

# Psychological functioning of drivers who present risky driving behavior and drive under influence of alcohol

Psychologiczne funkcjonowanie kierowców jeżdżących ryzykownie i pod wpływem alkoholu

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## Abstract

The purpose of this article is to depict psychological functioning of people who present risky and drunken driving. Police statistics indicate two specific groups of drivers causing accidents. The first group is composed of adolescents whose way of functioning is explained further from the perspective of Jessor's problem behavior theory. The second group comprises individuals repeatedly sentenced for driving while intoxicated. Many studies on these groups involved multiple factor analysis undertaken in order to determine correlation between social, behavioral, and psychological factors.

**Key words:** driving under the influence, adolescence, alcohol addiction, personality, Jessor's problem behavior theory.

## Streszczenie

Celem artykułu jest opis psychologicznego funkcjonowania osób jeżdżących ryzykownie i pod wpływem alkoholu. Ze statystyk policyjnych wynika, że istnieją dwie specyficzne grupy kierowców powodujących wypadki: są to adolescenty, których sposób funkcjonowania jest wyjaśniany w oparciu o koncepcję zachowań dewiacyjnych Jessorów oraz osoby wielokrotnie skazywane za jazdę pod wpływem alkoholu. W wielu badaniach dokonywanych na tych grupach osób przeprowadzano wieloczynnikowe analizy, których celem było znalezienie współzależności między czynnikami socjalnymi, behawioralnymi, psychicznymi.

**Słowa kluczowe:** jazda pod wpływem alkoholu, adolescencja, uzależnienie od alkoholu, osobowość, koncepcja zachowań dewiacyjnych Jessorów

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In 2009 Poland was top sixth European Union country classified in terms of number of road accidents. Moreover, Poland was listed first when the highest rate of fatalities in traffic accidents was the main criteria. According to the police statistics, in 2010 intoxicated drivers caused 8.9% of the total of accidents, which involved 352 fatalities. The ones operating vehicles were the most numerous group of intoxicated causes of accidents. Drivers of passenger cars constituted major threat for traffic safety. The main reasons of accidents caused by this group include: speed inadequate to given road conditions, failure to yield the right of way, and driving on the wrong side of the road. The research undertaken on the group of intoxicated drivers suggests that special attention should be paid to people between 18 and 24 years, as significant percentage of accidents was indicated among this age group. In 2010, they caused 343 accidents which represent 34.6% of the total [1].

The functioning of a driver in traffic is conditioned by various factors such as: psychophysical features, social adaptation, emotional control, ability to cope with complex task situation [2]. This paper is to review hitherto reports on social and psychological functioning of both groups of cause of accidents: adolescents and adults driving under the influence. The introduction of this article describes distinctive features of adolescents' functioning. These deliberations refer to important personality dimensions: self-concept, identity that in decisive way affect human psychosocial activities. Further, there is also emphasized specific functioning of people addicted to

alcohol. Adolescence is a period of time when intensive changes of psychological and social character occur, as well as stable structure of personality and identity is established. This developmental stage is connected with conflicts of values, ideologies, and lifestyles. The distinctive feature of this developmental phase is also proneness to extremism, radicalism, rigorism of thinking and acting. This developmental phase lasts as of 10 until 20 years of age, though it is exceeded in case of academic students [3]. The specificity of adolescence period is conducive to undertaking various risky behaviors. These behaviors are understood as potentially harmful for health and overall activity, they are undertaken out of one's free will, and their consequences remain uncertain. The spectrum of risky behaviors includes tobacco smoking, taking drugs, eating disorders, alcohol drinking, delinquency, violence, escapes from home, teen pregnancies, suicidal behaviors, non-intentional injuries, not succeeding in school, resigning from education, etc. These behaviors are conditioned in various ways. The following factors are mentioned in this respect: gender, family structure, relationships with parents, knowledge, need for acceptance, individual conditionings, age [4]. Risky behaviors of young drivers are investigated from a perspective of S. and R. Jessor's problem behavior theory [5]. The authors define deviant behaviors as „all behaviors diverging from commonly accepted norms (relating to legal, moral, social, health spheres) that are typical for a given age group” [6, s. 91]. It is essential for this theory that these behaviors are goal-oriented and they have important developmental

