Why are young adults willing to cooperate with the police and comply with traffic laws?
Examining the role of attitudes toward the police and law, perceived deterrence and personal morality.

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Abstract

The question why people are willing to comply with the law and to cooperate with the police has received more attention the past several years. According to the procedural justice model this is caused by the fact that when civilians trust the police to treat them honestly and fairly, they will perceive the police as a legitimate institution that deserves respect and obedience. The perception that the police is legitimate is necessary so the police can enforce authority and civilians will be willing to comply with the law and to cooperate with the police. This study attempts to test an expanded version of the procedural justice model. The added value of this study is, firstly, that it takes into account several intermediary mechanisms that might influence the relations between perceptions about the procedural justice and effectiveness of the police, and the compliance with the law and the willingness to cooperate with the police. More specifically, the perceived legitimacy of the law and legal cynicism are added as intermediary variables to the model. Secondly the model is adapted for compliance with traffic laws. Two alternative paths are examined more closely as well, this way we verify what role perceived deterrence and personal morality play in the explanation of the willingness of young adults to comply with traffic laws and cooperate with the police. The test was executed according to path models with the aid of a large-scale student survey (N= 1 659). On the one hand, the results show that procedural justice has an effect on the result variables through several pathways, i.e. through the perceived legitimacy of the police, the perceived legitimacy of the law and legal cynicism. On the other hand, the explanatory power of the model is limited. We wish to nuance the results by formulating several critical remarks.

Keywords: legitimacy, procedural justice, legal cynicism, cooperation with the police, compliance with the law

1. Introduction and problem definition

Different studies have shown that the willingness of civilians to cooperate with the police on the one hand and to comply with the law on the other hand significantly depends on the extent to which civilians see the police as legitimate (Hough et al., 2013; Jackson et al., 2012a; Tyler, 1997; Van Damme, 2013). Perceptions about the legitimacy of the police are in turn influenced by the trust civilians place in police functioning. According to the procedural justice model (Thibaut & Walker, 1975; Tyler, 1988, 2006, 2007, 2011) this trust is a result of *perceptions about the procedural justice* of the police and, to a lesser extent, of *perceptions about the effectiveness* of the police. For civilians being treated honest and respectful by the police seems to be more important than the objective results of their interventions (Hough et al., 2010).

Round 5 of the European Social Survey (ESS, 2010)[1], which included a specific module concerning trust in the police and courts, has contributed significantly to the research concerning the role of procedural justice. This dataset has made it possible to test the procedural justice model in several European countries. Hereby remedying one of the criticisms of the theoretical model. This criticism said the procedural justice model was primarily tested in Anglo-Saxon countries and might not be applicable for other contexts (Hough et al., 2010). After all, both the legal system and the position of the police can vary immensely between countries, but both want to be legitimate in all countries. But there still remain a few limitations in the research about the influence of perceptions about procedural justice on the willingness to cooperate with the police and the compliance with the law. E.g. research mainly focused on adult populations.[2] The question arises if the procedural justice model counts for non-adult populations as well, e.g. a student population. This question is relevant because the crime-age curve shows more rule-violating behaviour occurs among young adults than among older adults. As a result contact with the police can influence perceptions about police functioning. There have been studies that prove that youths think less positive about the police than adults (Bral, 2008; Brown & Benedict, 2002; Taylor et al., 2001). A second limitation is that there barely has been research about the possible interfering mechanisms. While the ESS makes it possible to test the core assumptions of the procedural justice model, attention has been spent to only one intermediary variable, i.e. the role of the perceived legitimacy of the police.

With this study we hope to contribute to the small amount of research on attitudes among youths/young adults about the police and the law (e.g. Nivette et al., 2015; Reisig et al., 2012; Reisig et al., 2014). Specifically we report the results of a test of the core assumptions of the procedural justice model on a student population (+ 18y.) in the Belgian context. The testable path model is based on the theoretical assumptions tested by Tyler (2006), Hough and colleagues (2010) and Jackson and colleagues (2012a). The model contains multiple intermediary social mechanisms that were not included in round 5 of the ESS because of the limited amount of items the survey could contain. More specifically, it concerns the *perceived legitimacy of the police*, the *perceived legitimacy of the law* and *legal cynicism*. As a critical test, we simultaneously check for the role of perceived deterrence and personal morality as an explanation of the willingness of young adults (youths, students) to cooperate with the police and to comply with traffic laws. These can generate effects on compliance with the law and cooperation with the police from other theoretical approaches (*perceived deterrence* and *morality* perspectives). The test is based on survey data collected in 2012 (N=1 659). The analyses have been executed by means of path models with the statistical treatment program Lisrel 8.52.

The following research questions are central in this study:
- Which role do the exogenous variables[3] perceived procedural justice of the police, perceived effectiveness of the police, perceived deterrence and personal morality play

for the explanation of citizens' willingness to cooperate with the police on the one hand and comply with traffic laws on the other hand?

- Which role do the intermediary variables[4] of perceived legitimacy of the police, perceived legitimacy of the law and legal cynicism play for the explanation of citizens' willingness to cooperate with the police on the one hand and comply with traffic laws on the other hand?

2. Through which mechanisms are people willing to comply with the law and cooperate with the police?

In what follows, we will discuss the procedural justice model. The original process-based model of Tyler, which can be seen as the basis, will be described shortly. This model was changed, completed and improved by several researchers. The elaborated model used in this study, is a slightly modified model of Jackson and his colleagues (2012a), experts in this subject. The evolution from the dominant basic model to the elaborated model will be described below. The role of perceived deterrence and personal morality will be described in more detail, because the study in hand checked for these explanatory mechanisms as well.

2.1. The procedural justice model

The procedural justice model is one of the 'compliance' theories in which the explanation of compliance with the law is situated within the *normative approach*. This approach assumes that people comply with the law, not out of fear to be punished, but because they feel it is *right* and because they feel *morally obliged* to do so (Tyler & Huo, 2002). Tyler puts forward that people exhibit norm-conform behaviour and are willing to cooperate with the police from the *belief that the penal justice system is legitimate*. Attitudes to the legal authorities are influenced by what people feel as 'good' or 'bad'. If legal authorities are committed to justice, both with regard to treating civilians as to taking decisions, people will *trust and support* this authority, and will *feel morally obliged to obey them* (Reisig et al., 2007; Tyler & Huo, 2002). Reisig and colleagues (2007) made a visual representation of this process-based model (see figure 1), based on the publication of Tyler (2003).

