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*Published in:*  
International Journal of Law, Crime and Justice

*DOI:*  
[10.1016/j.ijlcrj.2014.09.001](https://doi.org/10.1016/j.ijlcrj.2014.09.001)

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*Document Version*  
Publisher's PDF, also known as Version of record

*Publication date:*  
2015

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*  
Hertogh, M. (2015). What Moves Joe Driver? How Perceptions of Legitimacy Shape Regulatory Compliance among Dutch Traffic Offenders. *International Journal of Law, Crime and Justice*, 43(2), 214-234. <https://doi.org/10.1016/j.ijlcrj.2014.09.001>

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# What moves Joe Driver? How perceptions of legitimacy shape regulatory compliance among Dutch traffic offenders

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Available online 18 September 2014

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## Abstract

Using survey data collected from a sample of 1182 traffic offenders in the Netherlands, and building on the ‘procedural justice model’ which was first developed in Tyler (1990), this paper explores how perceptions of legitimacy shape regulatory compliance. The study makes three contributions to the literature. First, it is one of the few studies in which the procedural justice model is tested in Continental Europe. Second, following recent critiques in the literature, it introduces three modifications to the original model. Third, and unlike most previous studies, it is not only based on self-reporting by drivers, but includes actual evidence about their behaviour as well. With regard to the self-reported level of compliance, the present study largely confirms Tyler’s (1990) original findings. Yet with regard to the observed level of compliance, there are also important differences between both studies. These findings will be explained by shifting our focus to ‘legitimacy-in-context’ (Beetham, 1991).

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*Keywords:* Legitimacy; Compliance; Procedural justice model; Traffic laws; The Netherlands

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## 1. Introduction

Late at night, at a clear intersection with no drivers to be seen on any side, Joe Driver stopped at a stop sign. Why? His stop, after all, delayed his return home, cost him gasoline and

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denied him some gratification in driving fast. According to Hyde (1983: 386), who first introduced this example, there are several different reasons for Joe's action. These include habit, fear of the police, fear of hitting other (hidden) cars or pedestrians, or simply Joe's idea that stopping at stop signs is in his own best interest. Yet Hyde wonders if there may also be any additional motives for Joe's decision. "Those who believe that there are call these "legitimacy" [...]: [o]ne may adhere to a social order; that is, one may conform to its rules and norms, because one accepts the order as a model or believes it binding." (Hyde, 1983: 387).

In the Netherlands, the potential relationship between legitimacy and compliance with traffic rules is not only theoretically relevant but also of great practical relevance. In the past two years, most traffic fines went up sharply and in some cases nearly doubled. Dutch traffic fines are now among the highest in Europe (Dutch News, 2011; Radio Netherlands Worldwide, 2012). This has led to a wave of public protest in the media and on the Internet (RTL Nieuws, 2011). Also, the police themselves have openly protested against the new traffic fines. Police officers are reluctant to write out expensive tickets for minor traffic offences because they fear that this will ultimately undermine their authority (Hinke, 2011; Dutch News, 2013). People question the true motives of the Dutch government. Do these high traffic fines really improve traffic safety, as the government claims, or are they just an easy way to make money? Following these events, the underlying question of this paper may be summarized in the following terms: Are people's (critical) attitudes and opinions about the legitimacy of the Dutch government only words without any real consequences? Or do they also shape the behaviour of Joe and other drivers in the Netherlands? In this paper, I define legitimacy broadly as 'the belief that legal authorities are entitled to be obeyed and that the individual ought to accept those judgements' (Tyler and Huo, 2002: xiv).

There are basically two positions on legitimacy and compliance: a sceptical and an optimistic position. According to the first position, which is most clearly represented by Hyde, '[l]egitimacy [...] is insufficient to result in obedience.' (Hyde, 1983: 400) According to the supporters of this position, '[a]ll obedience [...] stems from a combination of habit, fear of sanctions, and individual conviction that the requested compliance is in the actor's interest.' (Hyde, 1983: 400; *emph. in original*). Although many social theorists claim that legitimacy is an important motive for compliance, Hyde and others argue that this idea is not supported by empirical evidence. 'Every study I have been able to locate that attempted to show a relationship between an attitude or belief in legitimacy of an order and some corresponding behaviour has found that the relationship is weak or nonexistent.' (Hyde, 1983: 395). The second position, which is most clearly represented by Tyler (1990), claims the exact opposite. In response to Hyde's (1983) criticism, Tyler (1990) has conducted several public opinion surveys. Based on this research, he argues that legitimacy shapes compliance not only in theory, but also in everyday practice. Although other factors (including habit, sanctions and self-interest) may also play a role, these motives are not sufficient to explain regulatory compliance. Tyler (1990: 58) thus concludes: '[L]egitimacy has a significant independent effect on compliance, even when other potential causal factors are controlled for.'

In this paper, both positions will be empirically examined in a survey among Dutch traffic offenders. The central research question (which will developed further later in this paper) may be formulated as follows: What is the role of self-interest, fear of the police, legitimacy and several other variables in influencing regulatory compliance behaviour with traffic rules? To analyse this, this paper uses the 'procedural justice model', which was first developed in *Why people obey the law* (Tyler, 1990) and which is currently considered the 'dominant theoretical approach' to legitimacy and compliance (Bottoms and Tankebe, 2012: 120). The current study

makes three important contributions to the literature. First, this study is one of the few studies in which the procedural justice model (and in particular the relation between legitimacy and *compliance*) is tested in Continental Europe (see also Hough et al., 2013). It is often assumed that Tyler's model applies universally, regardless of the specific context. Yet, nearly all previous empirical evidence for the model is United States-based, with only a few exceptions in Israel (Yagil, 1998), Australia (Murphy et al., 2009) and the United Kingdom (Jackson et al., 2012). As others have argued, this 'lack of a robust comparative empirical base' (Jackson et al., 2012: 1052) means that we do not know whether the central tenets of the model hold in other contexts. Second, following recent critiques in the literature, the paper introduces three important modifications to the original procedural justice model. The revised model considers both support for and resistance against the official legal system; applies a broader concept of legitimacy; and relies on a different methodology. Third, unlike most previous studies the current paper is not entirely based on self-reporting by drivers, but also includes actual evidence about people's behaviour. This allows us to compare the role of legitimacy in shaping both their self-reported and their observed level of compliance.

In the second section of this paper I will introduce an outline of the procedural justice model. Next, I will discuss several critiques in the literature and the original model will be modified in the light of this criticism. Here, I will also formulate the central hypothesis of this study. The third section of this paper discusses the research-design and the methodology of the study. I will then focus on the core of this paper: what are the attitudes and opinions of Dutch traffic offenders and how do these shape their behaviour? In the fourth section, I will examine which factors influence both their self-reported and their observed level of compliance. The findings suggest that people who question the legitimacy of legal authorities and legal rules are more likely to break the law. In the fifth section of this paper, I will compare both types of compliance. With regard to the self-reported level of compliance, our study largely confirms Tyler's (1990) original findings (and our central hypothesis). Yet with regard to their observed level of compliance, there are also important differences between both studies. I will suggest that the best way to explain these differences is by focussing on legitimacy-in-context; and by shifting our focus of attention from *if* to *when* and *how* legitimacy shapes compliance. In the final section I will summarize the main conclusions of this study.

