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Article

Communication Competencies of Human Resources in Healthcare

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Abstract: The Republic of Serbia has strong potential for spa and healthcare tourism development. One of the key prerequisites for exploiting this potential is the improvement of tourist guiding services, embodied in increasing the number and competencies of tourist guides and tour leaders. The subject of this paper is human resources in healthcare, with a focus on spa destinations. The objectives of the paper are to analyze, within the spa destinations of the Republic of Serbia: (1) the status of the number of tour leaders in terms of their headcount and estimated potential workload, and (2) the communication competencies of tour leaders as a basis for improving the quality of health tourism services. Foreign language proficiency was treated as part of communication competencies. Foreign language proficiency is the basis for attracting a larger number of foreign tourists, as well as for better promotion of public health. Data from the Statistical Office of Serbia were used to form the list of spas and tourist traffic, while the Ministry of Tourism and Youth database provided information on tour leaders. The results showed that it is necessary to improve communication competencies of tour leaders in order to improve the quality of health tourism services.

Keywords: *Human resource management; healthcare; tour leaders; spas; health tourism; communication competencies.*

1. Introduction

Tour guiding and escorting services are among the most significant activities realized through direct contact between the health tourism sector and tourists. Although more attention is devoted to tourist guides in theory and practice, tour escorts also hold an important position in creating the tourist experience. Various terms are often used for tour escorts, including tour escort, leader, attendant, and the like, but the authors of this paper take the view that using "tour leader" is the most appropriate, which is applied in the remainder of the paper.

The attitude of the tour leader towards health tourists has a significant effect on their perception of the trip and trip satisfaction. For example, the likability of the tour leader is linked to tourist behavior [1], just as tour leader playfulness is associated with tourists' delight, interaction, and attachment to them [2]. In accordance with their own characteristics, as well as those of the tourists, and with the goal of achieving the desired effect among tourists, each tour leader applies a specific leadership style. An example of the above is the identification of 12 leadership styles [3]. It is necessary to establish, develop, and maintain cooperation and exchange between the tour leader and group members. Factors that are significant in this context are harmony, trust, concerted effort, respect, information sharing, and tolerance [4].

Among the significant skills that a tour leader should possess are certainly communication skills. When it comes to international tour leaders, 21 communication skills have been identified, including fluency in foreign language [5]. When speaking of language ability, it primarily refers to grammatical accuracy, clarity of expressing opinions, careful choice of words, speaking in an understandable manner, and refraining from using slang [6,7].

There is a difference in the importance of interpretation skills depending on the perspective from which they are observed. For employers, linguistic, professional, and intellectual skills are more important, whereas for tourists, general communication, intercultural, and psychological competencies are of greater importance [8]. It can be stated that employers emphasize expertise, while on the other hand, tourists highlight the importance of communication, cultural awareness, and the personal traits of the escort. It is also important to point out that there is a difference in perceiving the importance of certain communication competencies of tour leaders depending on where the tourists originate from [9].

There is not a large number of papers directly dealing with the work of tour leaders in Serbia [10-12]. The focus is placed more on tourist guides, although adequate attention from scientific researchers has not been devoted to their domain of work either.

Research on tour leaders in Serbia has shown that the majority of respondents choose organized trips due to simplicity, which stems from the fact that the travel agency handles their organization. Significant reasons, present in more than a fifth of the respondents, are also safety and cost-effectiveness. Respondents feel a higher level of security when traveling accompanied by a tour leader, wherein the issue of security is not associated with the age of the tour leader. The majority of respondents view the key role of tour leaders as informative, followed by organizational (31.2%) and entertaining/animative (18.8%). Two-thirds of respondents state that the desired approach to presentation is the constant maintenance of a positive atmosphere, while about a third prefer finding a balance between seriousness and entertainment. The majority want to organize their free time independently, while about a fifth prefer that the tour leader does so. Deciding on visiting an attraction when a recommendation is necessary depends most on trust in the tour leader (41.1%), local population and the Internet (39%), and the tour leader (19.9%) [12].

According to the Law on Tourism of the Republic of Serbia, a tour escort is a natural person who has passed the professional examination for a tour escort and accompanies a tourist group, performing operational and technical duties from the beginning of the journey to the destination and back [13]. Among the basic prerequisites for a person to be a tour escort are [13]:

- Serbian citizenship or citizenship of an EU or EEA (European Economic Area) member state,
- Language proficiency – Serbian and another language (foreign or sign language),
- Education – completed secondary level (4 years),
- Professional examination – passed examination (theoretical – four subjects, among which a foreign language serves as an eliminatory test; and practical), after which the Ministry of Tourism and Youth issues a certificate and an identification card.

