Presentation a Model of Effect of Social Traffic Behavior on Traffic Violation, 
The Case Study of Tehran Metropolis

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Abstract
In this study, effect of social traffic behavior on rate of traffic violation of Tehran citizens becomes a model from the viewpoint of Sociology. Creation of model in this study has been done by questionnaire from 215 persons who refer the Police+10 (the organization of local police) to obtain their vehicle violation ticket. In this study, social traffic behavior defined as drivers' obligation measure to traffic laws that includes social and cultural aspects. Social Anomie, social capital and social assurance are social index aspect. Model shaping effect of mass media and social-cultural station of persons considered as cultural aspects. Conceptual model shows that elements, which studied in research as one part of elements, which is related to humans, are only 42 percent effective in traffic violation. Results of research shows elements like sexuality and education are main elements, inefficient laws component and lack of social justice are elements of social Anomie in social aspect, social-cultural station index and component of primary groups affected by model shaping in cultural aspect index have a great connection with traffic violation in Tehran city.

Keywords: Traffic Violation, Social Anomie, Regression Mode, Social traffic behavior

1- Introduction
Sociology is science of studying social and cultural phenomena and in urban Sociology engages in study urban phenomena like communication networks, neighborhood council, city council, public places and problems like sound pollution, traffic and city transportation and other disordered (Jasanoff et al., 1995; Easterby-Smith and Lyles, 2003). Urbanism increasing in world, especially in undeveloped countries is going to increase. This phenomenon happened because of growth population and because of extremely immigration of rural to cities so that population of some cities of reaches more than 2 times (York, 2007). With city extenuation, the distance rate of work and place of resistance increased and this fact make people to use vehicle for transportation, on other hand the growth of personal vehicle aggravate to it and it cause traffic jam in city transportation way.

Transportation and traffic specialist, human, vehicle and transportation network are effective elements in urban transportation (Kay, 1998). Several studies show that the role of human is the most important reason in traffic violation especially in traffic violation and accidents (Renner and Anderle, 2000; Macdonald et al., 2004, Castellà and Pérez, 2004; Yamamoto et al., 2008). Not observing to traffic laws and lawlessness are one of the reasons of problems, difficulties and traffic accident in many countries, they are influenced by social, cultural, economic and geographical situation of a society. Traffic accident static in Iran confirm high rate and abnormal of violation driving which every year cause several economic harm and social harm that human ingredient is reported as the main reason of violation driving. From point of view of sociology, one aspect of human reasons traffic violation has radical social traffic behavior. Intention of ‘social traffic behavior’ is level of obligation and duty band of persons to traffic laws which are enacted by transportation and traffic authorities and traffic responders.
This article tries to recognize elements which are effective on ‘social traffic behavior of Tehran’ to take a step in recognizing the element and reducing the traffic violation. With this introduction, in second part, expression and proposing the problem and purposes of research has been engaged. Whatever discussed in third part in general structure article, it includes the introduction dependent and independent variant and indexes related to examination, society studied and method of gathering information. In fourth part model shaping and in fifth part results and ideas in order to reducing traffic violation and improve traffic regularity in Tehran city at present.

2- Background, goals

Social living of human is influence by social rules and norms. Norms and rules that are followed in behaviors make social living spatially regular and predictable (Keverne, 2008). Disobeying traffic laws in one of clear social mistreat symbol in metropolises (Evans, 1996). In fact when people disobey norms and laws which are assigned by social formal organization from viewpoint of sociology, each unusual and or aberration behavior have several social reasons. Generally, deviation behavior and aberration cause disrupting urban regularity while regularity is base of urban living protection. One the important topic in current sociology is urbanized and urbanized behavior, which is product of urban living. In brief, citizen is a person who lives in city, use city facilities and have responsibility to city and citizens and urbanized moral mean duties and obligations in which each citizen have it to socialize institution and other citizens (Ajzen, 1991).

In this article, from sociology viewpoint, analyzing urbanized moral effect on disobeying traffic laws by drivers who drive in city, as one of the main reasons of disorderliness in urbanized traffic has been engaged. As it has been referred before each unusual and aberration behavior have several social reasons. In this study, disobeying traffic laws is moot as an aberration. One of social reasons of disobeying traffic laws is to destructible positive function. According to functioning theory, all social enacted laws have positive function but passing of time and social situation cause decreasing the role of some functions and in some matters cause changing to negative function (Bourdieu, 1977). Loosing these positive functions and having no proper alternative for them cause social Anomie situation on society. Disordering and chaos are consequences of making social anomie (Neumann and Brain, 2008). The other reasons of disobeying traffic laws, can be referred to have lack of feeling social connection between citizen and society.

