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Table of Contents:

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Evaluation of Touristic Risks While Visiting Ukraine and the Risk Perception by Travelers

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Abstract:

International tourist arrivals increase every year. Ukraine has always been a popular country for spending a vacation. However, many foreign tourists have very bad expectations about the trip to Ukraine. The reason is the military conflict in the East of the country. This article aims to explain whether Ukraine is a risky destination for tourists. For this purpose the determination, estimation and prediction of the risks for tourists in the summer of 2018 was conducted. This study shows that the risk is the main motivation of traveller's destination choice. The methodology to assess risks for foreign tourists who visit Ukraine is proposed in the article. To confirm the tourist threats evaluation model, an investigation was conducted, which included gathering information about potential touristic risks. The list of probably dangerous and mid-level dangerous touristic risks was determined in the summer n of 2019 in Ukraine. The fact that trips to the territory of Ukraine are safe was established.

Keywords: touristic risk assessment; risk evaluation model; method of expert evaluation; travel to Ukraine; risk perception.

JEL Classification: L83; D81.

Introduction

According to ITB Travel report 2020 despite pandemic caused by Covid -19 outbound trips increased worldwide by 3.9% in 2020. And all parts of the world were forecasted with positive outlook. Travel & Tourism Economics Impact Ukraine (2017) stated that by the year 2027, the international tourist arrivals are forecasted to reach 22,340,000, generating expenditure of USD 2,592 million. According to the forecast, visitor exports will grow by 5.6 % in 2027 compared to 2017. The other positive trend for Ukraine is the good growth of domestic spending – USD 3.8 billion by 2027. Compared to 2017 leisure spending will grow from USD 4 billion to 4.8, and really huge changes should be expected in business spending which will increase by 7% in 2027 (Travel & Tourism Economics Impact Ukraine, 2017).

According to the State Statistics Service of Ukraine (2020) it is obvious that the tourism industry is dependent on tourism security in the destination country and it is highly dependent on the level of risks for tourists. It is easy to see from statistical data that tourist arrivals to Ukraine decreased by 54% in 2015 compared to 2014 due to military conflict in the eastern part of the country. The important question arises: is a touristic trip to Ukraine safe enough? To answer this, it is necessary to analyze the main factors and risks affecting tourists who travel throughout Ukraine. The main hypothesis of the study is that: Ukraine is safe for foreign tourists. The main purpose of the study is the determination, estimation and prediction of the risks for tourists in the summer of 2018 and making a conclusion about whether tourism in Ukraine was really safe in this period.

1. Literature Review

According to the World Tourism Organization (2017) total international tourist arrivals increased from 25.3 million in 1950 to 1 451 million people in 2019. Growth was expected to continue. Thus after pandemic in the latest UNWTO (2020) researches is pointed that 47% of participants consider tourism will grow and 43% that tourism will stay at the same level of 2019. Ukraine is a popular destination place among international tourists. Ukraine was visited by 2.86 million tourists in 2017, 4.5 – million in 2018 and 6.1 in 2019 (State Statistics Service of Ukraine 2020). In Ukraine, 95% of tourist enterprises are small; their number of employees is less than 50 people (State Statistics Service of Ukraine, 2019). The number of touristic enterprises also decreased significantly. Ukraine had 2586 touristic enterprises in 2014 and their number decreased to 1785 in 2015, and to 1720 in 2016 (State Statistics Service of Ukraine, 2019). According to Bera (2009) small enterprises are very susceptible to two categories of risks: product risk (bad quality of service) and market risk fluctuations of sales income. These fluctuations are usually caused by decreasing the interest of tourists to travel. Based on statistic data of arrivals' dynamics to Ukraine in 2015- 2020 the conclusion could be reached about the growth of the number of tourists who want to visit Ukraine being mainly dependent on the political stability and safety and less on the quality of service (State Statistics Service of Ukraine, 2020). It is vital to note that tourists seek new and unusual experiences, so that practiced forms of tourism are increasingly diversified (Firoiu and Croitoru 2015). New and diversified touristic ideas can cause very specific risks for tourists. The other important question is how actual risks influence their perception by tourists. According to the latest studies, there is a huge difference between the actual risk level and the level perceived by tourists (Sjöberg, Moen and Rundmo 2004). In this study risk perception is the subjective assessment of the probability of a specified type of accident happening and how concerned we are with the consequences. It revealed the psychometric paradigm of risks perception which includes factors like age, gender, ethnicity, nationality, affects (Sjöberg, Moen and Rundmo 2004). According to Romagnoli (2016), «A potential tourist who negatively conceives a destination as risky may choose to cancel his/her holiday or not even consider it because of security and safety motives», (p. 125). At the same time, the latest research confirmed that a strong risk perception continues even if all threats to tourists have been removed (Williams and Baláž 2014; Chiao and Vikneswaran 2014). In recent studies (Trawöger 2014) researchers showed that perceived risk is influenced by qualitative characteristics related to whether a hazard is catastrophic or chronic, dreaded or common, old or new and delayed or immediate. The tourist's behavior depends on the type of hazard and its parameters: whether it is controllable, observable, fatal and known enough. Some studies have showed that there are many differences in risk perception among different types of tourists: young people aged 20-30 could ignore a risky situation in the country while people from an older group will certainly delay or cancel the trip (Casidy and Wymer 2016; Wu, Vassileva, Noorian and Zhao 2015).