It is important to note that "a person in a vehicle who accompanies a tourist group on a tourist trip organized by a foreign tour operator that originates and terminates in a foreign state shall not be considered a tour escort. A tourist guide may perform the duties of a tour escort [13].

It should be emphasized that various problems can arise in the training of tour leaders, such as educational and organizational challenges [14]. Regarding the situation in Serbia, after a candidate passes the psychological assessment, they first take the foreign language examination. The exam is conducted in both written and oral forms. If the candidate fails it, they cannot proceed to take the remaining exams. There is no possibility of a retake in the same year. One foreign language must be taken regardless of the candidate's educational background; however, after passing the professional examination for a tour leader, an individual has the option to have additional languages recorded on various grounds, for which appropriate proof must be submitted [15]. The above merely confirms how significant foreign language proficiency is in the work of tour leaders.

When speaking of the Republic of Serbia, it is essential to emphasize the importance that health tourism holds within the overall tourism offer, with spa tourism standing out as one of its most

significant elements [16,17]. The subject of this paper is human resources in healthcare, with a focus on spa destinations. The objectives of the paper are to analyze, within the spa destinations of the Republic of Serbia:

- The status of the number of tour leaders in terms of their headcount and estimated potential workload, and
- The communication competencies of tour leaders as a basis for improving the quality of health tourism services. Foreign language proficiency was considered as an element of communication competencies.

2. Materials and Methods

The research consisted of several stages. The research phases are illustrated in Figure 1.

Figure 1. Research phases.

First, a list of spas located in the territory of the Republic of Serbia was defined. This was done by analyzing available data from the Statistical Office of the Republic of Serbia [18]. Subsequently, a cross-check was conducted to determine which local self-government unit each previously identified spa belongs to. Regarding the tour leaders in spas, they were extracted from the database of tour leaders based on their place of residence [19]. For each place of residence, the corresponding local self-government unit was determined in order to select only those tour leaders residing in the local self-government units where spas are located. Through this process, a database of tour leaders in spas was created, containing data on: license number, full name, place of residence, local self-government unit, the spa located in that unit, spoken foreign languages, and email addresses. This database served as the foundation for conducting an analysis for each individual spa concerning:

- The number of tour leaders,
- The average number of tourist arrivals and overnight stays per tour leader,
- The foreign language proficiency of tour leaders.

The research was conducted during September 2025. The research methodology is based on a similar study conducted on tourist guides [20, 21].

3. Results and Discussion

The results and discussion are presented in four separate sections:

- Distribution of spas by local self-government units,
- Distribution of tour leaders by spas,
- Number of tourist arrivals and overnight stays per tour leader, and
- Foreign language proficiency of tour leaders.

3.1. Distribution of Spas by Local Self-Government Units

It was established that there are 29 spas located within the territory of 28 local self-government units. It is concluded that two spas exist within the territory of a single local self-government unit, namely the City of Čačak. Ovčar Banja (on the border with the Municipality of Lučani) and Gornja Trepča (on the border with the Municipality of Gornji Milanovac) are situated in its territory. Table 1 presents data on the spas, the local self-government units to which they belong, and the number of tourist arrivals and overnight stays in the spas. These data served as the starting point for analyzing tourism traffic.

Table 1. Number of tourist arrivals and overnight stays in spas.

Spas	LSGU	Arrivals			Overnight stays		
		Total	Domestic	International	Total	Domestic	International
Palanački Kiseljak	Smederevska Palanka	275	156	119	833	456	377
Brestovačka Banja	Bor	1305	1110	195	4661	3970	691
Bukovička Banja	Aranđelovac	33279	27356	5923	91520	75380	16140
Jošanička Banja	Raška	4171	3524	647	20411	17912	2499
Kanjiža	Kanjiža	8549	6032	2517	49426	42125	7301
Sokobanja	Sokobanja	148907	137188	11719	656489	624176	32313
Vrdnik	Irig	89873	64252	25621	220027	157380	62647
Vrnjačka Banja	Vrnjačka Banja	194140	162447	31693	686556	587974	98582
Niška Banja	Niš	6967	5418	1549	36715	31793	4922
Palić	Subotica	40279	22768	17511	89992	53728	36264
Pribojska Banja	Priboj	3887	3510	377	20009	17349	2660
Rusanda	Zrenjanin	1597	1460	137	15182	14175	1007
Banja Ljig	Ljig	-	-	-	-	-	-
Ivanjica	Ivanjica	8244	7478	766	42406	38747	3659
Banja Koviljača	Loznica	23754	18004	5750	177731	101835	75896
Vranjska Banja	Vranje	3051	2817	234	23761	22331	1430
Banja Zlatar	Nova Varoš	16580	14818	1762	63848	60233	3615
Bujanovačka Banja	Bujanovac	3381	3217	164	29830	28904	926
Sijarinska Banja	Medveđa	10968	10716	252	77134	76210	924
Gornja Trepča	Čačak	11620	10654	966	96988	84719	12269
Ovčar Banja	Čačak	3246	2855	391	8164	7294	870
Banja Bečej	Bečej	3061	1646	1415	14661	7022	7639
Mataruška Banja	Kraljevo	1824	1613	211	9163	6776	2387
Banja Vrujci	Mionica	14568	13886	682	68594	65706	2888
Selters Banja	Beograd	3695	3544	151	50321	49164	1157
Novopazarska Banja	Novi Pazar	3193	1359	1834	7714	3817	3897
Gamzigradska Banja	Zaječar	175	112	63	500	231	269
Lukovska Banja	Kuršumlija	33509	25955	7554	189115	162933	26182
Ribarska Banja	Kruševac	11442	11077	365	61637	59874	1763

