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ANALYSIS OF THE INFLUENCE OF THE SELECTED ASPECTS OF ORGANISATION OF A MASS EVENT UPON THE SECURITY OF PARTICIPANTS IN IT

Abstract: The principal motivation for undertaking a research process was the fact that, in the literature of the subject, there is still less than sufficient number of studies relevant to the subject of the influence exerted by the selected aspects of the organisation of mass events upon the security and the satisfaction of participants in them. The research process was conducted in two stages, in the years: 2016 and 2017, on the group of 3,820 participants in Rzeszow Juwenalia. In the publication, it was attempted as well to verify the research hypotheses enumerated hereinbelow: a presumption that the gender, the attended year of studies, and also attending a given institution of tertiary education, do not exert influence upon the assessments of Rzeszow Juwenalia in the context of the feeling of security of participants, and also the assessment of the actions of services ensuring the security of the event venue by them is adopted; another presumption, that the assessment of Rzeszow Juwenalia in the context of the feeling of security of participants, and also the assessment of the actions of services ensuring the security of the event venue by them, is not, to a significant degree, different in studied periods of time, was adopted as well. The research process which was conducted made it possible to verify the adopted research hypotheses, and also to determine what factors make it possible to grasp the difference between the perception of the selected aspects of the organisation of an event by participants in it.

Keywords: Mass event, Security, Customer service, Quality

1. Introduction

A customer occupies a central position in the management of organisation; this is concern for their satisfaction that results in the introduction of a number of solutions: logistics, marketing, qualitative and of different kinds, the intended function of which is to earn the favour of purchasers for the enterprise (Mandhachitara & Poolthong,

2011; Habek & Wolniak, 2016; Lejda et al., 2017). This is upon the ability of an organisation to acquire new customers, and also to take care of the needs of the current ones, that the future of it in the ever more competitive markets is dependent. In connection with the fact mentioned hereinabove, in the literature of the subject it is possible to effortlessly come across the opinions of authors claiming that efficient

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customer service is a crucial area of management for virtually each and every organisation (Hess Jr et al., 2003; Innis & La Londe, 1994; Taylor & Baker, 1994). Therefore, it is possible to ascertain that the position of an organisation in the market is determined by the degree of accommodating the requirements of a customer that is the ultimate judge deciding about the level of quality of products, and of services (Taylor & Baker, 1994).

Customers consciously search for products which accommodate their needs to the greatest possible degree. In the highlycompetitive market, customers have the possibility of comparing the offers of particular organisations, and of choosing the one most attractive for them (Liang, 2010). Prior to the moment when a customer makes a decision on purchase, he or she conduct the qualitative analysis of the available offers, and chooses the one which accommodates his or her expectations to the greatest degree. The representatives of an organisation have to, therefore, conduct a cyclical research into the needs and peferences of customers (Fonseca et al., 2017), and, upon that basis, to perfect the aspects which are particularly significant for them. The research into the market, and also the analysis of the acquired information, makes it possible to determine who individuals purchasing certain products are, and what exerts influence upon the decision taken by them (Terpstra et al., 2014). It is equally important to define a consumer and to determine the kind of products and of services which attract the greatest interest of the consumers in question (Santouridis & Veraki, 2017). Manufacturers search for the answer to the following question: what ought to be done in order to make a product highly valuable for customers? They ponder over the question how to encourage customers to choose offered products, and how to exert influence upon the attitudes and behaviours of these customers. Entrepreneurs are aware of the fact that the effectiveness of their actions is dependent, more than upon anything else,

upon the precise identification of the needs of customers, and the skillful adjustment of their trading offer to the needs in question (Yoshida et al., 2013). It is for that very reason that companies devote more and more time to search for information about purchasers, and also to conducting numerous studies within that scope (Nicolao et al., 2009). It makes the issues connected with extensively-understood customer service become indispensable, and means that these issues have to be researched cyclically (Homburg et al., 2006).

In accordance with the opinion of the authors of this publication, issues connected with customer service in manufacturing and service enterprises are extensively studied and discussed, however, there is not a sufficient amount of research into the subject of the aspects exerting influence upon the satisfaction of a customer with comparatively specific product, namely with mass events. In connection with the fact hereinabove. mentioned the principal objective of this dissertation is to analyse and assess the selected aspects of conducting mass events in the aspect of the influence exerted by them upon the security and the satisfaction of customers. In accordance with the opinion of the authors, this dissertation will, to a degree, eliminate a gap in the studied realm, and will be an impulse for a more extensive discussion on the subject of perfecting the selected aspects of the organisation of mass events.

2. Profile of the analysed mass event, and also of the aspects exerting influence upon the security of it

In our times; increase in the popularity of mass events is observed. In accordance with the data of the General Police Headquarters (2013; 2015), the quantity of registered mass events in Poland in the year 2013 amounted to 6,906, and; in turn; in the year 2016 to 7,562. In this dissertation, the mass event



constituted by Rzeszow Juwenalia was subjected to analysis.