This fact is result of feeling lack obligation and attachment, lack of feeling social responsibility and lack of feeling social participation among persons and social institution (Appadurai, 1986). Disrupting urban regularity, chaos and transportation problem, accident and disordering in traffic and transporting vehicle and citizens are result of disobeying traffic laws. Generally, disobeying traffic laws by human is only sensible and active element on transportation system, this happens because of two main reasons. Sometimes drivers perpetrate because lack of traffic laws information and knowledge, which can name it erroneous violation, but sometimes drivers violate consciously which is deliberate violation. Even though erroneous violation, cause many problems in transportation system in city but it has not root in urbanized moral traffic so, it is not mentioned in this study. In fact, whatever is mention in this study as social traffic behavior includes conscious traffic violations. This violations does not have root in lack of obligation to laws and not observing to their duties and responsibilities to society and other citizens; means persons having enough knowledge about laws, violate because of lack of urbanized traffic moral and lack of feeling obligation to laws in that place and time.

3- General structure of study

In this study, urbanized traffic behavior is engaged as independent variant and rate of drivers' violation as dependent variant. Examination the dependent variant with paying attention to amount of fine for persons during last 12 month from gathering information (April of 2010) and exanimate independent variant has done with asks in examining five parts level from completely agree to completely disagree.

3-1- Urbanized traffic behavior

According to several studies, traffic behavior examining is done in two parts (Parker et al., 1992; Rosenbloom & Wolf, 2002) so, better study direction on effect-urbanized traffic behavior on traffic violation is done in two social and cultural aspects.
3-1-1- Social aspect of traffic behavior

Social aspect of traffic behavior is consisting of feeling duty and responsibility on base of moral order against “others” (Bandura, 1977; Sterman, 2000).

In this article, social anomie, social capital and social assurance are studied as indexes of social aspect in traffic violation. Each index, according to sociology theories are enable to examine by special elements.

- Social Anomie

According to Durkheim (1951) and Merton (1938) theories and related studies (Smith & Jarjoura, 1989; Cattarello, 2000; Chuang et al., 2005) social anomie is social situation that generalized norm and accepted by society is inefficient or debilitated.

- Social capital

Set of available norms in social systems, which cause increasing cooperating level of members of that society and decreasing cost of exchanges and communicates which is called Social capital (Claridge, 2007). Briefly, social capital studies the rate of people's relations in several groups. According to formal norms of each group based on several studies (Zhao, 2002; Grootaert and van Bastelaer, 2002), some elements like social consciousness, social cooperating and social trusting use to examine social capital.

- Social assurance

According to Charby theory, each person's responsibility and attachment to the group and its society is called social assurances. Social assurance analyzed in three levels: public, organization and individual (Deegan et al., 2006). Since, organization obligation is not considered in this study, social assurances analyzed in two components: connective obligation (public) and enclosure obligation (individual).

3-1-2 Cultural aspect

Moral cultural aspect includes set of norm orders which have root in culture of society (Harvey, 1999). In this article, model shaping of persons, engage to use mass media and social-cultural situation based on person education as indexes of cultural aspect in traffic violation. 

- Model shaping

In sociality process, people try to choose several behavior symbols. Person’s model shaping according to Charles Cooley theory (1929) happened in primary groups and secondary groups. Primary groups are such a group, which relations are based on feelings and it is informal. People in these groups have face-to-face relations. Several studies base on Charles Cooley theory (Tran and Stanciugelu, 2001; Ozcinar, 2006) believe that most model shaping occur in these groups and from stability point of view, these groups are almost stable. In this study, family (include father and mother), friends and coworkers are mentioned as primary groups. Secondary groups are such a group which relations are based on regulations and mostly happened because of individual gain. Longevity of this group is less than primary group and it is less stable too. In this study, traffic police, general transportation vehicle and professor and university educated are secondary group.

- Mass media

Today, world is related to constant communicate or public mutual action which is completely separated. Newspapers, magazines, cinema and television or in generally mass media are obtrude in many aspects of our life and collected many information which people use them (Dozier and Broom, 2006; Basille, 2009). This article tried to recognize traffic information of Tehran among several media in order to surveying rate of media effect on law-abiding and reducing traffic violation.