Notes: LSGU – local self-government unit (municipalities or cities).

3.2. Distribution of tour leaders by spas

It was established that there are 387 tour leaders in spas, representing 58.55% of all licensed tour leaders (661). The majority are located in Selters Banja, with approximately one-fifth in Niška Banja (Table 2).

Table 2. Tour leaders by spas.

Spa	Tour leaders	%	Spa	Tour leaders	%
Selters Banja	212	54.78	Bukovička Banja	1	0.26
Niška Banja	78	20.16	Sokobanja	1	0.26
Gornja Trepča	28	7.24	Bujanovačka Banja	1	0.26
Ovčar Banja	28	7.24	Banja Bečej	1	0.26
Palić	16	4.13	Banja Vrujci	1	0.26
Vranjska Banja	10	2.58	Novopazarska Banja	1	0.26
Ribarska Banja	10	2.58	Gamzigradska Banja	1	0.26
Mataruška Banja	7	1.81	Vrdnik	0	0.00
Vrnjačka Banja	6	1.55	Pribojska Banja	0	0.00
Rusanda	4	1.03	Banja Ljig	0	0.00
Banja Koviljača	3	0.78	Ivanjica	0	0.00
Jošanička Banja	2	0.52	Banja Zlatar	0	0.00
Kanjiža	2	0.52	Sijarinska Banja	0	0.00
Palanački Kiseljak	1	0.26	Lukovska Banja	0	0.00
Brestovačka Banja	1	0.26	-	-	-

Table 3 presents data on spas according to the number of tour leaders in them. Slightly less than a third of the spas have one tour leader each. Seven spas, representing about a quarter of all spas, do not have any tour leaders. These are Vrdnik, Pribojska Banja, Banja Ljig, Ivanjica, Banja Zlatar, Sijarinska Banja, and Lukovska Banja.

Table 3. Spas with a specific number of tour leaders

Number of tour leaders	Spas	
	No.	%
212	1	3.45
78	1	3.45
28	2	6.90
16	1	3.45
10	2	6.90
7	1	3.45
6	1	3.45
4	1	3.45
3	1	3.45
2	2	6.90
1	9	31.03
0	7	24.14

3.3. number of tourist arrivals and overnight stays per tour leader

The average number of total tourist arrivals per tour leader in spas is 1771.42, with domestic tourists accounting for 1459.88 and foreign tourists for 311.55. The average number of total overnight stays per tour leader in spas is 7269.74, comprising 6207.27 domestic and 1062.47 foreign tourists. Data on the annual number of tourist arrivals and overnight stays per tour leader in each of the analyzed spas are presented in Table 4.

Table 4. Annual number of tourist arrivals and overnight stays per tour leader.

Spas	**Arrivals**		**Overnight stays**			
	Total	Domestic	Total	Domestic	Total	Domestic
Palanački Kiseljak	275.00	156.00	119.00	833.00	456.00	377.00
Brestovačka Banja	1305.00	1110.00	195.00	4661.00	3970.00	691.00
Bukovička Banja	33279.00	27356.00	5923.00	91520.00	75380.00	16140.00
Jošanička Banja	2085.50	1762.00	323.50	10205.50	8956.00	1249.50
Kanjiža	4274.50	3016.00	1258.50	24713.00	21062.50	3650.50
Sokobanja	148907.00	137188.00	11719.00	656489.00	624176.00	32313.00
Vrdnik	-	-	-	-	-	-
Vrnjačka Banja	32356.67	27074.50	5282.17	114426.00	97995.67	16430.33
Niška Banja	89.32	69.46	19.86	470.71	407.60	63.10
Palić	2517.44	1423.00	1094.44	5624.50	3358.00	2266.50
Pribojska Banja	-	-	-	-	-	-
Rusanda	399.25	365.00	34.25	3795.50	3543.75	251.75
Banja Ljig	-	-	-	-	-	-
Ivanjica	-	-	-	-	-	-
Banja Koviljača	7918.00	6001.33	1916.67	59243.67	33945.00	25298.67
Vranjska Banja	305.10	281.70	23.40	2376.10	2233.10	143.00
Banja Zlatar	-	-	-	-	-	-
Bujanovačka Banja	3381.00	3217.00	164.00	29830.00	28904.00	926.00
Sijarinska Banja	-	-	-	-	-	-
Gornja Trepča	415.00	380.50	34.50	3463.86	3025.68	438.18
Ovčar Banja	115.93	101.96	13.96	291.57	260.50	31.07
Banja Bečej	3061.00	1646.00	1415.00	14661.00	7022.00	7639.00
Mataruška Banja	260.57	230.43	30.14	1309.00	968.00	341.00
Banja Vrujci	14568.00	13886.00	682.00	68594.00	65706.00	2888.00
Selters Banja	17.43	16.72	0.71	237.36	231.91	5.46
Novopazarska Banja	3193.00	1359.00	1834.00	7714.00	3817.00	3897.00
Gamzigradska Banja	175.00	112.00	63.00	500.00	231.00	269.00
Lukovska Banja	-	-	-	-	-	-
Ribarska Banja	1144.20	1107.70	36.50	6163.70	5987.40	176.30