Rzeszow Juwenalia, regadless of the fact that they are not regulated by the Act on Mass Event Security, constitute a perfect instance of such an event. This is the largest students event organised in the South-East of Poland. For the organisers, the largest logistics undertaking is constituted by the Great Concert Final, which is organised on the campus of Ignacy Łukasiewicz Memorial Rzeszow University of Technology each and every year. The three days of concerts on two principal stages, intertwined with competitions, and also with numerous attractions, make more than 25 thousand of participants attend the event venue every single day. The token of recognition of the event was the fact that it won (in the year 2014) the title of ProJuvenes in the plebiscite of Gala of Students Awards organised by the Parliament of Students of the Republic of Poland. Such an enormous event requires an appropriate logistic approach in each and every realm of the project constituted by it, and also the one which is particularly painstaking in terms of the aspects exerting influence upon the satisfaction and the security of participants in it (Berridge, 2012).

It ought to be emphasised that mass events are a very specific product (Kruger & Saayman, 2017), and conducting them effectively requires identifying perfecting the aspects exerting a particularly significant influence upon customer satisfaction (Drengner et al., 2010; Geus et al., 2016), and also customer loyalty (Yuan & Jang, 2008; Black, 2016). In accordance with the opinion of the authors of this dissertation. apart from the aspects connected with the choice of a venue, and also with the repertoire of the event (Vinnicombe & Sou, 2017), what becomes particularly important, is the aspects connected with extensively interpreted security. It goes without saying that the aspect of security has been becoming more and more significant in the recent years, and quite frequently it determines whether a decision taken is that to participate in a mass event (Hajduczenia et al., 2011). The notion of security itself is quite a complicated one, and it is possible to be defined as an objective state of the matters consisting in the absence of a danger, felt subjectively by individuals or by groups; as the subject of research, it is multi-dimensional in character, and is something more than the sum of dangers (Taylor & Toohey, 2005). Taking under consideration the issues mentioned hereinabove, it is possible to ascertain that numerous factors exert influence upon the feeling of the security of the analysed mass event (Getz, 2010); it is possible to include the following into the group of the more important ones:

> the work of information services, and also of the protection ones: the principal objective of the representatives of these groups is to conduct actions in order to ensure the security of participants in the event, and also to provide them with the information which is indispensable to comply with the organisational guidelines set forth by the rules and regulations. These services ought to be appropriately trained. and also be in possession of profound a knowledge indispensable for the purpose of informing participants, among others, about facilities and requirements within the scope of security, choice of the locations of medical, sanitary and catering stations, and also the requirements of the organisers of an event. The services discussed here responsible as well for ensuring the safe and comfortable leaving and entering the event venue, and also preventing those not authorised to enter from doing it. The research conducted bv Zomer collaborators (Zomer et al., 2015) gives rise to the conclusion that the



- quality of work, and also the professional attitude of information services, and the protection ones, are of a significant importance for the the feeling of security and comfort of participants in an event.
- Medical security: this is without any doubts an aspect which has a crucial role in the feeling of security of participants in mass events. (Brinsfield & Mitchell Jr, 2015; Buehler et al., 2017). Mass events require preparing medical security, functioning independently of the medical rescue system. Ensuring the appropriate quantity of and location of medical assistance on the event venue provides the possibility of undertaking a rapid intervention at the very moment of arising a danger to the life and health of participants (Woźniak & Fill, 2017). In accordance with Polish legal regulations, regardless of the kind of a mass event, the actions of medical services in the course of the event are connected organising at least: permanent medical station, medical ambulance on duty, and also foot patrols, the task of which is to move amongst participants in an event.
- The location of a mass event and the technical condition of the infrastructure: from the point of view of logistics, the choice of the location of an event is one of the most important issues (Johansson & Kociatkiewicz, 2011), which exert influence upon security (Anzengruber et al., 2013), and also upon the success of the conducted undertaking. The location of an event has to fulfill all legal requirements, and also be prepared for accommodating an audience of several thousand. To attain the objective of facilitating access, the

event ought to be organised in the best possible venue making it possible to ensure an unobstructed access route. The event venue ought to be equipped with an appropriate infrastructure, which ought to be, first and foremost; include: access to the mass media, a hardened subgrade (in the case of opadów atmosferycznych, it is far more comfortable for participants to walk on a hard surface: furthermore, a hardened subgrade, to a significant degree, facilitates logistics instance. procedures. like. for stage, setting up a or transportation of heavy equipment), the capacity of access routes, and the evacuation ones, fencing the area of an event, and dividing it into zones, the lighting of the area of an event, accommodation facilities, and also the accessibility of parking space.

3. Objective of the dissertation, formulated hypotheses and the course of the research process

The principal objective of the dissertation is to determine the degree of the satisfaction of participants in a selected mass event with its security, and also to research how particular aspects of an event exerting influence upon the feeling of security are assessed by participants.

In the publication, it was attempted as well to verify the research hypotheses enumerated hereinbelow:

 following presumption was adopted: that the gender, the attended year of studies, and also being a student of a particular institution of tertiary education, does not exert influence upon the assessment of Rzeszow Juwenalia in the context of the feeling of security of participants, nor upon



- their assessment of the actions of services ensuring the security of the event venue;
- following presumption was adopted: that the assessment of Rzeszow Juwenalia in the context of the feeling of security of participants, and also that of their assessment of the actions of services ensuring the security of the event venue, does not differ, to a significant degree, in the studied periods of time.