**Figure 1: Process-based model of policing (Reisig et al., 2007)**
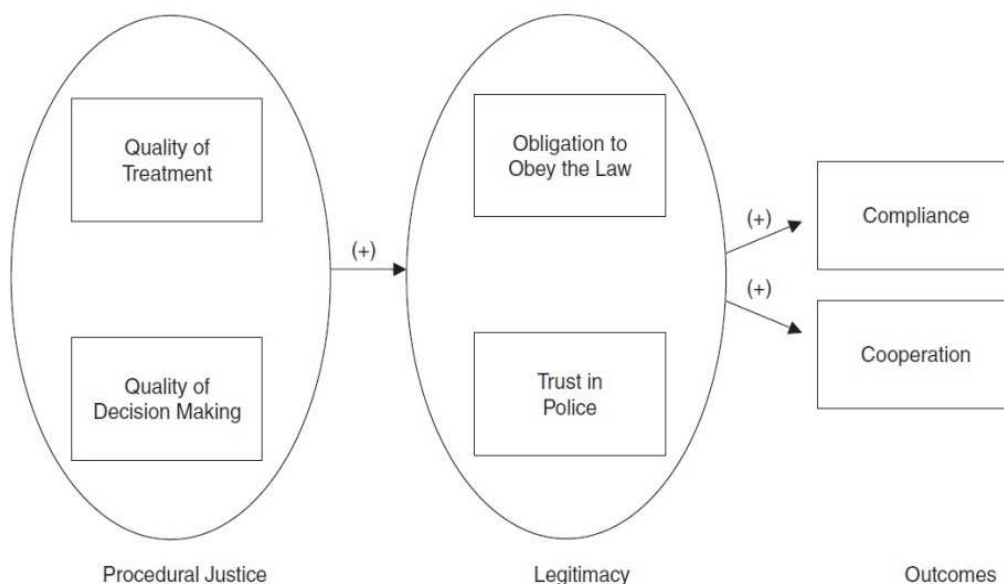
2.2. Legitimacy

As is explained above, 'legitimacy' is one of the central concepts within the procedural justice model. However, there is an ongoing discussion about the meaning and conceptualisation of this concept. Most scientist agree that initially a difference between *normative or objective* and *empirical or perceived* legitimacy should be made (Hinsch, 2010; Hough et al., 2013). *Normative legitimacy* exists when authorities meet certain objective criteria like absence of corruption. *Empirical legitimacy* on the other hand, is based on the perceptions of civilians. In this sense it is possible for an authority to be perceived as legitimate, while objectively it does not meet the criteria for legitimacy that are normally accepted within a democratic society (Van Damme, 2014). Only when an institution enjoys empirical or perceived legitimacy, can it count on the support of the public (Hough et al., 2010).[5]

As figure 1 shows, in Tyler's original process-based model the concept of perceived legitimacy was measured by means of the *trust in legal authorities* of civilians and the *felt duty to obey the law*. The latter refers to the institutional legitimacy or the experienced legitimacy in regard to the justice system and the juridical institutions (in general) (Hertogh, Schudde & Winter, 2013).

Hough and his colleagues (2013) and Jackson and his colleagues (2012a) are of the opinion that the trust in legal authorities should be seen as an antecedent for perceived legitimacy. They transcribe this trust into perceptions about the effectiveness and procedural justice of the police. Their definition of empirical legitimacy is the following: *"legitimacy is the recognition and justification of the right to exercise power and influence"* (Hough et al., 2013: 1). A legitimate authority means that the civilians *recognize its existence*, and *the right of this authority to enforce its authority and to use its power*. Furthermore this right should be *justified* (Jackson et al., 2012a). In this sense, civilians will only accept police authority when they believe in the justification of it. This belief in justice is based on the *perception that police and civilians share the same values and norms* and the *perception that the police comply with the law as well*. This *moral alignment* and *perceived legality* are two of the three dimensions that Hough and colleagues (2013) distinguish in their conceptualization of empirical legitimacy. The third dimension, *the extent in which a civilian feels obliged to obey the police*, refers to the recognition of the existence of the police as authority.[6] Figure 2 concerns a visual representation of the procedural justice model according to Jackson, Hough and colleagues.

Figure 2: The procedural justice model according to Jackson, Hough and colleagues
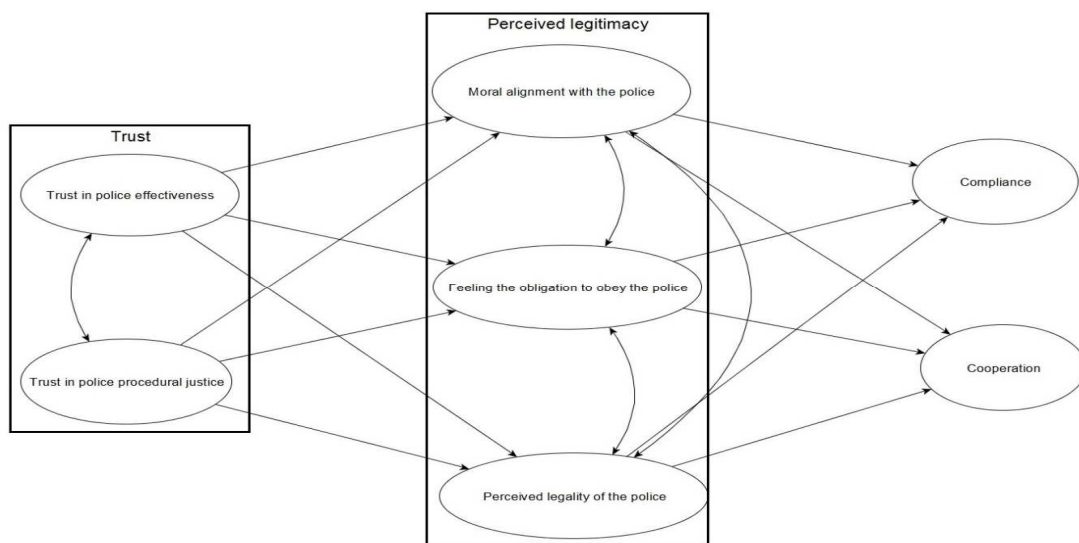
2.3. Legitimacy of the law and legal cynicism

