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# STUDYING SATISFACTION AND SPENDING WILLINGNESS OF GUESTS VISITING SPAS AND THERMAL BATHS IN THE NORTHERN HUNGARIAN REGION

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**Abstract:** In my study I will show the opinion of the guests familiar with seven thermal baths of the Northern-Hungarian Region (such as Eger Thermal Bath, Eger Turkish Bath, Egerszalók Salt Hill Thermal Spa, Demjén Thermal Bath, Bogács Thermal Bath and the Cave-Bath of Miskolc-tapolca) about the medical supply elements, about the price-value rate of supply elements in the thermal bath, and also the spending willingness of the guests in relation to age and earns.

From the data I calculated mean, SD and spectrum and examined the crosstab correlations as well, and the Cramer's V associate coefficient. The results of the correlation tests could be summarised as the following:

Guests regardless financial state and age give grade 4 to price/value ratio, but despite their positive judgement spending is not characteristic (most guests spend nothing additional besides admission fee, if so, they do not exceed the 5000 forint amount) even among those who belong to the 'upmarket' category. Both younger and elderly guests can be characterised with the economical approach, i.e. "Make both ends meet" although seemingly they could extend these "ends".

**Key words:** Northern Hungarian Region, thermal bath, medical supply elements, guest satisfaction, spending willingness

## Introduction

Since the past few decades health and keeping our body and mind in proper condition have become of high value. In modern world this value is also connected with the term of being successful: we can be more successful in our work, environment and even in private life if we can remain healthy, well-groomed and fit. Modern people are willing to spend more and more on this purpose and during their holiday people are ready to make up leeway spending a week under healthy conditions, meaning sporty, active yet relaxing healthy conditions. Health tourism includes all types of health travel overall. The main motivation of visitors is preserving their state of health, preventing any deformities and illnesses (wellness tourism) and amendment of existing illnesses (spa tourism). We can say that health tourism is considered to contain the totality of travels made for preserving or reinstating health. (Könyves and Müller 2007) But besides, there are other motivating factors as well.

Experience seeking is a basic motivation for the tourist of the 21st century. On the WTO Krakow conference it was said that "In the case of touristic products consumers pay attention to the relationship of the invested energy, effort (not only money) and the received experience in return, rather than to the price-value ratio." (Halassy 1999). Hungarian

wellness tourism is also experience-centred with large-scale development in the past decade. (Istók 2003).

More and more settlements start using their resources, mostly thermal water, the result of which is the multiplication of baths within the country. People need baths as well, they are willing to use the facilities near their home in everyday life, while they visit farther, well-known Hungarian baths for longer period during their summer holiday. The destinations of summer trips and spending free time are very often the baths. Going to baths is a part of everyday programmes as it offers the opportunity of regular physical training and combining hygiene, relaxation and recreation. Nowadays baths are not only the scenes of the well-deserved annual holiday but also those of general well-being, preserving the health of the body and the mind. Regular bath attendants expect the usual free time services and their high quality even far from their homes, this is what the baths of the tourist destinations should take into account more and more during their product development. (Müller et al. 2009a)

## Materials and methods

The baths were chosen randomly, yet it was an important aspect to include in the sample nationally or internationally

renowned spas, as well as those minor spas having regional, county or sub regional attraction. The questionnaire survey was conducted in the summer of 2010 (May-June) on the territory of Eger Thermal Bath (208), Eger Turkish Bath (200), Egerszalók Salt Hill Thermal Spa (205), Demjén Thermal Bath (200), Bogács Thermal Bath (203), Mezőkövesd Zsóry Thermal Bath (200) and Miskolc-tapolca Cave Bath (200).

As a result, altogether 1416 properly filled questionnaires were collected and processed.

The selection of the population (sample) was made according to the willingness to respond among the guests staying on the territory of the bath.

The aim was to have at least a 200 person sample-size per bath. The students of Tourism and Catering and Business Management Majors (BA) of Eszterházy Károly College helped to carry out the survey, together with students of Tourism Management.

The questionnaires contained open and closed questions, with the latter ones guests could choose from more answer categories. The questionnaires were carried out with the help of the PASW statistics software. From the data I calculated mean, SD and spectrum and examined the crosstab correlations as well.

The intensity of the correlations between criteria is examined with the help of Cramer's V associate co-efficient. It means to examine to what extent a correlation is close to independence or a function-like connection. Cramer V can be applied with any cross tables and according to many researchers it is the most reliable index. (*Sajtos and Mitev 2007*) This is the reason for my choice as well.

Cramer associate co-efficient can be between 0 and 1. In the case of 0 there is no connection between the two criteria (they are independent), whilst when it is 1, there is a function-like correlation between them. (*Korpás 1997*)

Consumer habits, motivations, satisfaction and willingness to spend among spa visitors (or wellness consumers) were examined in several previous studies (in other domestic regions and settlements), yet the results of these studies can be compared only partly as the questionnaires used during the studies were different and researchers themselves looked for responses related to different hypotheses.