Baum, Newman, Weinman, West & McManus (1997) determined that the risk means different things to different people. Perception of risk goes beyond the individual, and it is a social and cultural construct reflecting values, symbols, history, and ideology (Weinstein 1989). Garg & Kumar (2017) found that destinations regarded as safe from the tourism crisis will be given more consideration, and those perceived as risky may be rejected. The same view is shared by Chiu (2008) and (Chew & Jahari, 2014; Karl 2018; Magliulo 2013; Lepp & Gibson, 2003; Hasan, Ismail & Islam 2017). Risk perception depends also on the source of information: television, social networks, rumors, etc. This point is outlined in the study by Guanghua & Yihong. (2018): «Information about risks, such as what is reported, how is it reported, to whom and by whom is it reported, is a crucial factor in risk decisions» (p. 3). The more the tourist feels unsafe, the less intention does he/she have to visit any particular place. Tourists rarely go to those countries which they heard bad news about in the media (Amara 2012). Garg (2015) confirmed: «Once a destination is perceived to be risky by the tourist, it will have serious implications on the growth and development of the tourism industry of the specific destination» (Garg 2015, 9). The same point is substantiated by Kapuscinski and Richards (2016) who underlined that advertising and other marketing information could strongly influence tourists and the information about risks could amplify or attenuate the intentions to visit a certain country.

In the study by Wen-Qi Ruan, Yong-Quan and Chih-Hsing (2017) it is pointed out that the tourist's benefit should be seriously considered and that it is positively related to the destination's image and moderates the relationship between the feeling experience and the destination image. They suggested an idea that touristic risks are connected to tourist's benefit and feeling and nowadays tourism needs risk reduction strategies. Consequently, the latest research found that the popularity of destinations will depend not on the number of sites, but on political stability (Zbuchea 2015). Wen-Qi, Yong-Quan and Chih-Hsing (2017) extended this conclusion by

providing empirical evidence that touristic risk also decreases tourist's benefits, which influences foreign tourist's destination image.

Some scientists considered that not only risk perception influences a decision-making in tourism. Based on the theory of planned behavior, it is identified that tourist destination choice, regarding visiting or revisiting the country depends on consumers' beliefs, attitudes, intentions and behaviors (Park *et al.* 2017; Wu *et al*. 2016). Myriam Jansen-Verbeke (2016) considered that risky military front zones, political borders in wars, are presently marked as popular tourism destinations. Keller (2002) considers that the risks stem from interethnic and religious conflicts, which arise from the differences in beliefs.

Some researchers have attempted to create a decision-making model and reached the conclusion that travel motivation, perceived risks, and travel constraints influence the destination image (Khan *et al.* 2017). Previous studies prove that risk perception is an individual category which contains many personal subjective attitudes but usually it is a direct reflection of the actual risk level. So, the risk level is one of the main motivations of the traveler's destination choice.

The other important aspect is risk's determination and establishing what particular risks are actual for tourists nowadays. In the UK Essays (2015) some specific psychological risks are also considered: a possibility of not receiving holiday benefits due to the travel; the possibility that a product or service will not be performing well; a possibility of travelling experience not reflecting on traveler's personality or self-image, causing damage to self-image.

In a recent study, Baker (2015) considered the risk of infectious disease while travelling and found that 15% of travelers had potential exposure to blood through vehicles such as new sexual partner (9%); sharing instruments, such as razor or toothbrush (5%); receiving an injection for medical treatment (3.2%); having acupuncture or other percutaneous nontraditional treatment (1%); tattooing or body piercing (0.5%); and abrasive injury (0.5%). Baker (2015) points out that: «an expansion in the overall global tourism market has contributed significantly to the spread of infectious diseases. Human travelers can easily carry person-to-person transmitted infections to any part of the world as has been seen recently with the Ebola virus» (p. 2).