Jackson and his colleagues (2012a) have expanded their procedural justice model by paying attention to not only attitudes with regard to the police, but also attitudes with regard to the law in later research. In this way they have added the perceived legitimacy of the law as intermediary variable to their model. *Perceived legitimacy of the law* is meant to be understood as the acknowledgement of the law by feeling morally obliged to obey it. This means that it is possible that one does not agree with a specific law, but does obey it because one perceives legislation in general as legitimate. Tyler does not distinguish between the legitimacy of the police and the legitimacy of the law, because he is of the opinion that the police is the representative of the law, in the US at least. The sense of duty to obey the police is, for him, the same as the sense of duty to obey the law (Jackson et al., 2012b). Jackson et al (2012a) follow this argument partially by stating that the police is indeed a symbol for law keeping. As a result, the perceived legitimacy in regard to the police and the one regarding the law should be similar. But the police represent social order and stability as well. This means that the police might overlook certain things because keeping the social order is more important. This discretionary authority of the police can have as a result that the association between the police and "the law" made by civilians, is no longer completely applicable.

In the present study legal cynicism is added as an additional intermediary mechanism. Legal cynicism can be seen as a cultural frame in which the law and legal actors can be perceived as illegitimate, inefficient and badly equipped to guarantee public safety. According to Sampson and Bartusch (1998) this leads to a temporary state of anomy or "normlessness". Cynics would in this state no longer consider the laws and rules that govern the society as binding, which means they would be less willing to comply with the law and cooperate with the police (Kirk & Matsuda, 2011).

Some researchers such as Jackson and his colleagues (2012b) equate perceived legitimacy of the law as the absence of legal cynicism. We do not agree with this interpretation and make a distinction between positive and negative attitudes toward the law. Perceived legitimacy of the law can be understood as a strong believe that the law has to be obeyed even if it goes against own beliefs (Tyler, 2006), which is a positive attitude toward the law. Legal cynicism refers to the belief that behavior, that is forbidden by the law or isn't in line with social norms, is acceptable (Sampson and Bartusch, 1998). This strengthens the feeling that 'breaking the law is not bad', which is a negative attitude toward the law. The interpretation of 'legitimacy of the law' is in line with 'obligation to obey the police', namely, people feel it as their positive duty to obey the law because it is the law which has to be respected, not because of the acceptability of the behavior that is forbidden by the law. The interpretation of 'legal cynicism' is similar to 'moral alignment with the police'. Namely that you believe that it is acceptable to break the law when you also believe that the behavior which is forbidden by the law also is acceptable. So, if you believe that the law forbids the right behavior, you won't feel cynical about the law. The assumption arises that if one believes that the law has to be obeyed, even if it goes against the own moral principles, one will less accept deviant behavior because deviant behavior is not in line with the law and social norms.

Hough and colleagues (2010) state that the effect of perceptions about the legitimacy of the police on the willingness of civilians to comply with the law and cooperate with the police, is mediated by the abovementioned attitudes toward the law. The police is the most visible actor that is responsible for social control within a society. Because of their unique position and their legal mandate to use force or coercion, they possess the power to label behaviour as right or wrong. Abuse of this power can result in a negative effect on public perceptions about the moral authority of the police on the one hand, and the law prescribing what behaviour is acceptable on the other hand. Cherney and Murphy (2013) talk about a contrary relation. They pose that

the police function on the basis of the law. The law is a result of a common goal of the society. Every resistance against the law can lead to a legitimacy crisis for institutions. Perceptions about the legitimacy of the law can therefore influence the perceptions about the legitimacy of the police.

Figure 3 is a visual representation of the expanded procedural justice model with the intermediary variables perceived legitimacy of the law and legal cynicism. The text above clarifies that the line of thought of Hough and colleagues (2010) and Jackson and colleagues (2012a) was followed although we make a distinction between perceived legitimacy of the law and legal cynicism. Furthermore we are aware of the possible contrary relations or even correlation between perceived legitimacy of the police, perceived legitimacy of the law and legal cynicism.

Figure 3: The expanded procedural justice model[7]
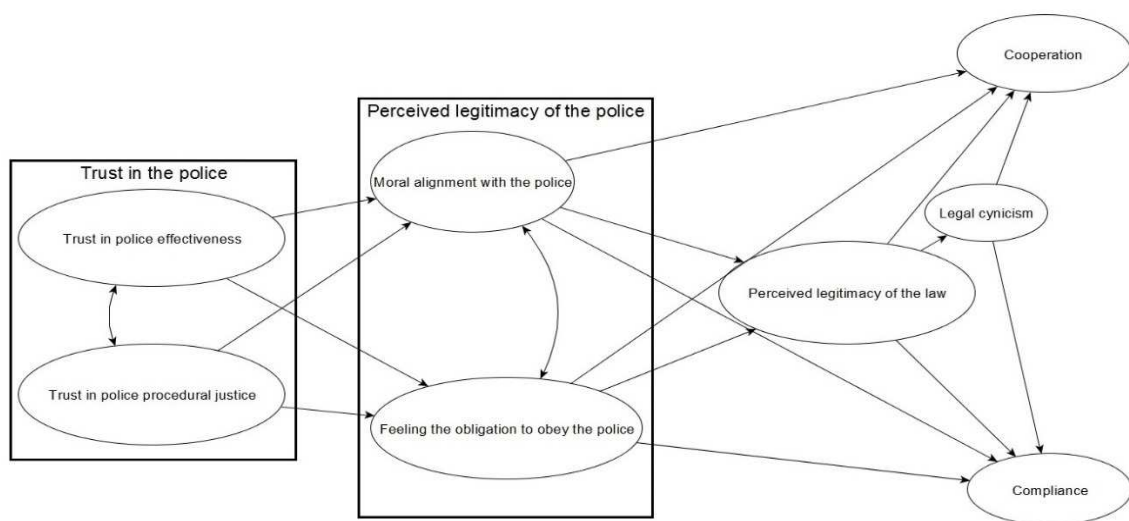
2.4. Alternative explanations for compliance with the law and the willingness to cooperate with the police

2.4.1. Perceived deterrence

Besides the abovementioned normative approach, there is an *instrumental approach* that can give an explanation for the willingness of civilians to cooperate with the police and obey the law. This approach assumes that people are rational-economical beings that make cost-benefit analyses before they decide whether to break rules or not. Norm-conform behaviour is explained in this approach by the deterrent character of the sanction that is associated with the rule-breaking behaviour (Tyler & Huo, 2002). Severity, certainty and the promptness of the punishments are the three key aspects to be able to understand the process of deterrence according to this theory (Pauwels et al., 2011; Stafford & Warr, 2006). Individuals should be less inclined to commit crimes when there is a higher risk on (1) a severe punishment, (2) a punishment that is actually executed and/or (3) a punishment executed immediately after the committed crime. The instrumental approach is less qualified to give an explanation for the willingness of civilians to cooperate with the police. In most research this is measured by asking respondents about their willingness to denounce crimes, identify suspects and appear as witness in a court. These forms of participation are not punishable (unless negligence) which means people are not at risk of being sanctioned (Van Damme, 2013).