Striving to fulfill the adopted objectives, and also to verify the formulated hypotheses, in the years 2016-2017, a survey was conducted; in that, as a research tool, a questionnaire made available with the application of the CAWI (Computer Assisted Web Interviews) method was taken The survey included advantage of. participants in Rzeszow Juwenalia organised in the years: 2015 and 2016. The surveys were made available after the event had been held. The questionnaire was published on the web site of the Self-Government of the of Rzeszow University Students Technology. Further information was placed in the USOSweb system of Rzeszow University of Technology, and also on the social portal, namely Facebook (Rzeszow Juwenalia). Support in the promotion of the survey was provided as well by the Faculty of Management of Rzeszow University of Technology, the Self-Government Candidates for Doctoral Degree of Rzeszow of Technology, University and Studentskie Koło Naukowe Komunikacji Marketingowej.

The respondents were requested to answer the questions enumerated hereinbelow:

- Do you feel safe in the course of the event on the area of the campus?
- How do you assess the quality of medical security in the course of the event?
- How do you assess the work of information services in the course

- of the event?
- How do you assess the work of security staff members in the course of the event?
- In accordance with your opinion, is the quantity of security staff members, and also of the information services ones, sufficient?

In the questionnaire, a form footer was included as well; in that, the respondents were requested to provide information about their gender, the attended institution of tertiary education, and also the year of studies which they were attending.

The questions relevant to the feeling of security, and also the assessment of the actions of particular services ensuring the security of the event venue, drawn up upon the basis of the five-point Likert scale, in which the digit '1' was referring to a very negative assessment, whereas the digit '5' a very good one. In the answer to the question relevant to the satisfaction of participants with the quantity of the protection services, and the information ones, the respondents were able to select out of the set enumerated hereinbelow: an less than sufficient quantity of security staff; an less than sufficient quantity of information services; an less than sufficient quantity of security staff members, and also of the information services ones; the quantity of security staff members, and also those of the information services ones, is sufficient. For the purpose of the analysis of data, the STATISTICA 12 programme was taken advantage of. In the statistical analysis, first and foremost, the contingency tabls, which demonstrated both the numerical collation as well the percentage share one of particular answers, were used. To attain the objective of the verification of the hypothesis, the Mann-Whitney U test, the chi-square Pearson test, and also the Kruskal-Wallis ANOVA test by ranks, were taken advantage of. All the developed results were presented in the graphic form.



In accordance with the opinion of the authors, the results of research may be taken advantage of practically, and they will be constituting a valuable source of information for all the organisers of mass events.

4. Profile of participants in research

The research were conducted in the years: 2016 and 2017. The first stage of the research included 2,300 individuals, who constituted 60% of the studied. In turn, at the second stage, 1,520 participants were studied; that number constituted 40% of the studied. The percentage shares of females and males in both of the groups was similar, whereas the number of the studied females was slightly larger.

In the aftermath of the analysis of the data presented in Figure 1 and Figure 2, it is possible to ascertain that the students of the second and third years of studies participate in Juwenalia far more frequently. They constitute slightly more than 55% of the respondents. Some of the individuals did not indicate the studies, and they were not included in the chart. That number amounted to 259 (11%) in the year 2015, and also to 153 (10%) in the year 2016. These are individuals that, most likely, do not belong to the community of students (individuals that had completed their academic education, or had not commenced it yet).

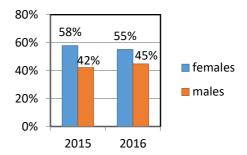


Figure 1. Percentage share of females and males in a survey in the years: 2016 and 2017

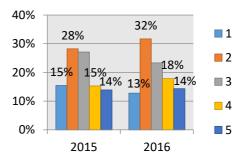


Figure 2. Percentage share of the respondents divided by the attended year of studies in the years: 2016 and 2017

In Figure 3, a distribution of the studied respondents was presented whilst taking under consideration the institution of tertiary education which is represented by them.

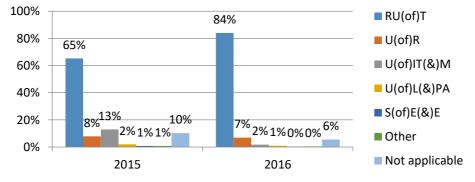


Figure 3. Institution of tertiary education which was represented by participants in Juwenalia in the years: 2015 and 2016



In the aftermath of the analysis in Figure 3, it was ascertained that the largest percentage of constituted participants was individuals from Rzeszow University of Technology. In the year 2016, they constituted 65% of the studied group, whereas a year after that the percentage increased to 84%. A significant percentage was that constituted by the individuals studying at Uniwersytecie Rzeszowskim, and also at the University of Information Technology and Management. In the group of other institutions of tertiary education, there were individuals that had come from the institutions of tertiary education situated elsewhere than in Rzeszow, for instance: Warsaw University of Technology, Kielce University of Technology, University of Technology, SHSs(of)T(&)E in Jarosław, Krosno and Tarnów, University of Warsaw. University of Wrocław, University of Silesia, Cracow University of Economics in Cracow, and there were also individuals studying at CUL, US(&)T and MCSU.