functions for a teenager. These actions may be targeted at reducing anxiety, frustrations connected with academic failures or with too high parents' expectations. The behaviors may become a way to manifest solidarity with peers, important attributes of one's identity. Does a deviant behavior occur or depend on mutual interrelations among the following three groups of variables: 1) prior and marginal variables (the authors mention social-demographic structure of a family, socialization – ideology of parents, house climate, influence of peers, impact of the mass media; 2) social and psychological variables (two systems are described: the personality system and the perceived-environment system); 3) variables of social behavior (where the structure of deviant behaviors and structure of conventional behaviors occur). Deviant behaviors are of a learned character, they may substitute one another, and they are similar to each other as it comes to functionality. On the other hand, conventional behaviors bring particular profits and they are socially accepted [5]. The established identity with self-structure is fundamental for psychical functioning of a human. It has important regulatory functions, enables making choices, as well as determines coherence and stability of behaviors [7]. It has impact on individual adaptation skills to new situations. Pursuing to maintain cohesion, consistency, non-discrepancy within self-image underlies regulation of social behavior, and thus good adaptation. Presence of discrepancy within self-concept results in tension, which may become motivation to undertake changes as it comes to external reality. Moreover, it may result in a strive for restoring integrity and cognitive coherence, or it may induce dysfunctional behaviors, especially in situations where tension is experienced as fear, sense of danger. Discrepancy within self-concept structure may be exemplified by instable, immature self-esteem, which is diversified depending on external factors – situations, circumstances [8]. The symptoms of immature self-concept include as well both, too low or too high self-worth, which increases the need for information confirming one's value. The dominant motivation for such behavior is a strive for maintaining or improving self-esteem, experiencing social acceptance, satisfying the esteem needs which leads to attitude focused on reception and seeking information supporting the self-concept and the surrounding world. The less effective functioning of esteem sub-systems and lower level of self-concept structure, the stronger and more active the esteem needs. "The personal identity is defined as self-awareness, own coherence within the time and space, in various situations, played roles, as well as consciousness of own distinctiveness and specificity" [7, p. 21]. The following components of identity shall be acknowledged: recognizing oneself, sense of distinctiveness from others, sense of coherence of oneself despite the passing of time and progressing changes [7, 8]. Strong motivation to maintain the sense of identity in some cases may result in establishing negative identity, which involves attributing to oneself negative features, as well as identifying with models who are not accepted socially. In this situation, it is more important to have any identity confirmed by society than to remain unnoticed. Significant role in development is played by values, objects of attachment, which direct a way of interpreting external world. [8] From the perspective of developmental psychology, adolescence is time of transition from immature identity

based on child identifications into independent recognition of one's place in social environment. Impulsive, unpredictable, labile behaviors may occur at this stage, as well as instability of attitudes and mood. There is a tendency to ignore norms, prohibitions, and to seek immediate gratifications, reject authorities and to present excessive conformism in relation to peers. Moreover, instability and uncertainty of self-concept are typical. Aggressive behaviors may happen as they are in general considered temporary for this stage. Establishing mature cognitive structures is influenced by environmental and educational conditions. If upbringing and education deprive of respect to oneself, and there is neither sense of safety nor belonging during the childhood, prospectively this will result in disorders within establishing mature self-concept and in blocking positive overcoming of developmental crisis. Ambivalence, instability of one's self-esteem results in sense of uncertainty, conflicted and unsatisfying interpersonal relations as well as in lack of sense of safety. Consequently, it leads to becoming more sensitive about criticism, together with fearing rejection and opinions of others. Aggressive individuals present self-concept structure characterized by low self-worth, sense of being unworthy of love and respect, sense of guilt, grievance, shame, no sense of control under events, nor skills of self-control. This investigated group was diagnosed with disorders within social identity and interpersonal relationships. In their functioning strive for dependence and rebellion, sense of guilt and sense of grievance co-exist. They tend to substitute expression and verbal communication with behaviors of an "acting out" character [8]. Aggressive behavior enables self-expression, it allows to release of suppressed emotions, satisfy need for respect, acceptance, and to specify own identity. Individuals with too strong, rigid control mechanisms who are not able to control own impulses may present rapid acts of aggression. Such behaviors are a consequence of storing tension that is not released on regular basis. Aggressive acts may be a way of increasing, confirming sense of self-control, as "if aggressive activity happens to be effective, it provides quick and distinct signals confirming own power and competence" [8, p.40]. Sense of control is determined by two factors. The first one is a belief in predictability of the world (sense of safety), whereas the second one is a belief in being able to exert effects on external environment (sense of power). The lower sense of control, the greater need for information to confirm self-control. As aggressive individuals prefer hostile distortion of attribution, they tend to attribute others with hostile intentions.