2.4.2. Personal morality

A second alternative explanation can be found in the normative approach. People can feel morally obliged to respect the law because it corresponds to their *personal morality*. In this case, civilians comply with the law because they believe that the behaviour that is prohibited is morally bad. Even if this behaviour would be legal, they would still not act like that because it is against their moral principles. In the same vein, people will break laws if they believe the behaviour that is prohibited by law, is morally correct or at least morally neutral (Jackson et al., 2012a). Personal morality can be an explanation for the willingness of civilians to cooperate with the police. Civilians can feel obliged to cooperate with the police, because they think that morally they ought to. Briefly, this is an internal obligation to follow their own idea of what is morally 'right' or 'wrong'.

3. Complying with traffic laws

In this research we specifically focus on the compliance of traffic laws as result variable. Firstly, because the procedural justice model was already tested in the Belgian context based on the ESS data about compliance with the law (in general) as result variable (Van Damme, 2013). Secondly, because previous research has already proven that traffic laws are a 'special case' (Jackson et al., 2010). A lot of people are of the opinion that the highway code is not well formulated and that it is enforced too severely. They are of the opinion that the police should address 'real criminality' instead of traffic violations. Jackson and colleagues (2010) show a possible highly weakened relation between personal morality and compliance with traffic laws. The risk on a sanction would be an important factor here. Although most researchers did not find perceived sanction risk as an antecedent for law-abiding behaviour in general. Following the rational choice model of human behaviour, people can be motivated to break traffic laws when they gain utility from it, f.e. when they really need to be on time somewhere; when the chance to get caught is low (knowing where speed cameras are located and where drink-drive campaigns normally are hold,…); when the punishment is low (a prohibition from driving for only a few hours, low fines,…) (Bradford et al., 2015). Hertogh, Schudde and Winter (2013) conclude in their research that the recent increase of traffic fines in the Netherlands had led to criticism from the community bringing the legitimacy of the police and legislation under discussion. The growing amount of traffic violations would be a result of a negative perception of legitimacy and a lowered trust.

Figure 4 is a visual representation of the model that is tested in this study. We start from four exogenous variables: perceived procedural justice and perceived effectiveness of the police (trust in the police), perceived risk on a sanction and personal morality. We suppose that attitudes regarding the police and the law are intermediary variables that explain why young adults are willing to cooperate with the police and why they comply with traffic laws.

Figure 4: Testable path model
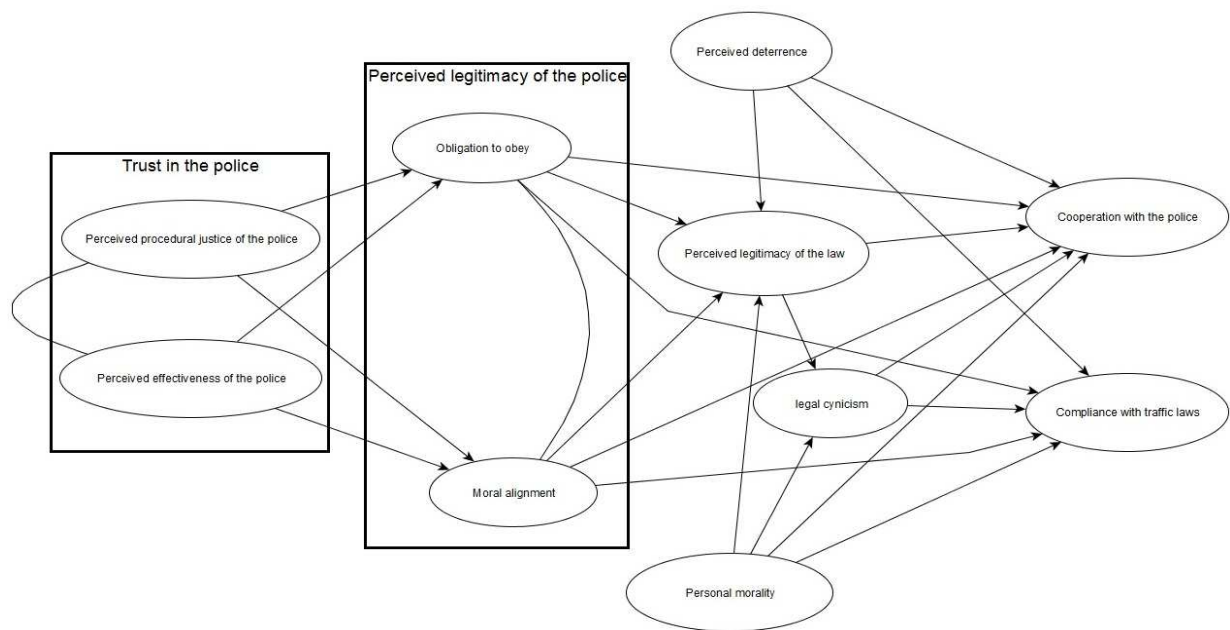
4. Data

During 2012 the data were collected through an online survey among 1,659 students that studied at the University or College in Ghent. The survey was online for one month and one week. This method of data collecting was chosen, because students usually spend a lot of time on the internet, and as a result the internet is particularly effective to reach the research population. Furthermore of importance while choosing this specific method, was the approachableness of this instrument and pragmatic reasons, like the cost and the speed in which the research could develop. This method of data collecting has as a result that we cannot speak of a probability sample, but of a *self-selection sample* (Heerwegh, 2005). The respondents choose themselves if they accept the invitation by mail or on active fora and websites, to fill out the questionnaire. The questionnaire was drawn up and spread online with the aid of the website Thesistools.nl accompanied by an introduction in which the goal of the research was explained. To increase the response, flyers were distributed and respondents had a chance to win a small price, namely two tickets for the movies. Given that it was an online questionnaire that was distributed in several ways, it is impossible to find out the *unit non-response* in this research. As it is difficult to find out the amount of visitors the website had during the period of data collection (Heerwegh, 2001).

