

SOCIALLY PATHOLOGICAL CHARACTERISTICS OF THE BEHAVIOUR OF TRAFFIC ACCIDENT OFFENDERS AND THEIR PREVENTION

Jan Vitoň*

University of South Bohemia in České Budějovice, Faculty of Health and Social Sciences, Institute of Humanities in Nursing Professions, České Budějovice, Czech Republic

Submitted: 2018-05-03

Accepted: 2018-05-11

Published online: 2018-06-30

Abstract

This study summarizes the issue of socially pathological behaviour in the psyche of drivers who cause traffic accidents. Its goal is to define the characteristics of these offenders and to highlight the possibility of recognizing them during preventative examinations. The socially pathological characteristics of people, and thus their behaviour in traffic, often result in tragedy. The psychology of driving deals intensively with the psychological profiles of drivers who not only commit traffic offences, but are becoming a real danger for disciplined drivers. Every participant in traffic, whether a driver or a passenger, can become their victim at any time. Therefore, it is important to be aware of this situation, to deal with it and try to prevent it. A great amount of professional literature was used to summarize the most frequent risk factors in traffic and the possible causes of accidents. Based on numerous sources, we established and analyzed the most frequent statistically recorded risk factors in traffic. We also presented the repressive system and the options of prevention as well.

Keywords: *traffic accidents; socially pathological behaviour; drivers; aggression; brake check; ADHD; prevention*

INTRODUCTION

An important part of everyday television and radio news are reports on traffic accidents or warnings about the place where they have happened. From the point of view of quality and quantity, this is a new type of behaviour, which is related to unpredictability of traffic, the outdated network of roads and the necessity of repairing them. These situations affect the smooth running of traffic and the frequency of accidents as well. Driving maturity and a driver's psychological condition are somewhat unpredictable. Psychologists have concluded that knowledge of laws and rules is not sufficient if the drivers do not respect them. Studying the survivors of traffic accidents, we concluded that many offenders are not persuaded of the

necessity to respect the rules of traffic. Psycho-diagnostic examinations and surveys of specialists that focus on the causes of traffic accidents show a high level of cynicism in offenders (Havlík 2010). Offenders who have caused death in a traffic accident mostly do not show any remorse. They sometimes show self-pity and only exceptionally do they feel guilty.

The goal of this study was to define the characteristics of the offenders of traffic accidents and to highlight the option of diagnosing them during preventative examinations.

MATERIALS AND METHODS

We used the findings gathered in the publication of the traffic psychologist and

expert Karel Havlík (2010) and the newest information from his other publications (2013). We also used the Web of Science, and internet sources with information related to socially pathological characteristics of the offenders of traffic accidents and their possible prevention. We analyzed selected texts and established different types of socially pathological behaviour of drivers and its possible causes. We selected the most frequent offences from statistical data and established possible preventative programmes which would lead to an effective decrease of aggressive or unpredictable drivers' behaviour. The programmes would also help to highlight the drivers' tendencies to behave psycho-pathologically when they are driving.

RESULTS

Socially pathological behaviour in general

Socially pathological behaviour regarding drivers greatly affects the occurrence of traffic accidents. *“Socially pathological behaviour is characterized mainly by unhealthy lifestyle, disrespecting or breaking social norms, laws, regulations and ethical values. It is behaviour that causes health damage; it damages a person's life and work environment and individual, group or social disorders and deformations”* (Pokorný et al. 2003, p. 9).

Such behaviour is dealt with by many scientific disciplines, such as psychology and its specializations –psychology of driving, sociology, ethics or pedagogy. Their consequences are assessed by law, as well as by medicine and other professional fields (Fisher and Škoda 2009). The same authors characterize this behaviour as unhealthy, undesirable and socially unacceptable. It is considered dangerous, and options for prevention are being searched for. Fisher and Škoda (2014) also consider aggression, violence or drug addictions, alcohol or both.

Generally, the cause of socially pathological behaviour can be a tendency towards exhibitionism; bringing attention to oneself, and social alienation as a result of an upbringing (or non-upbringing) in an inappropriate family environment (Nešpor 2011).

A natural and harmonious family environment may prevent the development of socially

pathological behaviour with the following related basic risk factors:

- a) using free time (individual and group behaviour);
- b) health and its influence on the development of personality;
- c) mental health, social competence;
- d) family and family background, school;
- e) job and profession;
- f) peers –basic relationships with group members;
- g) habits and addictions (Pokorný et al. 2003).

Pokorný et al. (2003) claim that socially pathological behaviour; its development or consequences, are associated with the environment. It cannot be perceived or solved individually. The environment mainly includes the family, where the upbringing is consistent or non-consistent, the communication is adequate or inadequate, as well as the level of risk factors, the problems of family members – alcohol, drugs, criminal background, etc. (Vašutová and Panáček 2013). The environment also includes the workplace, interests and society. It is impossible to exclude an individual's development – their gender, character, intellect, moral values, etc. An individual's health and social development later affects their behaviour, e.g. independent decision-making, responsibility for their actions, thinking about the consequences of their actions, or caring for their health and lifestyle (Vašutová and Panáček 2013).

