

Psychological Tests for the Privileged Vehicles Drivers

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Abstract

The aim of the publication is to present the results of the research with the documents research method, involving studies of literature, legislation, and source acts on development of the system supporting the psychological tests (psychological tests battery) of the police drivers, including the privileged drivers of the police. The system, in its assumptions, should *inter alia* allow to make assessment of intellectual and psychomotor skills as well as personality (in accordance with the detailed guidelines of annex 6 to Regulation of the Minister of Health of 8 July 2014 on the psychological tests of the vehicles drivers using the tools of proven accuracy, reliability above .7, objective, standardised, and normalised within a group of police drivers). The described research is conducted based on the grant for realisation of the development project: "Development of Psychological Tests Supporting System of the Drivers for the Police", no. DOB-BIO7/20/01/2015. The method for the research of the documents in the form of indirect observation allowed to analyse the legal acts, both national and international, and the laws in force in the European Union.

Keywords

Management, communication, psychology, driver, alcohol

The organizational culture zone of the states is formed by all standards and assessment influencing on the public behaviour. They form the social control system which is characterized by the following features: It is created by the behaviour standards that are the social standards, using the normative statements—directives, i.e. standards, recommendations, guidelines, and assessments, motivating the behaviour of the recipients of the formed directives, it aspires to the effective control of the concerned people, but actually it is characterized by a high degree of control failure, and uses sanctions and/or gratifications (grouped—law or scattered—morality) to prevent from the unlawful behaviour patterns (Hołyst 2005: 722). Expectations concerning the development of solutions to improve the implementation of the actions of the police in terms of independent execution of the required laws

psychological tests of the drivers using the existing HR (Human Resources) of the police departments force to undertake the interdisciplinary research. For this reason, the industrial and scientific consortium managed by Police Academy in Szczytno (Poland) acquired a grant for the development project: "Development of the Psychological Test Supporting System of the Drivers for the Police", no. DOB-BIO7/20/01/2015, within the contest 7/2014 for development of the projects in the field of scientific research or development work for defence and

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security of the state of the National Research and Development Centre.

The evolution of the organizational structure of one of the elements of the state system resulting from the socio-economic and political changes cannot be done in isolation from occurring for the same reasons, amendments to the law. Activities, structure, and task of the police are based on the developed legislation doctrine and principles resulting from these directives to the proceedings (Płowucha 1995: 4). The particular attention in terms of the police activities that public should pay on lawfulness is understood as the principle of observance of the law by the authorities of the state. It involves the legal qualification of the governmental authority activities, both in terms of development and application of the law. The police is supposed to be the guarantor of the implementation of the declared state fundamental freedoms and rights of a human and of a citizen. In other words, although the formal observance of the law is a prerequisite, the law cannot be divorced from its social functions, objectives, and socially important values, the implementation of which is a task *inter alia* of the police¹.

In accordance with Article 1 (1) of the Act on the Police, the police is uniformed and armed formation acting for the society and designed to protect safety of the citizens, and to maintain public safety and order. The implementation of the tasks requires the use of the technical measures to assist such as *inter alia* motor vehicles. Driving the privileged vehicle sets high demands both in terms of skills and personality. In the United States in 2012, in the accidents involving the police vehicles, 83 people were killed (including 35 at signal driving). The Polish statistics are not available, but the reports on the events due to the fault of the privileged vehicles are common. The need to test the suitability of the police drivers is based on the fact that their actions require the orienteering skills (Steenbruggen et al. 2011) and the prediction skills of both the elements of the physical

environment and other activities, since appearance of the vehicle driving at signal is an emergency situation and leads to chaotic behaviour. It should be remembered that the vehicle is equipped with the systems, supporting of which during driving a vehicle requires divisibility of attention (Yager et al. 2015). The Regulation of the Minister of Health on the tests of the drivers requires to apply the psychometrically proven methods. Most of the tests used today do not meet this condition, and they should be eliminated by the end of 2016.

The representatives of practice underline the importance of a human for a human activity, and specifically its behaviour as the result of different factors, both internal and external. This also applies to the safe functioning of drivers on the road. The conducted research concerning traffic safety shows the relationship between the aforementioned safety and psycho-physical features of a driver, his social adaptation, driving culture, social discipline, and skills to cope in a complex task situation that is driving a vehicle. Smooth driving is therefore the system of interrelated possibilities, knowledge, skills, attitudes, and emotions of humans. Driving skills involve three aspects:

- (1) Physical skills (specified in medical examinations);
- (2) Mental skills (tested within the psychological tests to be able to drive a vehicle);
- (3) Knowledge, skills, and attitudes of a driver (Bąk 2004: 12).