Of the total number of questioned students 73.7 percent (1,223) was female and 26.3 percent (436) was male. 93.2 percent were students of the University of Ghent of which the majority studied at the faculties of Medicine and Health Sciences (293), Law (245) and Psychology and Pedagogy (207). Only 6.8 percent of the respondents studied at another educational institution. At the time of the questioning 32.6 percent (548) was between 18 and 20, 52.1 percent (877) between 21 and 23, 11.9 percent (200) between 24 and 26 and 3.5 percent (58) older than 26 years old. 92.2 percent (1,538) were students without immigration background and 7.8 percent of the respondents stated at least one parent was of non-Belgian origin.

5. Operationalisation

Trust in the police

Perceived *procedural justice* was operationalised by a summated Likert scale of eight items regarding the way the police treats civilians and the quality of the decision-making of the police.

It concerned the following items: 'The police treat youths the same way they treat adults', 'The police treat people with respect', 'The police respect the rights of the civilians', 'The police take the time to listen to people', 'The police take honest and impartial decisions', 'The police are willing to motivate decisions when asked', ' Decisions of the police are not based on a personal opinion', 'The police involve civilians in their decisions'. The respondents were asked to give their opinion about these eight items by giving a score on a five point scale ranging from completely disagree to completely agree. A higher score on this scale shows a high level of trust in the procedural justice of the police. (Cronbach's alpha= 0.83). These items were based on the ESS items. Some new items were added in regarding to the four central criteria on which procedural justice can be judged.

The perceived *effectiveness* of the police was measured by a summated Likert scale of three items, in which the respondents had to indicate on a five point scale to what extent they thought the police succeeded in fulfilling certain duties (1= to a very small extent, 5= to a very large extent). It concerned the following items: 'Fighting criminality', 'Upholding public order' and 'Aiding civilians'. A higher score on the scale reflected a high level of perceived effectiveness (Cronbach's alpha= 0.60). These items were chosen because these are core tasks of the police in Belgium.

Legitimacy of the police
During the operationalisation of perceived legitimacy two dimensions were taken into account that were distinguished by Jackson and colleagues (2012a); namely a moral dimension (*moral alignment with the police*) and an authority dimension (*sense of duty to obey the police*). The respondents were asked to indicate on a five point scale to what extent they agreed with a number of statements (1= completely agree and 5= completely disagree).

Moral alignment with the police was measured through the following four items: 'The police value beliefs, that I think are important as well', 'If the police arrest someone, they will have a legitimate reason to do so', ' I respect the police' and 'I support the way the police operate'. A higher score means a stronger moral alignment with the police (Cronbach's alpha= 0.81).

The *sense of duty to obey the police* concerns the following four items: 'Orders of the police should always be followed, even if we do not agree', 'Not obeying the police, is not justifiable', 'I accept the decisions the police take, even if I do not agree with the taken decisions' and 'When the police request something, I should do as they say, even if I am treated without respect'. Higher scores on the scale reflect a strong sense of duty to obey the police (Cronbach's alpha= 0.79).

Perceived legitimacy of the law
We drew on the scale of Tyler (2006) to measure *perceived legitimacy of the law*. This positive feeling of obligation to obey the law was measured by a summated Likert scale existing of four items. Respondents had to indicate to what extent they agreed or disagreed with the following statements: 'The law should be respected, even if it goes against what some think is right', 'I try to comply with the law, even if I think it is wrong', 'Respect for the law is one of the most important things children should learn' and 'Breaking the law is seldom justifiable'. Possible answers ranged from completely disagree to completely agree. Higher scores on the scale indicate a higher level of perceived obligation to obey law. (Cronbach's alpha= 0.75).

Legal cynicism
Legal cynicism was measured by means of a summated Likert scale which was drawn on and modified from Sampson and Bartusch's (1998) scale of legal cynicism. Legal cynicism can be

understood as a negative feeling about the law. Respondents had to indicate to what extent they agreed with a few statements relating to how they thought about the law and social norms (1= Completely disagree, 5= Completely agree). It concerned the following four statements: 'Rules are meant to be broken', 'It is not bad to break the law, as long as you are not caught', 'There are no good or bad ways to get money' and 'It is not bad to fight when you are challenged'. Higher scores on the scale indicate a higher level of legal cynicism (Cronbach's alpha= 0.66).

Perceived deterrence
Perceived deterrence was measured through a summated Likert scale in which four crimes were proposed to the respondents. Every time they had to indicate how likely it was that one would be caught committing the specific crime and how likely one would get in trouble by committing the crime (1= very small, 5= very large). It concerned the following crimes: 'Driving under the influence', 'Taking cheap items from stores without paying', 'Spraying graffiti on buildings' and 'Burglary in a student flat'. Higher scores on the scale indicate that the risk to get in trouble was estimated to be high (Cronbach's alpha= 0.80).

Personal morality
The operationalisation of personal morality was calculated by using the same crimes. The respondents were asked to indicate how wrong it is to commit the abovementioned crimes (1=completely okay, 5=completely wrong). Higher scores on the scale indicated strong intrinsic moral principles (Cronbach's alpha= 0.69). Both perceived deterrence and personal morality are based on the measurement of the ESS and of Jackson and his colleagues (2012a), although some other 'everyday crimes' are chosen.

Willingness to cooperate with the police
A summated scale of four items was used to measure the *willingness of the respondents to cooperate with the police*. Respondents had to indicate how likely it was they would do the following things, if these situations occurred (1= very unlikely, 5= very likely): 'If I became the victim of a crime, I would inform the police', 'If I was a witness to a crime, I would inform the police', 'If I was a witness to a crime, I would be willing to identify a suspect' and 'When I notice a suspicious situation (e.g. a suspicious car driving by repeatedly), I would inform the police' (Cronbach's alpha= 0.74). These items were also based on the items of the ESS.

