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Road Traffic Safety in Ostróda County in 2017–2019. Research Report

Bezpieczeństwo ruchu drogowego na terenie powiatu ostródzkiego w latach 2017–2019. Raport z badań

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Abstract: The article presents the issues of road safety in the district of Ostróda. For this purpose, the definition of safety and safety in road traffic was discussed. The main hazards of road traffic were presented and the issues of weather conditions, road conditions and other elements contributing to road accidents were raised. Then, the results of the research carried out in 2017–2019 by the Prevention and Traffic Department of the District Police Headquarters in Ostróda on the roads of the Ostróda District aimed at improving safety was analyzed, as well as the topic of road traffic safety in the Ostróda District in the public perception on the basis of a questionnaire survey was presented.

Keywords: security, road safety, accident, road collision

Streszczenie: Artykuł prezentuje problematykę bezpieczeństwa ruchu drogowego na terenie powiatu ostródzkiego. W tym celu omówiono definicję bezpieczeństwa i bezpieczeństwa w ruchu drogowym. Scharakteryzowano główne zagrożenia w ruchu drogowym oraz poruszono kwestie warunków atmosferycznych, stanu dróg i innych elementów przyczyniających się do powstawania zdarzeń drogowych. Następnie zanalizowano wyniki badań przeprowadzonych w latach 2017–2019 przez Wydział Prewencji i Ruchu Drogowego Komendy Powiatowej Policji w Ostródzie na drogach powiatu ostródzkiego, zmierzających do poprawy bezpieczeństwa, jak również przedstawiono temat bezpieczeństwa ruchu drogowego na terenie powiatu ostródzkiego w odbiorze społecznym na podstawie badania ankietowego.

Słowa kluczowe: bezpieczeństwo, bezpieczeństwo ruchu drogowego, wypadek, kolizja

Ostróda County is located in the western part of Warmian-Masurian Voivodeship, and its capital city is Ostróda, situated on Drweckie Lake. The county consists of nine communes, including one urban commune (Ostróda), three urban-rural communes (Morąg, Miłakowo, Miłomłyn) and

five rural communes. It covers an area of 1766.29 ha and is 22nd in Poland in terms of area. It neighbors with the districts of Elbląg and Lidzbark to the north, Dzialdowo and Nidzica to the south, Sztum and Iława to the west and Olsztyn to the east. Within the county there are: municipal roads with a total length of 727.9 km, which constitutes 42.4% of all roads; county roads with a total length of 658 km, which constitutes 38.3% of all roads, on which there are 46 bridges and engineering structures with a length of 511.92 m. b. and 11 railroad crossings; provincial roads with a total length of 167.1 km, which accounts for 9.7% of all roads, including non-urban roads 160 km and those located in cities 8.8 km; national roads with a total length of 165.2 km, which accounts for 9.6% of all roads.

The total length of these roads includes 1718.07 km. The density of the road network is 97.3 km/100 km² (*Bezpieczeństwo Ruchu Drogowego* 2019: 62). The average technical condition rating of municipal roads is 3.36, district roads 3.65, provincial roads 4.01 and national roads 4.56 (Uchwała Nr XI/91/2015, Annex: 5–17). The roads are divided into class L (local) and class D (access) roads, they are well developed, with hard bituminous improved pavement, hard improved pavement, and dirt pavement (Zarządzenie Nr 22/2017, para. 4d of the Annex: 4).

The scope of the subject of empirical research includes the characteristics and consequences of road accidents on the roads of Ostróda County in 2017–2019, as well as the activities of the Prevention and Traffic Department of the Ostróda County Police Station for safety.

The primary research goal is to analyze the effectiveness of actions taken by the police officers of the District Police Headquarters in Ostróda in improving road traffic safety. The definition of such a research objective allowed the formulation of specific objectives, which are: 1) diagnosing the problem of road accidents and their causes; 2) determining the scale of the phenomenon of road accidents in Ostróda District; 3) determining the condition of road infrastructure in Ostróda District.

Considering the aim of the research and the research problem, the following hypothesis was accepted: policemen of the District Police Headquarters in Ostróda undertake a number of actions aimed at improving road traffic safety and most of them turn out to be effective.

The article uses the method of diagnostic survey conducted with the use of questionnaire survey technique. The survey was carried out on a group of 100 people living in Ostróda County.

1. Road traffic safety

Security in the social sciences does not have a single, consistent definition (Sekściński 2013: 42). In dictionary terms, it is defined as "the state of a state capable of resisting threats caused by man or nature" (Pokruszyński 2012: 62). In most definitions security is understood as "a feeling of a state of certainty, peace, security, absence of danger, and protection from danger." Insecurity creates a sense of threat and anxiety and causes harm to a specific entity, e.g., an individual, or a group of people, and destabilizes its functioning and identity.