5. Analysis of the obtained results of research

5.1. Assessment of the feeling of security, and also of the analysis of satisfaction of participants in Rzeszow Juwenalia with the actions of services ensuring the security of the event venue.

In this sub-chapter, the results of research relevant to the feeling of security of participants in Rzeszow Juwenalia, and also the degree of their satisfaction with the actions of services ensuring the security of the event venue, were presented. The opinions of participants in an event on the following subjects:

- the assessment of the feeling of security in the course of the event on the area of the campus,
- the assessment of the quality of medical security in the course of the event,

- the assessment of the work of information services in the course of the event.
- the assessment of the work of security staff members in the course of the event,
- whether the quantity of security staff members, and also of the information services ones, was sufficient, were verified.

The opinions of the studied respondents were presented with the division by the years in which they were studied, and verified also in the aspect of being, to a significant degree, different in the two studied periods of time. The research was conducted at the level of significance of α =0.05. For the analysis, the following tests were taken advantage of: U Mann-Whitney, and also the chi-square Pearson test. In the aftermath of the analysis of the data contained in Figure 4 and Figure 5, it was ascertained that the assessment of the feeling of security in the course of the event on the area of the campus had improved in comparison with the previous research, and that $p < \alpha$ (p=0.0000), not unlike the assessment of the quality of medical security in the course of the event $(p<\alpha (p=0.0000))$. In the year 2016, the assessment improved. Similar tendencies in the assessment of respondents were disclosed by a test with reference to the assessment of the work of information services in the course of the event (p< α (p=0.0032)), and also the assessment of the work of security staff members in the course of the event, namely p< α (p=0.0047). The assessment in the year 2016 was higher. The increase in the feeling of security might have been caused by the influence exerted by the fact that the organisers, thanks to their experience, introduce improvements each and every year, and that the objective of these actions is to improve security, and also the satisfaction, of participants in an event. One of such actions was increasing the capacity of the entrance gates by means of widening entrances, and also the quantity, of the gates in question.



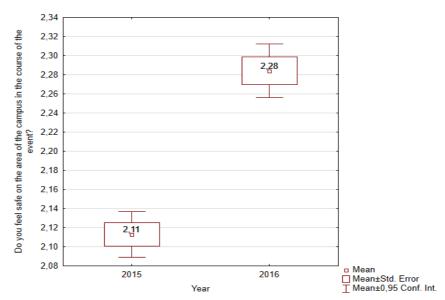


Figure 4. Assessment of security in the course of the event on the area of the campus in the years: 2015 and 2016

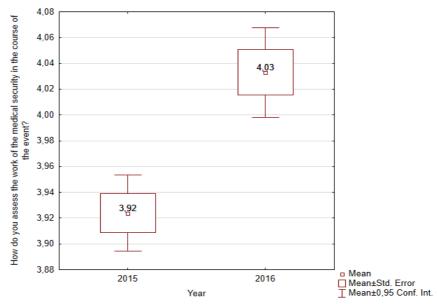


Figure 5. Assessment of the quality of medical security in the course of the event

In Figure 6 and Figure 7, the answers of the respondents relevant to the assessments of the work of information services, and also of the protection ones, were presented.

In the course of making a review of the

distribution of answers, it is possible to observe a slight increase in the satisfactions of participants in an event with the work of the analysed services. That might result might from the fact that the organiser of the



event made a particular effort to ensure training all services, and also presenting typical problems with which they may be struggling in the course of the event to them.

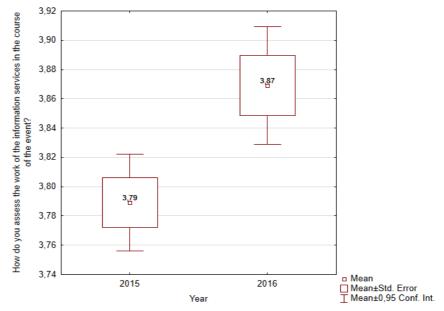


Figure 6. Assessment of the work of information services in the course of the event in the years: 2015 and 2016

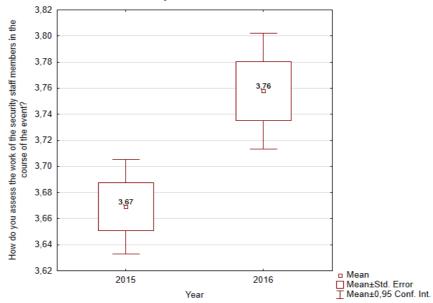


Figure 7. Assessment of the work of security staff members in the course of the event in the years: 2015 and 2016



The positive assessment of the work of the representatives of protection services, and also of the information ones, might have resulted as well from the fact that the majority of participants in an event were satisfactied with the quantity of the representing given individuals services (Table 1).