## 2. Applying the procedural justice model: critiques and modifications

This paper uses the 'procedural justice model' to analyse the role of legitimacy in shaping regulatory compliance among road users. Tyler (1990) distinguishes between two different perspectives on regulatory compliance: an 'instrumental' and a 'normative' approach.<sup>1</sup> According to the 'instrumental' approach: 'people are viewed as shaping their behaviour to respond to changes in the tangible, immediate incentives and penalties associated with following the law' (Tyler, 1990: 3). This perspective has long dominated the regulatory literature on compliance. By contrast, Tyler is more interested in the 'normative' approach. This approach is concerned with 'the influence of what people regard as just and moral as opposed to what is in their self-interest' (Tyler, 1990: 3). In other words, '[i]f people view compliance with the law as appropriate because of their attitudes about how they should behave, they will voluntarily assume the obligation to follow the rules.' (Tyler, 1990: 3).

<sup>1</sup>This is an analytical distinction. In practice, (elements of) both approaches may be important.

An important element of the 'normative' perspective is the idea that people's positive attitudes and opinions about the legitimacy of the authorities will have a positive influence on compliance. To test this idea, Tyler has conducted two surveys of the general population of Chicago. These surveys focused on a range of laws that people deal with in their everyday lives. These laws prohibited six forms of behaviour: making enough noise to disturb the neighbours, littering, driving a car while intoxicated, driving faster than the speed limit, taking inexpensive items from stores without paying, and parking illegally. Tyler examined legitimacy in two ways. First, by measuring the 'perceived obligation to comply with the directives of an authority, irrespective of the personal gains and losses associated with doing so' (Tyler, 1990: 27). And second, by measuring the extent to which 'authorities enjoy the public's support, allegiance and confidence' (Tyler, 1990: 28). Based on the literature, he also included several other potential motives for compliance, including deterrence, peer opinion and personal morality (as well as several demographic control variables). Finally, he included several questions related to the way in which people felt they were treated by the authorities.

Tyler concluded that legitimacy has a significant and independent effect on the level of self-reported compliance (even when other potential causal factors are controlled for). By contrast, deterrence and the risk of punishment have no significant effect on compliance. To quote the jacket of his book, Tyler (1990) argued that 'people comply with the law not so much because they fear punishment as because they feel that legal authorities are legitimate and that their actions are generally fair.' The final part of this citation also emphasizes a second important dimension of Tyler's work. He not only found that legitimacy shapes compliance, but also that the level of (perceived) legitimacy is influenced by the perceived procedural fairness of law enforcement authorities. In other words, 'the basis of legitimacy is the justice of the procedure used by legal authorities' (Tyler, 2006: 272). Tyler has followed up his initial study with many more survey-based studies (see, e.g., Tyler and Huo, 2002; Sunshine and Tyler, 2003; Tyler and Wakslak, 2004). Generally speaking, '[t]hese studies have amplified but also confirmed the original results' (Bottoms and Tankebe, 2012: 121). In this paper, I will zoom in on the first dimension of Tyler's approach (in particular the relation between legitimacy and compliance). Although this paper will primarily focus on Tyler's model, his work echoes a rich tradition of theoretical discussions in classical sociology. For example, Tyler's approach to normative and instrumental modes of regulatory compliance reflects important elements of Durkheim's distinction between different types of obedience associated with 'repressive' and 'restitutive' law (see, e.g., Durkheim, 1992; Lukes and Scull, 1983; Cotterrell, 1999). Moreover, Tyler's emphasis on a normative approach to compliance is related to Durkheim's central claim that law needs to be rooted in society's shared system of beliefs and morals (or 'collective consciousness'). For Durkheim, 'a contract between individuals would be meaningless and ineffective unless it was based on deeply held values and beliefs, and unless it was sanctified by custom, ritual, and morality.' (Turner, 1999: xxii). Likewise, he argued that '[l]egislation, to be effective, must reflect the moral climate already existing in society.' (Cotterrell, 1999: 168) Tyler's work is also closely linked to Weber's famous discussion of legitimacy (see, e.g., Bottoms and Tankebe, 2012; Hyde, 1983). Tyler's choice to prioritize normative compliance over instrumental compliance and his focus on legitimacy builds on Weber's assumption that 'social action which involves a social relationship may be guided by the belief in the existence of a legitimate order' (Weber, 1978: 31). It is beyond the scope of this paper to discuss this literature in great detail. However, the central focus on Tyler's model allows us to test some of these classical ideas as well.

Over the years, Tyler's work has become increasingly influential in the international literature on legitimacy and compliance. However, as these studies of procedural justice have

developed so have a number of critiques of procedural justice as a theoretical and methodological framework for research (see also Sarat, 1993). Most of this criticism has focused on: (a) the research design; (b) the concept of legitimacy used in these studies; and (c) the methodology, which largely depends on self-reporting. In this section, the original procedural justice model will be modified in the light of this criticism. In addition, and based on a review of the literature, I will formulate the central hypothesis that will be tested in this paper.

### *2.1. From law-abiding citizens to traffic offenders*

The first type of criticism focuses on the research-design of procedural justice studies. Most studies have found a relatively stable consensus about what people want from the law. However, Silbey (2005) and others have argued that these results are based on a biased research-design. '[R]esearchers inquire about only a limited number of issues, values, and institutional arrangements' and '[t]he formulation of the questions encourages conforming answers, lest the citizens appear deviant or disloyal.' (Silbey, 2005: 337). In other words, the procedural justice model almost completely focuses on the opinions of citizens who support the official legal system, but it virtually ignores those who are 'against the law' (Ewick and Silbey, 1998). Or, as Silbey (2005: 337) puts it, 'the research itself effaces the presence and possibilities of conflict, resistance, or attachment to alternative models [of justice]...'

In the light of this criticism, the first modification to the original model is that this paper will not focus on the opinions of law-abiding citizens but on the views of a large group of traffic offenders. In this way, our study not only records the level of support for the official legal system, but it will also allow room for those ('deviant' or 'disloyal') people who choose not to comply with the law.

### *2.2. From a limited to a broad concept of legitimacy*

The second critique focuses on the concept of legitimacy in the procedural justice literature. In his original study, Tyler (1990) considered two elements of legitimacy: the 'perceived obligation to obey the law'; and the level of 'support for legal authorities'. However, in more recent studies, several critics have argued that this operationalization of legitimacy is too limited (Murphy et al., 2009; Murphy and Cherney, 2010, 2012). According to Murphy et al. (2009: 1), 'previous research on procedural justice and legitimacy has examined legitimacy in a limited way by focussing solely on the perceived legitimacy of authorities and ignoring how people may perceive the legitimacy of the laws and rules they enforce.' Although an authority itself may be seen to have legitimate authority, the rules and laws it tries to enforce may be seen to be illegitimate. Following this criticism, in several recent projects Tyler has now also included 'legal legitimacy' in his research-design (Murphy et al., 2009; Jackson et al., 2012).