This article will also address the issue of road safety, which "refers to the state achieved as a result of actions and measures taken to eliminate or maximally reduce road hazards" (Leśnikowska-Matusiak 2012: 15). In this context, one can distinguish the factors determining road traffic safety, among which the following are singled out: traffic organization, traffic supervision, construction, technical condition and equipment of vehicles, training and examination of drivers, medical rescue, transport psychology, roads and signage, as well as enforcing appropriate behaviour in road traffic participants (Zbyszyński 2017: 50).

2. Types of road traffic hazards

When considering traffic hazards, it is important to keep in mind the causes of the hazards. There are many causes of hazards, but the most common ones can be divided into three categories: 1) man-made, e.g., failure to adjust speed to road conditions; 2) caused by factors of nature, e.g., snowstorms, blizzards, fog, rainfall, etc.; 3) resulting from structural defects in road infrastructure, e.g., gaps in the road surface (Moneta 2016: 57–58).

One of the key mistakes drivers make is speeding. At higher speeds, the driver has much less time to process the stimuli received from the environment and decide how to react to them and act on them. Moreover, excessive speed increases the braking distance and worsens the balance conditions of the vehicle on road curves. It is also important to mention that as speed increases, the demands on road visibility increase, which especially in cities can be difficult to meet (Gaca [et al.] 2016: 13). The second mistake drivers make is driving under the influence of alcohol or other psychoactive substances. Alcohol consumption prevents safe driving; it limits the field

of vision, and distorts the image, causing difficulty in judging distance and speed. Alcohol impairs motor coordination and vision and increases reaction time in case of danger, and moreover, influences the overestimation of the driver's abilities and skills (Berg 2017: 65). Narcotic substances, including amphetamines, cocaine, and ecstasy, impair visual and auditory perception and introduce chaos, resulting in the driver not noticing details such as road signs or pedestrians. Marijuana, hashish or heroin cause slowing down and distortion of visual and auditory perception. They lead to a lack of concentration and drowsiness to the point of bliss. LSD is particularly dangerous because of the "unreal" feeling, the sense of alienation of one's own body, delusions and hallucinations. Intoxicating substances very strongly impair judgment and analysis of the driving situation (Berg 2017: 64).

A completely different category of hazards are those caused by weather conditions. The first factor is the slippery road surface (Ząbczyk [s.a.]: 1). The combination of raindrops with dust and other dirt covering the road creates a slippery layer, which in turn results in a loss of grip. Aquaplaning can occur as a result of prolonged heavy rainfall. This phenomenon can be observed when driving at high speed on wet pavement when the tire treads are unable to evacuate the water from under the wheels of the vehicle, and the resulting wedge of water causes the tires to lose their grip, and eventually, the tire is carried on a layer of water. The second weather factor that negatively affects the feeling of safety on the road is fog or snow blizzard. These factors are often accompanied by sub-zero temperatures. Heavy snowfall contributes to drastically reduced visibility, as the driver must contend with headlight glare reflecting off falling flakes. Visibility is also reduced by snow scraped by the windshield wipers onto the sides of the windshield. The driver's field of vision is reduced on both the right and left sides of the vehicle, which can result in a risk of hitting a pedestrian or other road user. Keep in mind that driving in such difficult conditions requires from the driver the ability to assess the situation and react quickly to stimuli, because, for example, visibility when driving in dense fog is less than 40 m. In such conditions headlights do not perform their function, creating a so-called wall of light being their reflection in the fog particles (Wojtas, Szkoda 2018: 1150).

Road safety is also affected by the condition of the road surface and shoulders. The bumps, waves, depressions, potholes, ruts, and friction on the road surface cause vehicle shaking and vibration, which in turn leads to reduced driving comfort, increased concentration and increased driver

fatigue. Driving on such surfaces can lead to sudden lane changes. Too abrupt a lane change on a deformed pavement, e.g., when overtaking, may lead to a skid, which indirectly affects the occurrence of a traffic accident (Graczyk, Polasik 2016: 7). Poorly maintained shoulders, especially those with loose soil structure and collapsed shoulders near the edge of the roadway, pose a huge threat to drivers. When a vehicle leaves the roadway, even at low speed, it may lose traction and roll off the road, hitting a tree or other object in the roadway environment. Debris on the road surface in the form of spilt oil, gravel or other loose material, as well as clay or mud, can also lead to loss of control of the vehicle. These factors delay drivers' reactions and create a serious risk of traffic incidents.

3. The condition of safety on the roads in the county of Ostróda – analysis of the survey results

In 2017–2019, 239 road accidents were recorded on the roads of Ostróda County, resulting in 31 deaths and 293 injuries. In addition, the District Police Headquarters in Ostróda and its subordinate units accepted a total of 3919 reports of road collisions, i.e. incidents resulting in only material damage.

Table 1. Comparative summary of incident statistics of the Ostróda County Police Department 2017–2019

Specification	2017	2018	2019	2019/2018		2019/2017	
				Quantitative	Percentage	Quantitative	Percentage
Accidents	92	74	73	-1	-1,35	-19	-20,65
Persons killed	6	16	9	-7	-43,75	+3	+33,33
Injured persons	113	96	84	-12	-12,50	-29	-25,66
Road traffic collisions	1492	1210	1217	+7	+0,57	-275	-18,43

Source: own study.