Socially pathological attributes in the life of traffic offenders

The traffic psychologist Havlík (2013) has a long experience with traffic offenders and claims that, with the knowledge of the environment, it is possible to introduce preventative aspects of such offences. Accidents caused by these people are not usually random (they are often repeated). An inconvenient family environment, ignoring socially recognized norms and an effort to be self-assertive has a significant influence. Drivers who are associated with the following points are more frequently participants in traffic accidents (or are even offenders), because they do not respect traffic rules, current traffic conditions, or the other participants in traffic (Havlík 2013). The

most frequent attributes influencing accident frequency of the above-mentioned drivers are:

- divorced parents and growing up without a father or a mother;
- strict or protective upbringing;
- problems in groups of children; the child is aggressive or the victim of aggression;
- bullying– the child is bullied or a bully;
- unfinished school education, poor grades, failing classes;
- smoking, drug abuse and drinking alcohol;
- criminal offences;
- tendencies to adventures and showing off;
- problems in marriage, repeated divorces and domestic violence;
- conflicts with colleagues or superiors at the workplace;
- frequent change of employment;
- disrespecting authorities;
- unawareness of ethical principles;
- the need for self-assertiveness (Havlík 2013).

The following aspects affect the most frequent breaking of traffic regulations that are followed by an accident:

- wrong overtaking – this can be the consequence of a weak perception of space, inaccuracy in estimating distance and speed, recklessness and aggression;
- disrespecting safe distance – this can be caused by an unmanageable aggression, insufficient attention and self-control;
- wrong manner of driving – this can be caused by emotivity, irresponsibility, unpredictability, self-underestimation and other;
- accidents caused by fatigue or micro-sleep – here, we can speak about human irresponsibility and carelessness, an underestimation of the situation or even ignoring employer's instructions;
- the influence of alcohol or drugs – this is caused by addiction, irresponsibility, negative emotions, oversensitivity and vulnerability;
- not giving way and going in the opposite direction – this is most frequently caused by sight disorders, disorders of perception, emotional excitableness, loss of attention or failures of the mind, etc. (Havlík 2013).

According to traffic psychologists, there are other causes of traffic accidents as well,

such as inexperience, undeveloped skills, unawareness of regulations, underestimation of control over the car, or insufficient concentration. In a traffic environment, orientation can be easily lost. Not adjusting one's speed to the condition of the road and one's own skills often has tragic consequences (Havlík 2013).

“A good driver should always have everything under control – the car, the traffic, the speed and the real and assumed behaviour of other drivers. They should mainly control their emotions and reason” (Havlík 2010, p. 11).

The causes of incorrect manoeuvres by drivers who cause traffic accidents can be:

- impaired health and physical condition including sense organs;
- insufficient ability of judgement;
- insufficient motoric skills (insufficient experience and anticipation);
- insufficient necessary personal characteristics;
- temporary conditions (e.g. fatigue);
- temporary emotions arising from family environment, employment or society that affect attention;
- alcohol, drugs;
- chronic mental conditions, neurosis, different mental disorders (Štikar and Hoskovec 2006).

“I drive the way I live – a person who does not respect norms in life usually does not respect them behind the wheel” (Havlík 2013).

Specifics of the behaviour of the participants in traffic are dealt with by the psychology of driving. These are not only drivers but other people as well: other members travelling in the car, commuters in public transport, and pedestrians. This discipline is interested in the psychological behaviour in specific traffic situations, which depends on a person's individual characteristics, training, the character of traffic and traffic techniques. The psychology of driving is associated with other psychological disciplines and, as such, it shows that potential traffic offenders are people whose psychosomatic capacity is insufficient for traffic requirements. This discipline associates the driver's failure with their perception of traffic, traffic environment and means of transport (Havlík 2005). It also verifies the mental requirements for driving and

the real mental and psychosomatic capacity of the driver (Havlík and Seidlic 2015).

An important part of the human capacity is their health or biological, psychophysical and sensory condition (Havlík 2005), such as the activity of sense organs (Zaoral et al. 2010). Other important parts are personality features, abilities, skills, knowledge, experience and moral features (Havlík 2005). Important personality features may include dominance, emotional stability/instability, feelings of anxiety, extroversion/introversion, conscientiousness, self-control and aggression (Seitl and Šucha 2010).

The goal of the psychology of driving is to learn all principles of the human mental activities regarding traffic. Using them increases their safety, fluency, and regulates traffic speed (Štikar 2003).

A driver's characteristics

According to the act No. 13/1997 Col. on ground transport, a driver is a participant in traffic who drives a motor or a non-motor vehicle (Kučerová 2016). He or she must own a driver's licence, which enables him or her to drive/ride a motor vehicle of certain groups (Kučerová 2016).

A non-troublesome driver has a stable and balanced type of nervous system and is able to react adequately and quickly. Their personality features, which must be balanced, include emotional stability, the ability to adjust to a surprising or non-standard traffic situation, self-control, not being too self-confident but not self-underestimating as well, stress resisting, conscientiousness and reliability (Havlík 2005). Successful drivers are more decisive and persistent, they are more flexible, and are on a higher mental level than those who cause traffic accidents (Štikar 2006). Non-troublesome drivers usually have a minimum of 15 years of experience in which they have not caused a serious traffic offence, have driven more than 500 thousand kilometres without an accident, have not lost any points for offences, have never been prosecuted for causing a serious traffic accident and their driver's licence has not been taken away (Havlík and Seidlic 2015).