According to World Travel Monitor figures in 2016 about 36 million tourists, or about 3% of the total, became victims of serious crimes such as car break-in or theft, stolen handbags or luggage, and financial fraud or theft. Mawby (2000) also considered the possibility to be a victim of various criminals. This study pointed out that the widest spread crime is burglary. Tourists have a much greater risk of victimization during the trip than while staying home (Mawby 2000).

Studies by Mehmet E. Yaya (2009), Wolff and Larsen (2014) show that terrorism is one of the most dangerous hazards for tourists nowadays. According to ITB (2016/217), the impact of terror attacks on the travel industry was a much-discussed topic at the Pisa forum. World Travel Monitor data showed that the real risk to travelers from terror attacks is much lower than, for example, health problems or crime. However, many people (45%) now have serious safety and security concerns, especially about certain countries, and about two thirds of them plan to travel only to international destinations they perceive as being safe. Additionally Pender and Sharpley (2005) pointed that tourists frequently adapt their travel/holiday plans in response to threats, selecting destinations or types of holiday that may be closer to home, cheaper, or involve less risk. Nevertheless, ITB World travel trends report 2016/2017 outlines that probability of being exposed to a terrorist attack is very small. IPK president Rolf Freitag told the forum: "A comparison of travel risks shows international outbound travelers are much more likely to be affected by health issues or crime than by terror attacks," (ITB World travel trends report 2016/2017, p. 20). In the same time in the study by Mehmet (2008) an examination of the effect of terrorism on tourism was performed. His results indicated that there is a negative but small impact of terrorism on tourism.

All touristic risks can be divided into man-made and natural categories (Sönmez and Graefe 1998). In a study by Hasan, Ismail and Islam (2017) the risk perception dimensions and factors that are used in tourist's behavior were considered and grouped according to different contexts. Based on the latest publications, the main types of risks for tourists can be divided into such categories: 1. Medical risks (trauma, infections, disease, plagues); 2. Property risks (loss of baggage, car crash); 3. Financial: overpayment for a tour, currency risk, risk of additional costs; 3. Accidents (fire, explosion, theft); 4. Service risk (bad quality of service); 5. Legal risks or public liability (an event that tourist damages someone else's property or causes the death/injury of someone during the trip, contract defectiveness, trials in court, legal ignorance); 6. Political (new laws, terrorism); 7. Ecological risks (risks of natural environmental factors such as polluted air, garbage, out-of-town traffic, dirty water, radioactivity); 8. Cultural or religious differences and conflicts; 9. Natural (earthquakes, tsunamis, tornadoes, cyclones, frosts, landslides, volcanoes, storm, floods, lightning).

Risks for tourists can be divided into dangerous and not very dangerous or mid-level dangerous. The most dangerous risks for tourists worldwide in 2016 were: (descending from more dangerous to least dangerous) accidental death and dismemberment, terrorism, civil unrest, extreme weather events, natural disasters, petty crimes, infectious diseases, road accidents, Zika virus, gun violence, flu, inadequate healthcare, non-infectious diseases (International SOS and Control Risks publishing, 2017). Not very dangerous risks (mid-level dangerous) could be: trip cancellation, trip interruption, trip delay, baggage and personal effects, legal, administrative or civil liability for third parties. Some tourists can be affected by psychological risks (Jenkin 2006; Schmidt 2005). According to World Travel Monitor figures in 2016, among 48 million international travelers only about 4% of the total suffered serious health problems, such as stomach problems or allergic reactions.

According to figure 1, the Ukrainian territory is quite safe for tourists. The high danger is only possible in the east of the country. The Donetsk and Luhansk regions have an ongoing violent conflict and a volatile security situation. Tourists who don't travel to this territory have no possibility to suffer from military actions.

Figure 1. The travel risk map in 2017. International SOS and Control Risks publish (2017) «I» - insignificant travel risk; «L» means low travel risk; «M»- medium travel risk, «H» - high travel risk, «E» -extreme travel risk.

Source: https://www.internationalsos.com/travelriskmap2016.

The latest studies show that risk perception plays a tremendous role in tourism destination choice. It can be assumed that the estimation of an individual is often more subjective, while objectively, the risk could have a very low probability and a magnitude of consequences. For the objective likelihood estimation the more accurate methods should be used.

For making the risk estimation, an appropriate approach can be based on probabilistic and statistical methods (Ostrowska and Mazur 2015). Peculiarities of expert estimation methods were discovered in a recent study by Tikhomirova and Matrosova (2016). All risk evaluation methods have advantages and disadvantages. Some of them rely on subjective weighting (Guo *et al.* 2010). At the same time, the expert judgment could lead to high probability of experts making a wrong choice (Peng, Zan and Yi 2011). Therefore, the validation of each expert's assessment and the agreement coefficient of a group of experts should be performed.