The breakdown shows that in 2019, there was a decrease of 1 traffic accident compared to 2018 and a decrease of 19 accidents compared to 2017. This represents a decrease of 1.35% in 2018 and a decrease of 20.65% from 2017. In 2019, there were 7 fewer fatalities compared to 2018, a decrease of 43.75%,

while in 2017, there were 3 more fatalities, an increase of 33.33%. Analyzing the number of injured people, it was lower by 29 people in 2017 and 12 people in 2018 compared to 2019. The number of traffic collisions in 2019 increased by 7 with respect to 2018, in which 1210 traffic collisions were reported, and by 275 compared to 2017.

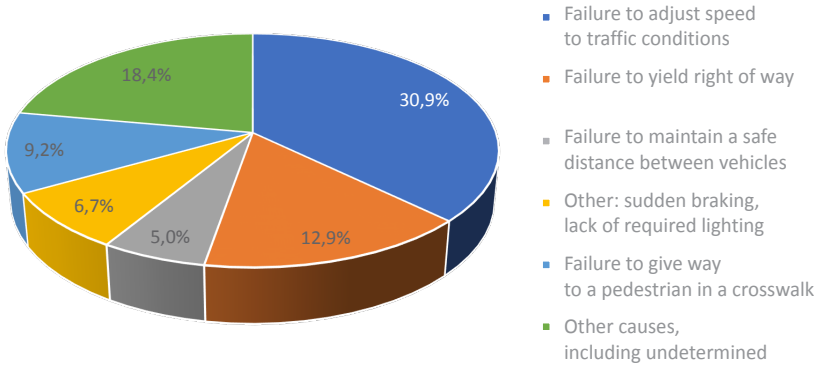

Chart 1. Structure of the main causes of accidents in 2017–2019 caused by vehicle drivers in the area of the District Police Headquarters in Ostróda

Source: own study.

Table 2. Intoxication of drivers and pedestrians – perpetrators of road accidents in 2017–2019 in the area of activity of the District Police Headquarters in Ostróda

Road users	Accidents			Killed			Injured			Collisions		
	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Driver	10	7	4	0	0	1	13	13	13	39	44	24
Pedestrian	2	1	2	0	0	1	2	1	1	0	0	1
Total	**12**	**8**	**6**	**0**	**0**	**2**	**15**	**14**	**14**	**39**	**44**	**25**

Source: own study.

For many years, not adjusting the speed to traffic conditions has been the main cause of accidents caused by drivers in Ostróda County. In the years under analysis, speeding was the cause of 30.9% of all accidents caused by drivers. In the period chosen by the author, one may notice that intoxicated road users in the Ostróda poviat caused 26 road accidents in total, including 21 drivers under the influence of alcohol and 5 pedestrians. 2 people were killed (1 driver and 1 pedestrian) and 43 were injured. In addition, intoxicated road users caused a total of 108 traffic collisions (*Bezpieczeństwo Ruchu*

Drogowego 2019: 30). The Ostróda District Police Station does not keep statistics on traffic incident perpetrators under the influence of a drug similar to alcohol (after drugs or other intoxicants), hence no such data is available.

As can be seen from Table 3, the vast majority of traffic accidents 2017–2019 occurred during "good weather conditions." It can be noted that during these same weather conditions, along with a high number of accidents, the highest number of people killed and injured was recorded. In 2019, the total number of road accidents increased slightly (+2) compared to 2018, while the number of fatalities (-7) and injuries (-10) decreased significantly. The second highest number of traffic accidents is during "cloudy" weather conditions. During these conditions, there were 9 fatalities and 89 injuries during the years analyzed. In 2019, a significant decrease in fatalities (-6) and injuries (-9) can be observed. There were 9 traffic accidents during the "rainout" in 2019. Compared to 2018, there was a slight decrease in the number of accidents (-1), the number of fatalities remained the same, and the number of injuries decreased (-6). According to statistics, these conditions rank third in terms of accidents and casualties. Increases in accident (+4) and injury (+5) rates occurred during "snow and hail," which accounted for 3.7% of the total of all weather conditions listed. Furthermore, in 2019, outside of the listed weather conditions, decreases in accidents and fatalities were mostly reported.

Table 3. The influence of weather conditions on road traffic safety in 2017–2019 in the area of Ostróda District Police Station operation

Weather conditions	Number of accidents			Number of persons killed			Number of injured		
	2017	2018	2019	2017	2018	2019	2017	2018	2019
Good weather conditions	44	41	48	4	8	7	56	47	49
Fog, smoke	0	1	1	0	0	0	0	1	1
Rainfall	24	10	9	2	1	1	32	18	12
Snowfall, hail	6	0	4	0	0	0	6	0	5
Dazzling sun	0	3	1	0	0	0	0	4	1
Cloudy	32	22	15	1	7	1	34	32	23
Strong wind	2	0	1	0	0	0	2	0	1
Total	**108**	**77**	**79**	**7**	**16**	**9**	**130**	**102**	**92**

Atmospheric conditions can duplicate each other, such as strong winds and cloudy weather, which increases the absolute number of indicators.