Drivers convicted for driving under the influence are frequently diagnosed with addiction to alcohol [9]. The addicts differ from healthy individuals in terms of real and ideal self-concept. When describing themselves, they apply more negative adjectives, they believe that they possess weaker interpersonal skills, they have lower magnitude of need for order and persistence. They tend to seek new experiences, they are more changeable and can resign from undertaken actions more easily. They focus on achieving immediate gratifications, have weaker planning skills as it comes to achieving long-term goals and are less reserved. They use less effective coping with stress strategies. They avoid confrontation, but direct to dreams and fantasies. They perceive other people as more efficient and more effective. Current studies target

at identifying particular personality traits that are conducive to getting addicted, though they are not seeking concrete personality type prone to addiction. High score in extraversion scale, low in neuroticism, and high in psychoticism signal proneness to using drugs by youth have been reported. It has been proved that there is a strong relation between impulsiveness and alcohol abuse, addiction from nicotine. Impulsiveness is a risk factor in regard to using psychoactive drugs by youth [9].

Sensation-seeking is following personality trait, whose magnitude commonly becomes a subject of research on drivers. It is defined as tendency to "seek diversified, new, complex, intensive sensations and experiences as well as means readiness to take physical, social, legal, or financial risk in order to gain such experiences" [10, p. 651]. A person with high magnitude of this personality trait can be characterized by chronically low level of activity, preferring new situations and activities that are strongly stimulating but frequently dangerous. This trait is moderately correlated with impulsiveness, less with extraversion, and it positively correlates with undertaking various risky behaviors such as: gambling, smoking cigarettes, risky driving, sexual activity, as well as susceptibility to injuries [10]. Sensation-seeking is more intensive for males than females, and it increases with age until about 16 years to stop and decrease afterwards. The three groups of drivers have been compared: individuals driving under the influence, risky drivers, as well as drivers from general population. It has been observed that risky drivers belong to more homogenous group as it comes to personality functioning than drunk drivers. In these groups, similar levels of aggression and sensation-seeking have been observed [10]. The research conducted by Johnson and Raskin White [10, 11] claims that eighteen-year-old males with high magnitude of sensation-seeking more frequently admit to driving after alcohol or marijuana. Parallel results were presented in a female group. However, the direction of this relation has been weakened for males and females at 20 years of age, especially in terms of using drugs. According to Jonah and Wilson, persons convicted for drinking and driving as well as the individuals admitting to perform such behaviors, have tendencies toward impulsive expression [10]. Mcmillen has observed that students who have been detained for drinking while driving had higher scores in the sensation-seeking scale when compared with students who have never driven a car under the influence, have never drank alcohol. Individuals repeatedly convicted for drunken driving had higher scores concerning sensation-seeking than the group of the first-time offenders [10]. Holt and co-workers [12] indicate that the persons convicted for drunken driving who were diagnosed with alcohol addiction, present also other disorders within their psychical functioning. The authors state that among 50% of females and 33% of males there occurs one of the following disorders: depression, post-traumatic stress disorder (PTSD), or drug addiction which happens to be the most popular. The research revealed that the convicts with the symptoms of depression were more motivated to change their habits connected with alcohol drinking when compared with the group of non-depressive convicts.

Depressive individuals after completed treatment reported greater positive changes in terms of alcohol drinking and depressive symptoms [12]. The risk factors

for dysfunctional behaviors such as drunken driving and public drunkenness among the group aged 18-20 are early abuse of psychoactive substances and influence of unfavorable social as well as behavioral factors [13]. Karlsson and co-workers indicate that the intoxicated drivers diverge within their functioning from the general population regarding the following dimensions: self-concept, self-control, responsibility, neuroticism, sensation-seeking, verbal aggression, assertiveness, emotional adaptation [13].