Considering this discussion, the second modification to the original model is that this paper expands the concept of legitimacy. In addition to the 'perceived obligation to obey the law' (institutional legitimacy) and 'support for legal authorities' (personal legitimacy), our study also considers 'legal legitimacy' (Crawford and Hucklesby, 2013: 2). This third element focuses on the perceived legitimacy of the rules and norms the authorities try to enforce.

### *2.3. From what people say to what people do*

The third and final critique questions the methodology of the procedural justice literature. Procedural justice studies typically rely on public opinion surveys. However, several scholars

have argued that this method only provides us with a limited view of the role of law in people's lives. As [Abel \(2010: 18\)](#) has noted in a review of four decades of law-and-society-research: 'Opinions about legal institutions, processes and rules, and events divorced from daily life may be easy to elicit through closed-ended questionnaires, but their meaning is opaque.' In his view, '[w]e need to know whether belief in law's legitimacy makes people more willing to comply against self-interest.' [Silbey \(2005\)](#) has made a similar point in her review of legal consciousness studies. In a direct comment about the procedural justice literature, she argues that 'the surveys [in this literature] often treat consciousness as a disembodied mental state, a set of attitudes and opinions, rather than a broader set of situated practices and repertoires of action' ([Silbey, 2005: 337/8](#)). In her view, however, legal consciousness is 'not a decontextualized set of attitudes toward and about law.' Instead, '[l]egal consciousness is produced and revealed in what people do as well as what they say.' ([Ewick and Silbey, 1998: 46](#)) This approach 'treats signs and performances, meanings and actions as ontologically inseparable.' ([Silbey, 2010: 69](#)).

Considering this discussion, the third and final modification to the original model is that this paper is not limited to self-reported compliance but also includes data about the observed level of compliance. This will allow us to analyse the importance of legitimacy not only for what people say, but also for what they do.

#### 2.4. Hypothesis

In the introduction, the central research question of this paper was formulated as follows: What is the role of self-interest, fear of the police, legitimacy and several other variables in influencing regulatory compliance behaviour with traffic rules? To analyse this, this paper uses Tyler's 'procedural justice model', which was slightly modified in the light of several critiques in the literature. Based on Tyler's theory, as well as the results from previous research, I hypothesize that legitimacy will have a significant effect on the level of compliance among Dutch traffic offenders, even when other potential causal factors are controlled for (this was earlier referred to as the 'optimistic position' on legitimacy and compliance). To test this hypothesis, I will use the results of a recent survey among traffic offenders in the Netherlands.

### 3. Methods

#### 3.1. Sample and procedure

The present study utilized survey data collected from a stratified random sample of 1182 Dutch traffic offenders (see [Hertogh et al., 2012](#)). Our study focused on five types of offences: (i) speeding; (ii) ignoring a red traffic light; (iii) illegal parking; (iv) driving a car while intoxicated; and (v) using a mobile phone while driving.<sup>2</sup> Three of these traffic offences (speeding, illegal parking and drunk driving) were also included in [Tyler's \(1990\)](#) original study. For this study, we closely cooperated with the Dutch Central Fine Collection Agency (CJIB), a government agency responsible for the collection of fines for traffic offences (and several other offences). In 2011, the CJIB drew a random sample from their

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<sup>2</sup>We also included fines for failing to produce a compulsory ID, but these data will not be used in this paper.



database of those people (with a Dutch licence plate) who during a four months period (March–June 2011) were booked for a traffic offence in one of our five selected categories.<sup>3</sup>

In the Netherlands, all drivers who are booked for a traffic offence receive a notification of decision sent by the CJIB. This letter sets out the details of the violation (e.g. which violation, where and when it took place, established by whom, etc) and this notification is accompanied by a payment slip. Three to six months after the offenders in our sample received their notification, we sent them a separate letter (using the letterhead of the University) in which we explained the purpose of our study and in which we invited them to participate in our on-line survey (using a unique log-in code). The 10-page survey examined a range of issues, including views about Dutch traffic laws, attitudes and beliefs about the CJIB and the police, and their personal experiences with legal authorities. In total a letter was sent to 7000 people (1200 for those people who received a ticket for all five traffic offences; and 1000 for people with a ticket for failure to produce an ID). Two reminder letters were posted to non-responders during the survey fielding period. After a period of approximately three months a total of 1182 completed surveys were returned (16.9% response rate). The response rate was the highest among those people who received a ticket for speeding (26.6%), followed by those with a ticket for ignoring a red traffic light (21.3%) and illegal parking (17.3%). The level of response was the lowest among people with a ticket for using their mobile phone (14.3%) and those with a ticket for drunk driving (12.5%).

### 3.2. *Variables and measures*

Of particular interest to this study are survey questions related to ten variables. The *dependent variable* in this study is (i) self-reported compliance behaviour. Our analysis included seven *independent variables*. These variables include different elements of legitimacy and several other factors which, according to the literature, may have an important influence on compliance (see Tyler, 1990: 42–56). This will allow us to compare the importance of legitimacy to other potential causal factors. Following Tyler's (1990) original study, we focused on three 'sociological factors': (ii) deterrence; (iii) personal morality and (iv) peer opinion. In addition, we included (v) procedural justice as a separate variable. We also considered three types of 'legitimacy': (vi) perceived obligation to obey the law (legitimacy 1); (vii) support for the police (legitimacy 2); and (viii) legitimacy of laws (legitimacy 3).<sup>4</sup> Moreover, we added two new variables related to people's personal situation: (ix) administrative problems and (x) financial problems. Finally, we included a number of demographic variables for controlling purposes. For most of the variables in the present study, we constructed scales similar to those in Tyler's (1990) original study.

Table 1 presents the means, standard deviations, Cronbach alpha reliability coefficients, and bivariate correlations among the scales used in this study. As can be seen, the Cronbach alpha coefficients of each scale are quite high, indicating reliable scales. All items used to construct these scales were measured on a 0–3 scale.

<sup>3</sup>Because we were only interested in natural persons, we excluded those fines that were sent to leasing companies or other corporations.

<sup>4</sup>In order to be able to compare the results from our study with the results from other previous studies, we decided to look at all three types of 'legitimacy' separately. In future studies, (some of) these three scales may perhaps be combined into one general scale of 'legitimacy'.