2. Methodology

The expert model of risk evaluation in Ukraine was proposed (see figure 2). Before the model implementation a preparatory work was done: the definition of expert assessment methodology, the establishment of examination periodicity, the appointment of a circle of experts and the requirements for their qualifications and experience. Finally, the number of experts was substantiated, and an individual expert questionnaire was formed with instruction for its completion.

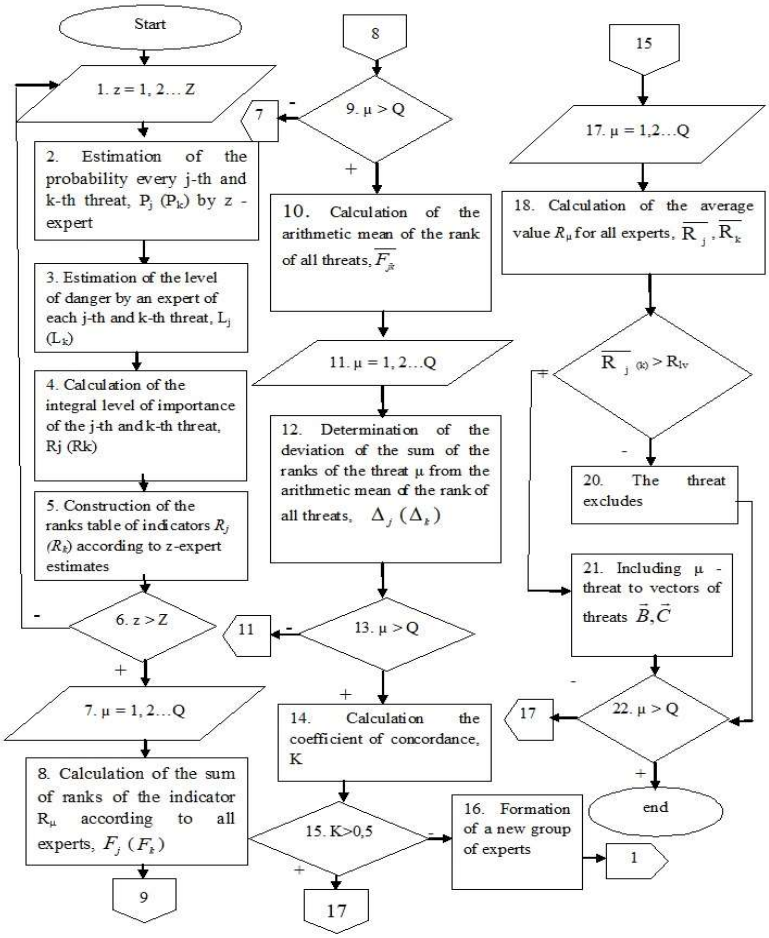
The investigation was conducted, which is outlined below. The nature of the investigation was informational and sufficient. The experimental conditions of the investigation were artificial, according to the number of factors – it was multi-factorial. The purpose of the research was to control and to predict the future

hazards for tourists in Ukraine in the summer of 2019. The conducted investigation was among many passive investigations because in the process of the implementation of the model of touristic threats evaluation, the threats were not exposed to the influence of investigation. For the experiment, the psychological portrait of a typical tourist was proposed. It was assumed that an average tourist coming to Ukraine for one or two weeks, has good underlying health, normal behavior, uses safe buses and rented cars, adheres to the safety rules specified in typical reminders to tourists, visits safe places such as historical monuments, cultural places, cathedrals and historical buildings. Expected cities to be visited were: Odesa, Kyiv, Kharkiv, Lviv and Lutsk.

For the experimental implementation of the model, special software was developed in the "MS Excel" program environment. All further calculations were carried out using it. Before the implementation of the expert model of touristic threats evaluation, the preparatory work was completed. Five experts in touristic safety were chosen: two professors of the tourism department and three senior analysts from the travel insurance company. All of them agreed to work for free. The preparatory work involved the formation of common arrays of dangerous and mid-level dangerous threats. The statistical information about threats in Ukraine was gathered. Then the array of most common threats that could happen to tourists was determined for the forecasting (summer, 2019).

Evaluated dangerous threats were: B1–terrorism, B2–infectious diseases, B3– strong ecological risks, B4 – the extreme weather events, B5 – radioactive radiation , B6 – gun violence (extraction, cultural or religious intolerance), B7 – accidents, B8 – non-infectious diseases, B9 – other (fire, explosion which causes death and dismemberment), B10 – inadequate healthcare. Evaluated mid-level dangerous threats were: C1 – losing or wasting money if travel expectations were not fulfilled (possibility of not receiving holiday benefits,), C2 – organizational problems occurring during travel or at the destination site, C3 – financial problems (risk of additional costs), C4 – small ecological risks, C5– trip interruption, C6 – travel experience reflecting poorly or not at all on the traveler's personality or self-image, C7 – bag snatching and pickpocketing (petty crimes like credit card fraud), C8 – liability for third parties, C9 – loss of baggage, C10 – minor illnesses.