According to Sigve Olteidal and co-workers' research [14] undertaken on group consisting of 1356 adolescents, there is a significant negative correlation between anxiety and both, sensation-seeking and risky driving. In the examined group there were indicated two strong factors determining undertaking risky driving: violating norms and gender. The authors suggest that the personality may exert indirect effect on behavior while driving, as also time of experience with this form of activity should be considered. Strong correlation between personality and drivers' specific behaviors is rather unlikely. Due to the trait theory, personality becomes stable at about age of 30. Thus, it is difficult to generalize results of research on adolescents onto the entire population of drivers. According to Ulleberg [14], high and low levels of anxiety are typical for two groups of drivers performing risky behaviors. His findings support the thesis about non-linear relation between anxiety and risky driving. On the other hand, Costa and McCrae indicate that anxiety is strongly connected with negative affect, and its level may have impact on the interpretation of drivers' behaviors as well as road environment [14]. Chliaoutakis [15] reports that young drivers, who are easily irritated, present their hostility and aggression toward other drivers and they are more likely to participate in an accident. Individuals with high magnitude of violating norms tend to present more risky behaviors and cause more accidents. Males are more likely than females to be engaged in risky behaviors. It has been investigated whether aggression and influence of peers and parents experienced by teens aged 15 and 18 have impact on prospective differences in predicting safety, limits of alcohol drinking and driving under the influence at the age of 21. The examined group of 15 and 18 year-old participants have completed the questionnaires relating to influence of their parents and peers, experiences of drunken driving with peers, but also aggression and prior accidents. At the age of 21, the same group was queried regarding the amount of alcohol they might drink and drive safely and whether they had already driven a car under the influence of excessive amount of alcohol. Research shows that aggression at the age of 15 and 18, drunken driving with peers at the age of 18 and prior accidents belong to risk factors for driving under the influence when aged 21. In case of males, aggression at the age of 15 becomes a predictor for distinctions in perceiving safety and estimating permitted level of alcohol in blood. As it comes to females, aggression when they are 15 and 18 and drunken driving with peers at the age of 15 were the predictor for distinctions in predicting safety as well as limitations in alcohol drinking [16]. The results of research indicate that aggressive behaviors as well as modeling behaviors in regard to driving under the influence during middle and late adolescence are connected with distinctions in perceiving safety and estimating permitted consumption

of alcohol by females, males, and males driving under the influence [16]. Manuela Bina and co-workers [17] examined development of risky driving presented by adolescents from age group 14-17 as well as relationship between risky driving and lifestyle. They concluded that boys who perform risky driving at the same time tend to lead lifestyle connected with antisocial behaviors (such as smoking cigarettes, non-organized leisure). On the other hand girls who presented risky driving were also involved in different risky and antisocial behaviors, were taking drugs. Due to the findings, risky driving is connected with antisocial behavior, especially for boys and younger adolescents. It relates to the need for violating social norms. The authors of research refer to Jessor's dysfunctional behavior theory and based on it they interpret the adolescents' behaviors as a form of activity that serves demonstrating own adulthood, belonging to peer group, overcoming own limitations [17]. The academics quote Hatakka's findings [18], who claimed that behaviors during driving are not behaviors of an isolated character, but are related to other aspects of life, motivation, system of values, attitudes. Research on a group of young drivers aged 18-23 (n=2,856) allowed identifying 6 types of drivers that have been differentiated within: risky driving, attitudes toward safe driving, risk perception, driving skills, accidents [19]. There were distinguished two groups of the highest risk. The first one in majority consisted of males characterized by low level of altruism and anxiety, high level of sensation-seeking, irresponsibility, aggression connected with driving. Members of this group performed more risky driving style, demonstrated attitudes conducive to undertaking risky acts. They were certain of their skills connected with operating a vehicle. Moreover, they achieved a low score as it comes to predicting negative consequences of their driving style. In the second group there was observed a high level of sensation-seeking, aggression, which was also presented when driving, as well as anxiety. The profile suggested low emotional adaptation. According to the researchers it proves lack of homogeneity within this group of drivers. Furthermore, they claim that for females as well for males, similar personality factors underlie undertaking risky behaviors. Males tend to assess their driving skills higher than females. Young drivers get involved in more risky driving, they are more frequent to speed when driving, and they do not keep proper distance from other road users and overtake unsafely. The authors additionally mention the Jessor's theory that explains significance of dysfunctional behaviors for adolescence stage, which are to manifest independence, oppose to authorities, make impression on peers. Deery and Fildes [19] classified 5 groups of young drivers. Two of them were depicted as high-risk groups as it comes to undertaking risky behaviors on road. Traits that differ these groups from the remaining ones were: high level of sensation-seeking, hostility, aggressive driving. One of the groups presented high level of depression, irritability and low level of adaptation. Nearly 80% the risk group were males [19]. The research of Vassallo and co-workers [20] focused on identification of the problem's scale as well as long-term factors connected with risky driving.