Table 1  
Bivariate correlation coefficients among all scales used in the study.

|                             | 1           | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9       | 10     | Mean | SD   |
|-----------------------------|-------------|----------|----------|----------|----------|----------|----------|----------|---------|--------|------|------|
| 1. Self-reported compliance | (0.83–0.88) | –        | –        | –        | –        | –        | –        | –        | –       | –      | 2.41 | 0.58 |
| 2. Deterrence               | –0.05*      | (0.84)   | –        | –        | –        | –        | –        | –        | –       | –      | 1.13 | 0.79 |
| 3. Personal morality        | –0.33***    | 0.17***  | (0.69)   | –        | –        | –        | –        | –        | –       | –      | 1.47 | 0.46 |
| 4. Peer opinion             | –0.13***    | 0.20***  | 0.40***  | (0.73)   | –        | –        | –        | –        | –       | –      | 1.90 | 0.66 |
| 5. Procedural justice       | 0.25***     | 0.03     | –0.17*** | –0.02    | (0.91)   | –        | –        | –        | –       | –      | 1.45 | 0.76 |
| 6. Legitimacy 1             | 0.33***     | –0.12**  | –0.46*** | –0.24*** | 0.19***  | (0.78)   | –        | –        | –       | –      | 1.78 | 0.48 |
| 7. Legitimacy 2             | 0.36***     | 0.02     | –0.37*** | –0.09**  | 0.32***  | 0.38***  | (0.86)   | –        | –       | –      | 1.74 | 0.66 |
| 8. Legitimacy 3             | 0.43***     | –0.06**  | –0.65*** | –0.24*** | 0.32***  | 0.55***  | 0.50***  | (0.65)   | –       | –      | 1.69 | 0.44 |
| 9. Administrative problems  | –0.26***    | –0.07**  | 0.09**   | –0.03    | –0.11**  | –0.13*** | –0.11**  | –0.19*** | (0.69)  | –      | 0.77 | 0.50 |
| 10. Financial problems      | –0.15***    | –0.15*** | 0.04     | –0.04    | –0.17*** | –0.03    | –0.21*** | –0.11**  | 0.42*** | (0.80) | 1.33 | 0.75 |

Figures in parentheses are Cronbach alpha reliability coefficients (all scales measured on a 0–3 scale).

\* $P < 0.1$ ; \*\* $P < 0.05$ ; \*\*\* $P < 0.001$ .

### 3.2.1. *Dependent variable*

Because our sample included only traffic offenders, we could not distinguish between those people who did and those who did not break the law. Our scale for *self-reported compliance* behaviour builds on a scale previously used by [Murphy et al. \(2009: 7\)](#) in their study of tax offenders in Australia. Following their example, traffic offenders in our study were asked a series of six questions about how they thought the traffic ticket had affected their behaviour. First, all respondents were asked to answer four items about traffic laws in general (e.g. 'I now try to ignore traffic rules as much as possible'). Next, all respondents were also asked to answer two specific items which were related to the offence for which they were booked (e.g. those with a speeding-ticket were asked to react to this statement: 'If I think it is possible, I will now drive as fast as I want'). All answers were given on a four-point scale (0 = 'completely disagree' to 3 = 'completely agree'). Eventually, the scores on the 'general' scale and those for each 'special' scale were combined into one overall score for self-reported compliance behaviour. All responses to the six items were reverse scored to form the traffic rules compliance score. A higher score indicates greater compliance ( $\alpha = 0.83\text{--}0.88^5$ ). In general, the self-reported level of compliance among most respondents is quite high, with an average score of 2.41 (on a scale from 0 to 3). Those offenders who were booked for drunk driving report the highest score (2.56) and those who were caught for the use of a mobile phone report the lowest score (2.32). In general, less than five per cent indicate that 'I will now try to ignore traffic rules as much as possible' or 'I will not pay a new traffic ticket'.

### 3.2.2. *Independent variables*

*Deterrence* was measured with five items: 'If you did each of the following things, how likely do you think it is that you would be arrested or cited by the police?' (see [Tyler, 1990: 188](#)). The respondents were asked to answer this question for all five selected offences (e.g. speeding, illegal parking, etc.) The answers were given on a four-point scale (0 = 'very likely' to 3 = 'not at all likely'), with a higher score indicating lower perceptions of deterrence ( $\alpha = 0.84$ ). Nearly three quarter of all respondents think that it is (somewhat or very) likely that they would be cited or get arrested for illegal parking (72.0%) and speeding (70.6%). However, these numbers are lower for driving while intoxicated (61.1%). About one out of every six respondents (17.9%) thinks that it is not likely at all that they will get caught for this offence.

*Personal morality* was measured with five items: 'Think about your own feelings about what is right and wrong. How wrong do you think it is to do each of the following things?' (see [Tyler, 1990: 190](#)). The respondents were asked to answer this question for all five selected offences. The answers were given on a four-point scale (0 = 'very wrong' to 3 = 'not wrong at all'). A higher score on this scale reflects those who perceive these offences as less wrong ( $\alpha = 0.69$ ). All respondents (very) strongly disapprove of drunk driving and ignoring a red traffic light. Of all respondents 90.9% feel that drunk driving is (very) wrong; and 70.2% feel that ignoring a red traffic light is (very) wrong. However, these scores are much lower for illegal parking (16.9% feel this is very wrong) and for speeding (16.1%).

*Peer opinion* was measured with five items: 'Think about the five adults that you know best. If you got a fine or got arrested for doing each of the following things, how much would they disapprove or feel that you had done something wrong?' (see [Tyler, 1990: 189](#)). The respondents were asked to answer this question for all five selected offences. The answers were given on a

<sup>5</sup>Cronbach's  $\alpha$  speeding = 0.85; traffic lights = 0.85; parking = 0.83; drunk driving = 0.88; mobile phone = 0.88.

four-point scale (0 = ‘very much disapprove’ to 3 = ‘not at all disapprove’). A higher score on this scale reflects lower perceptions of peer disapproval ( $\alpha = 0.73$ ). A majority of our respondents think that their peers would (very) strongly disapprove of drunk driving (73.8%); and ignoring a red light (52.6%). However, these scores are somewhat lower for speeding (42%) and much lower for illegal parking (19.3%).

*Procedural justice* in relation to the CJIB was measured with two items: ‘I feel that I was treated fairly by the CJIB’; and ‘I feel that the procedures used by the CJIB were fair’ (see Murphy et al., 2009: 25). The answers were given on a four-point scale (0 = ‘completely disagree’ to 3 = ‘completely agree’), with a higher score indicating greater perceptions of procedural justice towards the CJIB ( $\alpha = 0.91$ ). More than half of our respondents (strongly) agree that they were treated fairly by the CJIB (54.6%). Almost half of all our respondents (strongly) agree that the procedure at the CJIB was fair (48.7%).

*Perceived obligation to obey the law (legitimacy 1)* was measured with six items (e.g. ‘People should obey the law even if it goes against what they think is right.’) (see Tyler, 1990: 187). The answers were given on a four-point scale (0 = ‘completely disagree’ to 3 = ‘completely agree’). A higher score on this scale reflects those who perceive a larger obligation to obey the law ( $\alpha = 0.78$ ). A large majority of our respondents (85.2%) feel that ‘people should obey the law even if it goes against what they think is right’. About two thirds (63.2%) feel that ‘disobeying the law is seldom justified’. Only 34.4% think that ‘a person who refuses to obey the law is a menace to society’. Considering the fact that all respondents are traffic offenders themselves, this is perhaps not surprising.

*Support for the police (legitimacy 2)* was measured with four items (e.g. ‘I have a great deal of respect for the police’) (see Tyler, 1990: 183). The answers were given on a four-point scale (0 = ‘completely disagree’ to 3 = ‘completely agree’), with a higher score indicating greater support for the police ( $\alpha = 0.86$ ). Most respondents (strongly) agree with the statement ‘I feel that one should support the police’ (78.2%). However, a smaller number of respondents also indicate that they ‘trust the police’ (52.4%).