Figure 2. The expert model of touristic threats evaluation



Source: developed by the author

Conventions of the expert model of risk evaluation

z - sequential number of the expert, z = 1, 2,3,4,5; Z - total number of experts; j – sequential number of dangerous touristic threats, j = 1, ..., m; m – total number of dangerous threats; k – sequential number of mid-level dangerous threats, k = 1, ..., w; w - total number of mid-level dangerous threats; Pj, Pk – probability of occurrence of j-th and k-th threats respectively in ψ -th period of the trip to Ukraine; Lj, k – level of danger of j-th and k-th threat in ψ -th period of the trip to Ukraine; Rj, R k – integral level of importance of j-th and k-th threats; fj, fk – ranks of the integral level of importance of each j-th and k-th threat determined by the z-expert; μ – sequential number of the aggregate array of threats, μ = 1,2,3, ..., Q; Q – total number of dangerous and mid-level dangerous threats; Fj, Fk – the sum of the ranks of the integral indicator of the importance of each j-th and k-th threat for each expert; – arithmetical mean of the ranks of all threats; – deviation of the sum of ranks of each threat from the arithmetical mean of all ranks; K – coefficient of concordance; and – average value of integral level of importance for each threat by all experts; Rlv – limit value of integral level of importance; – vector of the most dangerous and probable threats; – vector of the mid-level dangerous and probable threats. Ai - certain trip to Ukraine.

Block 1. The experts provided with a questionnaire about dangerous and mid-level dangerous threats, instructions for its filling, and access to quantitative current indicators of the internal political, social, economic, ecological, criminal situation in Ukraine and the information about the quality of medical services and the statistics of other indicators that affect the threats in the current period. An expert evaluation cycle was organized.

Block 2. Estimation of the probability of occurrence of each j-th and k-th threat by Z experts - Pj,k. The z-expert, having analyzed the list of common arrays of threatening factors {Bj}, {Ck} and information about Ukraine, estimated the probability of occurrence of j-th and k-th threats according to the given scale (see table 1), (Kulikova 2008).

Block 3. The level of danger was assessed – Lj,k of every j-th end k-th threats for the trip {Ai}. z-expert evaluated tourist risks according to the 5-point scale: 5 - critical danger, 4 - high danger, 3 - average, 2 - low, 1 - very low danger. After the end of the expert evaluation phase, the final stage began. Then the processing and analyzing of the results of the expert evaluation was performed (blocks 4-13).

- Rk which were evaluated by z-expert. These indicators were calculated by the formulas:

$$R_j = L_j \times P_j \quad , \qquad 2.1$$

$$R_k = L_k \times P_k \qquad 2.2$$

Table 1. Classification of threats according to the probability of occurrence

The probability of a threat	The probability ($P_{j,k}$) scale	Qualitative description of the threat
Almost unbelievable	$0 < P \leq 0,1$	the probability of occurrence is very low, the threat may appear in very rare cases
Unlikely	$0,1 < P \leq 0,4$	the onset of the threat is unlikely, but such cases were in practice
Medium	$0,4 < P \leq 0,6$	there are good reasons why the threat can be realized in half of the cases
High	$0,6 < P \leq 0,9$	the threat is more likely to be realized
Extreamly high	$0.9 < P \leq 1$	it is very likely that the threat will be realized

Source: developed by the author (Based on Likert scale)

Block 4. Calculation of the integral level of importance of each j-th threat -R_j and k-th threat

The results of calculating the integral level of the importance of each threat - R_j, R_k for all experts were grouped into the resulting table.

Block 5. Ranking the expert assessments according to the indicator of the integral level of importance R_j, R_k for each z-expert assigning f_j, f_k - ranks for each j-th and k-th threats was done.

At the stage of the expert evaluation (blocks 1-6), five experts estimated the probability and the level of danger of each threat, which allowed the determination of the indicator of the integral level of threat's importance R. According to the estimations of each expert, a table of ranks for each j-th and k-th threats was constructed separately for the most dangerous and probable threats and for mid-level dangerous and probable threats.

Block 6. The completeness of the cycle was checked. If calculations were completed, then the control should have been transferred to block 7, if not - to block 1.

Block 7. The cycle for calculating the indicators which were necessary for determining the coefficient of concordance K was organized.