The opinion on the subject of the quantity of

security staff members, and the information services ones, was very similar in the studied periods of time. Research did not manifest significant differences, with p> α (p=0.6945). The majority of participants (approximately 60%) are of the opinion that the quantity of the security staff members, and also of the information services ones, is sufficient.

Table 1. Assessment of the quantity of security staff members, and also of the information

services ones, in the years: 2015 and 2016

	Less than sufficient quantity Of security staff members	Less than sufficient quantity Of information services	Less than sufficient quantity of security staff members, and also of the information services ones	Quantity of security staff members, and also of the information services ones,in sufficient
2015	18%	10%	14%	58%
2016	17%	9%	14%	59%

5.2. Conclusions from the conducted research, and also the verification of the formulated hypothesis

5.2.1. Gender

It was studied whether the gender of participants exerted influence upon the assessment of the security of Juwenalia. The conducted research gave rise to the

conclusion that gender makes it possible to the difference between assessment of both in the year 2015 and in the year 2016 alike in the case of the assessment of security in the course of the event on the area of the campus, and also the assessment of the work of security staff members in the course of the event (Table

Table 2. Results of research relevant to the influence exerted by gender upon the assessment of the security of Juwenalia in the years: 2015 and 2016

	2015	2016
	p	
Assessment of the feeling of security in the course of the event on the area of the campus	0.0299	0.0485
Assessment of the quality of medical security in the course of the event,	0.8979	0.6041
Assessment of the work of information services in the course of the event,	0.2234	0.4764
Assessment of the work of security staff members in the course of the event	0.0000	0.0002
Assessment of the fact whether the quantity of security staff members, and also that of the information services, was sufficient.	0.4333	0.7211

The assessment of the feeling of security in the course of the event on the area of the is campus dependent upon gender. Differences in the assessments observed both in the year 2015, in the case of which p< α amounted to p=0.0299, and in



the year 2016, in the case of which $p<\alpha$ amounted to p=0.0485. Figure 8 makes it possible to decode that, generally, assessment in the year 2016 increased both

in the groups of females and males alike. It was definitely higher in the group of males (in the course of the event, males feel safer than females do).

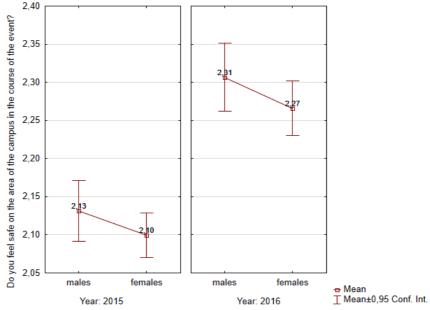


Figure 8. Assessment of security in the course of the event divided by gender in the years: 2015 and 2016

Assessment of the quality of medical security in the course of the event, and also the assessment of the work of information services in the course of the event, is not dependent upon gender. Females and males in both of the studied periods of time assess these at a similar level. However, they assess medical security more favourably than the provision of information. Assessment of the work of security staff members in the course of the event shows a lot of diversification according to gender, both in the year 2015, in the case of which $p < \alpha$ amounted to p=0.0000, and also in the year 2016, in the case of which p< α amounted to p=0.0002. The work of the security staff members in both of the studied periods of time alike is assessed more favourably by females than it is by males (Figure 9).

The differences of the opinions on the question whether the quantity of security staff members, and also of the information services ones, was sufficient, are dependent upon gender solely in the case of the year 2015. Females assess access to information, and also the quantity of security staff members, more favourably. Males more frequently referred to the fact that the quantity of security staff members, and those of the information services ones, was less than sufficient. Generally, however, the level of satisfaction of participants was high because approximately 60% were of the opinion that the provision of information and the quantity of security staff members were sufficient (Figure 10).



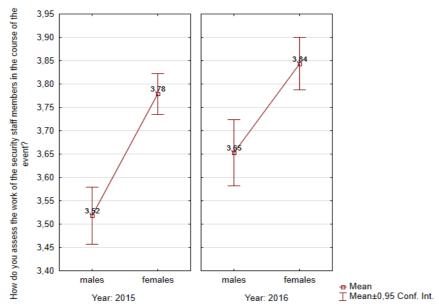


Figure 9. Assessment of the work of security staff members in the course of the event in the years: 2015 and 2016

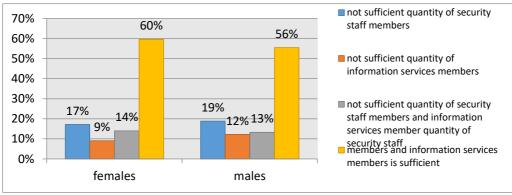


Figure 10. Opinion of females and males on the subject of the quantity of security staff members, and also of the information services ones, in the year 2015

5.2.2. The attended year of studies

The year of studies attended by respondents exerted influence upon the assessment of the organisation of Juwenalia. The research gives rise to the conclusion that the year of studies of participants in the event did not exert influence upon the assessment of the area of an event in the aspect of the assessment

of quality of medical security in the course of the event, and also of the fact whether the quantity of security staff members, and also of the information services ones, was sufficient. In each and every case, test probability p in the studied years was higher than the level of significance $\alpha=0.05$ adopted for the purpose of research (Table 3).