- Social-cultural situation

Another cultural element, which is effective on people traffic violation, is “social-cultural situation” of persons. Social situations are an expression, which in sociology means the differences between social groups' base on respect or social validity. Situation is related to person's mental evaluation from social disorders and always it has not originated from income and property. Educating, job, social level and many other items can show the social situation of persons (McEvoy and Kingsep, 2006; Rodebaugh and Heimberg, 2008). It is important to mention this point that persons who have high social situation level feels more concord to enacted laws, so, the do less deviancy and aberration like not observing to traffic laws. In this study person’s cultural-social situation are ranked base on education and literacy.
3-1-3 Main elements
To examine the elements which are influenced on traffic violation, in addition social-cultural elements main elements like sex, age, educating, marriage, home and job are also has been examined.

Figure 1: conceptual study model.
2-3 Traffic violation

As it has been said before, dependent variant in this study is the rate of person's traffic violation. For surveying, the rate of traffic violation it has been used from violation static is which is signed in Tehran traffic center in 2008 and 2009. Figure 2 shows percent of 20 main violations in 2008 based on violation code. Figure 1 shows the subject of main violation based on violation code and rate of fines.

Comparison of these two figure shows that main violation type, was same in each 2 years. Even though in some situation, rank of them are changed. For simple in each 2 year of surveying, violation code of 1043 with subject of “Not using seat belt” has been most type of violation which shows lack of culture in obtained information, violation code of 1131 with subject of “Crossing the speed limit” was in fifth rank in 2009 increase into rank 5. Also in these two years, violation code of 1088 and 1060, which is related to Lawful Parks (absolutely no parking and no parking), was signed in the first four. This fact shows parking capacity limitation problem against many vehicle in civil pavements in above period.
Table 1: traffic violation on base of violation code

<table>
<thead>
<tr>
<th>Violation code</th>
<th>Subject of violation</th>
<th>Cost of fine (Rial)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1043</td>
<td>Not using seat belt by the people sitting in front seat while driving</td>
<td>40000</td>
</tr>
<tr>
<td>1088</td>
<td>Stop in non-stop zones (absolutely no-parking)</td>
<td>130000</td>
</tr>
<tr>
<td>1060</td>
<td>Stopping in prohibited area</td>
<td>70000</td>
</tr>
<tr>
<td>1090</td>
<td>Entry of not permitted vehicle to the traffic zone</td>
<td>130000</td>
</tr>
<tr>
<td>1053</td>
<td>Any parking that causes traffic and blockage</td>
<td>70000</td>
</tr>
<tr>
<td>1077</td>
<td>Using cell phone or the same while driving</td>
<td>70000</td>
</tr>
<tr>
<td>1084</td>
<td>Not carrying driving license, car document or third person insurance</td>
<td>70000</td>
</tr>
<tr>
<td>1089</td>
<td>Double parking in street</td>
<td>130000</td>
</tr>
<tr>
<td>1033</td>
<td>Not using helmet by the motorbike driver and the pylon</td>
<td>40000</td>
</tr>
<tr>
<td>1100</td>
<td>Stopping from the beginning up to the end of curves and the crossing zones and on the bridges and insight of the tunnel</td>
<td>130000</td>
</tr>
<tr>
<td>1131</td>
<td>Crossing the speed limit</td>
<td>250000</td>
</tr>
<tr>
<td>1082</td>
<td>Lack of technical sheet of vehicle</td>
<td>70000</td>
</tr>
<tr>
<td>1124</td>
<td>Not observing the Stopping and moving sign of the police</td>
<td>130000</td>
</tr>
<tr>
<td>1146</td>
<td>Parking of the vehicle in the pavements</td>
<td>150000</td>
</tr>
<tr>
<td>1133</td>
<td>Crossing the prohibited areas</td>
<td>200000</td>
</tr>
<tr>
<td>1015</td>
<td>Not observing of the traffic police or his warning</td>
<td>130000</td>
</tr>
<tr>
<td>1091</td>
<td>Parking of the other vehicle in parking zone of the special vehicle (Taxi, Bus, etc.)</td>
<td>20000</td>
</tr>
<tr>
<td>1130</td>
<td>Crossing the red light</td>
<td>200000</td>
</tr>
<tr>
<td>1076</td>
<td>Entrance in special passerby areas</td>
<td>70000</td>
</tr>
<tr>
<td>1078</td>
<td>Eating, drinking and smoking while driving</td>
<td>70000</td>
</tr>
</tbody>
</table>

In this study, the rate of the violation of rule by the individual according to the dates in questionnaires has been calculated. The rate of each violation in the number of its repetition has been calculated for each individual. Because of two reasons signed cost in violation paper was unusable in this study. Some signed violation in violations sheet of each car was related to out of city while aims of this study are in the city. Because of lack of on time paying some violation becomes 2 times which cause increasing total cost of fines in which signed in sheet and in fact it calculate as one kind of error in this study. So, in this study, calculating the cost of fines after gathering questionnaires has been done. Primary result shows that in Tehran city 78% of drivers had minimum one violation of 3.5 times of persons, which had no violation during one year.