Willingness to comply with traffic laws
The willingness to comply with traffic laws was measured by a total frequency scale 'violating traffic laws'. The respondents were asked how often they did the following things in the past year (0 1 2 3-4>5): 'Driving a vehicle under the influence', 'driving above the maximum allowed speed' and 'parking a car on illicit places' (Cronbach's alpha= 0.51[8]). In the study of Jackson and his colleagues (2012a) only one item referred to a traffic offence. The researchers created a binary variable to cover traffic offences.

6. Method
All scales were subjected to factor analytical testing to exclude anomalies. All items had good factor scores, as a result of which the further analyses occurred on scale constructs. The relation between perceived procedural justice and effectiveness of the police, two dimensions of perceived legitimacy of the police, the perceived legitimacy of the law, legal cynicism, perceived deterrence, personal morality and the dependent variables willingness to cooperate with the police and to comply with traffic laws, were analysed by means of path models or structural equation models (SEM). These analyses were executed by the statistical treatment program Lisrel 8.51 (Jöreskog & Sörbom, 1999). Typically for structural equation models is that the starting point is the observed co-variation matrix between constructs. Based on

assumptions regarding linear relations between variables, we examined if the observed co-variation matrix shows strong similarities to the expected co-variation matrix based on the theoretical guided model specification. This technique enables distinguishing between direct and indirect effects in a joint test. Because of this we gained insight into the mediating role of legitimacy. The scale constructs were made beforehand in SPSS22 and the structural comparison models are based on the correlation matrix between variables.[9]

Only when the path model fits the data adequately, the interpretation of the parameters will be meaningful. In order to evaluate the fit of path models, the root mean square of approximation (RMSEA) is preferred over the Chi-square value. In principle, Chi-square is not allowed to be significant, although it tends to be very sensitive to the size of the sample. On the contrary, RMSEA, is a measure of close fit, indicating that it takes into account the error of approximation in the population as well as the precision of the measure itself. Models with a RMSEA < 0.05 are considered acceptable.

7. Results

The theoretical path model from figure 4 was tested. Figure 5 is the visualization of the results of the statistical model with the best model fit. In order to keep the figure clear only the structural model is presented.[10][11]

Figure 5: Tested path model
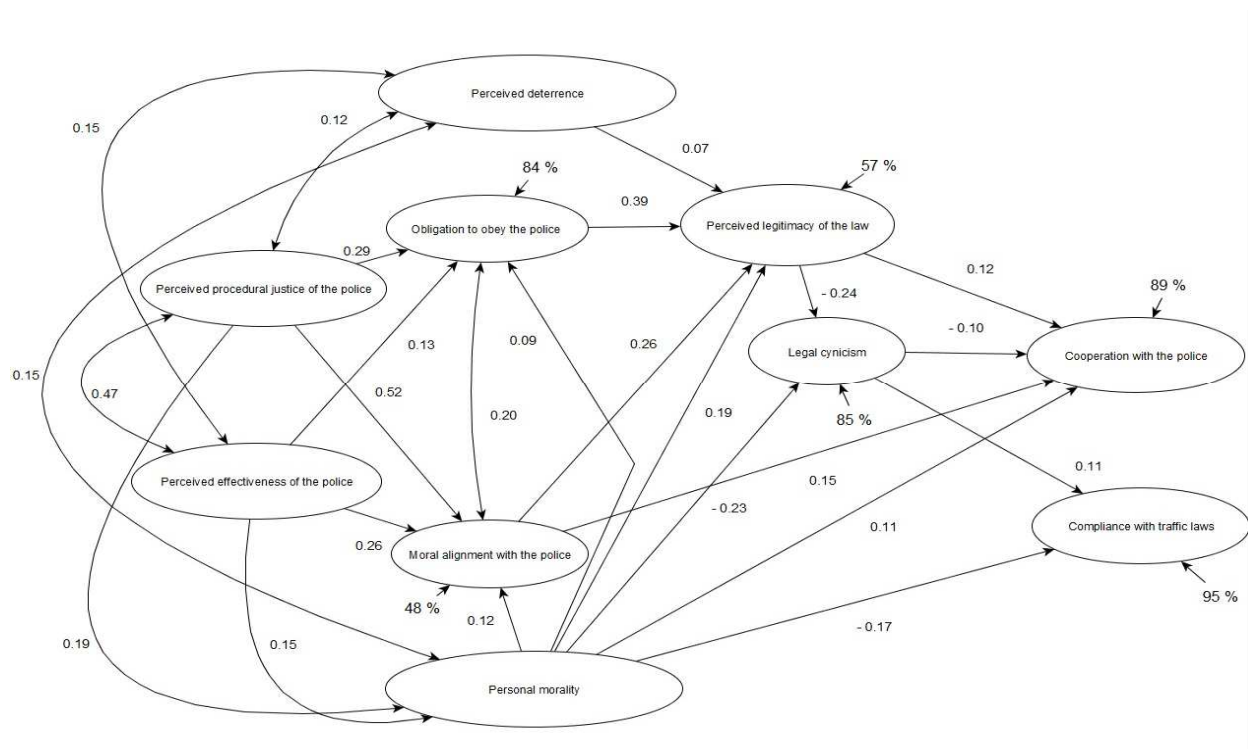
Chi-Square= 30.44; df=20; p=0.063; CFI 1; AGFI 0.98; RMSEA= 0.022

What is the role of trust in the police?
Trust in the police as predictor of compliance with traffic laws on the one hand and willingness to cooperate with the police on the other hand is complex. It deals with supposedly two indirect effects that deal with perceptions regarding the police and the law. According to the theory, especially perceived procedural justice of the police would be of influence to its perceived legitimacy. The results in this study confirm this theoretical assumption. There is a strong

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positive effect of perceived procedural justice (β= 0.52) and a less strong effect of perceived effectiveness of the police (β=0.26), on moral alignment with the police. Students who are of the opinion that civilians are treated honestly and respectfully by the police, will feel like the police share the same values and norms as them. 52 percent of the variation in moral alignment is explained by the model. Concerning the sense of duty to obey the police, the effect of perceived procedural justice (β=0.29) is bigger than the effect of perceived effectiveness of the police (β=0.13), but the variation explained by the model is only 16 percent. This shows that there are a number of other possible explanations as to why civilians are willing to obey the police. In the studies of Jackson and colleagues (2012a) and Van Damme (2013) similar results were found.