Table 3. Results of research relevant to the influence of studies on the assessment of security of Juwenalia in the years: 2015 and 2016

of Juwenana in the years. 2015 and 2010					
	2015	2016			
	p				
Assessment of the feeling of security in the course of the event on the area of the campus	0.0171	0.4588			
Assessment of the quality of medical security in the course of the event	0,2374	0.4018			
Assessment of the work of information services in the course of the event	0.0094	0,5482			
Assessment of the work of security staff members in the course of the event	0.0000	0.0429			
Assessment of the fact whether the quantity of security staff members, and also the information services ones, was sufficient.	0.4333	0.7211			

In the year 2015, research demonstrated differences in the assessment of the feeling of security on the area of the campus in the course of the event (p< α (p=0.0171)), and also in the assessment of the work of information services in the course of the event (p< α (p=0.0094)). Security on the area

of the campus is most favourably assessed by the students of the second year, whereas least favourably by those that have solely just commenced education (and that means, the students of the first year), and also the remaining individuals (Figure 11).

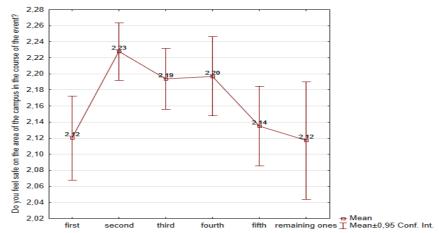


Figure 11. Assessment of security on the area of the campus in the course of the event in the year 2015

In turn, the most favourable assessment of information services was that by the students of the fourth year, and the least favourable by the remaining ones (and that means: those that do not attend the institutions of tertiary education, or either have not commenced tertiary education yet, or have already completed it) (Figure 12).



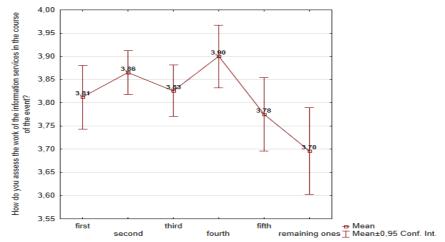


Figure 12. Assessment of the work of information services in the course of the event in the year 2015

The research demonstrated that there occurred statistically - significant differences in the assessment of the work of security staff members in the studied periods of time. Figure 13 makes it possible to observe that the work of security staff members was assessed much more favourably in the year 2016. The most favourable assessment in the year 2015 in the aspect of the work of

security staff members was that by the students of the second year, and the least favourable was that by the students of the fifth year, whereas in the year 2016 the most favourable assessment was that by the students of the first and third years, whereas the least favourable one by the students of the fifth year.

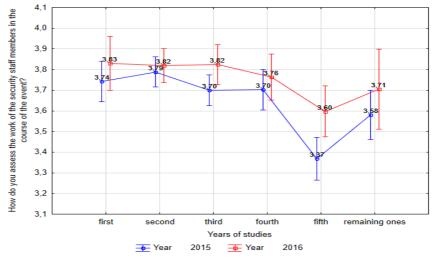


Figure 13. Assessment of the work of security staff members in the course of eventsy in the years: 2015 and 2016



5.2.3. Attendance of the institution of tertiary education

It was verified whether the institution of tertiary education at which the respondents studied exerted influence upon the assessment of the organisation of Juwenalia (Table 4). In this category, the differences were observed in numerous dimensions.

Table 4. Results of research relevant to the influence of the kind of the institution of tertiary education on the assessment of security Juwenalia in the years: 2015 and 2016

	2015	2016
	p	
Assessment of security in the course of the event on the area of the campus	0.0000	0.0060
Assessment of the quality of medical security in the course of the event	0.0000	0,6372
Assessment of the work of information services in the course of the event	0.0000	0.0061
Assessment of the work of security staff members in the course of the event	0.0339	0.0099
Assessment tego czy quantity of security staff members, and also the information		
services ones, was sufficient.	0.0015	0.4744

Those most satisfied with fulfilling the conditions of security both in the year 2015 and 2016 alike are the students at Rzeszow University of Technology, and the least satisfied were those from other institutions of tertiary education.

The assessment of security on the area of the

campus was fluctuating (it increased in the year 2016). The individuals studying at Rzeszow University of Technology felt safest, whereas those from other institutions of tertiary education felt least safe (Figure 14).

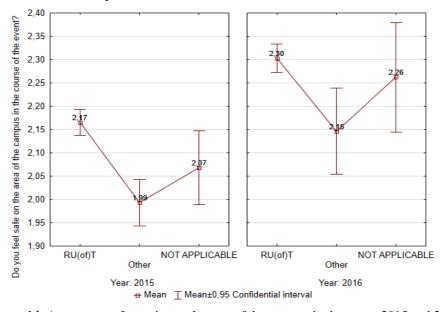


Figure 14. Assessment of security on the area of the campus in the years: 2015 and 2016



In the year 2015, all area, namely the assessment of medical security, the work of information services, and also of the protection ones, were most favourably assessed by individuals studying at Rzeszow University of Technology, whereas least favourably by the individuals that were included into the category 'not applicable',

and, therefore, those that do not yet study, or have completed their studies already. In the year 2016, it was no different: the most favourable assessment of that realm was that by the students of Rzeszow University of Technology, but the least favourable one by individuals studying at other institutions of tertiary education (Figure 15).