Troublesome drivers are characterized by an increased level of emotions, impulsiveness, a tendency towards irresponsibility and risk, self-overestimation, and also underestimation

as well. Their characteristic features include aggression, absence of empathy and excessive egocentrism. When the success of solving a traffic situation depends on the driver, the vehicle or the traffic environment, the driver is usually the dangerous factor because of their individuality (Seitl and Šucha 2010). It is always a problem in the case of the assessment of the driver's personality (Zaoral et al. 2010). The driver's social competences are also very important. They can end up showing asocial behaviour or unmanageable aggression. The driver's health condition also plays an important role, as well as their professional competences. Driving a vehicle requires constant quick reactions; it is necessary for the driver to keep a balanced relationship between oneself, the vehicle, the road, the changing traffic situation and other participants in traffic (Havlík 2005).

The individual personality features can significantly show during the solving of different traffic situations. An individual is influenced by their natural and developed dispositions, as well as the gradual adaptation to the society, which can suppress undesirable manifestations and develop the desirable ones.

According to Havlík (2005), an important role in the quality of solving traffic situations is played by the Jung bipolar personality typology – extroversion and introversion (Kučera 2013) – see Figure 1, where the bottom part shows the features of a well-balanced individual and the upper part shows the opposite.

Introverts are inclined toward the phlegmatic and melancholic type and are slower in deciding. They can be more stressed, they are more sensitive but also more attentive and empathic, they can reflect situations and are not inclined to euphoria. They are more perceptive, more concentrated, they have a good memory and they have a highly developed instinct for self-preservation (Löhken 2014). These are the reasons why introverts behave much less dangerously and less riskily in traffic. They are much more reliable and they cause fewer accidents than extroverts.

Extroverts like challenges and they respond to them. They welcome difficult situations, they are more flexible and they are not easily disturbed. Extroverts respond very easily and are able to react to difficult situations better. They are calm and more flexible and are not easily disturbed by noise. Regard-

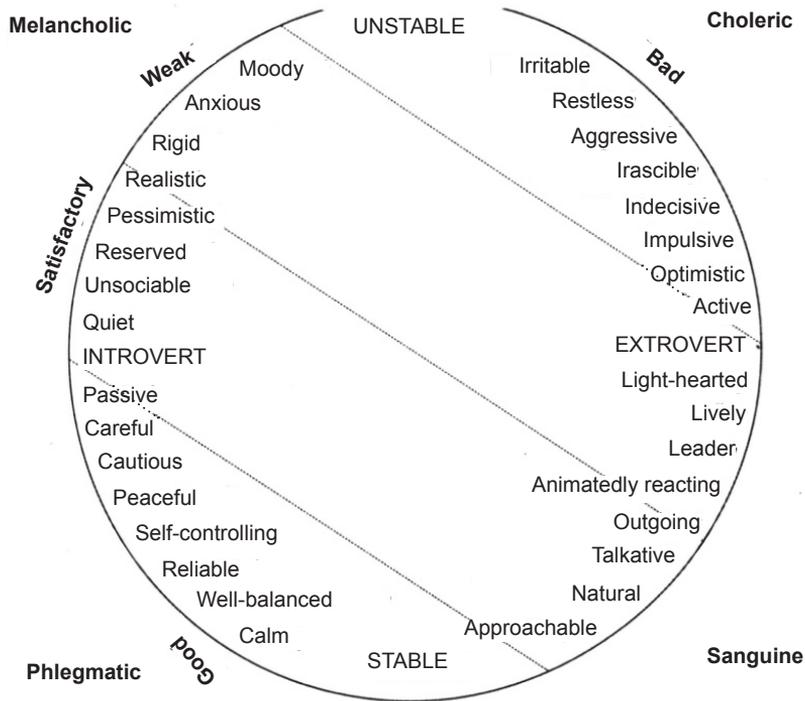


Fig. 1 – Types of drivers (Havlík 2005, p. 19)

less of failure or loss, they risk more, which can cause asocial behaviour (Löhken 2014). According to Havlík (2005), extroverts are more optimistic. They are inclined to the sanguine type and even choleric type. They are dynamic, impatient and inattentive, they are easily diverted and their attention decreases. Havlík (2005) describes extroverts as people who love people and connect with them. They are full of optimism and joy for new things and changes. They are closer to the sanguine type but, if they are unstable, they can also be choleric. In traffic, the characteristics of an extrovert are expressed by dynamic driving and constant changes. When the drive is monotonous, they become impatient and their attention is not focused (Havlík 2005). All people have introvert and extrovert features. The accident frequency is higher if the people are inclined to be unstable. Emotional instability is one of the features of troublesome drivers, which leads to unpredictable mood swings. Emotional stability is characterized by standard reactions, a more balanced mind

and an adequate self-assessment (Havlík 2005). Emotions that express inner pleasure or displeasure are physically and psychologically dangerous, because they can disturb a driver's focus and lead to aggression towards other participants in traffic. The necessary characteristics of a driver's emotional intelligence are the ability to control oneself and feel empathy towards other participants in traffic. At present, Hippocrates' typology of human temperament is still relevant. Fig. 2 shows the connection between emotional stability or instability and personality temperament.