Source: own study.

Table 4. Road accidents in 2017–2019 depending on the condition of the road surface in the area of the Ostróda District Police Station operation

Surface condition	Number of accidents			Number of persons killed			Number of injured		
	2017	2018	2019	2017	2018	2019	2017	2018	2019
Dry	43	47	50	4	8	7	48	54	55
Wet	47	23	17	2	8	2	63	37	22
Icing, snow	6	3	7	0	0	0	6	3	8
Ruts, humps	1	0	2	0	0	0	1	0	2
Potholes, bumps	0	5	1	0	1	0	0	5	1
Puddles, spillages	0	0	1	0	0	0	0	0	1
Contaminated	0	1	0	0	1	0	0	0	0
Total	**97**	**79**	**78**	**6**	**18**	**9**	**118**	**99**	**89**

There may be repetition, e.g., wet pavement, puddles, and spills in one event.

Source: own study.

While sunny weather, dry pavement, and good visibility positively affect driving comfort and confidence, they also encourage dangerous and risky driving. This has to do with a psychological effect called the "Peltzman effect," which is that the safer a driver feels, the more dangerous they drive. This feeling of safety is encouraged by both favorable road conditions and the safety systems in the car. Drivers then feel confident on the road, or even overconfident, which can lead to bravado, the consequences of which can sometimes be tragic (*Co oznacza "efekt Peltzmana"* 2017). During adverse weather conditions, such as heavy snow, rain, or slippery pavement, motorists are more cautious, focused, and pay more attention to required speed limits due to road conditions. In addition, many of them give up driving and switch to public transportation.

Having statistical data on the number of accidents with their specific location, you can thus identify the areas most at risk. Thanks to such analyses it is much easier to make decisions aimed at improving safety in these places, among others, to conduct traffic surveillance, as well as to monitor it.

4. Prevention and control activities in the territory of Ostróda County within the framework of safety improvement

In 2017–2019 the Traffic Department of the District Police Station in Ostróda had 23 police officers. The following technical means, which are on the equipment of the unit in question, were used during the activities concerning the disclosure of speeding and intoxicated drivers: 5 hand-held (laser) speed meters, an unmarked vehicle equipped with a video recorder and devices for sobriety testing in the form of 14 AlcoBlow and 7 Alco-Sensor IV CM.

Among the prevention and control activities aimed at improving road traffic safety, the District Police Headquarters in Ostróda has carried out the following activities in the years under analysis:

1. "Speeding" – the aim of these actions was to improve safety and order in road traffic by enforcing vehicle drivers to observe speed limits. Police officers conducted static as well as dynamic speed measurements (for this purpose the newest vehicles equipped with video recorders were used, which were driven by special police SPEED groups, and their main task was to reveal and counteract dangerous behaviours of drivers, affecting the severity of road accidents. Police officers measured the speed with hand-held meters with image recording);
2. "Alcohol and drugs" – these activities were aimed at testing the sobriety of as many drivers as possible, primarily using the tactics of the so-called quick tests;
3. "Unprotected participants of road traffic" – the activities were aimed at drawing attention to offences committed by pedestrians and drivers against them, as well as at enforcing the obligation of pedestrians walking after dark outside built-up areas to use reflective elements in a manner visible to other road users.

During the period 2017–2019, police actions were also carried out, which were aimed at eliminating all deficiencies related to improper road markings or their absence from the road. Particular supervision was exercised over repaired road sections or their reconstructions, as well as other places which, due to periodic increases in traffic volume, as well as the type and condition of the road surface, were at risk of a higher number of traffic incidents. Moreover, after each fatal road accident, a road section inspection team was appointed to determine whether or not there was a connection between the road accident and factors connected with traffic

organization and the road environment. The purpose of this was to eliminate hazards in a given place in the future. In order to increase the safety of Ostróda District citizens, the reports on the National Road Safety Map were corrected, in particular those concerning improper road infrastructure and speeding.

5. Road traffic safety in the county of Ostróda in the public perception on the basis of a survey

The survey was conducted between March 17–25, 2021 via the Internet. An electronic version of the survey was created using the Google website. The link created for it was posted on Facebook social media asking people living in Ostróda County to complete the survey. The respondents filled in the survey questionnaire on their own without being asked, and sent the answers electronically to the indicated e-mail address.

The study group consisted of 100 individuals, including 70 females and 30 males. The respondents were divided into 6 age groups: 18–25, 26–35, 36–45, 46–55, 56–65 and over 66. A very large group of respondents was recorded in the age range of 36–45 years (52%), while the least number of respondents was recorded in the category of over 66 years (2%). The most numerous group (88%) of respondents were people living in Ostróda Municipality (it was most probably Ostróda because this is the town where most of the respondents live). Less numerous group (12%) were people living in other towns located in Ostróda County. People with secondary education were the most numerous group (46%), and the least numerous were representatives of the primary and secondary school (1% each). The dominant category of respondents were drivers (72%), followed by pedestrians (24%) and cyclists (2% each). The vast majority of respondents used a car very often (59%), ⅓ often and rarely, and 14% very rarely. When asked if the roads in Ostróda are safe, 63% of the respondents answered "rather yes" and 3% answered "definitely not" 3%.