However, one should regard the issue not only in the context of a human (driver) as an individual, but also as regard to the legal structures, in which a human is found as a subject of traffic. As the initial assumption, one should accept the fact that the driver in the police is subject to the same rules of conduct on the road as any other participant of traffic².

- (1) The Polish legal system defines the concepts of both a vehicle driver, who, in accordance with the content of Article 3 of the Act of 5 January 2011, the

Journal of Laws 2015, 155 consolidated text, can be a person who has reached the required age, is efficient in terms of physical and mental, and meets one of the following conditions:

(a) Has the ability to drive a vehicle in a manner that does not endanger safety, prevent from traffic, and impose no harm to anyone, and has the corresponding document stating permission to drive a vehicle;

(b) Is taught driving within the training;

(c) Passes the state exam;

(2) The driver can also be a person, who is trained within the initial qualification, the accelerated initial qualification, the initial supplementing qualification, or the initial accelerated supplementing qualification, as referred to in the provisions of Chapter 7a of the Act of 6 September 2001 on road transport (the Journal of Laws of 2013, item 1414, as amended), and is efficient in terms of physical and mental;

(3) The physically disabled person can be a driver if he obtained a medical certificate of no medical contraindications to drive;

(4) A person, who is 18 years old, is not obliged to have a document indicating permission to ride a bicycle, bicycle cart, or horse-drawn vehicle.

The provisions of this act clarify the criteria of a person, who is to drive a privileged vehicle by pointing in Article 106 (1) that the following person is allowed to drive a privileged vehicle:

(1) Is 21 years old;

(2) Has a driving license appropriate to the type of the vehicle category;

(3) Obtained a certificate:

(a) Medical on no health contraindications to drive a privileged vehicle;

(b) Psychological on no psychological contraindications to drive a privileged vehicle;

(4) Completed a course for privileged vehicles drivers;

(5) Has a permit to drive a privileged vehicle in terms of a specific category of driving licence.

The provision of Paragraph 1 (1) is not applied to the officers referred to in Article 8 (3).

The provisions of Paragraph 1 (4) are not applied to the State Fire Brigade, the Police, the Border Guard, the Government Protection Bureau, the Prison Service, and the Road Transport Inspection as well as vehicle drivers of the volunteer fire brigades.

This provision clearly indicates the need to obtain a certificate on no health and psychological contradictions by the privileged vehicles drivers. This takes place in the context of the effort to obtain a permit to drive the privileged vehicles. However, one should bear in mind the fact that the circumstances require these tests, when there is doubt whether a person is allowed to use the already held permits. Each test of a driver is the test of the diagnostic nature. A special kind of diagnosis constitutes tests of people at risk, referred to the test under the act—the law on road traffic, i.e. people who are arrested for driving under alcohol, the drivers who crossed the limit of criminal points, and the perpetrators of traffic accidents. The purpose of these tests is to diagnose whether and to what extent there is a relationship between the behavior of the driver (the causes of road accidents) and the findings of the research level of its performance and/or personality traits. Specification of the relationship is the basis for the predictive diagnosis—predicting the future functioning of the driver on the road³.

The analysis of the legal acts was conducted for the project, the results of which were to introduce the legal measures necessary to assess the efficiency of intellectual, psychomotor, and personality of the drivers of motor vehicles allowed to place the psychological tests in the Polish legislation system, assuming the starting point in the fact of driving of a privileged vehicle under the influence of alcohol or other substance.

Accepting the definition of a “safe driver”, defining it as the person, who drives a vehicle without collision from one place to another, it can be

concluded that such a driver:

(1) Has the relevant mental skills;

(2) Masters and knows how to use all the skills related to driving.

There is no doubt that this also applies to a driver of a privileged vehicle.

There is a continuous relationship between the type of behaviour and a road situation and its solution, accepted by a driver. The psychologists, testing the predisposition to safe or dangerous behaviour of drivers, cannot foresee all factors, which occur in a particular accidental situation. They only conduct diagnosis of these elements, to which they provide that:

(1) Firstly—they have a diagnostic and prognostic value in the assessment of mental skills, necessary for driving vehicles;

(2) Secondly—they differentiate the behaviour of individuals;

(3) Thirdly—they are able to be tested using the psychological tools, psychometrically verified (Bąk 2004: 12).