Block 8. Calculation of the sum of ranks according to the estimations of all experts in relation to each j-th and k-th threat was calculated according to the following formulae:

$$F_j = \sum_{z=1}^{Z} fz \quad 2.3$$

$$F_k = \sum_{z=1}^{Z} fz \quad 2.4$$

Block 10. The calculation of the arithmetic mean of the rank $\overline{F_{jk}}$ of all threats was estimated according to:

$$\overline{F_{jk}} = \frac{\sum_{j=1}^{m} F_j + \sum_{k=1}^{w} F_k}{Q} \quad 2.5$$

Block 11. The cycle for calculating the deviation of the sum of ranks of each threat from the average arithmetic value $\overline{F_{jk}}$: Δ_j and Δ_k was organized.

Block 12. Determination of the deviation of the sum of ranks of each threat from the average arithmetic value. Δ_j and Δ_k were calculated with the help of the formulae:

$$\Delta_j = \overline{F_{j.k}} - F_j \quad 2.6$$

$$\Delta_k = \overline{F_{j.k}} - F_k \quad 2.7$$

The sum of ranks $\overline{F_{jk}}$ for each threat, the arithmetic mean of the ranks, the deviation of the sum of ranks from the arithmetic mean value were calculated (blocks 8-12).

Block 13. Completeness of the cycle for calculating the deviation of the sum of ranks of each threat from the average arithmetic value Δ_j and Δ_k was checked. If the calculations were completed, the control should have been transferred to block 14, if not to block 7.

Block 14. To verify the coherence of the expert estimates, the calculation of the coefficient of concordance K was calculated with the following formula (Novosad and Seliverstov 2007):

$$K = \frac{12 \times \sum_{j=1}^{m} \sum_{k=1}^{w} (\Delta_{jk})^2}{Z^2 \times (Q^3 - Q)} \quad 2.8$$

$\sum_{j=1}^{m} \sum_{k=1}^{w} (\Delta_{jk})^2$ — the sum of the squared deviations of the sum of the ranks of each threat from the mean arithmetic value.

Block 15. Verification of consistency of expert evaluations was done according to the rule: if K > 50, there were no significant differences in the opinions of all experts, the coherence rate is high. If K ≤ 50, a new expert group needed to be formed. It meant that the discrepancies in expert's opinions were significant; in that case, the control should have been passed to the block 16 for the formation of a new group of experts with the subsequent transfer of the control to block 1. Therefore the results were acceptable for further analysis.

Block 17. A cycle to identify the vectors of the most probable and dangerous threats of touristic environment was organized.

Block 18. The average values of the integral level of significance of each j-th and k-th threat were calculated as follows:

$$\overline{R_j} = \frac{\sum_{z=1}^{Z} R_z}{Z} \quad 2.9$$

$$\overline{R_k} = \frac{\sum_{z=1}^{Z} R_z}{Z} \quad 2.10$$

The sum of all indicators of the integral level of importance of all threats was an indicator of the overall state of safety in Ukraine. The results of the calculations were entered in the resulting table.

Block 19. From the whole set of threats, it was necessary to select the most important one. The selection was carried out according to the criterion R_{lv}, which characterized the boundary at which a decision about including a certain threat to a resulting vector should be made. The range of its possible values was R = 0 ÷ 5. For establishing the criterion R_{lv} characterized by a product of the level of threat and the probability of threat it was suggested that if the probability of any threat was high (characterized by the value of p > 0.75) and if the level of danger "L" was also high (characterized by the indicator L > 4 - very dangerous), then R_{lv} = L*q, (0.75 * 4 = 3). That is why it was proposed to install R_{lv} at level 3. The condition was checked: if, $\overline{Rk} > Rlv$, the control was transferred to block 21: the corresponding j-th or k–th threats should be included in the vectors $\vec{B}, \vec{C}$. If $\overline{R_j}$, $\overline{Rk} \le Rlv$, then the control should have been transferred to block 20.

Block 20. The threat is rejected as not dangerous and control should have been transferred to block 21.

Block 21. The threat is excluded.

Block 22. The cycle completion was checked to evaluate the significance of each j-th and k-th threat for all experts and identify the vectors of the most probable and dangerous threats $\vec{B}, \vec{C}$. If the cycle was completed, then the examination process should have been ended, if not - the control should have been transferred to block 17.

3. Empirical Results

The experts evaluated all threats. Testing the consistency of expert opinions by the coefficient of concordance (blocks 7-16) was performed. The level of the expert consistency K was 0.86, which was acceptable. A cycle to identify the vectors of the most probable and dangerous threats (blocks 17-22) was summarized. The average values of the integral level of significance of each j-th and k-th threat were calculated (see table 2).

