediği şekilde trafik denetimi yapabilmektedirler.

Bu çalışma Şanlıurfa’nın merkez Karaköprü ilçesinde artan kırmızı ışık ihlali şikâyetleri üzerine başlatılan toplum destekli kırmızı ışık denetim programının kırmızı ışık ihlallerine etkisini incelemektedir. Türkiye kanunlarına göre trafiği denetleme yetkisi kolluk kuvvetleri dışında sadece fahri trafik müfettişlerinde olduğu; diğer vatandaşların böyle bir yetkisi olmadığı için bu programda Karaköprü ilçesinde yaşayan fahri trafik müfettişleri (FTM) kullanılmıştır. Emniyet müdürlüğü planlanan proje hakkında Karaköprü ilçesinde yaşayan 43 fahri trafik müfettişine bilgilendirme toplantısı yapmıştır. Bunlardan 21 tanesi programa katılmaya gönüllü olmuştur.

Programın uygulamaya konacağı 5 kavşaktan her birine 4 FTM görevlendirilmiştir ve farklı saatlerde olmak kaydıyla kendilerine uygun olan bir saat boyunca kırmızı ışık denetimi yapmaları istenmiştir. Program 21 Mart 2011 tarihinde başlamış ve başlamasından 2 gün önce programın yürütüleceği kavşaklara “kırmızı ışık ihlalleri trafik müfettişleri tarafından gözlemleniyor” yazan tabelalar asılmıştır. Programın kırmızı ışık ihlallerine etkisini ölçmek için 5 program sahasında, 2 program dışı sahada ve 2 kontrol sahasında kırmızı ışık ihlal sayımları yapılmıştır. Sayımlar programdan 2 hafta önce, program başlamasından 2 hafta sonra ve program balamasından 6 ay sonra yapılmıştır. Sayım süreleri 1 haftadır. Sayımlar 9 kavşağın tek bir yol girişini izlemek için kurulmuş gizli kamera kayıtları üzerinden gerçekleştirilmiştir. Ayrıca video görüntüsü üzerinden araç sayımı yapan bir yazılım sayesinde araç sayımı yapılmıştır. Araç sayımları artan araç sayısının ihlaller üzerindeki etkisini ortadan kaldırmak için kullanılmış ve değerlendirme 10.000 araca düşen ihlal sayısı üzerinden yapılmıştır.

Çalışmanın sonuçları programın başlangıç döneminde program öncesi döneme göre 3 sahada da kırmızı ışık ihlallerinde bir azalma bulamamıştır. Yalnız 6 ay sonraki sayım sonuçları program bölgelerinde program öncesine göre % 27’lik bir ihlal azalması tespit etmiştir. Program-dışı ve kontrol sahalarında ise yine kayda değer bir değişim olmamıştır. Program-dışı sahalarda önemli bir değişiklik olmaması fahri trafik müfettişleri tarafından gerçekleştirilen bu toplum destekli kırmızı ışık denetim programının program alanları dışına bir yayılma etkisi göstermediğini ortaya koymaktadır. Diğer bir deyişle program sadece levhalarla uyarı yapılan kavşaklarda etkisini göstermiş diğer kavşaklara bu etki yayılmamıştır. Kontrol bölgelerindeki ışık ihlallerinde bir azalma olmaması, program sahalarındaki değişimin toplum destekli kırmızı ışık denetim programından başka bir sebebe dayanmadığının bir göstergesi olmuştur.

Sonuçlar, toplum odaklı polislik programlarının trafik uygulama alanında başarıyla uygulanabileceğini göstermektedir. Başlangıç döneminde ihlallerde değişiklik olmaması, sayımların henüz cezaların sürücülerin eline geçmediği bir dönemde yapılmış olması nedenine bağlanmıştır. Diğer bir deyişle program, cezalar sürücülerin eline geçinceye ya da sürücüler cezaların gerçekten kesildiğini duyuncaya kadar istenilen etkiyi oluşturamamıştır. Bu durum caydırıcılık teorisiyle açıklanabilir. Caydırıcılık teorisi mantıklı insanların cezaların kesinliği ve ciddiyetinin eylemlerinin yararlarından ağır bastığını algıladıklarında suç işlememeyi tercih etme eğiliminde olduklarını öne sürmektedir. Bu sebeple trafik ihlallerini önlemek için, TDP programlarının caydırıcılık teorisi taktikleri ve diğer polislik stratejileriyle desteklenmesi gerekmektedir.