3-1 data collection

This study has been done on the basis of polling through questionnaire. in the primary test stage, considering the violation percentage of the year 2010, to measure the amount of people's driving violations, 12 violations were examined as the main violations in the questionnaire which formed about 85% of all violations. In addition, to consider the citizens' traffic behavior for each index described in the previous section, some buoys were designed and in some, a questionnaire with 67 questions was prepared. The primary questionnaire was distributed gathered among 30persons of the community under study. According to the obtained information from these questionnaires, some of the questions were omitted or modified and 76% of the final questionnaire was distributed and gathered in the time span of Jun 6th to Jul 6th of the year 2010 in Police+10 centers of Tehran. The statistical community under study was all of the people going to the executive of Police+10 centers of Tehran to receive driving violation. The questionnaires were only delivered to the drivers who used the vehicles personally and the registered violations were exclusively related to the persons him/herself. In sum, 215 questionnaires were collected which 137 of them were related to men and 78 of them to women. Figure (4) shows most of the violations done by the drivers in the sample community.
On the basis of the obtained results, also in this survey, the violations code 1043 with the title of "not using seat belt" has been recorded as the most violation as in the year 2009. In addition, the violation codes 1060 and 1088 in the study done, as in years 2009 and 2008, were recorded as the first five violations.

4- Modeling

After data collection, SPSS software was used to analyze the data. First, according to the research approaches, the components and then desirable index were extracted from the buoys under measurement. Using appropriate correlation coefficient, the relations between independent and dependent variables were addressed, that because in this study, the dependent variable is quantitative and the independent variables are rank. The correlation coefficient rank Spearman was used with 95% confidence level.

<table>
<thead>
<tr>
<th>index</th>
<th>component</th>
<th>( \beta )</th>
<th>Standard deviation</th>
<th>t</th>
<th>Meaningfulness level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td>-1425485.890</td>
<td>401859.024</td>
<td>-3.547</td>
<td>.001</td>
</tr>
<tr>
<td>Background factors</td>
<td>Academic education</td>
<td>-507605.814</td>
<td>232143.871</td>
<td>-2.187</td>
<td>.030</td>
</tr>
<tr>
<td></td>
<td>sex</td>
<td>317860.971</td>
<td>168305.183</td>
<td>2.036</td>
<td>.043</td>
</tr>
<tr>
<td>Social anomie</td>
<td>Non social justice</td>
<td>74247.848</td>
<td>260667.911</td>
<td>2.848</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>Law inefficiencies</td>
<td>40689.841</td>
<td>19041.423</td>
<td>2.137</td>
<td>.034</td>
</tr>
<tr>
<td>patterning</td>
<td>Primary groups</td>
<td>509558.478</td>
<td>83191.366</td>
<td>6.125</td>
<td>.000</td>
</tr>
<tr>
<td>Cultural-Social degree</td>
<td>education</td>
<td>-533299.416</td>
<td>76387.514</td>
<td>-6.494</td>
<td>.000</td>
</tr>
</tbody>
</table>

\( R^2 = 0.42 \)

As it is observed, using linear procedural analysis, model of the impact of the citizenship traffic behavior components in violation levels has been obtained with 42% index. Conforming this model, components such as sex, academic education, law inefficiencies, feeling non-social justices, people's patterning from their primary groups and also their cultural-social degree, on the basing of education level, have been known as the factors effecting on traffic violation level of citizens in Tehran. Components such as social commitments, feeling non-social security, social confidence, social participation and knowledge level were not made meaningful and they did not have a clear impact on driving violation level. Results of the obtained model are interpreted as follows:

- **sex**

One of the main factors effecting on driving violation level is sex. This factor has positive sign effects on driving violation level. Since, in this relationship, the code (0) has been allocated to women and (1) to men, the above variable coefficient is indicator of more violation commission by men. The truth of this result can be examined based on bio-sociology theories.
In these theories, it is assumed that the offences needing agility and faster reaction are more common in men. Some driving violations such as no permissible speed also need the driver's control power and fast reaction, which observe in men more.

