

RISK MANAGEMENT IN ROMANIAN AQUATIC FACILITIES

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ABSTRACT. An effective risk management strategy in aquatic facilities includes preventive measures that should be designed and implemented to improve safety and customer satisfaction. The objective of this study is to evaluate how Romanian aquatic and recreation facilities give importance to customer satisfaction and to risk management, establishing correlations between the existing study variables and identifying the way certain variables influence each other. We can assert that there are concerns about risk management within aquatic facilities and the number of safety measures is reduced in Romanian aquatic facilities, therefore we believe customer satisfaction could be improved primarily by the safety provided within the aquatic facilities.

Keywords: *sports and recreational aquatic facility, risk management, swimming pools, safety measures, customer satisfaction.*

REZUMAT. Managementul riscului în bazele acvatice sportive și de recreere din România. O strategie eficientă de gestionare a riscurilor în bazele acvatice sportive și de recreere, include măsuri preventive care ar trebui proiectate și implementate pentru a îmbunătăți siguranța și satisfacția clienților. Obiectivul acestui studiu este de a evalua modul în care bazele acvatice sportive și de recreere din România acordă importanță satisfacției clienților și managementului riscurilor, stabilirea corelațiilor existente între variabilele studiului și determinarea modului în care unele variabile le influențează pe altele. Putem afirma că există îngrijorări cu privire la gestionarea riscurilor în cadrul bazelor acvatice studiate, iar numărul de măsuri de siguranță este mult redus în cadrul acestora, de aceea considerăm că satisfacția clienților ar putea fi îmbunătățită în primul rând prin siguranța oferită în cadrul bazelor acvatice sportive și de recreere din România.

Cuvinte-cheie: *baze acvatice sportive și de recreere, managementul riscului, bazine de înot, măsuri de siguranță, satisfacția clienților.*

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Introduction

Sport facility managers must evaluate each event from its security risk point of view, taking into consideration not only the athlete's profile, but also the profile of the attending public and the anticipated media coverage. An important management strategy, in such situations, is represented by the elaboration and use of the crowd management plan. Such plan comprises the categorization of the type of event, knowing the surrounding structures and environment, the rivalries between different sports teams, the violence threats, the size of the crowd and the seating configuration; involving the security staff and the existence of an emergency plan (Sawyer, 2010).

Since, according to our knowledge in Romanian sports literature, there is no definition of sports and recreational aquatic facilities, we have proposed the following definition: sports and recreational aquatic facilities are those indoor and outdoor structures, that are including competitive swimming pools, public swimming pools, recreation and therapeutic swimming pools, as well as structures built on rivers, lakes, seas, oceans, where competitive, educational and leisure activities are taking place.

An effective risk management plan in aquatic facilities beside client's surveillance includes preventive measures that should be designed and implemented to improve safety and customer satisfaction.

Objectives

The objective of this study is to evaluate how Romanian aquatic and recreation facilities give importance to customer satisfaction and to risk management, establishing the existing correlations between the study variables and the way in which certain variables influence others, as well as establishing the relationships between them.

Materials and Methods

In this study the research was based on questionnaires addressed to 14 Aquatic Managers and 90 clients from the following surveyed aquatic facilities: Complex Natație Universitas and Complex Natație Politehnica from Cluj-Napoca, Bazinul Steaua and Bazinul Grințescu (Floreasca) from Bucharest, Bazinul Ioan Alexandrescu and Bazinul Acoperit Crisul from Oradea, Csiki Csobbano from Miercurea Ciuc, Severus Pool from Zalau, Septimia Wellness&Spa from Odorheiu

Secuiesc, Bazinul Olimpic Delfinul from Arad, Complexul de agrement si sport Mureşul and Piscina Inginer Mircea Birau from Târgu Mureş, Paradisul Acvatic from Braşov and Piscina Select from Satu Mare.

We have introduced in the survey questions where those surveyed had to choose according to their preferences on a scale from one to five for patrons and yes or no to managers (Table 1. and Table 2.). One of the most frequently used scoring scale is the Likert scale, intended for evaluating the attitude of the subjects who express their agreement or disagreement degree regarding a certain topic. The scale has, usually, a set of equal steps for the agreement and the disagreement. The subjects are asked to choose one of the four or five answers, respectively (Norman, 2010).

Table 1. Questionnaire addressed to clients

How satisfied are you with the following?	Very satisfied	Mostly satisfied	Mostly unsatisfied	Very unsatisfied	I don't know
1. General opinion regarding the aquatic facility	1	2	3	4	5
2. Opening hours	1	2	3	4	5
3. Customer service	1	2	3	4	5
4. Cleanliness, hygiene	1	2	3	4	5
5. Quality of water in the pool	1	2	3	4	5
6. Quality of services	1	2	3	4	5
7. Safety	1	2	3	4	5
8. Employees' professionalism	1	2	3	4	5
9. Prices	1	2	3	4	5

Table 2. Questionnaire addressed to Aquatic Managers

Please indicate whether the following statements are true or not at your aquatic facility:	Yes	No
1. Our swimming pools are under constant surveillance by lifeguards	1	2
2. Our swimming pools are set with all the necessary equipment for rescue and first aid	1	2
3. Our aquatic facility is set with AED	1	2
4. The quality of equipment is checked daily for proper functioning	1	2
5. Our aquatic facility provides safe access and water entry equipment for people with disabilities	1	2