Table 5. Respondents' opinion on whether the roads in Ostróda County are safe

Specification	Percentage
Rather yes	63
Rather not	26
Definitely yes	8
Definitely not	3

Source: own survey.

One of the three extended questions in the survey contained nine responses concerning factors affecting road users' lack of feeling of safety on Ostróda County roads. It was chosen on the basis of the author's personal observations so that the respondents could relate to actual dangers rather than theoretical book examples. The respondents, according to their own experience and observation, were asked to choose 3–5 answers from the proposed cafeteria in the category of the main factors affecting the lack of feeling of safety of road users.

Table 6. Respondents' opinion on the factors influencing the lack of feeling of safety of road traffic participants on the roads in Ostróda County

Specification	Percentage
Trespassing on the street/inappropriate pedestrian behaviour/crossing the street in prohibited places	72
Excessive speeding by drivers in areas with heavy traffic	68
Lack of visibly marked pedestrian crossings with particular attention to areas with high pedestrian traffic such as schools, hospitals, sports facilities etc.	55
Inadequate lighting of pavements, roads and car parks	53
Lack of solutions (speed bumps, speed cameras, signs, etc.) to slow down traffic	32
Lack or poor quality of communication routes (footbridges, pavements, public roads)	21
Poor traffic organisation endangering all road users	19
Inadequate care of urban greenery endangering road users	15
Other	2

Percentages do not sum to 100 because respondents could select more than one response.

Source: own survey.

According to the results of the survey, respondents most often encountered pedestrians trespassing on the street, improper behaviour, and crossing the road in prohibited places (72%). As the second factor influencing the lack of feeling of safety, respondents indicated excessive speed of drivers in places with heavy traffic (68%). In third place was the lack of visibly marked pedestrian crossings (55%), followed by inadequate lighting of sidewalks, roads and parking lots (53%) and inadequate maintenance of urban greenery endangering road users (15%).

The second extended question in the survey questionnaire asked respondents to identify actions to improve the safety of road users. Respondents were asked to select 3–5 responses that they felt could improve the safety of road users. The respondents indicated that improving the lighting of sidewalks, roads, and parking lots was the most important to them (68%). Among the actions that should be taken, respondents singled out: improving the visibility of pedestrian crossings (58%), improving and developing road infrastructure (53%), and early childhood education about road safety (43%). Most indifferent to the respondents were increasing social campaigns (14%) and the number of police patrols and road checks (22%). Survey results are presented in Table 7.

Table 7. Respondents' opinions on improving the safety of road users on the roads in Ostróda County

Specification	Percentage
Improving the lighting of pavements, roads and car parks	68
Visibly marked pedestrian crossings	58
Improvement and development of road infrastructure	53
Early childhood education on road safety	43
Installation of speed bumps	36
Better education of future drivers	33
Stricter penalties for offenders	27
Installation of speed cameras in places where speeding is considerably exceeded	26
More police patrols and road checks	22
More social campaigns	14
Other	3

Percentages do not sum to 100 because respondents could select more than one response.

Source: own survey.

In the third extended question, respondents were asked to select the most common offences committed by motorists. The answers obtained may contribute to the identification of the main dangers posed by drivers. This will make it possible to determine the scale of the phenomenon on the roads of the Ostróda District.

Table 8. Respondents' opinion about offences committed by vehicle drivers in the Ostróda County

Specification	Percentage
Exceeding the speed limit	86
Using the phone while driving	76
Overtaking other vehicles in prohibited places	67
Driving under the influence of alcohol or of a similarly acting substance	47
Failure to use direction indicators	36
Better education of future drivers	31
Parking in prohibited spaces	31
Failure to obey traffic signs and signals	29
Failure to use seat belts while driving	27
Carrying children in an improper manner	9
Other	0

Percentages do not sum to 100 because respondents could select more than one response.

Source: own survey.

As shown in Table 8, the respondents indicated that the most common offence committed on the roads of Ostróda County is speeding (86%). In addition to speeding, respondents note the danger caused by using a cell phone while driving (76%) and overtaking other vehicles in unauthorized places (67%). Fourth place, according to respondents, is driving under the influence of alcohol or a similarly acting drug (47%). The respondents indicated that carrying children in an improper manner (9%) and not using daytime running lights (6%) are among the least common offences committed by drivers in Ostróda County.