The interaction between mental/health condition and traffic environment/driver's skills is shown in Fig. 3.

As mentioned, the most important personality dispositions of a successful driver can be divided into:

- a) cognitive, e.g. thinking, evaluation and solving situations;
- b) psycho-motoric, e.g. skilfulness and movement co-ordination;
- c) mechanic, e.g. manipulation with objects.

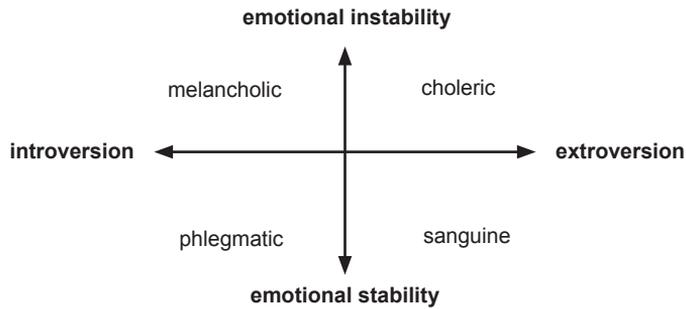


Fig. 2 – Emotionality and temper (Havlík 2005)

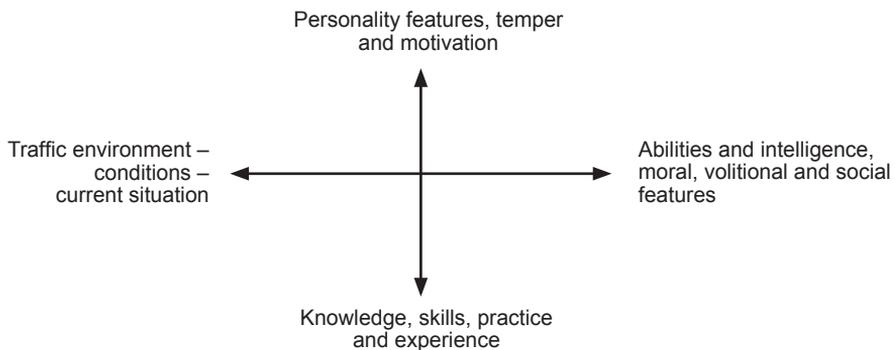


Fig. 3 – Health and mental condition (Havlík 2005, p. 15)

Different types of drivers and their personalities are shown in Table 1.

Table 1 – Groups of drivers’ personalities and their behaviour (Štikar and Hoskovec 2006, p. 78)

Groups	Drivers’ behaviour while driving
Well adjusted, they are very rarely upset and quickly recover	They mostly do not experience accidents nor do they break traffic regulations
They have mental problems, nevertheless, they are socially responsible and have self-control	They mostly do not experience accidents nor do they cause breaking traffic regulations
They have mental problems, they are socially responsible, but they are upset for a long time	In certain periods (weeks and months), they experience accidents and break traffic regulations
They are socially responsible, they have mental problems and they tend to be constantly upset	They experience a high number of accidents and breaking of traffic regulations
They constantly tend to be unsociable and asocial, they do not respect authority	Constant offenders of traffic regulations who may experience a high number of accidents
Other (epileptics, diabetics, mentally disturbed, etc.)	Unpredictable behaviour; the behaviour while driving may be very bad or very good

A driver's age is also very important. Older drivers are socially more mature, more careful, they are better at making predictions and they have more realistic ideas about the consequences of traffic accidents (Žádník 2013).

It is necessary to add that, with age, physical and mental strength decreases. The adequate reaction time is longer and people over 65 years start having sensory handicaps, such as sight, hearing and even memory (Havlík 2013). Such defects may be compensated by

experience, carefulness, abidance by regulations or anticipation. Young drivers mostly overestimate their skills, their vehicle power or they consume alcohol or drugs. Older drivers cause accidents because of their slow reactions to lights or sounds, wrong assessment of distance or not giving way.

Fig. 4 shows the interconnection between age and the wrong behaviour of drivers. The highest number of accidents occurs in drivers between 18 to 25 years and from 66 years.

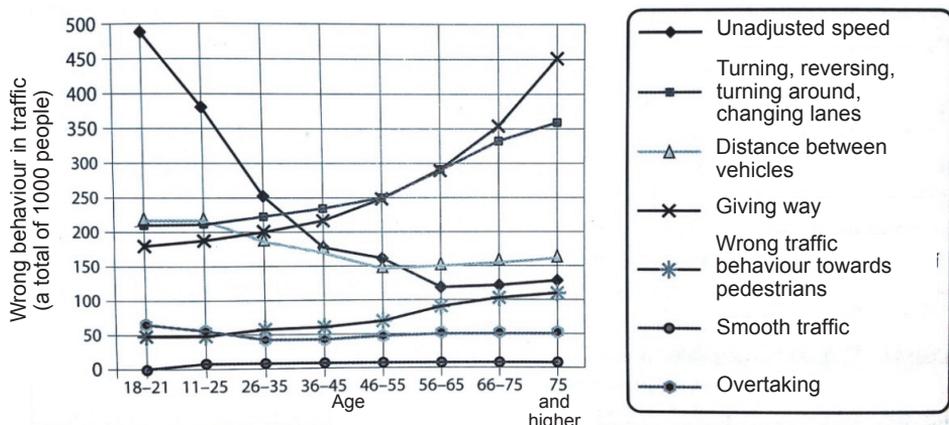


Fig. 4 – Wrong behaviour in traffic (Šucha et al. 2013, p. 147)