What is the role of perceived legitimacy of the police?
Perceptions concerning procedural justice and effectiveness of the police seem to be important predictors for the perceived legitimacy of the police. Furthermore, the perceived legitimacy of the police was expected to influence the attitudes concerning the law. The results showed a direct, sufficiently strong, positive effect (β=0.39) of the dimension 'sense of duty to obey the police' on perceived legitimacy of the law. The effect of the dimension 'moral alignment with the police' is slightly weaker, but positive nonetheless (β=0.26). This shows that on the one hand, young adults that have a higher sense of duty to obey the police and on the other hand, young adults that feel morally aligned with the police, feel morally obliged to comply with the law. 57 percent of the variation in 'perceived legitimacy of the law' cannot be explained by the variables that are included in our path model. This means that 43 percent of the variation can be explained by perceived deterrence, personal morality, perceived legitimacy of the police and indirectly perceived procedural justice and effectiveness of the police. A directly positive, but weak effect (β= 0.15) of moral alignment was found on the willingness to cooperate with the police.

What is the role of the perceived legitimacy of the law and legal cynicism?
Perceived legitimacy of the law appears to have both a direct and an indirect effect on the willingness of young adults to cooperate with the police. The direct effect is weakly positive (β= 0.12), but does indicate that young adults who perceive the law as legitimate, and thus feel an obligation to obey the law, show a larger willingness to cooperate with the police. The indirect effect goes through the intermediary variable 'legal cynicism'. The effect of perceived legitimacy of the law on the variable 'legal cynicism' is weak to modest and negative (β=-0.24), which means that young adults who have a positive feeling of obligation to obey the law are less cynical regarding the law and social norms. Legal cynicism is not only explained by perceived legitimacy of the law, but also by personal morality. In total 15 percent of the individual variation in legal cynicism can be explained by the tested model. The effect of legal cynicism on cooperating with the police is weak and negative (β= -0.10). This means that young adults who are cynical regarding the law, and thus 'accept' some kind of deviant behaviour, are less willing to cooperate with the police. Concerning violating traffic laws a weakly positive effect (β=0.11) was found. Cynical young adults appeared to comply less with traffic laws. In their research Nivette and colleagues (2015) treated self-reported delinquency as an antecedent of legal cynicism supporting the notion that legal cynicism is a post hoc justification for wrongdoing. They found it as the strongest predictor of legal cynicism (stronger than bonds to parents, alienation from society, negative experiences with police and association with deviant peers). Although they are aware of the possibility that the causal order can be the other way around.

What is the role of deterrence?

The results show that perceived deterrence has no significant direct effect on compliance with traffic laws on the one hand, and the willingness to cooperate with the police on the other hand. There appears to be an indirect path from perceived deterrence to this ultimate dependable variable through perceived legitimacy of the law. The effect of perceived deterrence on perceived legitimacy of the law is particularly weak (β=0.07). Perceived deterrence appears to be no major explanatory factor in this study. These findings are in line with those of previous research in adult populations in England and Wales (Hough et al., 2010; Jackson et al., 2012a) and in Belgium (Van Damme, 2013) in which the instrumental approach did not find empirical support.

What is the role of personal morality?
The individual, normative path was confirmed in this study, like it had been in studies from Wikström (2010), Jackson and colleagues (2012a) and Van Damme (2013). Students that in general consider certain behaviours as morally wrong, reported less traffic violations in this study and showed a large willingness to report crimes and identify criminals. The direct effects of personal morality on these ultimate dependent variables are, however, only modest (β=-0.17 for compliance with traffic laws and β =0.11 for cooperating with the police).

There appears to be indirect paths from personal morality to compliance with traffic laws and willingness to cooperate with the police as well. E.g. a weakly to modest positive effect appears to exist from one's personal morality on both dimensions of perceived legitimacy of the police. In other words, students with a higher personal morality in this study feel more strongly connected with the police (β=0.12) and feel morally obliged to obey the police (β=0.09) in comparison to students with a low personal morality.

Personal morality is an explanation for the attitudes of students regarding the law as well. A high personal morality is in this study connected to a stronger belief in the legitimacy of the law (β=0.19) and lower legal cynicism (β=-0.23). This isn't surprising because if someone believes that behaviour such as spraying graffiti on buildings, driving under influence,… is not in line with one's own moral beliefs, one will not be tending to break the law because the law criminalizes this kind of 'unacceptable deviant' behaviour. Personal morality can also be an explanation of why people feel obliged to obey the law, namely because the same (or some) behaviour that one believes is morally wrong seems to be also forbidden by the law.

Is everything explained?
The model tested in this study cannot be expected to deliver a cut-and-dried answer on the question why young adults are willing to cooperate with the police or why they comply with traffic laws. *Only five percent* of the variation in compliance with traffic laws and *eleven* percent of the variation in willingness to cooperate with the police can be explained by this model. There are other factors that can influence the willingness to cooperate with the police and violate traffic laws. Nonetheless, several important explanatory factors were exposed in this study and it appears that the findings in a student population are similar to findings in research with adults.

8. Conclusion and discussion
When we return to the central research questions in this study, we can conclude from the results that deterrence plays no important role in the explanation of on the one hand compliance with traffic laws and on the other hand willingness to cooperate with the police. If young adults are not led by their perceptions about the chance to get caught, it seems that an increase in the chance to get caught will, according to these results, not accomplish a lot in regard to stimulating young adults to comply with traffic laws and cooperate with the police. While these findings are in line with our expectations, relying on previous research, this might be the result of the manner in which perceived deterrence was measured in this study. The risks to get caught

were examined for four selective crimes of which only one is related to traffic laws. If these four had been traffic violations, it might have led to other findings. Bradford and his colleagues (2015) for example, did find that people who perceived a greater risk of sanction (related to traffic offences) were less likely to say they would commit traffic offences in the future. As such it can be expected that the risk to be punished for a traffic violation is an important factor for compliance with traffic laws. Another footnote is that compliance with traffic laws was measured by means of traffic violations with a car. Not every respondent had a driving license at the time of the study. This is of possible influence on the results. Furthermore, it is not completely surprising that deterrence is no explanation for the willingness to cooperate with the police among students. Not declaring crimes and the willingness to identify criminals, are almost undetectable with as a result that the likelihood of punishment is minimal. Future research should take these remarks into account.