-Education
In this study, first, the person's education has been divided into below Diploma, junior diploma, Bachelor, Master of Science and above, that no meaningful relationship between education level and violation was found with this categorization. In the second stage, the education was divided into below bachelor and above. This categorization shows a meaningful and inverse relationship between education level and violations of driving. Nevertheless, the higher education levels of citizens, as expected, cause to the lower their driving violations.

-Law inefficiencies
One of the factors effecting on driving violation amount believes in low inefficiencies by drivers. Inefficiency coefficient becoming positive in this study indicates the tendency toward rebel against traffic laws by the respondents having driving violations as expected. It should be mention that more than 50% of the people in the sample claimed that the traffic laws are not so efficient. The low inefficiencies show destruction of the lows positive functions. Time passage, cause to destruct or change social functions of every low. The change in social and cultural conditions of societies calls for the necessity of reviewing laws in time. In addition when people do not believe in social laws, it is more likely that shows abnormal behavior.

-feeling non social justice
Based on the obtained results, feeling non-social justice with positive coefficient indicates increasing tendency towards driving violations by the respondents in the sample under study. Feeling non-social justice arises from the social control weakness. In the sample under study, the people's viewpoint about law enforcement and the social control system is negative, so because of non-internalizing laws, the person binds him/herself to observe traffic laws only in the presence of social control. In addition, this matter arises from the weakness of people's internal control resulting from absence of relationship between the person and society (by internal control, we mean feeling social joint between the person and society). Based on social control theories, weakness in the process of social control in the society causes people's values and believing towards manners such as observing traffic laws to faint and to increase law-breaking among the drivers.

-Cultural- social degree
In this study, cultural-social degree is one of the cultural factors effecting on driving violations on which the education of the drivers under study effects. In this index, the persons' viewpoint (depend from their education degree) towards the effect of others' education on low abidingness or non-law observance has been studied. According to obtained results, there is a meaningful relationship between the people's education level and their driving violations. The social degree effects on driving violation level. With the persons having higher cultural-social degree, the customs and laws are internal and they commit themselves more to laws. The most people's thought is on the basis that education causes to promote persons' socio-cultural degree.

-Patterning
In this study, one of the other factors effecting on driving violation level was patterning level of the persons considered. According to the obtained model, in the community under study, there is a meaningful and direct relationship between persons' patterning from their primary groups and driving violation levels. Based on social learning theory, most of the human's behaviors acquired through seeing and during the patterning process (Iacono et al., 1999).

5-Results and recommendations
Considering the issues presents in the previous section, the study results and some recommendations explained in order to reduce driving violations in human terms as follows:
1-In this study knowing and considering human factor as the most important factor of driving violation, in social and cultural terms, were addressed. According to the obtained results, in this study, the human factor in terms of citizenship traffic behavior has been affected on driving intentional violations only 42% and the other 58% is related to the factors not considered in the study.
In the community under study, one of the other factors effecting on weakness of citizenship traffic behavior, is law inefficiency. To the opinion of the persons under study, most of the laws have lost their functions or they do not have positive function. As it is shown in figure 4, non-observance of permissible speed has been known as the second factor of traffic violations. Most of the citizens believe that the determined speed in the laws is not appropriate for current roads, therefore they justify themselves to not observe it. It appears that reviewing some laws helps to solve such violations. This review should be done by qualified experts and with people consultation. People and expert presence beside each other is a step to make collective participation morale. Social participation is a very effective step in civic problem solving. In addition, the people presence in social decision-making can be a factor to enhance the feeling of social dependence, cooperation and collaboration between authorities and the citizens.

One of the other reasons of driving violations is the people believing in non-observance of social justice in the police's attitude towards the violators. Citizens believe that because the probability of being friend is not always and the traffic police officers are not presents everywhere, there is no need to observe the laws permanently. In fact, this matter arises from non-internalization of laws among citizens. Assuming that compiling any law has been done with a clear aim, people should deem necessary to observe traffic laws and presence or absence of police officers do not have a significant role in violation happening, to internalize the proposed laws, the main responsibility is on shoulders of families and instructional organizations.

One of the other factors effecting on driving violation level in the community under study is the people's patterning from their primary groups. Since the family is the first group in which every person find him/herself, so the deepest and most of the learning are in it. Therefore, values and social laws internalization including traffic laws have more effects on the persons' performance than other groups. The results of this study also confirm the principle that the family and primary groups have the most significant role in learning lifestyles and internalizing social customs.

One of the other factors effecting on driving violation level in the community under study is the people's social culture degree. Most of the people think that education brings social culture degree to persons. Therefore, they expect low driving violation level in these persons.

References