There were taken into account: temperament, behavioral and emotional adaptation, social skills, health, academic achievements, relations with parents and peers,

family structure as well as demographic profile. The research involved people aged 19 and 20. The adolescents were mostly differentiated by the results in the following scales: low achievement-orientation, high aggression and antisocial behavior, low co-operation, responsibility, empathy, low academic adaptation, more frequent affiliation with peers presenting antisocial behaviors. The

examined were divided into three groups, according to their intensity of risky driving. As a result of longitudinal study it was concluded that the group with frequent risky drivers were found significantly more aggressive, hyperactive as children, less task-oriented, they had more trouble with adaptation to school requirements. In their late childhood, these individuals tended to be less cooperative and less task-oriented. In early adolescence, they presented high level of problem behavior: aggressive and antisocial behaviors, low level of social competences. When compared with two remaining groups tested, in early adulthood they performed more aggressive, antisocial behaviors, less empathy, they had more contacts with police due to their offences connected with driving. The strongest differences identified among the groups concerned antisocial behavior, maintaining relationships with antisocial peers, as well as offences while driving. The examined groups were not found significantly different as it comes to family characteristics, socio-economic level, experiences with driving. According to the researchers, personality traits may have direct impact on young person's behaviors while driving. They claim that aggressive acts presented in childhood are a risk factor for antisocial behaviors in adolescence, which at the same time may become a risk factor for other behaviors such as risky driving. Young drivers with a tendency to risky driving differ from others as it comes to: temperament, social competences, interpersonal relationships, adaptation to functioning in academic environment, problem behavior [20]. Shope [20] suggested that low academic achievements were a risk factor for both, girls and boys who later presented risky behaviors when driving. Using psychoactive substances by peers was found a risk factor for girls. Parents' disapproval for drinking alcohol was a protective factor for boys [20]. Vassallo [20] found that the adolescents who presented more antisocial behaviors at the age between 12 and 14, when in fact became drivers, they happened to drive at a greater speed. It seems that drivers' attitudes toward social acceptance concerning speed and undertaking risky behaviors may have strong impact on performing particular behaviors when driving. Previous research indicated that sensation-seeking explains 10-15% variance as it comes to excessive speed [20]. Vassallo [20] claims that young adults who have not exceeded speed limit were diagnosed more anxious and depressive than individuals having already one or more offence concerning speed. Subject-matter literature mentions findings to confirm the thesis that risky behaviors presented when driving are a component of a wider problem that underlies undertaking risky behaviors. Risky drivers also present other hazardous behaviors [21, 22, 23]. Caspi [23] based on his research concluded that risky driving at the age of 21 is connected with the following factors occurring at the age of 18: aggressive behaviors, negative emotionality, lower conventionality, lower social proximity, lower control

[23]. According to Beirness [24] risky driving and accident rate at the age of 18 are connected with lower attachment to traditional values, greater peers' influence, higher need for stimulation, lower self-esteem, higher sensation-seeking, more tolerant attitudes toward deviant behaviors, more liberal attitudes as it comes to drinking alcohol, greater involvement in risky behaviors that are harmful for health such as alcohol drinking etc. [24]. Research findings indicate that not experienced drivers do not value risk connected with spectrum of situations connected with driving vehicles. Furthermore, they tend to drive with high speed, overestimating their own skills [25, 26]. The results of research confirmed that greater probability of excessive speed have younger drivers who are characterized by high level of sensation-seeking, low level of altruism, low aversion to risky behaviors [25]. Pal Ulleberg, Torbjorn Rundmo [27] examined adolescents (1,932 people with driving license) as it comes to aggression, altruism, anxiety, violating norms, attitudes toward road safety, taking risk on road, as well as perception of risk. The results claim that personality traits indirectly affect taking risk in traffic behaviors, though attitudes of drivers are important. High scores in sensation-seeking, violating norms, aggression, were connected with presence of attitudes connected with taking risk. High level of aggressiveness indicated becoming easily frustrated, which is conducive to undertaking aggressive behaviors – speeding, keeping close distance to other road user. Individuals that had high scores in the altruism and anxiety scales, were more likely to have positive attitudes towards road safety. They presented lower probability of performing risky behaviors. Furthermore, it was concluded that perception of risk does not have significant connection with risky behavior [27, 28]. Horvarth and Zuckermann [29] claim that the risk perception is rather a consequence of behavior than its result. Jennifer S. Zakrajsek and Jean T. Shope [30] on the basis of longitudinal studies concluded that individuals who experienced precocious initiation in terms of drinking alcohol, in a greater extent present risky behaviors connected with both, driving and alcohol drinking. Moreover, it can be observed that drinking alcohol by parents becomes a risk factor for driving under the influence by males as well as females. Drinking alcohol by peers was significant only in cases when it did not concern parents. Hubicka [31] with co-workers examined group of 162 people (143 males and 19 females) convicted for driving under the influence. Age range of the group under investigation was 18-88. It was indicated that the group members of which drink and drive, is differentiated from general population by the two factors: openness to experience and conscientiousness. Significant differences were found in almost all scales of the SCL-90 questionnaire. The exception was the hostility scale. The researchers found that the only factor, which determines repeating of dysfunctional behavior such as driving under the influence, is depression. Various studies refer to different data relating to occurrence of alcohol addiction in the group of individuals convicted for driving under the influence. Statistics vary from 4% to 87%, which derives from adapting different definitions of 'alcohol addiction', or different assessment methods applied etc. When compared with general population, the examined who tend to drive under the influence, function worse in the