6. Our lifeguards are certified in Lifeguarding and CPR, and know the safety procedures in case of accidents	1	2
7. All of our employees know the safety procedures in case of emergency	1	2
8. All of our lifeguards and employees are familiar with safety procedures in case of lightning and other severe weather conditions (outdoor pools)	1	2
9. In our aquatic facility, chemicals and other materials for pool maintenance and hygiene are kept in a closed area and accessed only by authorized persons	1	2
10. Lifeguards/pool managers check and note (display to be visible for customers) the Ph and Cl chemical data of water every 2 hours.	1	2

Documentation is a key component of effective risk management. Unfortunately it is often a weak link in a facility's risk management system. Effective documentation can serve two main risk management objectives: injury prevention and legal defence in the event of an incident. Records provide valuable insights into the day to day operations of the facility. Analysis of these records reveals patterns from which preventive measures can be designed and implemented to improve safety. The records can also provide proof that reasonable efforts were made to identify and reduce or eliminate the risk (Life Saving Society Lifeguarding Experts, 2017).

We believe that it is also essential to establish a national commission for accreditation and safety supervision of aquatic facilities operation (Baloga, 2015).

Results

In order to find out if the risk management through the safety provided influences customer satisfaction, we have used the customer satisfaction index for each aquatic facility and the overall number of safety measures employed within those aquatic facilities. The average number of the safety measures in aquatic facilities in Romania is 5,6 on a significance of $(p)= 0,000$ (ANOVA analysis).

The correlation between the safety measures number and the customer satisfaction index, respectively the correlation between the number of safety measures and the customer satisfaction index regarding the safety provided leads us to the idea that there is an obvious concern regarding the risk management within the aquatic facilities that influences customer satisfaction (Table 3.).

Table 3 a. Correlation between the safety measures number and the customer satisfaction index/ **b.** Correlation between the number of safety measures and the customer satisfaction index regarding the safety provided

a. Correlation between the safety measures number and the customer satisfaction index.	Pearson Correlation (r)	-0,042
	Sig. (2-tailed)	0,885
	N	14
b. Correlation between the number of safety measures and the customer satisfaction index regarding the safety provided.	Pearson Correlation (r)	-0,177
	Sig. (2-tailed)	0,546
	N	14

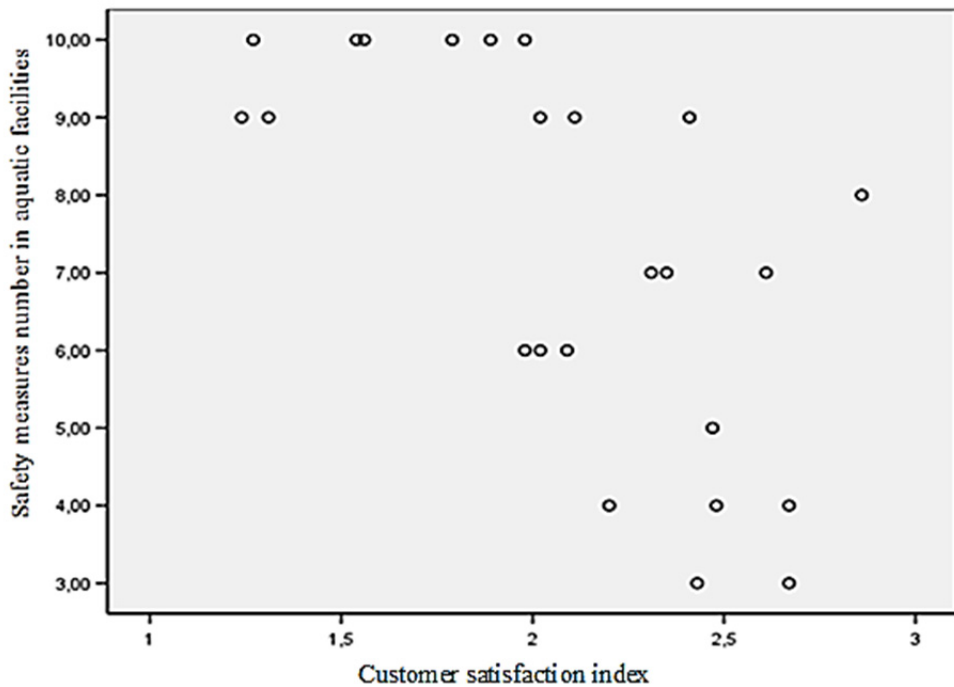


Figure 1. Chart of correlation between the safety measures number and the customer satisfaction index

Conclusions

In conclusion, we can assert that there are concerns about risk management within aquatic facilities that influence customer satisfaction and the number of safety measures is reduced in Romanian aquatic facilities.

Teachers, swim coaches, and aquatics personnel must plan for potential aquatics emergencies, the most serious of which include drowning, near drowning and spinal injuries; these incidents are a substantial source of liability exposure for aquatics organizations and can be very costly (Sawyer, 2010).

Customer satisfaction from the point of view of the safety provided within the aquatic facilities in Romania could be improved by: the acquisition of quality equipment that are suitable for prevention and rescue in case of injury; preparing the personnel by means of various qualification and first aid courses; effective documentation for injury prevention and legal defense in the event of an incident; the installation of aquatic facilities with devices allowing access to the water for people with disabilities; setting up a commission for countrywide aquatic facilities audit operations.

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