Knowing the results concerning undesirable behaviour by drivers, the question of whether various types of preventive and control activities by the police are desirable and how often they should be carried out was examined. For this purpose, the respondents were asked two questions: one in

which they were to determine whether there was a need for such activities, and the other about how often they should be carried out. An overwhelming number of respondents (86%) believe that police-led activities are desirable and should take place once or twice a month (47%). Of those surveyed, 9% expressed no opinion and 5% said they did not need such activities. A small number of respondents think that such activities should be carried out once or twice a week (23%) and a small group (6%) think that such activities should be carried out every day. In the opinion of 16% of respondents, such activities should be carried out once or twice a year. The realized survey has shown that the safety of pedestrians is assessed as good by 49% of Ostróda citizens and 42% as bad. Moreover, 79% of the respondents indicate a significant lack of bicycle paths.

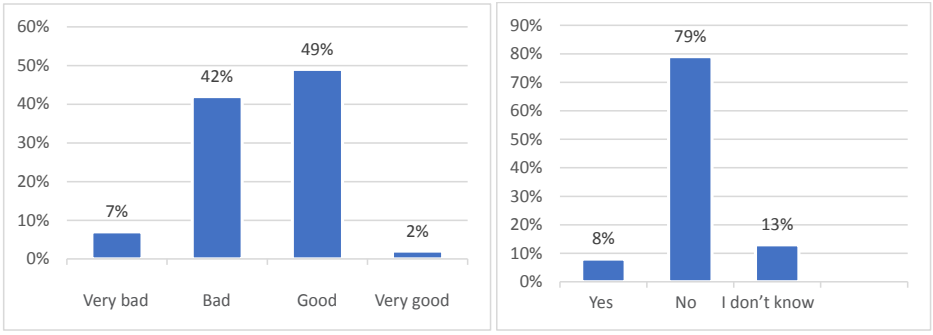

Chart 2. Pedestrian safety ratings and respondents' opinion of the lack of bike lanes

Source: own survey.

In the light of the results analysed, cyclists, pedestrians or skaters listening to music/radio via headphones are also a threat to road safety in Ostróda County (72%). The percentage of "rather yes" statements was 21% and "rather no" 7%.

The survey also focused on the assessment of the condition of road surfaces in Ostróda County and the need for road infrastructure development. Among the respondents, 54% said that the condition of the road surface is bad and 35% said that it is good. Moreover, 79% of the respondents think that there is a need to extend the road infrastructure in the county of Ostróda.

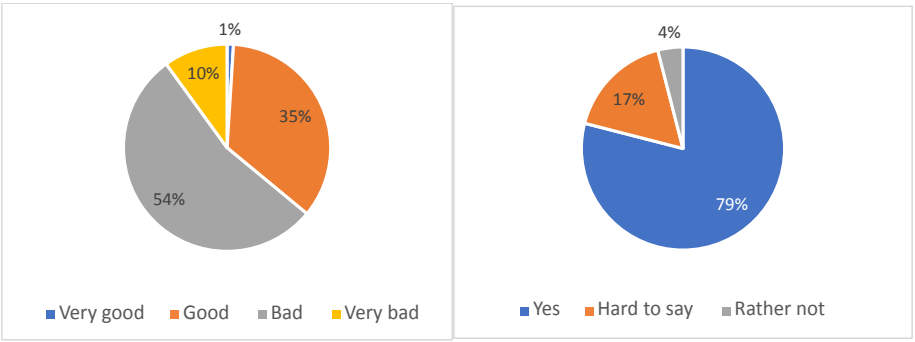

Chart 3. Assessment of road surface condition and need for road infrastructure development

Source: own survey.

The next research area undertaken was to find out through whose fault, according to the respondents, road safety is endangered. The respondents could choose from five answers: the fault of drivers, passengers, motorcyclists, cyclists and pedestrians. According to the respondents, safety is most often endangered by the driver's fault. This answer was chosen by as many as 72% of the respondents. In the second place, the respondents indicated pedestrians (23%), and in third place cyclists (5%). In this study, those surveyed omitted passengers and motorcyclists.

In the area of the activities of the District Police Headquarters in Ostróda, social actions are organized to promote appropriate behaviour on the road in order to improve safety on the roads of the Ostróda District. The survey also included a question about these social campaigns. As can be seen from the data analysis, 59% of the respondents have not heard of social campaigns run by the police. Only 41% of the respondents confirmed the fact about the community actions undertaken.

In the next question, the respondents were asked to express their opinion on whether children at schools in Ostróda are well prepared for participation in road traffic. The answer "I don't know" was given by 38% of the respondents, "no" by 39% and "yes" by 23%. As a side note, it is worth mentioning that early childhood education does not have road safety in its curriculum. Police officers visit schools only at the invitation of the headmasters. Then, traffic issues are discussed and children are made aware of the dangers on the road. Teaching about road safety should appear already

in elementary school. The respondents may not know about the visits of the Traffic Officers of the District Police Headquarters in Ostróda to schools and that is why such a low opinion was given in this respect.