The manifestations of drivers' risky behaviour are:

- inflexibility and tendencies to selfishness;
- disturbed sociability with a low level of altruism;
- low ability to learn from one's experience;
- self-asserting regardless of others and the traffic conditions and environment;
- self-overestimation and underestimation of others;
- insufficient self-control, predictability and carefulness;
- tendencies to rational failure;
- anger, irritability and rage;
- disrespecting authorities and people;
- inability to consider the consequences of one's actions;
- no conscience and feelings of guilt;
- oversensitivity towards the ego but insensitivity towards punishment;
- mood swings;
- tendencies towards relying on coincidence, hasty reactions to traffic situations,

tendencies towards adjusting traffic environment to oneself (Vavroň 2014).

The problems in the behaviour of drivers in traffic are caused by the conflict between the formal and informal norms. The formal regulations are the legal regulations, which means that a driver respects traffic regulations and is polite and tolerant towards other drivers. The informal regulations are characteristic for drivers who do not show regard for other participants in traffic and do not respect traffic regulations and signs (Havlík 2005).

The most frequent psychopathological features of drivers

From the point of view of different types of drivers' aggressive reactions, their manifestations can be ordered from the most frequent to the least frequent:

- 1) speeding;
- 2) wrong overtaking – over the unbroken line, in dangerous stages, bends;

- 3) not giving way to overtaking drivers by suddenly accelerating;
- 4) driving closely behind another vehicle;
- 5) pushing vehicles to the edge of the road;
- 6) honking and flashing at slow vehicles;
- 7) cursing and aggressive gestures;
- 8) physically attacking other drivers;
- 9) disrespecting the recommended speed or speed regulations;
- 10) brake checking;
- 11) cutting up other drivers;
- 12) approaching other vehicles;
- 13) blinding other drivers;
- 14) intentional slow driving along an unbroken line (Havlík 2017).

The most frequent cause of drivers' dangerous behaviour in traffic is aggression, which is demonstrated by the information coming out of CNS. It is a form of attack. In traffic, it represents deviant behaviour, and it is becoming a serious problem because the number of aggressive drivers is increasing. Aggression is usually characterized by destructive behaviour which causes damage (Šucha et al. 2009). The damage is not only physical but verbal and non-verbal (Zaoralet et al. 2010). Aggression can also be perceived as belligerent behaviour and hostility, which precedes an intentional physical attack and violence (Kučera 2013).

In traffic, aggression is perceived as a consequence of a hostile and violent reaction which is caused by frustration. It is not always the case because it can be a means to evoke an adrenaline experience. Aggression in traffic can be found in all age groups, regardless of the gender. Lately, the myth that aggression is characteristic of male drivers has been shown to not be completely true because the number of aggressive female drivers has been growing (Kováčsova et al. 2016). Social background, level of education or intellectual level are not important (Havlík 2010). Aggression behind the wheel threatens other vehicles or people in the traffic environment (Seitl and Šucha 2010).

Aggressive behaviour in traffic occurs mainly in young drivers, and its roots are in negative family situations (broken homes), imitating parents' behaviour while driving (so-called 'social inheritance'), or problems with behaviour at school, alcohol and drugs (Vavroň 2014). According to Prechtet et al

(2017), aggression is considered an emotional construction of feelings of anger and hostile thoughts while driving. These feelings may cause distraction in drivers and insufficient attention in traffic. Some studies indicate that aggression is one of the main factors of dangerous and accident-causing driving (Prechtet et al. 2017). Lately, aggression has been manifested by brake checking (when a driver overtakes a slower vehicle, suddenly hits the brake and endangers the vehicle behind them). It is a way of exacting revenge on slower vehicles or wrongly or slowly overtaking drivers. An aggressive driver wants to punish them this way. Cunning drivers use their experience and punish slower drivers without suffering any injuries. They lightly press the brake and then immediately speed up (Ginter 2012). However, they are not aware of the pointlessness of their actions because all they accomplish is letting their aggression out. They are mostly caught up again at traffic lights, crossroads or other stops (Ginter 2012).

Such drivers are often convinced that they are not guilty, believing that because the collision happened from behind, the driver behind them was at fault for not keeping a safe distance. In this case, they are wrong. Not keeping a safe distance is not considered if it is proven that the driver in front unnecessarily hit the brake to punish the driver behind them (Kotál 2016). According to Havlík (2011), this offence is mostly committed by previously punished drivers who received points or tend to be aggressive. They reached 12 points in the system and their driver's licence was temporarily taken away.