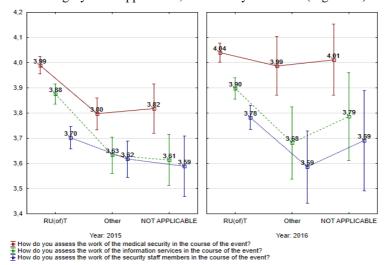


Figure 15. Assessment of medical security, the work of information services, and also the protection ones, in the years: 2015 and 2016

In the case of the last realm which was assessed by the respondents, and that means, the sufficient number of members of the services mentioned hereinabove, the research demonstrated differences in the assessments

solely in the year 2015. The highest level of satisfaction with the quantity of services was that of the students of Rzeszow University of Technology (Figure 16).

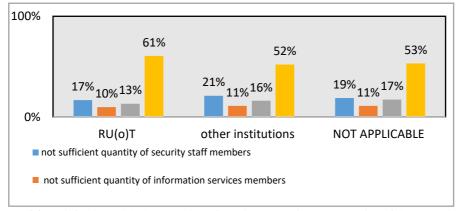


Figure 16. Satisfaction with the quantity of services ensuring the security of the event in the year 2015 divided by the institution of tertiary education represented by participants



6. Limitations and the further directions of research

There are three principal limitations in the research presented in this publication:

- The first limitation is the fact that the research was conducted solely on participants in a single mass event in a single country, in which particular legal provisions are in force. Therefore, it does not give a reason to accept the acquired results as valid and relevant without restrictions to other countries of Europe.
- A further limitation results from the specific character of Juwenalia, which is an event dedicated, principally, to students, who are quite specific customers, and requirements and needs of whom are different than those of other groups of society.
- It is possible to include into the group of limitations as well the fact that Rzeszow Juwenalia is an otwartą event, in which the identity of participants is not verified, which, in turn, means that reaching all the groups in virtually not possible.

Regadless of the limitations which are succinctly referred to hereinabove, the authors hope that the presented results of research will be found useful for the organisers of various mass events in the context of perfecting the aspects connected with ensuring security for participants in an event. In the nearest future, the authors plan to continue their research into the security of mass events on a broader scale, and compare them with that relevant to another mass event, in the case of which the group of participants will be more diversified.

7. Conclusion

The process of the organisation of mass events in very complicated and timeconsuming. The appropriate conduct of it requires a comperehensive acquintanceship with the tastes and expectations of customers, flexibility, and also skillfulness in responding to difficulties occurring in the course of the event (Yürük et al. 2017). In connection with that fact, organisers ought to make all kinds of efforts in order to improve the standards of the quality offered services, and also conduct a permanent measurement of the satisfaction of customers. The considerations contained in this paper give rise to the conclusion that the organisers of mass events ought to, in particular, concentrate upon maximising the feeling of security of participants in an event. The issue of the feeling of security is quite a complicated and subjective one, however, upon the basis of the research process it was ascertained that:

- assessment of the feeling of security in the course of the event has improved (it increased in comparison with the previous state of the matters), and so did the assessment of the work of information services, and also of security staff members (which are also better nowadays),
- genders make it possible to grasp the difference (exert influence upon) between the assessment of the feeling of security, and also the work of the security staff; males assess the security better than females do, whereas the latter ones assess access to information, and also quantity of security staff members, more positively than the former.
- The attended year of studies it exerted influence upon, in two studied periods of time, the assessment of the work of security staff; the further year of studies, the



less favourable this assessment was. Only in the year 2015 did the research demonstrate a difference in the assessment of the feeling of security and assessment of information services. Generally, it is possible to ascertain that the nearer one is to graduation, the less favourable their assessment is.

 Kind of the institution of tertiary education – it resulted in diversified opinions on the subject of the assessment of security. The most favourable assessment was received by particular realms from participants studying at Rzeszow University of Technology.

The research process, and also conclusions formulated upon the basis of it, make it possible to reject the adopted research hypotheses, and to ascertain that both gender and the attended year of studies, and also the kind of the institution of tertiary education, make it possible to grasp the differences between the opinions of the studied participants. What changed as well was the assessment of the feeling of security, which is different in the two studied periods of time (it has improved).