Table 2. The result table of the expert evaluation model

Bj	Rj	*Rlv*- Rj	Conclusion	Ck	Rk	*Rlv-Rk*	Conclusion
B_1	0,4	2,6	excluded	C_1	1,24	1,76	excluded
B_2	3,5	-0,5	**included**	C_2	1,7	1,3	excluded
B_3	0,6	2,4	excluded	C_3	0,4	2,6	excluded
B_4	0,98	2,02	excluded	C_4	0,44	2,56	excluded
B_5	1,28	1,72	excluded	C_5	0,17	2,83	excluded
B_6	1	2	excluded	C_6	1,24	1,76	excluded
B_7	0,61	2,385	excluded	C_7	4	-1	**included**
B_8	1,88	1,12	excluded	C_8	0,81	2,19	excluded
B_9	0,03	2,97	excluded	C_9	2,4	0,6	excluded
B_{10}	3,3	-0,3	**included**	C_{10}	2,8	0,2	excluded

Source: developed by the author

The hazards which had the high level of indicator of the integral level of importance (Rj, Rk) > Rlv were chosen as the most dangerous and probable. Consequently, as a result of the expert's evaluation, two vectors of threats were formed. The result of an experiment is establishing the most dangerous hazards which could have occurred in Ukraine in summer 2019. According to the result vectors the hazards which could have occurred were: B2 – infectious diseases, B10 –inadequate healthcare (see table 2). Therefore, the tourists who intend to visit Ukraine have to be very careful in public transport, avoid close contacts, wash hands, drink bottled water and

buy a good insurance policy with an appropriate assistant (medical company). The mid-level dangerous hazard which should have been taken into consideration were: C7 – bag snatching and pickpocketing or petty crimes. It means that everybody who visits Ukraine has to be attentive and careful especially in crowded places.

All other hazards in Ukraine were not expected and had a very low probability of occurrence in Summer 2019. That's why they had to be excluded from the main vectors (less than 5%).

Discussion and Conclusions

This investigation has shown that attention had to be paid to only three analyzed risks and it gave a reason to determine Ukraine as a completely friendly destination, except the territories which should be avoided for visiting (Donetsk and Luhansk territories).

The hazards which could probably occur to tourists were medical ones (infectious diseases, inadequate healthcare) and some petty crimes. For this reason, some scholars point out that a tourist-friendly destination is a concept according to which the police and legal institutions should play their role in reducing crimes and enhancing the safety of tourists (Anuar, Ahmad, Jusoh and Hussain 2012).

In a study by Anuar, Bookhari & Aziz (2012) the evaluation of prevention strategy was proposed which contained the evaluation of special security steps for tourists, according to its estimation. The most effective was installation of closed-circuit television, segregation of pedestrian walkways, lighting crime targeted area, safety mirrors and others stuff, police booths, security alarms. Dioko & Harrill (2019) pointed out that epidemiology of deaths and injuries require more observations and further study. In the latest research by Dioko & Harrill (2019) the statistics of leading causes of tourist deaths were analyzed for 2000-2017. A total number of deaths was 2650. Causes: road injuries 34%, falls 10,5%, conflict and terrorism 9,6%, physical violence 6%, unintentional injuries 5,9%, interpersonal violence 5,6%, other causes (non-specific, unknown, or multiple causes) 5,1 %, exposure to forces of nature 4,6%, drowning 4%, cardiovascular issues 2,7%, animal contact 2,5%, infectious or communicable diseases 1.4%, drugs 1.2%, exposure to mechanical forces less than 1%. Among 124 countries the leaders of tourist's deaths were: Australia, New Zealand, India, the US, UK, Thailand, Spain, Canada, Turkey and Egypt. Ukraine was not among them. So the conclusion about Ukrainian safety was not groundless. At the same time, Dioko & Harrill (2019) suggest that, while it is not zero, the probability of tourists dying worldwide during the trip is small. At the same time, the Ukrainian scientists have not performed the estimation and forecasting of touristic risks in Ukraine deep enough, while many internet sources give the latest information about travel safety in Ukraine. The information site about Ukraine for foreigners («Is It Safe to Travel to Ukraine», 2019) warned about Donbas region where the military conflict is still ongoing, also pointing out some other hazards: pickpocketing, criminal activities with unregistered taxy-cabs, car accidents. At the same time it informs that «9 out of 10 times, your stay in Ukraine will be safer than in the country you come from» («Is It Safe to Travel to Ukraine», 2019).