following dimensions: employment, education, family and social relationships. According to the studies, females convicted for drinking and driving are characterized by worse socio-economic indicators than the convicted males and individuals from general population. The females are more frequently unemployed and addicted to drugs.

In addition, they have family and health problems more often. They are more frequently experiencing disorders of depressive and anxious character when compared with the group of convicted males. Fifty percent of females and 33% of males convicted for driving under the influence present additional mental problems, in majority depression as well as PTSD. As the researchers considered existence of specific personality profile, there were attempts to classify drivers who drink and drive. In the beginning, the two profiles were discussed: depressive and anti-social [31]. Hauser and Rybakowski [31, 32] suggested parallel classification, though they listed also the third type where alcohol addiction co-exists with mental and somatic disorders. However, Reardon [31] claims that individuals who had parents addicted to alcohol and present antisocial behaviors are more likely to drink alcohol in order to cope with stress rather than because of social reasons. The antisocial type presents more vivid problems relating to both, alcohol drinking and coping with stress strategies, which motivate them to drink. On the other hand, Vaillant [31] claims that after 40 years of longitudinal studies is not able to determine any specific alcohol personality profile. Donovan [31] distinguished 5 types of drivers. Few of them were characterized by high depression level, low level of assertiveness, emotional adaptation, perceived control. The remaining types had high level of aggression connected with driving, vulnerability to stress, hostility, as well as sensation-seeking. Ball [31] categorized drivers into two types. For "the A type" (72% of the sample) characteristic is late initiation of alcoholism, the problems with alcohol are not specifically vivid, there is less family alcoholism, rather not many behavioral problems in childhood, low level of anxiety, depression and antisocial behavior. On the other hand, "the B type" (28% of the sample) are characterized by: early initiation of alcoholism, occurrence of more pre-pathologic risk factors, more psychosocial limitations and greater severity of addiction to alcohol. Fisher reports that in the NEO-PI-R test the addicts achieve higher level in neuroticism and lower in conscientiousness scales. Combination of these factors results in increased risk of recurrence to using psychoactive substances. Similar were the conclusions of McCormick. When applied the same questionnaire, he indicated that the addicted individuals are more neurotic, less agreeable and conscientious than the individuals from control group. Eensoo [31] concluded that when compared with the control group, the drivers operating vehicles under the influence tend to have higher level of impulsiveness assessed with the NEO-PI-R questionnaire. Arthur and Graziano [31] identified reverse dependence between conscientiousness and road accidents. Because the intoxicated drivers have problems with addiction, the researchers suspect that these individuals would function psychologically similarly to alcoholics. The research findings confirm the reports that both groups, the persons addicted to alcohol and those convicted for