*Perceived legitimacy of laws (legitimacy 3)* was measured with ten items, some of which related to specific traffic laws (e.g. ‘You should always stop for a red traffic light, even if it's on a deserted crossing at midnight’) (see Murphy et al., 2009: 25) while some related to the law general (e.g. ‘My own feelings about what is right and wrong usually agree with most laws in our country’) (see Murphy and Cherney, 2012: 200). The answers were given on a four-point scale (0 = ‘completely disagree’ to 3 = ‘completely agree’). A higher score on this scale reflects those who see laws more legitimate ( $\alpha = 0.65$ ). Two thirds of all respondents (66.4%) feel that, ‘if circumstances allow it, it is all right to drive faster than the speed limit.’ Also, a majority (55.3%) thinks that ‘good driving is more important than always follow traffic rules.’ In more general terms, about two thirds (62.8%) agree that ‘my own feelings about what is right and wrong usually agree with the laws of our country.’

To measure the state of people's personal (financial) administration and their (perceived) level of *administrative problems*, we constructed a new scale with four statements (e.g. ‘I always try to postpone paying a bill as long as possible’). The answers were given on a four-point scale (0 = ‘completely disagree’ to 3 = ‘completely agree’). A higher score on this scale reflects those with more administrative problems ( $\alpha = 0.69$ ). A large majority of our respondents (84.5%) indicate that they have no major administrative problems; and only a small group (12.4%) sometimes have dealings with a bailiff because they did not pay their bills on time.

Finally, to measure people's (perceived) *financial problems*, we constructed a new scale with three statements (e.g. ‘I usually run out of money towards the end of the month’). The answers

were given on a four-point scale (0 = ‘completely disagree’ to 3 = ‘completely agree’). A higher score on this scale reflects those with more financial problems ( $\alpha = 0.80$ ). Almost half of our respondents (48.5%) indicate they sometimes have trouble dealing with financial setbacks; and four out of ten respondents (40.9%) usually run out of money towards the end of the month.

### 3.2.3. Control variables

Our study also included a number of socioeconomic and demographic variables for controlling purposes. Similar to other studies on legitimacy and compliance, respondents were asked to report their gender, their ethnicity, their age, their highest level of education and their income. Respondents in our sample are mostly male (71%), ‘with a Dutch background’<sup>6</sup> (77.7%) and between 14 and 88 years of age ( $M = 43.1$ ;  $SD = 15.0$ ). Moreover, 42.2% has received a university or a higher vocational education and 23.6% earns an annual income over 50,000 Euro. Using the limited amount of demographic information provided by the CJIB (i.e. gender and age), this sample was found to be representative of the overall traffic offender population chosen, with one exception. Compared with the overall traffic offender population, younger drivers (<35) are slightly underrepresented (Hertogh et al., 2012: 78).

## 4. Results: why do traffic offenders (dis)obey the law?

Based on the survey results, we can now analyse which variables shape the level of regulatory compliance among Dutch traffic offenders.

### 4.1. Influences on self-reported compliance

As can be seen from the bivariate correlations presented in Table 1, those with high scores for all three types of legitimacy were also more likely to report a high level of compliance. This holds true for the perceived obligation to obey the law (legitimacy 1), support for the police (legitimacy 2) and the legitimacy of laws (legitimacy 3). Similarly, procedural justice was positively correlated with self-reported compliance. A regression analysis further confirmed these findings. A multiple linear regression analysis was performed using instrumental and normative motives as predictors of ‘self-reported compliance’.

As predicted by our central hypothesis, the relation between legitimacy and self-reported compliance was found to be significant (Table 2). Those offenders who perceive the laws to be highly legitimate (legitimacy 3) were more likely to comply with traffic rules. The same holds true for those offenders who show a high level of support for the police (legitimacy 2); as well as for those who strongly feel that they have an obligation to obey the law (legitimacy 1). Moreover, those offenders with a greater perception of procedural justice towards the CJIB were also more likely to comply.

The bivariate correlations presented in Table 1 indicated that personal morality was negatively associated with self-reported compliance. This was also confirmed by our regression analysis (Table 2). Those offenders who do not feel that committing a traffic offence is wrong were less likely to comply with traffic laws. Finally, Table 2 shows that several variables have no significant effect on compliance. Those offenders with a high or low perception of deterrence were *not* more or less likely to comply with traffic rules. The same holds true for those

<sup>6</sup>We followed the official definition of the Dutch Central Bureau of Statistics (CBS). ‘A person with a Dutch background’ refers to ‘a person whose parents were both born in the Netherlands’.

Table 2  
Regression analysis showing predictors of 'self-reported compliance'.<sup>a</sup>

| adj. $R^2 = 0.224$                    | $B$    | $\beta$ | Sig.  |
|---------------------------------------|--------|---------|-------|
| (Constant)                            | 1.830  |         | 0.000 |
| Legitimacy 3***                       | 0.231  | 0.153   | 0.000 |
| Administrative problems***            | -0.167 | -0.148  | 0.000 |
| Legitimacy 2**                        | 0.091  | 0.099   | 0.001 |
| Offence: alcohol <sup>b</sup> ***     | 0.241  | 0.153   | 0.000 |
| Offence: ID**                         | -0.129 | -0.062  | 0.027 |
| Personal morality***                  | -0.139 | -0.117  | 0.000 |
| Legitimacy 1**                        | 0.123  | 0.096   | 0.001 |
| Procedural justice**                  | 0.069  | 0.078   | 0.004 |
| Education: very low <sup>c</sup> **   | -0.158 | -0.060  | 0.023 |
| Offence: traffic light**              | 0.113  | 0.089   | 0.002 |
| Offence: parking**                    | 0.121  | 0.088   | 0.002 |
| Background: non-Dutch <sup>d</sup> ** | -0.087 | -0.055  | 0.047 |
| Excluded                              | Ln $B$ |         |       |
| Income: <15,000 <sup>e</sup>          | 0.015  |         | 0.571 |
| Income: 15–20,000                     | 0.019  |         | 0.463 |
| Income: 20–30,000                     | -0.002 |         | 0.928 |
| Income: >50,000                       | -0.030 |         | 0.263 |
| Education: low                        | -0.018 |         | 0.498 |
| Education: medium                     | 0.031  |         | 0.229 |
| Offence: mobile phone                 | -0.005 |         | 0.876 |
| Deterrence                            | -0.028 |         | 0.282 |
| Peer opinion                          | -0.020 |         | 0.472 |
| Age                                   | -0.023 |         | 0.411 |
| Financial problems                    | 0.003  |         | 0.911 |

\* $P < 0.1$ ; \*\* $P < 0.05$ ; \*\*\* $P < 0.001$ .

<sup>a</sup> Stepwise regression, missing = replace with means.

<sup>b</sup> Offence included as dummy variable, reference category = 'Offence: speeding'.

<sup>c</sup> Level of education included as dummy variable, reference category = 'Education: high'.

<sup>d</sup> Non-Dutch background included as dummy variable, reference category = 'Background: Dutch'.

<sup>e</sup> Level of income included as dummy variable, reference category = 'Income: 30–50,000'.

with high or low perceptions of peer disapproval. Most background variables have no effect on compliance either.