Therefore, the compatibility of the provisions states the need to conduct the psychological tests even with the standards of the criminal law or administrative law.

For the first time, a prohibition to drive a vehicle by a person in the state of intoxication was introduced in § 51 (a) of the Regulation of the Minister of Public Works and the Minister of Internal Affairs in agreement with the Minister of Military Affairs on movement of motor vehicles on the public roads of 27 January 1928⁴.

This provision does not specify, however, what the state means. Despite the prohibition on driving after consuming alcohol, driving under its influence was not punished. The driver in the state of intoxication, who caused a traffic accident, was punished. The sanction provided in the regulation was of the administrative nature and involved deprivation of the driving license (Pyter 2011: 99).

In § 53 (2) (a) of the Regulation of the Minister of Communication, Internal Affairs and Military Affairs of 27 October 1937, issued in consultation with the Minister of Social Welfare on movement of motor vehicles on the public roads, it was strongly forbidden to drive a vehicle in the state of intoxication⁵. Therefore, from January 1, 1938 to December 10, 1959, when the Act on combating alcoholism came into force (the Journal of Laws, no. 69, item 434), driving in the state of intoxication was an offence, since it constituted infringement of the legal provisions.

The Criminal Code of 1932 (the Journal of Laws of 15 July 1932, no. 60, item 571) did not sanction driving in the state of intoxication, but in Article 247, it anticipated imprisonment or detention for up to three years for someone, who did not help a person in the position of impending direct danger to life, being able to do so without endangering himself or people close to danger⁶.

The breakthrough in the legislation on driving a motor vehicle under influence of alcohol was the adoption by the Parliament of the Polish People's Republic on December 10, 1959, the Act on combating alcoholism, which introduced criminal liability for driving in the state of intoxication. The content of Article 28 § 1 of this act provides: "Who, in the state of intoxication, drives a motor vehicle, used for civil, water or air communication shall be subject to a penalty of detention for 2 years or a fine or both penalties in total". Article 28 § 2 stipulates: "Who, in the state of intoxication, drives another vehicle on a public road shall be punishable by detention for a year or a fine up to PLN 5000"⁷.

In the regulation, the legislator accepted a comprehensive qualification covering driving of motor vehicles both in land and water movement or air movement. In addition, Article 30 of the same act includes: "Who drives a vehicle in the state of intoxication causes inadvertently risk of disaster in the communication by land, water or air, is punishable by imprisonment up to 5 years or a penalty of arrest". In

turn, the content of Article 31 points to the loss of the right to drive motor vehicles. Pursuant to the act, in connection with the commission of the aforementioned offences, the perpetrator lost these privileges for a period of six months to 10 years. While Article 19 (1) of the Act of 27 November 1961 on safety and order on the public roads prohibited driving in the state indicating consumption of alcohol or any other similarly acting substance.

According to Stefański (1999: 2), for the offences referred to in Article 28 of the Act on combating alcoholism, primarily fines were imposed, e.g. pursuant to Art. 28 § 1, in 1963, it represented—79% of the imposed penalties, and in 1971—88%. The absolute arrest was minimal (in 1963, they were 13%, and in 1969—2%).

The Act Criminal Code of 19 April 1969, which replaced the criminal settlement of 1932, in the content of Article 145 § 3, provides that: “If the perpetrator, in the state of intoxication, drives a motor vehicle or other vehicle, commits the offence specified in § 1 or 2, it shall be subject to imprisonment from one to 10 years”⁸. The main elements of the offence specified in § 2 of the article involve death, serious injury, or serious health disorder of another person, caused as a result of infringement of traffic laws.

Under the provisions of the code, all types of offence of road accident were prosecuted by indictment, such as light and medium road accident (Art. 145 § 1), severe road accident (Art. 145 § 2), and qualified road accident due to a driver of a motor vehicle or other vehicle being in the state of intoxication (Art. 145 § 3) (Stefański 2009: 28-29).

This provision, however, did not refer to driving of a motor vehicle or other vehicle in the state after consumption of alcohol or another substance.

The Act on Upbringing in Sobriety and Counteracting Alcoholism of 26 October 1982, in Art. 46 (3), includes the statement that “intoxication occurs when blood alcohol concentration exceeds 0.5‰ and leads to presence above 0.25 mg of alcohol in 1 dm³ in

exhaled air”⁹.