Sokobanja recorded the highest annual number of total tourist arrivals per tour leader (148907.00), followed by Bukovička Banja (33279.00), Vrnjačka Banja (32356.67), and Banja Vrujci (14,568.00). The remaining spas had an average of less than 10000.00. Regarding foreign tourist arrivals, the highest average was recorded in Sokobanja (>10000.00), followed by Bukovička Banja and Vrnjačka Banja (>5000.00).

Sokobanja also had the highest annual number of domestic tourist arrivals per tour leader (137188.00), followed by Bukovička Banja (27356.00), Vrnjačka Banja (27074.50), and Banja Vrujci (13886.00). Other spas recorded an average of less than 10000.00. Regarding foreign tourist arrivals, the highest average was in Sokobanja (11719.00), followed by Bukovička Banja (5923.00) and Vrnjačka Banja (5282.17). The remaining spas had an average of less than 5000.00.

The highest annual number of total overnight stays per tour leader was recorded in Sokobanja (656489.00), followed by Vrnjačka Banja (114426.00), Bukovička Banja (91520.00), Banja Vrujci (68594.00), Banja Koviljača (59243.67), Bujanovačka Banja (29830.00), Kanjiža (24713.00), Banja Bečej (14661.00), and Jošanička Banja (10205.50). In the case of the remaining spas, the average was below 10000.00.

Sokobanja recorded the highest annual number of domestic tourist overnight stays per tour leader (624176.00), followed by Vrnjačka Banja (97995.67), Bukovička Banja (75380.00), Banja Vrujci (65706.00), Banja Koviljača (33945.00), Bujanovačka Banja (28904.00), and Kanjiža (21062.50). In the case of the remaining spas, the average was below 10000.00.

Sokobanja recorded the highest annual number of foreign tourist overnight stays per tour leader (32313.00), followed by Banja Koviljača (25298.67), Vrnjačka Banja (16430.33), and Bukovička Banja (16140.00). In the case of the remaining spas, the average was below 10000.00.

The average daily number of total tourist arrivals per tour leader in spas is 4.85, with domestic tourists accounting for 4.00 and foreign tourists for 0.85. The average daily number of total overnight stays per tour leader in spas is 19.92, comprising 17.01 domestic and 2.91 foreign tourists. Data on the daily number of tourist arrivals and overnight stays per tour leader in each of the analyzed spas are presented in Table 5. Due to the calculation method (annual average / 365), the ranking is identical to that of the annual average.

Table 5. Daily number of tourist arrivals and overnight stays per tour leader.