When a driver reaches 12 points in the point system, they must give up their driver's licence. The point system serves for evaluating, monitoring and recording repeated unsafe traffic offences, i.e. the register of drivers' offences (Kučerová 2016). Such drivers are characterized by a troubled personality. They are egocentric and tend to be aggressive and impulsive. We cannot exclude addiction to alcohol and drugs (Havlík and Seidlic 2015). Those who require their licence back frequently have problems in intersocial relationships and they have usually been divorced at least once and usually come from dysfunctional families. If they had problems at school, they often have similar ones at the workplace and in traffic (Vavroň 2014). According to a rule

that came into effect from 9th March, 2016, which changes the regulation of the Ministry of Transport No. 31/2001 Col. on driver's licences and registers, every driver who has had their driver's licence taken away must undergo a psychological examination, even though they have not reached 12 points. They are drivers who commit serious offence; such as wrongly overtaking, speeding at very high speeds, or are under the influence of addictive substances (drugs, alcohol), etc. For these offences, drivers get 7 points, a fine of 7 000 CZK and their driver's licence is taken away for 6 months. They can ask for their driver's licence to be returned to them after 3 months, but it can only be returned after a positive result from the traffic psycho-diagnostics examination. This also represents a radical change. In the past, a doctor decided whether the driver was capable of driving again after being given a positive opinion by a psychologist, but, at present, it is the opposite, i.e. the doctor gives a report to a psychologist and their decision is final. If the driver does not agree with the final result, they have 12 days to file for a review at the Ministry of Traffic of the Czech Republic. This is an official act that reduced the basic psychological goal to prevent and protect the life and good health of participants in traffic.

By the end of 2017, the state registered 482 461 drivers who committed an offence (a criminal act) in the point system. At the same time, each of these drivers had received at least one point before. The number of such drivers is 8% (7.13% last year) (Ministry of Traffic of the Czech Republic 2017). The Ministry of Traffic registered the highest number in the region of Ústí nad Labem – 9.06%, and the lowest in Prague – 5.58% (Ministry of Traffic of the Czech Republic 2017).

By the end of 2017, a total of 39 609 drivers with 12 points were registered, which is 8.21%, and 0.59% of all registered drivers. There were 36 713 (92.69%) men and 2 896 (7.31%) women with 12 points. The ratio of all registered drivers by gender is 55.24% of men and 44.76% women. Out of all the drivers, men and women are very different in terms of points – 81.61% of men and 18.39% of women. The differences between men and women in regions are insignificant (between 79.69% and 83.67% of men).

According to traffic psychologists, the traffic system should primarily be preventative

and educational. In the Czech Republic, it is mainly vindicatory. An educational system is effective if most drivers start to accept it and believe it to be just (Slováček 2013). The purpose of this system is to decrease the number of the most aggressive drivers who vent their aggression while driving, and in doing so endanger others their risky driving (Novotný 2012).

Lately, traffic psychologists have considered hyperactivity as a possible influence on drivers' attention (ADHD – a hyperactivity syndrome, internationally known as Attention Deficit Hyperactivity Disorder). For now, these cases are rare, because these syndromes are more frequently seen in children of pre-school age, so its influence on driving can only be considered. It is a light brain dysfunction – impairment of activation level. It is characterized by behavioural disorders, emotional instability, cognitive disorders, weaker perceptual and motoric skills or weaker senses (sight, touch and hearing) and also problems in the total motoric co-ordination (Beránková et al. 2012). The characteristic feature is the urge for any (even meaningless) activity. A person suffering from ADHD is unpredictable, unfocused, impulsive, and behaves inadequately. They can suffer from other disorders too, such as in their cognitive and emotional functions, which seriously complicate their normal life (Fuermaier et al. 2017). ADHD also brings a personal and social burden, which significantly affects the total quality of life in various areas (Schoeman and de Klerk 2017), and this includes driving (Fuermaier et al. 2017).

Prevention

From a psychological perspective, the point system is necessary, but it is not self-salvable. Whenever an offender is proven guilty, they should be punished and their driver's licence should be taken away. The issue should be dealt with by traffic unions. In such cases, from the educational and preventative point of view, it could have a significant impact. It is not always successful and many guilty drivers escape punishment because of adjournments, etc. Those who commit repeat offences (using addictive substances) should immediately undergo a medical and psycho-diagnostic examination (Havlík 2013). Besides repressions, an important role would be played

by public appreciation of non-troublesome drivers, emphasizing their successes in the media etc. More attention should be paid to the practice of future professional drivers. The drivers' psychological examination should more effectively reveal the possible problems of people who are not sufficiently qualified to be professional drivers and who suffer from personality disorders. Education on traffic safety in the family and at school should not be omitted, and new owners of driver's licences, people with risky behaviour and drivers with aggressive tendencies should be aimed at. Increased attention should be paid to risky stages, where traffic accidents occur most frequently (crossings, level-crossings, dangerous crossroads, etc.).

Based on the available sources, this study summarizes the issue of socially pathological characteristics in the psyche of drivers who cause traffic accidents. Its goal was to define the characteristic features of these offenders, and to point out the possibility of their diagnostics during preventative examinations.