The counterpart of the repealed provision of Art. 28 of the Act of 10 December 1959 on combating alcoholism (the Journal of Laws, no. 69, item 434) was the provision of Article 87 of the Act Offences Code of 20 May 1971 (the Journal of Laws of 31 May 1971, no. 12, item 114), which stated:

(1) § 1 who, in the state of consumption of alcohol or similar acting substance, drives a motor vehicle of land, water, or air communication, is subject to arrest or a fine;

(2) § 2 who, in the state of consumption of alcohol or similar acting substance, drives a motor vehicle other than specified in § 1 on the public road, is subject to arrest or a fine;

(3) § 3 if the offence specified in § 1 is committed, prohibition of driving motor vehicles can be assumed, and such decision is made when the perpetrator is in intoxication.

In accordance with the guidelines of the Minister of Internal Affairs of 24 December 1975 as to the jurisdiction policy on road offences (ZW1/76, pp. 5-10), the term “state after consumption of alcohol” is more general to “intoxication” and is associated only with the fact of alcohol consumption. The state after consumption of alcohol is when alcohol concentration in blood exceeds .2 promiles (i.e., the upper limit for the so-called physiological alcohol). This concept includes the narrower concept of “state of intoxication”, which occurs when alcohol concentration in blood exceeds .5 promiles (Bafia, Egierska, and Śmietanka 1980: 212).

From the beginning of validity of the offences code, for these offences, primarily a fine and exceptionally arrest was imposed. The fine represented more than 99% of the sentences (e.g. in 1995—99.7%, in 1996—99.9%, and in 1997—99.9%) (Stefański 2009: 28).

The criminalization of non-accidental driving of motor vehicle in state of intoxication or under influence of intoxicant, in land, water, or air movement (Par. 1),

or any other vehicle on the public road, in the zone of residence or movement area was implemented based on the amendment of the penalty code of 14 April 2000.

The equivalent of Art. 178 (a) of the penal code based on the offences code is Art. 87 of the petty offence code, stating that it is forbidden to drive, after consumption of alcohol or similar acting substance, of a motor vehicle in land, water, or air movement, or any other vehicle on the public road, in the zone of residence or movement area.

The similarity of the constituent elements of both provisions is visible.

The difference is only in intoxication with alcohol or intoxicant.

Article 87 of the petty offence code involves the “state after use of alcohol or similar acting substance”; the state after consumption of alcohol, in accordance with the Act on Upbringing in Sobriety and Counteracting Alcoholism, occurs when the content of alcohol in the body is or leads to:

- (1) Concentrations in blood from .2 to .5 of alcohol;
- (2) Presence in the exhaled air from .1 mg to .25 mg of alcohol in 1 dm³.

Article 178 (a) of the penal code includes the state of intoxication or being under influence of intoxicant.

The state of intoxication within the meaning of Article 115 (16) of the penal code occurs when:

- (1) Alcohol content in blood exceeds .5 per mille or leads to concentrations exceeding this value;
- (2) Alcohol content in 1 dm³ exhaled air exceeds .25 mg or leads to concentrations exceeding this value.

For the perpetrator in the state after consumption of alcohol, the threshold of intoxication specifies the limit between crime and offence, exceeding of which has only the quantitative aspect.

However, one must take into account the Order of the Supreme Court of 2002 that if the state after consumption of alcohol beyond the specified limit transfers into the state of intoxication, it does not

mean that it ceases to be a state after consumption of alcohol.

The influence on intoxicant, typical of these offences, is presented differently. The difference between intoxicant and substance acting similarly to alcohol is qualitative. There was no such measure of alcohol content, which is expressed in promiles or mg/dcm³. However, one can assume, based on the discussions in the literature, that if any content of substance acting similarly to alcohol is found in a driver’s body, it will correspond to Article 87 of the petty offence code under the “negative” condition—missing data (specified based on other evidence, particularly testimonies of witnesses), proving the actual intoxication causing ability to safe driving. If “influence of intoxicant” was established, a driver would not be responsible based on Article 87 of the petty offence code, but for offence based on Article 178 (a) of the penal code.

Another change in the Act of 27 September 2013, amending the act—the Code of Criminal Procedure and other acts with effect from November 9, 2013, implemented the normative changes in terms of behaviour during driving on the public road, in the zone of residence or in the zone of movement of a vehicle other than motor by the perpetrator in the state of intoxication. This act ceases to be a crime and is included in the list of offences. In addition, a penalty in the form of driving prohibition, yet decreed mandatory for this offence, was replaced by the optional mode.