#### 4.2. Observed compliance

After analysing the most important drivers of self-reported compliance, most previous studies (including Tyler's study) stop here. Although perhaps understandable given the (im)possibilities of survey research, it is also somewhat disappointing. After all, we are primarily interested in how legitimacy shapes compliance, but thus far we've only measured compliance based on people's own reports. But there's an obvious problem with this: do these reports really reflect people's behaviour? As others have pointed out, '[t]he reliability and validity of self-reported data are not well understood.' (Engel, 2005: 461) Looking back at his work, Tyler has made a similar point about his own study:

I think the biggest weakness of the book is the focus on self-reporting. I made the best case I can make for its validity but the fact is that it would have been a lot better to have

had some actual evidence about people's behaviour. (cited in Halliday and Schmidt, 2009: 147).

In an attempt to address this shortcoming in our own study, we decided not to limit our analysis to self-reporting, but to include actual evidence about people's behaviour as well. For this, we were able to use the data base of the CJIB. This allowed us to trace the number of traffic tickets that the people participating in our survey had received over the 12 months prior to the survey. In our sample for this part of the study ( $n = 461$ ), 66.1% ( $n = 297$ ) received 1 or 2 tickets; 21.0% ( $n = 102$ ) received 3 or 4 tickets, 7.7% ( $n = 32$ ) collected 5 or 6 tickets and 5.2% ( $n = 30$ ) got 7 tickets or more. We used the number of traffic tickets as an indicator for the 'observed level of compliance'. Although the small numbers in several categories prevent us from drawing any definitive conclusions, these data still give us a fairly good indication.

#### 4.3. Influences on observed compliance

A regression analysis was performed using instrumental and normative motives as predictors of the level of 'observed compliance'. Because the data didn't meet the necessary requirements for a linear regression analysis, we decided to perform a multinomial logistic regression. In this regression we focused on the role of 'deterrence' and 'legitimacy' in shaping the level of observed compliance (as well as some demographic control variables). Therefore, 'procedural justice' and other sociological factors were not included.<sup>7</sup>

As predicted by our central hypothesis, Table 3 shows that the 'perceived obligation to obey the law' (legitimacy 1) has significant effects on the observed level of compliance. (Using 1 or 2 tickets as a reference) people with a high score for this element of legitimacy were less likely to receive 3 or 4 and 5 or 6 traffic tickets (a similar effect was not found for 7 tickets or more). However, partially disproving our hypothesis, Table 3 also indicates that the other two types of legitimacy — 'support for the police' (legitimacy 2) and 'legitimacy of laws' (legitimacy 3) — have no effect on the level of observed compliance.

(Again using 1 or 2 tickets as a reference) several background variables of traffic offenders also have a significant effect on the level of observed compliance. This is particularly true for income: those offenders with a high income are more likely to receive a traffic ticket in all three categories. To some extent, this is also true for male traffic offenders (who are more likely to receive 3 or 4 tickets and 7 tickets or more) and for those offenders with an average level of education (who are more likely to receive 5 or 6 tickets and 7 tickets or more). People with a high score for administrative problems are more likely to receive 3 or 4 tickets; and those with a very low level of education are more likely to receive 5 or 6 tickets. Conversely, those people with a Dutch background are less likely to receive 7 or more tickets. Finally, those people with a high score for deterrence are also less likely to receive 3 or 4 tickets.

#### 4.4. Limitations of this study

The limitations of the present study must be acknowledged when considering its results. First, it is, of course, reasonable to ask whether quantitative surveys such as that used here are truly able to capture complex phenomena like trust and legitimacy. Moreover, the possibilities

<sup>7</sup>With regard to 'procedural justice', there was a considerable amount of item non-response. If we would also include 'procedural justice' in our analysis, the number of respondents would drop from ( $n = 461$ ) to ( $n = 302$ ).

Table 3  
Regression analysis showing predictors of ‘observed compliance’.

| Reference cat. = 1 or 2 tickets (n = 297) | 3 or 4 tickets (n = 102) |         | 5 or 6 tickets (n = 32) |         | 7 or more tickets (n = 30) |          |
|---|--------------------------|---------|-------------------------|---------|----------------------------|----------|
| Nagelkerke $R^2 = 0.242$<br>(n = 461)     | B                        | Sig.    | B                       | Sig.    | B                          | Sig.     |
| Intercept                                 | −1.457                   | 0.129   | −0.999                  | 0.467   | −2.822                     | 0.066    |
| Administrative problems                   | 0.563                    | 0.029** | −0.250                  | 0.561   | 0.640                      | 0.134    |
| Legitimacy 1                              | −0.515                   | 0.095*  | −0.995                  | 0.057*  | 0.168                      | 0.732    |
| Legitimacy 2                              | 0.193                    | 0.417   | 0.511                   | 0.185   | −0.253                     | 0.476    |
| Legitimacy 3                              | 0.106                    | 0.793   | 0.004                   | 0.995   | −0.372                     | 0.542    |
| Deterrence                                | −0.308                   | 0.058*  | −0.170                  | 0.522   | −0.215                     | 0.456    |
| Education: very low                       | 0.576                    | 0.466   | 1.547                   | 0.076*  | −19.157                    |          |
| Education: low                            | 0.078                    | 0.816   | −0.105                  | 0.842   | −0.106                     | 0.852    |
| Education: medium                         | −0.069                   | 0.814   | −1.244                  | 0.062*  | −1.145                     | 0.063*   |
| Gender: male                              | 0.712                    | 0.021** | 0.684                   | 0.168   | 1.570                      | 0.020**  |
| Background: Dutch                         | 0.163                    | 0.724   | −0.920                  | 0.129   | −1.452                     | 0.017**  |
| Income: high                              | 0.935                    | 0.001** | 1.081                   | 0.023** | 2.222                      | 0.000*** |
| Income: low                               | −0.315                   | 0.379   | 0.170                   | 0.773   | 0.844                      | 0.175    |
| Offence: drunk driving                    | −0.218                   | 0.597   | 0.778                   | 0.189   | 0.933                      | 0.159    |
| Offence: traffic light                    | −0.157                   | 0.638   | −0.420                  | 0.525   | 0.161                      | 0.818    |
| Offence: parking                          | −0.178                   | 0.620   | 0.031                   | 0.961   | 0.350                      | 0.580    |
| Offence: mobile phone                     | −0.673                   | 0.075*  | −0.006                  | 0.992   | −0.431                     | 0.549    |

\* $P < 0.1$ ; \*\* $P < 0.05$ ; \*\*\* $P < 0.001$ .

to draw any theoretical conclusions from this study are limited. However, the present study was primarily aimed at testing a hypothesis specified in advance (based on Tyler's work). I agree with Jackson et al. (2012: 1061) that ‘[i]f relationships proposed by a priori hypotheses do indeed turn out to exist, this should provide at least some confidence in any conclusions drawn from them.’

Furthermore, it should be stressed that (unlike Tyler's original study), the present study was not aimed at the general population but at a specific group of traffic offenders. Moreover, the overall response rate in our survey was 16.9%. This may also be due to the fact that our study depended on the cooperation of traffic offenders. However, our response rate is not very different from the level of response in other similar studies. Whereas Tyler's (1990: 11) original (first wave) survey aimed at the general population of Chicago recorded a much higher response rate (63%); in a recent study among traffic offenders in Australia (Mazerolle et al., 2013: 43) he and his team reported a response rate (13%) similar to the one in our study. Also, our sample was found to be fairly representative of the overall traffic offender population chosen but with younger drivers (<35) slightly underrepresented. Since earlier research has found that normative motives for compliance with traffic laws are more frequent among young drivers (Yagil, 1998), the actual effect of legitimacy on compliance may be even greater than reported in the current study.