CONCLUSION

The development of traffic is associated to constantly more frequent manifestations of drivers' psycho-pathological behaviour which we did not know about before. The number of aggressive drivers and new manifestations of dangerous behaviour whilst in traffic is constantly growing. The causes of such behaviour are being searched for. They can be hidden in home environment, health problems, especially psychological etc. Apart from regula-

tions that operate as a deterrent, it is necessary to emphasize prevention with regards to current drivers, as well as those who will become drivers or have been driving for a short time. The psychology of driving is a scientific field with great potential. It focuses on the issue, analyzes the causes of traffic accidents and looks at ways to prevent them. The most frequent socially pathological characteristics in traffic are manifestations of aggression and this is associated with many accidents. Lately, the most frequent has been the so-called 'brake check', when a driver slows down the driver behind by hitting the brake, regardless of the possible consequences. The article outlines the personality typology of traffic offenders, as well as those who are or can be completely non-troublesome. According to bipolar typology, the basic personality division is the extrovert and the introvert type of driver who are characterized by a certain type of behaviour, e.g. extroverts are more likely to cause an accident. Other aspects that influence drivers' behaviour are age and emotions. Low or high age is a potential risk of causing a traffic accident, and emotional state can be the cause of a driver's lower level of attention. As prevention, we know about the system of points but a quality prevention of socially pathological characteristics should be included in driving schools and, according to psychologists, this is just as important.

CONFLICT OF INTERESTS

The author has no conflict of interests to disclose.

REFERENCES

1. Beránková L, Grmela R, Kopřivová J, Sebera M (2012). Zdravotní tělesná výchova: Nervová a neuropsychická oslabení [Health and physical education: Nervous and neuropsychological impairments]. Brno: Masarykova univerzita. [online] [cit. 2018-05-02]. Available from: <https://is.muni.cz/do/fsp/s/e-learning/ztv/pages/11-neuropsych-text.html> (Czech).
2. Fischer S, Škoda J (2009). Sociální patologie: analýza příčin a možností ovlivňování závažných sociálně patologických jevů [Social pathology: analysis of causes and options of affecting serious socially pathological features]. Praha: Grada, 218 p. (Czech).
3. Fischer S, Škoda J (2014). Sociální patologie: závažné sociálně patologické jevy, příčiny, prevence, možnosti řešení [Social pathology: serious socially pathological features, their causes, prevention, options for solving them], 2nd ed. Praha: Grada. 231 p. (Czech).
4. Fuermaier ABM, Tucha L, Evans BL, Koerts J, de Waard D, Brookhuis K, et al. (2017). Driving and attention deficit hyperactivity disorder. *J Neural Transm.* 124/1: 55–57.

5. Ginter J (2012). Vyržďování se dokazuje obtížně, pomoci mohou jen svědci [Brake checking is difficult to prove; only witnesses can be of help]. Právo. [online] [cit. 2018-05-02]. Available from: <https://www.novinky.cz/finance/288099-vyrzdvovani-se-dokazuje-obtizne-pomoci-mohou-jen-svedci.html> (Czech).
6. Havlík K (2005). Psychologie pro řidiče: zásady chování za volantem a prevence dopravní nehodovosti [Psychology for drivers: principles of good behaviour behind the wheel and the prevention of traffic accidents]. Praha: Portál. 223 p. (Czech).
7. Havlík K (2010). Osudová setkání. Rozhovory s lidmi, kteří přežili dopravní nehodu [Fated meetings. Speaking with survivors of traffic accidents]. Praha: Triton, 150 p. (Czech).
8. Havlík K (2011). Otázky pro psychologa [Questions for psychologists]. Sumavanet.cz [online] [cit. 2018-05-02]. Available from: <http://www.sumavanet.cz/cpp/user/2011/Otazpsych.pdf> (Czech).
9. Havlík K (2013). Kompendium praktické dopravní psychologie a psychodiagnostiky [A handbook of practical psychology and psychodiagnosics]. Klatovy: Vogel Medien International. 110 p. (Czech).
10. Havlík K (2017). Agresivita ve službách řidičů [Aggression in drivers]. Plzeň: Centrum dopravní psychologie (Czech).
11. Havlík K, Seidlick J (2015). Metodika pro psychodiagnostiku problémových řidičů [Methods of psychodiagnosics of troublesome drivers]. Centrum psychologie práce. [online] [cit. 2018-05-02]. Available from: <http://www.sumavanet.cz/cpp/user/2015/metodika.pdf> (Czech).
12. Kotál R (2016). Vyržďování [Brake checking]. Praha: Dopravní akademie. [online] [cit. 2018-05-02]. Available from: <http://www.dopravniakademie.cz/author/robert/> (Czech).
13. Kováčková N, Lajunen T, Rošková E (2016). Aggression on the road: Relationships between dysfunctional impulsivity, forgiveness, negative emotions, and aggressive driving. *Traffic Psychology and Behaviour*. Transportation Research Part F: Traffic Psychology and Behaviour. 42/2: 286–298.
14. Kučera D (2013). Moderní psychologie: Hlavní obory a témata současné psychologické vědy [Modern psychology: The main disciplines and issues of contemporary psychology]. Havlíčkův Brod: Grada Publishing, 213 p. (Czech).
15. Kučerová H (2016). Zákon o silničním provozu s komentářem a judikaturou [The traffic law with comments and judicial decision making]. 3rd ed. Praha 2: Leges, 832 p. (Czech).
16. Löhken S (2014). Introverti a extroverti: Jak spolu vycházet a vzájemně se doplňovat [Introverts and extroverts: How to get on with each other and complete one another]. Praha: Grada Publishing, 259 p. (Czech).
17. Ministerstvo dopravy ČR (2017). Statistika bodovaných řidičů [Statistics of drivers punished with points]. Ministerstvo dopravy ČR. [online] [cit. 2018-05-02]. Available from: <http://www.mdcr.cz/Statistiky/Silnicni-doprava/Statistiky-k-bodovemu-hodnoceni/Statistiky-bodovanych-ridicu> (Czech).
18. Nešpor K (2011). Návykové chování a závislost [Addictions and related behaviour]. 4th ed. Praha: Portál. 173 p. (Czech).
19. Novotný J (2012). Vybodování řidiči musí navštívit psychologa [Drivers with maximum points must visit a psychologist]. Praha: Borgis, a. s. [online] [cit. 2018-05-02]. Available from: <https://www.novinky.cz/domaci/260874-vybodovani-ridici-musi-navstivit-psychologa.html> (Czech).
20. Pokorný V, Telcová J, Tomko A (2003). Prevence sociálněpatologických jevů [Preventing socially pathological features]. 3rd ed. Brno: Ústav psychologického poradenství a diagnostiky, 186 p. (Czech).
21. Precht L, Keinath A, Krems JF (2017). Effects of driving anger on driver behaviour – Results from naturalistic driving data. *Traffic Psychology and Behaviour*. Transportation Research Part F: Traffic Psychology and Behaviour: 45: 75–92.
22. Schoeman R, de Klerk M (2017). Adult attention – deficit hyperactivity disorder: A database analysis of South African private health instance. *South African Journal of Psychiatry*. 23/1. [online] [cit. 2018-05-02]. Available from: http://www.scielo.org/za/scielo.php?script=sci_arttext&pid=S2078-67862017000100004
23. Seitl M, Šucha M (Eds) (2010). Manuál doporučených psychodiagnostických metod pro vyšetřování a posuzování psychické způsobilosti k řízení motorových vozidel. Praha: Ministerstvo dopravy ČR.
24. Slováček P (2013). Dopravně-psychologické vyšetření: Jak člověk žije, tak i jezdí [Psychological examination of drivers: How people live and drive]. *Svět motorů* (23), pp. 6–9 (Czech).
25. Štikar J (2003). Psychologie v dopravě [Psychology of driving]. Praha: Karolinum, 275 p. (Czech).