The driver should learn self-assessment of his current skills and adjust his behaviour to the results of this self-assessment. Therefore, mental skill is a factor, which decisively influences on behaviour of the driver, and consists of:

- (1) Possibilities resulting from configuration and inter-relationships of psychological predispositions of a vehicle driver. These predispositions form a subsystem, in which a momentary disorder of one factor (e.g. visual perception) can or cannot be

compensated by other factors (e.g. by personality traits such as caution, responsibility, etc.). Both psychomotor characteristics, personality traits, and temperament as well as short-term emotional states create mental skills of a driver;

(2) Knowledge—includes the information, which a driver should be known on functioning of the whole system, and such as the rules of driving in traffic, on behaviour of all road users, on a vehicle, on influence of traffic situation (physical and social), on the way of driving, and on itself, its behaviour, and the level of mechanisms for designating this behaviour;

(3) Skills and abilities for responsible participation in traffic. The conditions of safe driving are: (a) skills of proper handling of steering devices (under the influence of skill, it turns into habits); (b) skills of correct perception of the traffic environment and all situation changes; (c) skills of overall assessment of the situation; (d) skills to assess own skills to act in the situation (normal or difficult); and (e) ability to perform appropriate manoeuvres taking into account the characteristics of the current road situation and anticipated behaviour of other road users and the traffic law;

(4) Motivation and attitudes—factors influencing and changing driver behaviour, self-assessment. The smooth functioning of a driver on the road subjects to appropriate physical and mental skills, and includes all of the above items (Bąk and Bąk-Gajda 2008: 22).

In case of driving a vehicle by a driver, prior alcohol consumption causes a number of changes in the process of perceiving and processing of information and decision-making:

(1) Deteriorates coordination of movements—There are difficulties in execution of several activities at the same time;

(2) Reduces the response time—It is extended;

(3) Causes deterioration of sight—problem with seeing details and events on the road;

(4) Reduces the field of view—narrows a normal field of view;

(5) Causes erroneous assessment of distance and speed;

(6) Causes erroneous assessment of own skills (belief in own skills “one beer won’t hurt”);

(7) Interferes the processes of concentration and divisibility of attention;

(8) Causes slow adaptation of vision to dark;

(9) Increases susceptibility to glare;

(10) Is in favour of recklessness, showing off, and aggression¹⁰.

The criminal legislation allowing the competent authorities to state that a vehicle driver was under influence of alcohol or any other substance acting similarly, can have its consequences in terms of the need to conduct the psychological tests. This is specified in Article 99 of the Act of Driving Vehicles:

The foreman issues the administrative decision to refer to (...) the psychological tests in terms of transport psychology, if:

(1) A person drove a vehicle in the state of intoxication, in the state after consumption of alcohol or substance acting similarly to alcohol;

(2) A person exceeded the number of 24 points imposed for infringement of traffic laws;

(3) During the trial period, a person committed two offences against the safety of communication;

(4) A driver caused a road accident, as a result of which another person suffered death or injury referred to in Article 156 (1) or Article 157 (1) of the Criminal Code.

CONCLUSIONS

The Polish criminologist, Paweł Horoszowski stated:

The legal provision itself, changes radically and directly factors of social life neither in the field of crime, nor in numerous other fields; the factors duration is due to tradition and heredity of the environment—especially due to ingrained needs and attitudes shaped by the objective conditions. This does not mean, however, that the provision (including criminal one) does not have a major role in

shaping of life; if it grows out of the essential requirements of large groups of the population, if it meets the basic functions in organizing social life, in a manner appropriate to the development of civilization. However, the provision seeing difficulties, having no support in objective conditions and in the attitude of some substantial part of the population, remain *lex imperfecta*; and its implementation *per fas et nefas* usually provides the population severe damages. (Horoszowski 1965: 15)

The conducted analysis of the legislation was necessary to prepare and demonstrate, in the form of a prototype, the on-line platform, and the space model of psychological variables tested with the proposed tests. A user—psychologist of transport conducting the test will have the possibility to enter and edit data of the tested person, choose which tests to conduct and generate the documents, both required by the provisions of the law and usable. A psychologist will also have tools to analyse the results, generate descriptions, and support in making judgement decisions.