Finally, unlike most previous studies, we were able to compare the level of ‘self-reported compliance’ among Dutch traffic offenders (Table 2) with their level of ‘observed compliance’ (Table 3). Yet, it should be noted that the total number of traffic fines is not the only (and not always the most accurate) way to analyse people's ‘actual’ behaviour. Moreover, the small numbers of traffic fines recorded in some categories prevent us from drawing any definitive conclusions. The regression-analysis indicates that the ‘perceived obligation to obey the law’



(legitimacy 1) has significant effects on the observed level of compliance (Table 3). However, this effect is only registered when we use a lower significance level ( $p < 0.1$ ).

## 5. Discussion: legitimacy-in-context

In general terms, our findings seem to support Tyler's (1990) position that normative motives (including legitimacy) offer a better explanation for regulatory compliance than instrumental motives (like deterrence). Similar to previous research in Israel (Yagil, 1998) but unlike a recent study in the UK (Jackson et al., 2013), legitimacy plays an important role in shaping regulatory compliance with Dutch traffic rules. On closer inspection, however, our findings also suggest that there are some important differences between the two types of compliance that were included in this study. With regard to the self-reported level of compliance of Dutch traffic offenders, our findings largely confirm the findings from Tyler's (1990) original study. Yet with regard to their observed level of compliance, there are also important differences between both studies. As predicted by our hypothesis, all three types of legitimacy have significant effects on the level of self-reported compliance and we recorded no significant effects for deterrence (see Table 2). By contrast, looking at the level of observed compliance, we only recorded significant effects for people's 'perceived obligation to obey the law' (legitimacy 1). Moreover, those offenders with a high score for deterrence were less likely to receive 3 or 4 tickets (see Table 3). Both results partially disprove our hypothesis. In order to explain these and other differences between both types of compliance, we need to look more closely at the background of Tyler's approach.

In the Afterword in the second edition of *Why people obey the law*, Tyler (2006: 270) recalls that at the time his book was written 'legitimacy was discounted as a factor that shaped compliance' and 'deterrence seemed to be the only viable approach to managing problems of social order.' Ultimately, this defined the agenda of his book:

The goal of *Why People Obey the Law* was to articulate and to defend empirically an alternative vision of social order maintenance linked to gaining the consent and cooperation of the public with the law and legal authorities. (Tyler, 2006: 270)

The key purpose of this 'alternative vision' was to investigate *if* legitimacy shapes compliance. Against this background, Tyler emphasizes the general character of his findings. Legitimacy shapes compliance, regardless of the specific context. For example, in a recent review of procedural justice studies Tyler (2013: 9) claims: 'Over the last twenty years, research has shown that people obey the law and cooperate with legal authorities primarily if and when they view those authorities as legitimate.' According to Tyler (2013: 22/3), what is 'especially striking' about these results, is that they are true 'irrespective of who the people are.'

Contrary to Tyler's 'universalistic' approach, the British political scientist Beetham (1991) has suggested a more 'contextual' approach to legitimacy. According to Beetham (1991: 14): '[l]egitimacy for social scientists is always *legitimacy-in-context*, rather than absolutely, ideally or abstractly. [emph. added]' In his view, social scientists, unlike moral or political philosophers, should be concerned with 'legitimacy in particular historical societies rather than universally; with legitimacy in given social contexts rather than independent of any particular context; with actual social relations rather than ideal ones.' (Beetham, 1991: 6) From this approach it follows that 'legitimacy is more crucial to some kinds of power relationships than to others' (Beetham, 1991: 30).

Comparing both approaches to legitimacy, Tyler's 'universalistic' approach has been very useful to articulate an alternative view of social order based on normative motives at a time when most of the literature was only interested in deterrence. This approach was also useful to demonstrate important links between legitimacy and self-reported compliance. However, Beetham's 'contextual' approach seems better suited to understand the observed level of compliance and to help us explain the differences between both types of compliance. This means that we need to shift our focus of attention from *if* to *when* and *how* legitimacy shapes compliance. Or, echoing one of the first reviews of Tyler's book (Melossi, 1991), rather than focussing on 'Why people obey the law' we now need to consider 'Why which people obey which law, using which procedure'.

### 5.1. Which people?

As discussed earlier, when Tyler (2013: 22) summarizes the findings from the procedural justice literature, he emphasizes that the personal background of the respondents in these studies is not important. According to Tyler (1990: 156): 'the characteristics of the person do not influence the criteria used to assess whether a procedure is fair.' In his view, notwithstanding differences in race, class, ideology, and other similar factors, 'the members of American society generally exhibit widespread agreement both that procedural justice is key to legitimacy and in the issues they view as defining procedural justice' (Tyler, 2006: 281).

When focussing on self-reported compliance, our study largely supports Tyler's general conclusion that personal characteristics are not particularly relevant for legitimacy and compliance. The results from our regression analysis suggest that only two variables related to the social or economic position of traffic offenders (a very low level of education and a non-Dutch background) have a significant (negative) effect on compliance. All other demographic variables (income, low or medium education, age) have no significant effect (see Table 2). Yet when we focus on the level of observed compliance among Dutch traffic offenders, our analysis shows a different result. This time, our regression analysis suggests that their gender, background, level of education, and income are all significant (see Table 3). Most notably, traffic offenders with a high income are more likely to receive more traffic tickets. This holds true for all three categories.<sup>8</sup> Male offenders are also more likely to receive 3 or 4 and 7 or more tickets. Finally, offenders with a medium level of education and offenders with a Dutch background are less likely to receive 7 or more tickets.

Our findings are similar to previous research in the US which, unlike Tyler (1990, 2006, 2013), also found that there are significant differences in citizens' perceptions of legitimacy by race and ethnicity (see, e.g., Sarat, 1993; Lundman and Kaufman, 2003; Engel, 2005). In other words, different people react differently to traffic tickets. To some extent (in particular with regard to their personal economic situation), this is also reflected in the comments by some of our respondents. While for some of them a traffic fine is just a fact of life; others indicate that they experience great difficulties<sup>9</sup>:

<sup>8</sup>These findings may indicate that people with a high income are more willing to take the risk of a traffic ticket (cost-benefit analysis); or that people with a high income are more likely to drive a car (participation theory). However, a discussion of these or other explanations is beyond the scope of this paper.

<sup>9</sup>These comments were given in response to the final open-ended question of our survey: 'Would you like to add something in relation to the previous questions?' All comments were originally phrased in Dutch and were translated by the author.

I've added the CJIB's bank-account to my 'favourites' in the on-line banking system on my computer. Saves me a lot of trouble in dealing with useless speeding tickets.

People like me with only a minimum income cannot afford a traffic ticket.

It's unfair that someone with a low income and someone with a high income get the same ticket for a similar offence. Both experience a 100 Euro ticket completely different.