driving under the influence have low scores as it comes to conscientiousness. For this group of drivers the actual functioning of their parents becomes significant. Prognostic factors for recurrence to such functioning are: alcoholism of parents, parents taking drugs or having psychiatric problems. The authors emphasize that driving under the influence is not just a symptom of alcoholism as such, but also a symptom of other psychosocial problems [31]. Thomas Nochajski and Paul R. Stasiewicz [33] reviewed the results of studies devoted to functioning of drivers under the influence. They concluded that the intoxicated drivers are a heterogeneous group, as not all meet the diagnosis criteria of addiction to psychoactive substances. There are significant relations between drunken driving and gender, age, education, employment, income, marital status. According to research, males are more likely than women to repeat offences in regard to driving when intoxicated. Research reveals that the individuals convicted for driving under the influence are in a greater extent unemployed, they have lower income than the persons convicted for this offence for the first time [33]. Persons who are divorced, separated, widowed, or have never contracted marriage are more likely to repeat such offence. Drivers who present recurrence to driving under the influence reveal heavier drinking model, they tend to use psychoactive substances other than alcohol, and they are more likely to meet the criteria typical for addiction to psychoactive substances. The diagnosis of addiction is a significant factor for predicting recurrence to drinking and driving. Problems with alcohol abuse as well as with taking drugs increase the likelihood of driving under the influence. When compared with the persons convicted for drinking and driving for the first time, individuals convicted repeatedly scored higher in the following scales: hostility, sensation-seeking, low emotional adaptation, assertiveness, mania, depression. Individuals currently convicted for drinking and driving as well as old offenders were diagnosed with traits typical for antisocial personality [33]. Other studies report significant relations between committing one's offence and depression, sensation-seeking, problem behavior in childhood, self-esteem, psychiatric problems. Those repeatedly convicted for drunken driving were identified with higher severity of psychopathology, more serious problems with interpersonal relationships than the first-time offenders. Rehabilitation programs for persons convicted for driving under the influence focus on psychological counseling, treatment of addiction as well as on education about influence of drugs and alcohol on human functioning [33].

The mentioned research findings allow to conclude that it is right to consider adolescents' behaviors presented when driving from the perspective of the Jessor's problem theory. This is because functioning of young people as drivers has multifactorial conditionings. Investigation of reasons for risky, aggressive driving as well as driving under the influence involves taking into account the entire spectrum of factors that are of social, psychological, and economical character. Nevertheless, there is still a need for expanding knowledge about these phenomena, as the subject matter literature frequently contains various contradictory data. Moreover, there is still a deficiency of studies on Polish population in terms of functioning of young drivers and those already convicted for driving under the influence.