Spas	Arrivals		Overnight stays			
	Total	Domestic	Total	Domestic	Total	Domestic
Palanački Kiseljak	0.75	0.43	0.33	2.28	1.25	1.03
Brestovačka Banja	3.58	3.04	0.53	12.77	10.88	1.89
Bukovička Banja	91.18	74.95	16.23	250.74	206.52	44.22
Jošanička Banja	5.71	4.83	0.89	27.96	24.54	3.42
Kanjiža	11.71	8.26	3.45	67.71	57.71	10.00
Sokobanja	407.96	375.86	32.11	1.798.60	1.710.07	88.53
Vrdnik	-	-	-	-	-	-
Vrnjačka Banja	88.65	74.18	14.47	313.50	268.48	45.01
Niška Banja	0.24	0.19	0.05	1.29	1.12	0.17
Palić	6.90	3.90	3.00	15.41	9.20	6.21
Pribojska Banja	-	-	-	-	-	-
Rusanda	1.09	1.00	0.09	10.40	9.71	0.69
Banja Ljig	-	-	-	-	-	-
Ivanjica	-	-	-	-	-	-
Banja Koviljača	21.69	16.44	5.25	162.31	93.00	69.31
Vranjska Banja	0.84	0.77	0.06	6.51	6.12	0.39
Banja Zlatar	-	-	-	-	-	-
Bujanovačka Banja	9.26	8.81	0.45	81.73	79.19	2.54
Sijarinska Banja	-	-	-	-	-	-
Gornja Trepča	1.14	1.04	0.09	9.49	8.29	1.20
Ovčar Banja	0.32	0.28	0.04	0.80	0.71	0.09
Banja Bečej	8.39	4.51	3.88	40.17	19.24	20.93
Mataruška Banja	0.71	0.63	0.08	3.59	2.65	0.93
Banja Vrujci	39.91	38.04	1.87	187.93	180.02	7.91
Selters Banja	0.05	0.05	0.00	0.65	0.64	0.01
Novopazarska Banja	8.75	3.72	5.02	21.13	10.46	10.68
Gamzigradska Banja	0.48	0.31	0.17	1.37	0.63	0.74
Lukovska Banja	-	-	-	-	-	-
Ribarska Banja	3.13	3.03	0.10	16.89	16.40	0.48

3.4. Foreign language proficiency of tour leaders

Table 6 presents the number of foreign languages spoken by tour leaders depending on the spa, the average number of foreign languages per tour leader, as well as the number and percentage of tour leaders who speak one or more foreign languages.

Table 6. Tour leaders and foreign languages in spas.

Spa	Number of foreign languages	Average number of foreign languages per tour leader	Number of tour leaders speaking one or more foreign languages					
			1		2		3	
			No.	%	No.	%	No.	%
Palanački Kiseljak	1	1.00	1	100.00	0	0.00	0	0.00
Brestovačka Banja	1	1.00	1	100.00	0	0.00	0	0.00
Bukovička Banja	1	1.00	1	100.00	0	0.00	0	0.00
Jošanička Banja	1	1.00	2	100.00	0	0.00	0	0.00
Kanjiža	1	1.00	2	100.00	0	0.00	0	0.00
Sokobanja	1	1.00	1	100.00	0	0.00	0	0.00
Vrdnik	-	-	0	-	0	-	0	-
Vrnjačka Banja	3	1.00	6	100.00	0	0.00	0	0.00
Niška Banja	8	1.08	73	93.59	4	5.13	1	1.28
Palić	4	1.25	12	75.00	4	25.00	0	0.00
Pribojska Banja	-	-	0	-	0	-	0	-
Rusanda	1	1.00	4	100.00	0	0.00	0	0.00
Banja Ljig	-	-	0	-	0	-	0	-
Ivanjica	-	-	0	-	0	-	0	-
Banja Koviljača	1	1.00	3	100.00	0	0.00	0	0.00
Vranjska Banja	2	1.00	10	100.00	0	0.00	0	0.00
Banja Zlatar	-	-	0	-	0	-	0	-
Bujanovačka Banja	1	1.00	1	100.00	0	0.00	0	0.00
Sijarinska Banja	-	-	0	-	0	-	0	-
Gornja Trepča	2	1.00	28	100.00	0	0.00	0	0.00
Ovčar Banja	2	1.00	28	100.00	0	0.00	0	0.00
Banja Bečej	1	1.00	1	100.00	0	0.00	0	0.00
Mataruška Banja	5	1.14	6	85.71	1	14.29	0	0.00
Banja Vrujci	1	1.00	1	100.00	0	0.00	0	0.00
Selters Banja	11	1.06	200	94.34	11	5.19	1	0.47
Novopazarska Banja	1	1.00	1	100.00	0	0.00	0	0.00
Gamzigradska Banja	1	1.00	1	100.00	0	0.00	0	0.00
Lukovska Banja	-	-	0	-	0	-	0	-
Ribarska Banja	4	1.00	10	100.00	0	0.00	0	0.00

Tour leaders speak the highest number of foreign languages in Selters Banja (11). In addition to Selters Banja, according to the aforementioned criterion, Niška Banja (8), Mataruška Banja (5), Palić (4), Ribarska Banja (4), and Vrnjačka Banja (3) also stand out. In the remaining spas, tour leaders speak either one or two foreign languages.

Only four spas have tour leaders who speak two or three foreign languages. More precisely, tour leaders speak three foreign languages in only two spas (Niška Banja and Selters Banja), while in two spas they speak two foreign languages (Palić and Mataruška Banja).

The average number of foreign languages per tour leader is approximately 1, with the highest average recorded in Palić (1.25). This is further supported by the fact that in most spas, only one foreign language is present (13 spas) (Table 7).

Table 7. Spas according to the number of foreign languages spoken in them.