The next part of the questionnaire was devoted to the Prevention and Traffic Department of the District Police Headquarters in Ostróda. The aim of the survey was to get information on how the respondents perceived the officers. The next question was about how the respondents evaluate the Prevention and Traffic Department in shaping the road traffic safety on the roads of Ostróda County. 46% of the respondents marked "difficult to assess," 22% "rather a lot" and 12% "a lot." A similar distribution of results can be seen in the answers "rather little" (12%) and "in a very big" (7%). The lowest score was given to the statement "in a small" and "not at all" (2% each). In the survey, respondents omitted the answer "in a very small."

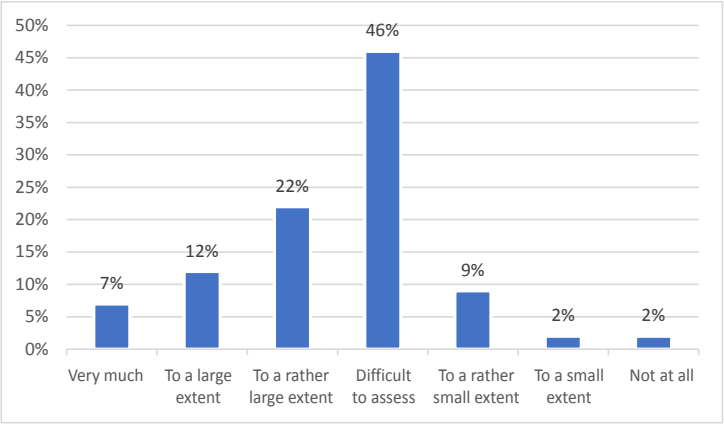

Chart 4. Assessment of the Prevention and Traffic Department in shaping safety

Source: own survey.

The survey questionnaire also included a question regarding the evaluation of the work of traffic safety officers. The answer "good" was recorded by 34% of the respondents, and "sufficient" by 24%. The work of the police officers responsible for road safety is "insufficient" for 13% of the respondents.

As for the issue of trust in the officers of the District Police Headquarters in Ostróda, the most frequently chosen answer was "difficult to say" (30%). The category "I trust" police officers was selected by 24% of the respondents, "I rather trust" by 23%, and "very trust" by 9%.

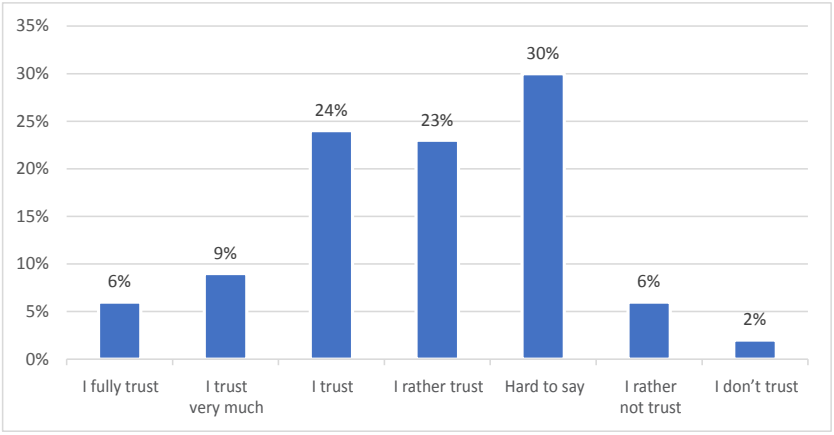

Chart 5. Evaluation of the level of trust towards officers responsible for improving road traffic safety in the county of Ostróda

Source: own survey.

In the last section of the survey questionnaire, the focus was on the respondents' safety assessment and on obtaining information on where they get their knowledge on this topic.

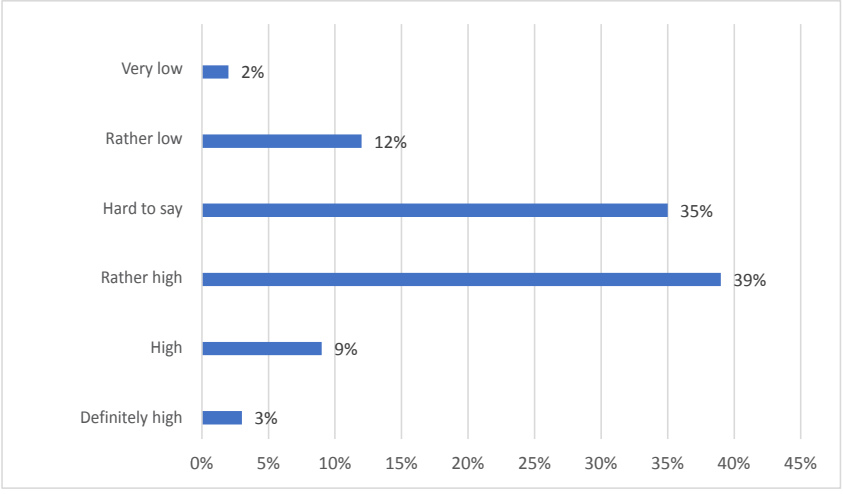

Chart 6. Evaluation of the feeling of safety in road traffic according to the respondents

Source: own survey.