The risk assessment model which was proposed in this paper is flexible and can be used by scholars, managers and authorities for forecasting and evaluating different types of touristic risks in any trip to any country. Expert methods and forecasting risks are widely used by Rae & Alexander (2017), some authors Hansson & Aven (2014) consider risk analysis as a scientific work for decision-making. Risks could be quantitative or qualitative and be very unusual. The risk assessment model gives an opportunity for investigator to invite any number of experts and analyze and forecast different types of risks in real time and evaluate and predict risks in the future. Using it also helps to plan measures for avoiding probable dangerous risks. For model implementation, highly educated and experienced experts should be involved.

The main contribution of this study to the theory of risk management is that the proposed model can be useful as managerial support and information background for different levels of management in tourism. It gives a reason to take the results of this study into consideration by managers of tourism companies and government officials who create and devolve the safety strategy in Ukraine or any other country.

Limitations and Future Research

This study has several limitations, which may inspire future research. Only 5 experts agreed to take part in the investigation. As a result, the findings might be subjective. So, further investigation should extend the number of experts. In future research, experts in various fields should be invited. The set of tourist hazards should be extended according to the situation at the location of destination. All touristic risks could be divided according to the different criteria such as: location, season, purpose, means of transportation, tourist's age, physical health, cultural behaviour, etc.

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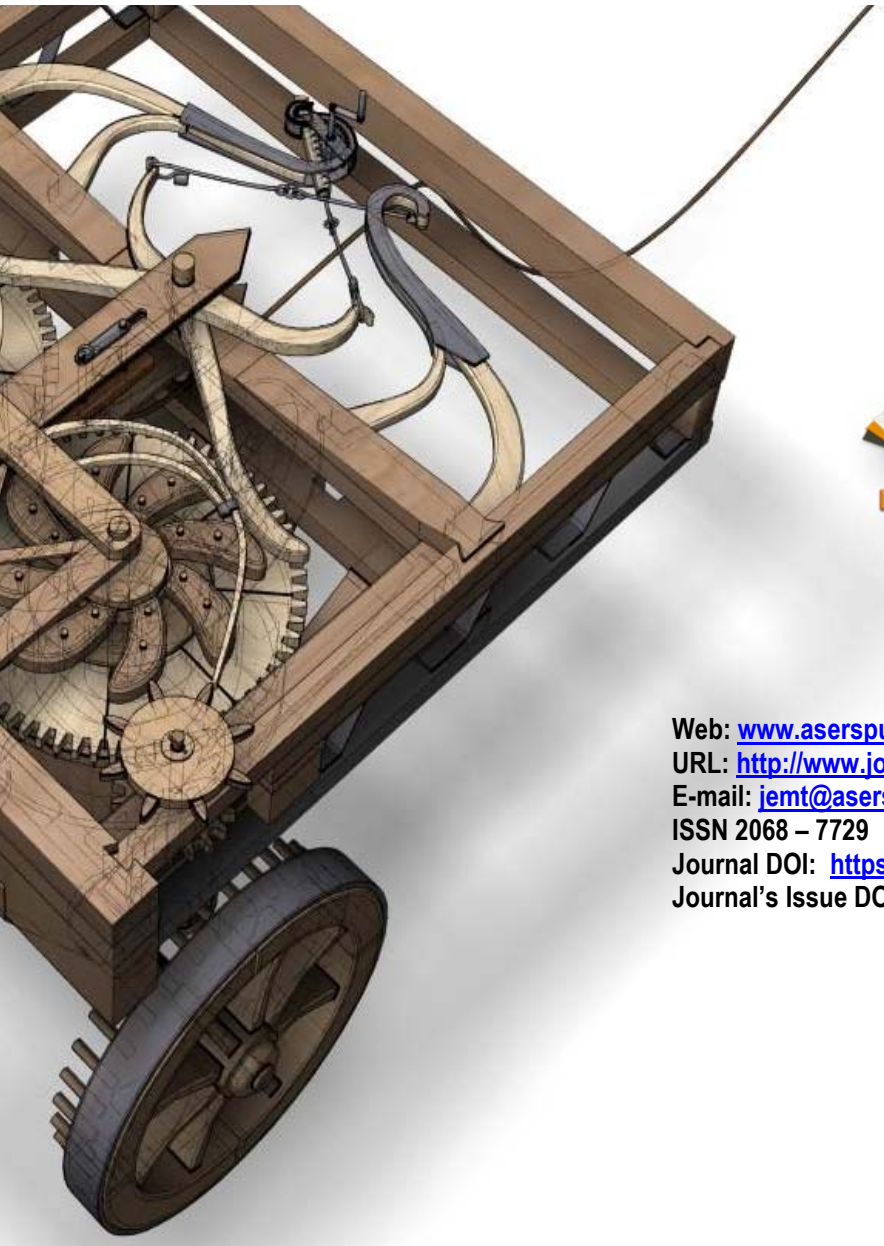

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