No. of foreign languages	**Spas**	
	Br.	%
11	1	3.45
8	1	3.45
5	1	3.45
4	2	6.90
3	1	3.45
2	3	10.34
1	13	44.83
0	7	24.14

Table 8 provides an overview of the spas and the foreign languages spoken in them.

Table 8. Spas and foreign languages spoken in them.

Spa	Foreign language (number of leaders, percentage of total leaders in the spa)
Palanački Kiseljak	English (1, 100.00%)
Brestovačka Banja	English (1, 100.00%)
Bukovička Banja	English (1, 100.00%)
Jošanička Banja	English (2, 100.00%)
Kanjiža	Hungarian (2, 100.00%)
Sokobanja	English (1, 100.00%)
Vrdnik	-
Vrnjačka Banja	English (4, 66.67%), French (1, 16.67%), Spanish (1, 16.67%)
Niška Banja	English (67, 85.90%), Russian (5, 6.41%), Greek (3, 3.85%), Bulgarian (2, 2.56%), French (2, 2.56%), German (2, 2.56%), Spanish (2, 2.56%), Chinese (1, 1.28%)
Palić	English (14, 87.50%), Hungarian (4, 25.00%), Serbian (1, 6.25%), Czech (1, 6.25%)
Pribojska Banja	-
Rusanda	English (4, 100.00%)
Banja Ljig	-
Ivanjica	-
Banja Koviljača	English (3, 100.00%)
Vranjska Banja	English (9, 90.00%), Russian (1, 10.00%)
Banja Zlatar	-
Bujanovačka Banja	English (1, 100.00%)
Sijarinska Banja	-
Gornja Trepča	English (27, 96.43%), Russian (1, 3.57%)
Ovčar Banja	English (27, 96.43%), Russian (1, 3.57%)
Banja Bečej	English (1, 100.00%)
Mataruška Banja	English (3, 42.86%), German (2, 28.57%), Russian (1, 14.29%), Greek (1, 14.29%), Turkish (1, 14.29%)
Banja Vrujci	English (1, 100.00%)
Selters Banja	Arabic (2, 0.94%), English (180, 84.91%), French (5, 2.36%), Greek (12, 5.66%), Italian (5, 2.36%), Hungarian (1, 0.47%), German (3, 1.42%), Russian (10, 4.72%), Spanish (5, 2.36%), Bulgarian (1, 0.47%), Chinese (1, 0.47%)
Novopazarska Banja	English (1, 100.00%)
Gamzigradska Banja	English (1, 100.00%)
Lukovska Banja	-
Ribarska Banja	English (6, 60.00%), Greek (2, 20.00%), French (1, 10.00%), Russian (1, 10.00%)

English is the language spoken in the majority of spas (21). In most of the spas where tour leaders speak English (12), it is present as the only foreign language among tour leaders. In 8 spas, it is spoken by the majority, but not all tour leaders. A specific situation occurs only in Mataruška Banja, where less than half of the tour leaders speak English. Data on foreign languages and the spas in which tour leaders speak them are presented in Table 9.

Table 9. Foreign languages and spas in which tour leaders speak them.