The results obtained in the field of respondents' assessment of their own feeling of safety on the roads in Ostróda County show that 39% define it as "rather high," 12% "rather low" and 35% chose the answer "difficult to say." Only 2% of the respondents assessed it as "very low."

Data on the respondents' sources of knowledge about road traffic safety in the county of Ostróda were also analyzed. 50% of the respondents pointed to their own experience, 45% to their own observations, 4% to the opinions of family members, neighbours and friends and 1% to information obtained from the press, radio, Internet or television.

Table 9. Respondents' sources of knowledge about road traffic safety in the county of Ostróda

Specification	Percentage
On your own experience	50
On my own observations	45
On the opinions of family members, neighbours, acquaintances	4
On information from the press, radio, internet, television	1

Source: own survey.

Conclusions

Improving road traffic safety is one of the most important tasks carried out by the police. Analyses so far show that the biggest threats occur in relation to speeding and vulnerable road users, mainly pedestrians. Despite the fact that the areas of danger have been described in this article, we should still notice the dangers that directly or indirectly cause road accidents or affect the type and extent of injuries. Such behaviours certainly include driving under the influence of alcohol, using the telephone while driving, disregarding the obligation to use seat belts and finally the technical condition of vehicles.

Within the framework of road safety assessment on the roads of Ostróda District, the safety condition has been analysed and it has shown a decrease in the number of accidents with a simultaneous decrease in the number of fatalities. It is connected with the prevention and control activities carried out in the analyzed years by the Prevention and Road Traffic Department of the District Police Headquarters in Ostróda. Due to the cyclical nature

of such activities, the drivers are subjected to more frequent road controls during which the police officers carry out preventive and warning talks on the observance of the law. Such awareness-raising of vehicle drivers significantly influences their prudent driving and thus improves road safety. Therefore, further analysis of the results indicated that prevention and control activities conducted by the police are desirable (86%) and should take place once or twice a month (47%).

The study showed that most of the road accidents occurred mainly in the undeveloped area (57.7%), during "good weather conditions" (50.3%), during daytime (65.7%), and on dry pavement (55.1%). In the Ostróda District, one can encounter such dangers as incorrect or faulty road markings, gaps in the road surface, trees on the edge of roads, invisible horizontal markings or an excessive number of advertisements placed in the road lane or in the area of intersections. In addition, there is also the human factor. Traffic participants, through their thoughtlessness, lack of imagination or prudence, commit a number of offences and thus pose a threat to others. In order to improve safety among the residents of the county, prevention in the area of road traffic safety was carried out within the framework of the local tournament "Road Traffic Safety" and other important undertakings. As the surveys showed, 59% of the respondents had not heard of community campaigns conducted by the police. In order for the police to be able to act efficiently in the implementation of such undertakings, it would be necessary to initiate legal processes to ensure its financial and human resources potential for the effective implementation of activities to improve road safety. Other actions that can have a positive effect are cooperation with the local media, road authorities, municipal police, and schools. It is also important to coordinate the creation and implementation of the programs, to promote and publicize a website with up-to-date information about the campaigns. Moreover, the District Police Chief in Ostróda should sign an agreement with the headmasters ofn elementary schools located in the Ostróda District to implement more frequent lectures on road safety issues.

A review of the data collected shows that 72% of respondents do not feel safe in the face of inappropriate pedestrian behaviour and speeding by drivers (68%). Respondents specified that improving the lighting of sidewalks, roads and parking lots, improving the visibility of pedestrian crossings and developing road infrastructure is most important to them. Despite such shortcomings, as many as 63% of the respondents believe that the roads in Ostróda County are "rather safe."

The opinion of the respondents concerning the assessment of the Prevention and Road Traffic Department of the District Police Headquarters in Ostróda in shaping the safety on the roads of the county seems interesting. The answer "difficult to judge" was given by 46% of the respondents. This result was probably influenced by the region of residence. Therefore, it can be concluded that there is a relationship between the place of residence of the respondents and their choice of the evaluation of professional competence of police officers. This result may also indicate different perceptions of police officers' competence by men and women and other experiences resulting from direct encounters with police officers. This assessment could also be influenced by the age of the respondents. The obtained answer could have been either a consequence of objectively even greater criticism of younger generations or definitely different experiences from encounters with police officers. Despite this response, 34% of the respondents well assess the work of police officers of the Prevention and Traffic Department of the District Police Headquarters in Ostróda. Thanks to the activities and commitment of the officers, road traffic safety has improved, as evidenced by the fact that 39% of the respondents consider the safety in this area to be "rather high."

Various research methods were used in the conducted research. Statistical methods, research techniques and the research tool, which was a questionnaire survey, as well as the analysis of the respondents' statements were also the basis for determining whether the hypothesis was confirmed in the collected research material.

The main hypothesis was verified only partially positively.

The author of this article finds a reflection for the hypothesis confirmed as a result of the conducted research in personal observations from the perspective of an officer of a public institution, which was the research area. It seems that this is such an important topic in terms of shaping road traffic safety in Ostróda County that it requires further observation, research and scientific analysis.

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