Personal morality seems to have an important role in our model. It is a mechanism with both a direct as an indirect effect. A high morality results not only in a lower frequency of self-reported traffic violations and a higher willingness to cooperate with the police, but also in a stronger feeling of moral alignment with the police, a higher sense of duty to obey the police, a stronger belief in the legitimacy of the law and lower legal cynicism.

The results show that the effect of trust in police functioning is chiefly indirect through the intermediary variables concerning perceived legitimacy of the police, attitudes concerning the law and legal cynicism. This brings us to the answer of the second central research question in this study, namely the one regarding the role of several intervening mechanisms. Without going into detail again, the results showed firstly that perceptions about procedural justice of the police have an important role in explaining both dimensions of perceived legitimacy of the police. Secondly, perceptions about the legitimacy of the police appeared to be an important explanatory factor for the perceptions about the legitimacy of the law. Thirdly, perceptions about legitimacy of the law and legal cynicism are an influence on the willingness to cooperate with the police and comply with traffic laws of students, although there is a direct effect of moral alignment with the police on the variable 'cooperating with the police' as well.

Perceived procedural justice appears to be an important starting point on which perceptions about the legitimacy of the police and the law are based. It are specifically these perceptions that can improve police functioning as positive perceptions influence the willingness to cooperate with the police and compliance to traffic laws of students. The police can influence its own operating by paying more attention to their functioning. More specifically, this should be in line with the expectations of civilians about the procedural justice of the police. Civilians expect, among other things, that the police treat civilians respectfully, that neutrality and integrity are central, that the police give explanations if asked for them and the police listen to its civilians.

Although the results are in line with previous research concerning the procedural justice model, we want to indicate the surplus of this study. Firstly, the theory was tested on a student population while most studies on attitudes concerning the police focus on adults. Secondly, a broad conceptualization of legitimacy was included here. Perceptions about the police and law were examined. At the moment there is a discussion about the conceptualization and meaning of this concept. The usual conceptualization is based on very trustworthy operationalisations that were used in previous research. Thirdly, we concluded that a lot of effects go through legal cynicism, a concept that has barely been tested in this kind of research. The antecedents and results of legal cynicism deserve more attention in research on compliance. Fourth and last, the surplus of this test is the fact that not only did we look at the role of procedural justice, but we also looked at the role of deterrence and personal morality in explaining the willingness of students to cooperate with the police and comply with traffic laws.

Naturally we also wish to pinpoint a number of important limitations of this research. Firstly, it should be noted that data was collected cross-sectional. Which means that we cannot speak in terms of cause-consequence relations. We want to add that the tested path model was drawn up based on previous research and theoretical assumptions. Literature has proven that relations can work in reverse as well. Longitudinal studies and experimental designs can provide more clarifications about causality. Secondly, we opted to use a web survey to collect data. Respondents were invited to participate in the research on active student websites and through distributing flyers. This led to a self-selection of respondents, which means there was no random sample survey. Thirdly, the model is not capable to explain everything. The model tested in this study can be expanded with other potentially explanatory factors f.e. (repeated) victimization, previous police contact, social identity. Fourth and last, the survey measured attitudes of young adults that gave insight into the *willingness* of young adults to cooperate with the police and the extent to which young adults are *willing* to comply with traffic laws. The relation between these attitudes and factual behaviour is unknown. It is possible that when a situation occurs, someone might not cooperate with the police while he/she indicated in the survey to be willing to do this.

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[1] The ESS maps behaviours, values and opinions of het inhabitants of more than 20 European countries and shows how they develop. The ESS is known to be one of the most qualitative surveys in which a lot of effort is put into keeping the respondent grades high and guaranteeing the trustworthiness and validity of the measuring instrument.
[2] The ESS dealt with a more general population, namely above 14 years old.
[3] Exogenous variables in a path model are those with no explicit mentioned predictors. In a path model they only have outgoing arrows. This means that they only act as an independent variable in relation to other variables.
[4] Intermediary variables or intervening endogenous variables have both incoming and outgoing arrows in a path model. This means that they can act as a dependent variable in relation to one variable and as an independent variable in relation to another variable. They thus can play a mediating role in the relationship between other variables.
[5] In this study, the focus lies on empirical or perceived legitimacy because perceptions of young adults are given. When we use the term 'legitimacy' without adjective, we refer to the perceived legitimacy.
[6] In this study we use the same conceptualisation as Hough and colleagues (2013), although we are aware of the discussion about the meaning and conceptualisation of the term. More about this discussion can be found in the following publication: Van Damme et al. (2013).
[7] Perceived legitimacy was not included as a dimension of perceived legitimacy of the police in this model, because this had not been the case in the study of Jackson and colleagues (2012a) either and in the present study this dimension was not measured.
[8] Cronbach's alpha is on the low side. Factor analysis was substantially per item. Analyses on the separate items did not produce different results than those represented here. It is recognized that behavior scales cannot be evaluated in the same way as attitude scales. The total frequency scale measures practically the same as a total equation scale (the classical summation of the different delict items that were reported) (r= 0.91, p < 0.001). The frequency scale produces additional variabilities. Problems with obliquity are less of a problem with scales that measure traffic violations than those that measuring criminal transgressions, as is the case in classic self-reported studies. This is probably because these forms of rule violation have a higher prevalence. This is proven by the ESS as well. 80% of the Belgian respondents indicated to have violated traffic laws.
[9] This choice is influenced by the fact that all separate operationalisations are already complex composed notions. We are only interested in identifying the direct and indirect effects. We notice that a lot of notions are constructs that are the result of choices by the researcher and not 'latent variables' as is meant in line with SEM.
[10] We opted to test both compliance with traffic laws and the willingness to cooperate with the police in one model in this research. When two separate models are tested, we received the same results.
[11] When we describe the results and speak about effects, we mean statistical effects and not causation. Because of the cross-sectional nature of the survey we cannot speak in terms of causal relationships. Although path analysis was initially used to examine causal relationships between two or more variables. It allows us to test theoretical propositions about cause and effect without manipulating variables. Nevertheless, if propositions are supported, it doesn't prove that causal assumptions are correct. While causality never can be proven, it should be acknowledged that causality requires correlation and statistical effects and thus remain a useful way of analyzing data.