Foreign language	Spas		Spa name (number of tour leaders, percentage of tour leaders in the spa, percentage of the total number of tour leaders in spas who speak the specified language)
	No.	%	
English	21	72.41	Selters Banja (180, 84.91%, 54.88%), Niška Banja (67, 85.90%, 20.43%), Gornja Trepča (27, 96.43%, 8.23%), Ovčar Banja (27, 96.43%, 8.23%), Palić (14, 87.50%, 4.27%), Vranjska Banja (9, 90.00%, 2.74%), Ribarska Banja (6, 60.00%, 1.83%), Vrnjačka Banja (4, 66.67%, 1.22%), Rusanda (4, 100.00%, 1.22%), Banja Koviljača (3, 100.00%, 0.91%), Mataruška Banja (3, 42.86%, 0.91%), Jošanička Banja (2, 100.00%, 0.61%), Palanački Kiseljak (1, 100.00%, 0.30%), Brestovačka Banja (1, 100.00%, 0.30%), Bukovička Banja (1, 100.00%, 0.30%), Sokobanja (1, 100.00%, 0.30%), Bujanovačka Banja (1, 100.00%, 0.30%), Banja Bečej (1, 100.00%, 0.30%), Banja Vrujci (1, 100.00%, 0.30%), Novopazarska Banja (1, 100.00%, 0.30%), Gamzigradska Banja (1, 100.00%, 0.30%)
Russian	7	24.14	Selters Banja (10, 4.72%, 52.63%), Niška Banja (5, 6.41%, 26.32%), Vranjska Banja (1, 10.00%, 5.26%), Gornja Trepča (1, 3.57%, 5.26%), Ovčar Banja (1, 3.57%, 5.26%), Mataruška Banja (1, 14.29%, 5.26%), Ribarska Banja (1, 10.00%, 5.26%)
French	4	13.79	Selters Banja (5, 2.36%, 55.56%), Niška Banja (2, 2.56%, 22.22%), Vrnjačka Banja (1, 16.67%, 11.11%), Ribarska Banja (1, 10.00%, 11.11%)
Greek	4	13.79	Selters Banja (12, 5.66%, 66.67%), Niška Banja (3, 3.85%, 16.67%), Ribarska Banja (2, 20.00%, 11.11%), Mataruška Banja (1, 14.29%, 5.56%)
Hungarian	3	10.34	Palić (4, 25.00%, 57.14%), Kanjiža (2, 100.00%, 28.57%), Selters Banja (1, 0.47%, 14.29%)
German	3	10.34	*Selters Banja* (3, 1.42%, 42.86%), Niška Banja (2, 2.56%, 28.57%), Mataruška Banja (2, 28.57%, 28.57%)
Spanish	3	10.34	Selters Banja (5, 2.36%, 62.50%), Niška Banja (2, 2.56%, 25.00%), Vrnjačka Banja (1, 16.67%, 12.50%)
Bulgarian	2	6.90	Niška Banja (2, 2.56%, 66.67%), Selters Banja (1, 0.47%, 33.33%)
Chinese	2	6.90	Niška Banja (1, 1.28%, 50,00%), Selters Banja (1, 0.47%, 50,00%)
Arabic	1	3.45	Selters Banja (2, 0.94%, 100.00%)
Italian	1	3.45	Selters Banja (5, 2.36%, 100.00%)
Serbian	1	3.45	Palić (1, 6.25%, 100.00%)
Turkish	1	3.45	Mataruška Banja (1, 14.29%, 100.00%)
Czech	1	3.45	Palić (1, 6.25%, 100.00%)

Table 10 presents the most significant spas according to the foreign languages spoken by tour leaders.

Table 10. The most significant spas according to foreign languages spoken by tour leaders.

Foreign language	**Highest % of tour leaders**	
	in all spas (no., %)	in a specific spa (no., %)
English	Selters Banja (180, 54.88%)	Rusanda (4, 100.00%,), Banja Koviljača (3, 100.00%), Jošanička Banja (2, 100.00%), Palanački Kiseljak (1, 100.00%), Brestovačka Banja (1, 100.00%), Bukovička Banja (1, 100.00%), Sokobanja (1, 100.00%), Bujanovačka Banja (1, 100.00%), Banja Bečej (1, 100.00%), Banja Vrujci (1, 100.00%), Novopazarska Banja (1, 100.00%), Gamzigradska Banja (1, 100.00%)
Russian	Selters Banja (10, 52.63%)	Mataruška Banja (1, 14.29%)
French	Selters Banja (5, 55.56%)	Vrnjačka Banja (1, 16.67%)
Greek	Selters Banja (12, 66.67%)	Ribarska Banja (2, 20.00%)
Hungarian	Palić (4, 57.14%)	Kanjiža (2, 100.00%)
German	Selters Banja (3, 42.86%)	Mataruška Banja (2, 28.57%)
Spanish	Selters Banja (5, 62.50%)	Vrnjačka Banja (1, 16.67%)
Bulgarian	Niška Banja (2, 66.67%)	Niška Banja (2, 2.56%)
Chinese	Niška Banja (1, 50,00%)	Niška Banja (1, 1.28%)

Notes: Data for foreign languages spoken in only one spa are not included in this table.

It is concluded that tour leaders from Selters Banja account for the highest percentage of tour leaders in spas who speak eight foreign languages: for two foreign languages, they account for all speakers (Arabic and Italian), for five, the majority (English, Russian, French, Greek, and Spanish), and for one, the highest percentage, though not the majority (German).

Tour leaders from Niška Banja account for the highest percentage of tour leaders in spas who speak two foreign languages, representing the majority of tour leaders in spas who speak them in both cases (Bulgarian and Chinese).

Tour leaders from Palić account for the highest percentage of tour leaders in spas who speak two foreign languages, representing all speakers in one case (Czech) and the majority in another (Hungarian).

Analyzing the percentage structure of tour leaders in each spa individually, the results show that Russian and German are mostly spoken among tour leaders in Mataruška Banja, Bulgarian and Chinese in Niška Banja, Greek in Ribarska Banja, and Hungarian in Kanjiža (all of them).

The most prevalent foreign language among tour leaders in spas is English (Table 11). It is spoken by the majority of tour leaders in spas (84.75%). Other foreign languages are present among less than 5.00% of tour leaders in spas.

Table 11. Representation of foreign languages among tour leaders in spas.