References:

- Anzengruber, B., Pianini, D., Nieminen, J., & Ferscha, A. (2013, November). Predicting social density in mass events to prevent crowd disasters. *In International Conference on Social Informatics* (pp. 206-215). Springer, Cham.
- Berridge, G. (2012). Event experience: A case study of differences between the way in which organizers plan an event experience and the way in which guests receive the experience. *Journal of Park and Recreation Administration*, 30(3), 7-23.
- Black, N. (2016). Festival connections: How consistent and innovative connections enable small-scale rural festivals to contribute to socially sustainable communities. *International Journal of Event and Festival Management*, 7(3), 172-187.
- Buehler, J. W., Caum, J., & Alles, S. J. (2017). Public Health and the Pope's Visit to Philadelphia, 2015. *Health security*, 15(5), 548-558.
- Drengner, J., Jahn, S., & Gaus, H. (2010). Events and loyalty formation: the role of satisfaction, felt community, emotional experience, and frequency of use. In Zanger, C. (Ed.) *Stand und Perspektiven der Eventforschung*, Wiesbaden, (pp.151-165).
- Fonseca, L. M., Domingues, J. P., & Sá, J. D. G. (2017). Leading Quality in the 21st Century: Profiles of Quality and Organizational Excellence Managers. *Quality-Access to Success*, 18(161), 34-38.
- Getz, D. (2010). The nature and scope of festival studies. *International Journal of Event Management Research*, 5(1), 1-47.
- Geus, S. D., Richards, G., & Toepoel, V. (2016). Conceptualisation and operationalisation of event and festival experiences: creation of an event experience scale. *Scandinavian Journal of Hospitality and Tourism*, 16(3), 274-296
- Hąbek, P., & Wolniak, R. (2016). Assessing the quality of corporate social responsibility reports: the case of reporting practices in selected European Union member states. *Quality & Quantity*, 50(1), 399-420.
- Hajduczenia, J., Kleszczyński, J., & Braksator, M. (2011). Przystanek Woodstock 2009 and 2010 danger to life and health and medical security of mass event. *Wiadomosci lekarskie*, 64(2), 97-103.

International Journal for Quality Research



- Hess Jr, R. L., Ganesan, S., & Klein, N. M. (2003). Service failure and recovery: the impact of relationship factors on customer satisfaction. *Journal of the Academy of Marketing Science*, 31(2), 127-145.
- Homburg, C., Koschate, N., & Hoyer, W. D. (2006). The role of cognition and affect in the formation of customer satisfaction: a dynamic perspective. *Journal of Marketing*, 70(3), 21-31.
- Johansson, M., & Kociatkiewicz, J. (2011). City festivals: creativity and control in staged urban experiences. *European Urban and Regional Studies*, 18(4), 392-405.
- Kruger, M., & Saayman, M. (2017). Segmenting beyond behavioural intentions: Fine tuning music festival visitors' music appreciation. *International Journal of Event and Festival Management*, 8(2), 204-223.
- Lejda, K., Mądziel, M., Siedlecka, S., & Zielińska, E. (2017). The future of public transport in light of solutions for sustainable transport development. *Scientific Journal of Silesian University of Technology. Series Transport*, 95, 97-108.
- Liang, G. S. (2010). Applying fuzzy quality function deployment to identify service management requirements for customer quality needs. *Quality & Quantity*, 44(1), 47-57.
- Mandhachitara, R., & Poolthong, Y. (2011). A model of customer loyalty and corporate social responsibility. *Journal of Services Marketing*, 25(2), 122-133.
- Nicolao, L., Irwin, J. R., & Goodman, J. K. (2009). Happiness for sale: do experiential purchases make consumers happier than material purchases? *Journal of Consumer Research*, 36(2), 188-198.
- Santouridis, I., & Veraki, A. (2017). Customer relationship management and customer satisfaction: the mediating role of relationship quality. *Total Quality Management & Business Excellence*, 28(9-10), 1122-1133.
- Taylor, S. A., & Baker, T. L. (1994). An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. *Journal of retailing*, 70(2), 163-178.
- Taylor, T., & Toohey, K. (2005). Impacts of terrorism-related safety and security measures at a major sport event. *Event Management*, *9*(4), 199-209.
- Terpstra, M., Kuijlen, T., & Sijtsma, K. (2014). How to develop a customer satisfaction scale with optimal construct validity. *Quality & Quantity*, 48(5), 2719-2737.
- Vinnicombe, T., & Sou, P. U. J. (2017). Socialization or genre appreciation: the motives of music festival participants. *International Journal of Event and Festival Management*, 8(3), 274-291.
- Woźniak J., & Fill K. (2017). Influence of acquaintanceship with a mass event rules and regulations on the perception of the selected aspects of safety by participants, *Modern Management Review*, 22, 24(3), 209-222.
- Yoshida, M., James, J. D., & Cronin, J. J. (2013). Sport event innovativeness: Conceptualization, measurement, and its impact on consumer behavior. *Sport Management Review*, *16*(1), 68-84.
- Yuan, J., & Jang, S. (2008). The effects of quality and satisfaction on awareness and behavioral intentions: Exploring the role of a wine festival. *Journal of Travel Research*, 46(3), 279-288.
- Yürük, P., Akyol, A., & Şimşek, G. G. (2017). Analyzing the effects of social impacts of events on satisfaction and loyalty. *Tourism Management*, 60, 367-378.

Zomer, L. B., Daamen, W., Meijer, S., & Hoogendoorn, S. P. (2015). Managing crowds: The possibilities and limitations of crowd information during urban mass events. *In Planning Support Systems and Smart Cities* (pp. 77-97).

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