## References:

1. Dane pochodzące ze statystyk policyjnych dotyczące liczby oraz przyczyn wypadków:  
[http://dlakierowcow.policja.pl/porta1/dk/807/47493/Wypadki\\_drogowe\\_raporty\\_roczne.html](http://dlakierowcow.policja.pl/porta1/dk/807/47493/Wypadki_drogowe_raporty_roczne.html)
2. Bąk J., Bąk-Gajda D. Psychologiczne czynniki bezpieczeństwa ruchu drogowego. *Eksplotacja i Niezawodność*, 2008; 3: 22-29.
3. Harwas-Napierała B., Trempała J. Psychologia rozwoju człowieka. Tom 2. Charakterystyka okresów życia człowieka. Warszawa: Wydawnictwo Naukowe PWN: 2000.
4. Moryłowska, Makara-Studzińska M. Rodzina z zachowania ryzykowne młodzieży. *Roczniki Teologiczne*, 2007; 10: s. 59-69.
5. Gaś Z. B. Ankiety EPIDAL jako narzędzia kompleksowej samooceny uczniów w zakresie zachowań dysfunkcyjnych i konwencjonalnych. W: Gaś Z. B. red., *Badanie zapotrzebowania na profilaktykę w szkole*. Lublin: Pracownia Wydawnicza Fundacji „Masz Szansę”; 2004, s.175-184.
6. Hufleit-Łukasik M. Ja i procesy samoregulacji. Różnice między zdrowiem a zaburzeniami psychicznymi. Warszawa: Wydawnictwo Naukowe „Scholar”; 2010.
7. Kubacka-Jasiecka D. Agresja i autodestrukcja z perspektywy obrotowo-adaptacyjnych dążeń Ja. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego: 2006.
8. Szczukiewicz P. Nałogowa osobowość. *Świat Problemów*, 2004; 3: 1-4.
9. Jonah, B.A. Sensation seeking and risky driving: a review and synthesis of the literature. *Accid. Anal. Prev.*, 1997; 29; 5: 651-665.
10. Johnson V., Raskin White H. An investigation of factors related to intoxicated driving behaviours among youth. *Journal of Studies on Alcohol*, 1989; 50: 320-330.
11. Holt L. J., O'Malley S. S., Rounsaville B. J., Ball S. A. Depressive Symptoms, Drinking Consequences, and Motivation to Change in First Time DWI Offenders. *Am J. Drug Alcohol Abuse*, 2009; 35: 117-122.
12. Karlsson G., Romelsjö A. A longitudinal study of social, psychological and behavioural factors associated with drunken driving and public drunkenness. *Addiction*, 1997; 92:4: 447-457.
13. Oltendal S., Rundmo T. The effects of personality and gender on risky driving behaviour and accident involvement. *Safety Science*, 2006; 44: 621-628.
14. Chliaoutakis J. E., Demakakos P., Tzamalouka G., Bakou V., Koumaki M., Darviri C. Aggressive behavior while driving as predictor of self-reported car crashes. *J Safety Research*, 2002; 33:4: 431-443.
15. Gulliver P., Begg D. Influences during adolescence on perceptions and behaviour related to alcohol use and unsafe driving as young adults. *Accid. Anal. Prev.*, 2004; 36: 773-781.
16. Bina M., Graziano F., Bonino S. Risky driving and lifestyles in adolescence. *Accid. Anal. Prev.*, 2006; 38: 472-481.
17. Hatakka M., Keskinen E., Gregersen N. P., Glad A., Hernekoski K. From control of the vehicle to personal self-control; broadening the perspectives to driver education. *Accid. Anal. Prev., Transport. Res. Part F* 5, 2002; 201-215.
18. Ulleberg P. Personality subtypes of young drivers. Relationship to risk-taking preferences, accident involvement, and response to a traffic safety campaign. *Transportation Research Part F* 4, 2002: 279-297.
19. Vassallo S., Smart D., Sanson A., Harrison W., Harris A., Cockfield S., McIntyre A. Risky driving among young Australian drivers: Trends, precursors and correlates. *Accid. Anal. Prev.*, 2007; 39: 444-458.
20. Beirness, D.J., Simpson, H.M., 1988. Lifestyle correlates of risky driving and accident involvement among youth. *Alcohol Drugs Driving* 4, 193-204.
21. Bingham, C.R., Shope, J.T. Adolescent problem behavior and problem driving in young adulthood. *J. Adolesc. Res.*, 2004; 19: 205-223.

22. Caspi, A., Begg, D., Dickson, N., Harrington, H., Langley, J., Moffitt, T.E., Silva, P.A. Personality differences predict health risk behaviors in young adulthood: evidence from a longitudinal study. *J. Personal. Social Psychol.*, 1997; 73: 1052-1063.
23. Beirness, D.J. Do we really drive as we live? The role of personality factors in road crashes. *Alcohol Drugs Driving.*, 1993; 9: 129-143.
24. Machin M. A., Sankey K. Relationships between young drivers' personality characteristics, risk perceptions, and driving behavior. *Accid. Anal. Prev.*, 2008; 40: 541-547.
25. McKenna F. P., Horswill M. S. Risk taking from the participants perspective: the case of driving and accident risk. *Health Psychol.*, 2006; 25: 163-170.
26. Ulleberg P., Rundmo T. Personality, attitudes and risk perception as predictors of risky driving behaviour among young drivers. *Safety Science.*, 2003; 41: 427-443.
27. Rundmo, T. Perceived risk, health behaviour and consumer behaviour. *Journal of Risk Research* 2., 1999: 187-200.
28. Horvath, P., Zuckerman, M., 1993. Sensation-seeking, risk appraisal and risk behaviour. *Personality and Individual Differences.*, 1993; 14: 41-52.
29. Zakrajesk S. J., Shope J. T., Longitudinal examination of underage drinking and subsequent drinking and risky driving. *J. Safety Res.*, 2006; 37: 443-451.
30. Hubicka B., Kallmen H., Hiltunen A., Bergman H. Personality traits and mental health of severe drunk drivers in Sweden. *Soc. Psychiat. Epidemiol.*, 2010; 45: 723-731.
31. Hauser J., Rybakowski J. Three clusters of male alcoholics. *Drug Alcohol. Depend.*, 1997; 48: 243-250.
32. Nochajski T. H., Stasiewicz P. R. Relapse to driving under the influence (DUI): A review. *Clin. Psych. Rev.*, 2006; 26: 179-195.