It is likely that these and other individual differences will also influence the way in which legitimacy shapes their level of compliance. For example, our findings indicate that the demographic background of Dutch traffic offenders influences their average legitimacy scores. Older respondents display a higher score for all three types of legitimacy than younger respondents. Moreover, those offenders with a high level of education and a high income show more 'support for the police' (legitimacy 2) than those with fewer qualifications and a low income (results not shown; see [Hertogh et al., 2012: 37](#)).

## 5.2. Which law?

As discussed earlier, critics have argued that previous studies on procedural justice have examined legitimacy in a limited way because they focused only on the perceived legitimacy of authorities and neglected the legitimacy of the underlying laws. Following this criticism, in several recent projects Tyler has now also included 'legal legitimacy' in his research-design ([Murphy et al., 2009](#); [Jackson et al., 2012](#)). Our study of Dutch traffic offenders supports the argument that the perceived legitimacy of laws plays an important role in shaping regulatory compliance. In our study, the legitimacy of traffic laws (legitimacy 3) has a significant and independent effect on self-reported compliance (see [Table 2](#)). However, this effect was not found in relation to the observed level of compliance (see [Table 3](#)).

These findings remind us of the many contextual differences between different laws. In his study, [Tyler \(1990\)](#) focused on the effect of 'the law' in general as if its effects are essentially the same regardless of its substantive content. But what is true for one law may not be true for other laws. After all, 'different substantive areas of law are associated with different perceptions, understandings, and behaviors' ([Engel, 1998: 140](#)). All findings in our study are limited to the field of Dutch traffic laws. Yet, what is true for traffic law may not be true for other laws as well. Moreover, our study suggests that what is true for speeding, may not be true for drunk driving or illegal parking. Similar to previous research ([Watling and Leal, 2012](#)), our study indicates that people's perceptions and understandings are not identical for all types of traffic offences. This is also reflected in these comments by some of the respondents:

I don't know anyone who would object to traffic fines for drunk driving, aggressive behaviour or speeding in built-up areas. But what really annoys me is the endless stream of futile traffic tickets for speeding on highways. I'm a strong supporter of harsh enforcement, but only for those offences that deal with clear cases of wrongdoing.

My most recent traffic ticket was for ignoring a red traffic light. I realize that's wrong. But I also thought it was really stupid that the camera caught me at a time with virtually no other traffic on the road. Also, it would be a good thing to raise the maximum speed limit on certain roads.

As a result of these different attitudes, the role of legitimacy in shaping compliance may also differ from one offence to the other. To analyse this, we've conducted a new regression analysis which differentiated between different types of traffic offences. While the level of (self-reported) compliance among those offenders who got a ticket for speeding is largely shaped by the perceived 'legitimacy of laws' and the level of 'support for the police'; this is not the case for those who were caught for drunk driving or illegal parking. The level of compliance among these offenders is primarily shaped by their own 'personal morality' (results not shown, see Hertogh et al., 2012: 98).

### 5.3. Which procedure?

Similar to Tyler's (1990) original study, our findings indicate that procedural justice has a significant effect on compliance. This is most clearly illustrated in relation to the level of self-reported compliance (see Table 2). In our study we were not able to analyse the effect of procedural justice on the observed level of compliance. In general terms, our findings suggest that procedural justice is not equally important for all types of bureaucratic procedures. Most discussions about procedural justice in the public sector focus (implicitly) on organizations with a high degree of personal contact between public officials and the general public. Lipsky (1980) has famously characterized these organizations as 'street-level bureaucracies'. However, current administrative decision-making is often carried out by a completely different type of organization, where public decision-making has been largely routinized and most work is done by computers. In other words, traditional 'street-level bureaucracies' have been taken over by 'screen-level bureaucracies' (Bovens and Zouridis, 2002). Contacts with citizens no longer take place in the streets or from behind a counter, but through cameras, computers and websites.

In the Netherlands, the handling and processing of traffic tickets is a highly automated and anonymous process. People find a ticket in their mailbox, without ever speaking to a government official. This is also reflected in our survey. A considerable number of our respondents were unsure how to answer survey questions about the way they were treated by the CJIB. Almost one third of them 'do not know' if the procedure at the CJIB was fair (28.3%) and a similar number 'do not know' if they got a chance to tell their tell side of the story at the CJIB (29%). In relation to these types of public decision-making, procedural justice may be less important than in other – more personalised – bureaucratic procedures. Or, as one of the respondents noted:

For me, the CJIB is only a logo and a payment slip. I don't have any strong feelings about this.

In other words, 'people care strongly about their treatment by authorities when they believe they should have personalised connections with authorities and the institutions they represent. For people with the opposite opinion, procedural justice is less of a concern.' (Murphy and Cherney, 2012: 184).

## 6. Conclusion

Late at night, at a clear intersection, there are many different reasons why Joe Driver decides to respect or to ignore a stop sign. Our study among Dutch traffic offenders suggests that Joe's decision is not only shaped by his fear of sanctions or his self-interest, but also by his attitude towards legitimacy. Drivers who question the legitimacy of legal authorities and legal rules are more likely to break the law. This is most clearly reflected in the self-reported level of

compliance of Dutch traffic offenders, but there is evidence that this is true for their observed level of compliance as well.

The present research supports three conclusions. First, this study is one of the few studies in which the procedural justice model is tested in Continental Europe. Following recent critiques in the literature, the paper has also introduced several modifications to the original model. Similar to earlier studies in (mostly) the United States, the findings from our survey in the Netherlands support Tyler's (1990) principal conclusions. This suggests that the central tenets of the model also hold in other contexts outside the US.

Second, and unlike most previous studies, the study was able to compare self-reported compliance with observed compliance among Dutch drivers. With regard to the self-reported level of compliance, our study largely confirms Tyler's (1990) original findings. Yet with regard to their observed level of compliance, there are also important differences between both studies. It was argued that the best way to explain these differences may be by shifting our focus of attention from *if* to *when* and *how* legitimacy shapes compliance. Rather than focussing on 'Why people obey the law', we looked at 'Why which people obey which law, using which procedure'.

Finally, the key finding of the study that perceptions of legitimacy help shape regulatory compliance with traffic rules is not only theoretically relevant, but is also of great practical relevance. As mentioned in the introduction, the sharp increase in traffic fines in the Netherlands has led to a wave of public protest and people question the legitimacy of the Dutch government. This study suggests that policy makers should take this growing criticism seriously. After all, people's opinions about legal authorities and legal rules are not mere words without any real consequences, but they also shape their behaviour on the road and elsewhere.

## Funding

The research reported in this paper was conducted with financial support from the Dutch Central Fine Collection Agency (CJIB). The CJIB had no input into the study design, data collection, analysis or interpretation of data, writing of or decision to submit this paper for publication.

## Acknowledgements

I am greatly indebted to Bert Schudde and Heinrich Winter for their contribution to the empirical research (see Hertogh et al., 2012). Earlier versions of this paper were presented at the Centre for Socio-Legal Studies in Oxford, November 2012 and at the Law & Society Association annual meeting in Boston, May 2013. I would like to thank the participants on both occasions for their feedback and two anonymous reviewers of this journal for their helpful comments and suggestions.

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