Notes

1. Retrieved March 12, 2016 (<http://pl.wikiedia.rg/wiki/praworz>).
2. The Act of 20 June 1997, the law on road traffic, the Journal of Laws of 2012, 1137 consolidated text.
3. Retrieved March 16, 2016 (http://rop.sejm.gov.pl/1_Old/opracowania/pdf/material1.pdf). Psychologiczne badania kierowców jako forma działań na rzecz bezpieczeństwa i higieny pracy kierowców (Psychological testing of drivers as a form of action on the health and safety of drivers). The material for the meeting of the Labour Protection Council at the Polish Parliament on October 21, 2008.
4. The Regulation of the Minister of Public Works and the Minister of Internal Affairs in agreement with the Minister of Military Affairs on movement of motor vehicles on the public roads of 27 January 1928, the Journal of Laws of PR of 1928, no. 41, item 396.
5. The Regulation of the Minister of Communication, Internal Affairs and Military Affairs issued in agreement with the Minister of Social Welfare on movement of motor vehicles on the public roads of 27 October 1937, the Journal of Laws of 1937, no. 85, item 616.
6. The Regulation of the President of the Republic of Poland, the Criminal Code of 11 July 1932, the Journal of Laws of PR of 1932, no. 60, item 571.

7. The Act of 10 December 1959 on combating alcoholism, the Journal of Laws of 1959, no. 69, item 434.
8. The Act Criminal Code of 19 April 1969, the Journal of Laws of 1969, no. 13, item 94, as amended.
9. The Act of 26 October 1982 on Upbringing in Sobriety and Counteracting Alcoholism, the Journal of Laws of 1982, no. 35, item 230.
10. Retrieved March 15, 2016 (<http://psychotesty-szczecin.pl/po-zatrzymaniu.html>).

References

- Bafia, J., D. Egierska, and I. Śmietanka. 1980. *Kodeks wykroczeń (Petty Offences Code)*. Komentarz (Comment), Warszawa.
- Bąk, J. 2004. "Psychologiczne badanie kierowców. Bezpieczeństwo pracy" (Psychological Testing of Drivers. Work Safety). No. 6.
- Bąk, J. and D. Bąk-Gajda. 2008. "Psychologiczne czynniki bezpieczeństwa ruchu drogowego, Eksploatacja i Niezawodność" (Psychological Factors of Road Safety, Maintenance and Reliability). No. 3.
- Development Project: "Development of Psychological Test Supporting System of the Drivers for the Police." No. DOB-BIO7/20/01/2015.
- Hołyst, B., ed. 2005. *Wielka encyklopedia prawa, opr. definicji Prawo a inne normy społeczne—Małgorzata Król (United Encyclopedia of Law, ed. Definition of Law and Other Social Norms—Małgorzata Król)*. Warszawa.
- Horoszowski, P. 1965. *Kryminologia (Criminology)*. Warszawa.
- Płowucha, S. 1995. *Zagadnienia prawne organizacji i funkcjonowania Policji (Legal Issues of Organization and Functioning of the Police)*. Szczepno.
- Pyter, M. 2011. "Prawne zasady użytkowania pojazdów, mechanicznych w Drugiej Rzeczypospolitej" (Legal Principles of Vehicles, Mechanical Second Republic). *Czasopismo prawno-historyczne (Magazine Legal and Historical)*, volume LXIII, book 2.
- Steenbruggen, J., M. T. Borzacchiello, P. Nijkamp, and H. Scholten. 2011. "Mobile Phone Data From GSM Networks for Traffic Parameter and Urban Spatial Pattern Assessment: A Review of Applications and Opportunities." *Geo Journal* 78(2):223-243. Retrieved (<http://link.springer.com/article/10.1007/s10708-011-9413-y>).
- Stefański, R. A. 1999. "Opinia o projekcie ustawy o zmianie ustawy—Kodeks karny" (Opinion on the Draft Law Amending the Law—Penal Code). (Parliamentary print no. 1019) Office of the Parliament, the Office of Expertise and Research, the Expertise executed at the order to the OER, Expertise no. 183, April 1999.

———. 2009. “Wnioskowy tryb ścigania przestępstwa średniego wypadku drogowego” (Of a Motion Mode of Prosecution Middle of a Road Accident). *Prokuratura i prawo* (Prosecutor’s Office and the Law), no. 11-12.

Yager, L. M., K. K. Pitchers, S. B. Flagel, and T. E. Robinson. 2015. “Individual Variation in the Motivational and Neurobiological Effects of an Opioid Cue.” *Neuropsychopharmacology* 40:1269-1277.

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