26. Štikar J, Hoskovec J (2006). Psychologická prevence nehod [Psychological prevention of accidents]. Praha: Karolinum, 218 p. (Czech).
27. Šucha M et al. (2009). Agresivita na cestách [Aggression on the road]. Olomouc: Univerzita Palackého v Olomouci, 186 p. (Czech).
28. Šucha M, Rehnová V, Kořán M, Černochová D (2013). Dopravní psychologie pro praxi [Psychology of driving in practice]. Praha 7: Grada Publishing, 216 p. (Czech).
29. Vašutová M, Panáček M (2013). Mezi dětstvím a dospělostí: vybrané kapitoly z psychologie adolescence [Between childhood and adulthood: selected chapters from the psychology of adolescents]. Ostrava: Filozofická fakulta Ostravské univerzity v Ostravě, 137 p. (Czech).
30. Vavroň J (2014). Agresivní a nepoučitelní egocentrici: to je většina vyhodovaných řidičů [Aggressive and obstinate egocentrics]. Právo. 24/144: 1–2 (Czech).
31. Vyhláška ze dne 9. března 2016, kterou se mění vyhláška Ministerstva dopravy a spojů č. 31/2001 Sb., o řídičských průkazech a o registru řidičů, ve znění pozdějších předpisů [Regulation from 9th March, 2016, which changes the regulation of the Ministry of Traffic No. 31/2001 Col.] (Czech).
32. Zákon č. 13/1997 Sb., o pozemních komunikacích [Act No. 13/1997 Col. on ground communications]. In: Sběrka zákonů České republiky, částka 3/1997 (Czech).
33. Zaoral A et al. (2010). Manuál doporučených psychodiagnostických metod pro vyšetřování a posuzování psychické způsobilosti k řízení motorových vozidel [A manual of the recommended psychodiagnostic methods of assessing the psychological capability of driving]. Ministerstvo dopravy ČR. [online] [cit. 2018-05-02]. Available from: http://contexo.cz/files/other/filemanager/Files/Doprava/Manual_doporucene_psdg_postupy.pdf (Czech).
34. Žádník Š (2013). Respekt: Máme bodový systém i lepší auta, ale horší řidiče-nováčky: Nehodovost klesá, ovšem na Evropu to pořád nestačí [Respect: We have the system of points and better cars but worse new drivers: The rate of accidents is decreasing but still not sufficiently in comparison to the rest of Europe]. Praha: Copyright Economia, a. s. [online] [cit. 2018-05-02]. Available from: <https://www.respekt.cz/fokus/mame-bodovy-system-i-lepsi-auta-ale-horsi-ridice-novacky> (Czech).

 **Contact:**

PhDr. Jan Vitoň, Ph.D., University of South Bohemia in České Budějovice, Faculty of Health and Social Sciences, Institute of Humanities in Nursing Professions, J. Boreckého 27, 370 11 České Budějovice, Czech Republic
Email: viton@zsf.jcu.cz