Foreign language	**Tour leaders**	
	No.	%
English	328	84.75
Russian	19	4.91
Greek	18	4.65
French	9	2.33
Spanish	8	2.07
Hungarian	7	1.81
German	7	1.81
Italian	5	1.29
Bulgarian	3	0.78
Chinese	2	0.52
Arabic	2	0.52
Serbian	1	0.26
Turkish	1	0.26
Czech	1	0.26

Figure 2 illustrates the network relationship between foreign languages spoken by tour leaders in spas. Using VOSviewer version 1.6.19 [22], nine clusters were formed: (1) English, German, Russian; (2) French, Italian, Chinese; (3) Hungarian, Serbian; (4) Arabic; (5) Bulgarian; (6) Czech; (7) Greek; (8) Spanish; (9) Turkish. The size of the circles represents the frequency of the foreign language among tour leaders in spas, while the thickness of the lines connecting the foreign languages indicates the strength of the link between them.

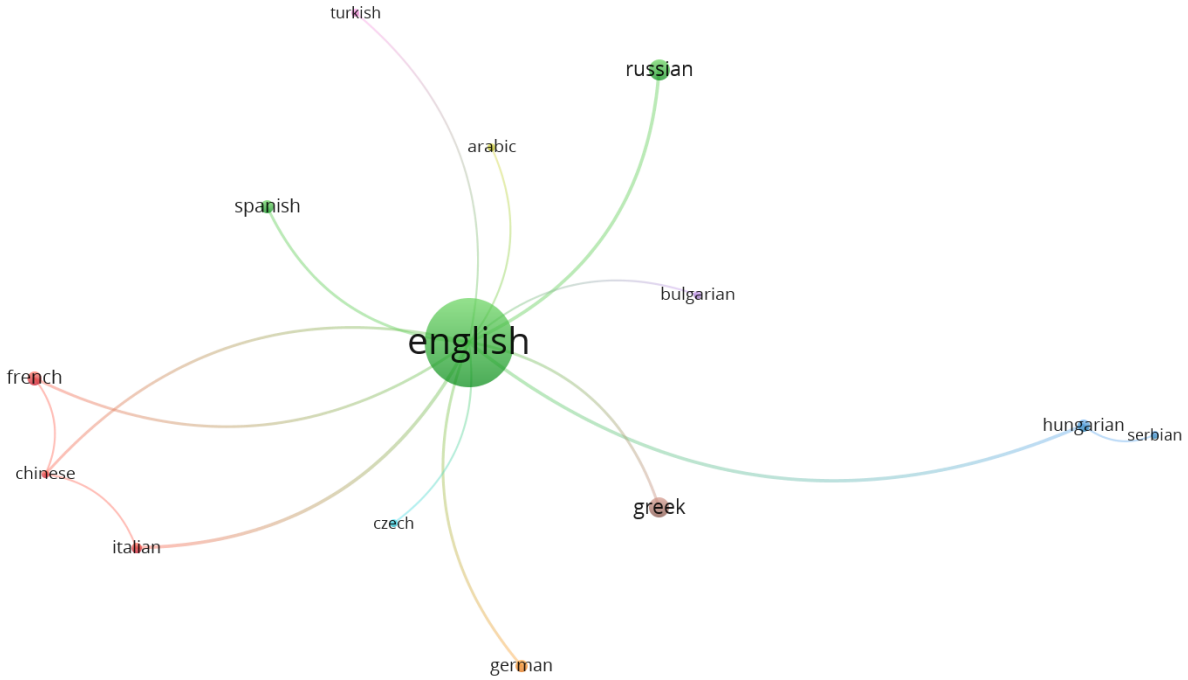

Figure 2. Relationships between foreign languages.

4. Conclusions

In this paper, the results of the research are presented concerning the distribution of spas by local self-government units, distribution of tour leaders by spas, number of tourist arrivals and overnight stays per tour leader, and foreign language proficiency of tour leaders. Based on the above, it can be concluded that the subject and the aim of the paper have been achieved.

The limitations of this study concern the method of determining: (1) the number of spas (only spas with available data on tourist traffic were included in the sample); (2) the number of tour leaders (the sample included tour leaders according to the municipality/city of residence in which spas are located); (3) the foreign language proficiency of tour leaders (only languages for which tour leaders are officially licensed were taken into account); (4) the workload level of tour leaders. These limitations are similar to those in the study conducted on the communication competencies of tour guides [21], which served as the methodological basis for this paper.

This paper represents a starting point for further consideration of the communication competencies of tour leaders in Serbian spas. Future research should strive to overcome the previously highlighted limitations and provide a more precise and detailed insight into the analyzed topic. What is indisputable is that communication competencies represent one of the key skills that human resources in health and tourism should possess in order to ensure higher quality service delivery and greater user satisfaction

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