A study was made describing the Southern Transdanubian region, where besides thermal baths, wellness hotels were also included in the sample. In this study, the knowledge of the word "wellness", its related associations, attitudes, consumer motivations and factors influencing these were thoroughly examined (according to demographic, cultural and economic aspects), but willingness to spend was not examined (*Hegedűs and Laczkó 2008*).

From two other studies we could learn about the visitors' motivating factors, opinions and satisfaction, financial background and willingness to pay regarding three spas in Central Transdanubia (Agárd, Komárom, Pápa). (*Müller et al. 2009b*); (*Müller and Szabó 2009*).

There were several studies about the surveys made among the guests of the Northern Great Plain region spas: consumer habits, satisfaction with the spa facilities, willingness to spend. One of the studies (*Müller and Kórik 2009*), examined four

spas of the region (Szolnok, Nyíregyháza, Hajúszoboszló, Debrecen), another one (*Könyves et al. 2005*) Karcag and Cserkeszőlő, the Szolnok Tiszaliget Thermal bath (*Szabó 2009*) and Hajdúszoboszló (*Könyves et al. 2004*) to learn about guests' motivations, consumer habits, guest satisfaction with the bath facilities and willingness to spend.

## Baths and Spas of the Northern Hungarian Region

Northern Hungary is an attractive destination for those wishing to recreate their body and mind during holiday. No wonder that the region's climatic spa resorts, caves, the unique carbon-dioxide dry bath and the thermal baths are impressive for the followers of wellness lifestyle. The main strength of the region's health tourism is the diverse supply, i.e. besides the water the presence of the climatic spa resorts and the gas bath supply based on carbon-dioxide. The supply is further varied with the existing specialities, namely the Turkish Bath in Eger, the mofetta (dry bath) in Mátraderecske, the cave bath in Miskolctapolca or the hot spring of Egerszalók, which is a spa resort having unique natural features. The supply of health tourism is also enhanced by the ancillary services (wine-gastronomy, culture, etc.), which cannot be found in such complexity in other parts of the country. The medicinal effect of the region's thermal waters has been known for a long time, the bathing culture based on this has hundreds years of traditions (e.g. Eger Turkish Bath, Parád, Kács, Miskolctapolca etc.). Due to the 20<sup>th</sup> century carbon-hydrogene researches, further medicinal thermal water supplies have been revealed (e.g. Egerszalók, Mátraderecske, Pásztó, Bükkészék, Sárospatak). The peculiarity of the region's thermal water treasure is the difference between the water content and features of each bath and well, making them suitable for curing numerous illnesses. (*RMC 2006*)

At the end of 2003, 34 health tourism projects of the Széchenyi Plan had already operated. In 2004, 33 new and renewed health tourism projects were visited. (*Mudruczó and Szennyessy 2005a*)

As a result of the developments, by 2003 the capacity of the Hungarian baths increased by 75%, the attendance by 18% on the average and the revenues by 32%. (*Szűcs 2005*)

The most important presumed effect of the health tourism developments was to increase the touristic attraction of the given settlements (and that of Hungary), thus enhancing further touristic investments. This way of supply development can reduce the spatial and time-concentration of the international and domestic touristic demand and contributes to the enforcement of the favourable economic effects of tourism. The First Széchenyi Plan included the development of the Cave Bath in Miskolctapolca, Zsóry Bath, Thermal Bath of Egerszalók and the Eger Thermal Bath. (*Mudruczó and Szennyessy 2005a*)

Within the framework of the New Hungary Development Plan, in the Northern Hungarian Region developing tourism was also important, besides industrial developments and extending services. (*Új Magyarország Fejlesztési Terv 2007*)

According to the 'Healing in Hungary-Health Industry' project of the New Széchenyi Plan, the development of health tourism in the future should be done by harmonising both touristic and health expectations. Strengthening the significance of health preserving services is inevitable, yet the background is provided by the treatments based on traditional balneotherapy. It is also necessary to create the individual image of the baths and its apparent market communication as well. Supply must not only be extended but also specialised. (*Új Széchenyi Terv, Gyógyító Magyarország – egészségipari program* 2011)

### **Introducing the Baths Included In the Questionnaire Survey**

The position of the region's most important thermal baths and spas has changed significantly in the past few years: baths have been renewed, their services have been extended. On the territory of Eger Thermal Bath we can find seven pools: for swimmers, children, with thermal and healing water.

In Eger the reconstruction of the beloved and popular lido has been completed, there were pool refurbishments, indoor-outdoor adventure pools and an EU-conform playground were created, the courts and fields for ancillary sporting facilities and the bath-related facilities have also been renewed (e.g. changing rooms) (*Egri termál és élményfürdő* 2012); (RMC 2006)

In Eger we can see several relics and traditions of the baths from the Turkish era. The Turkish Bath was built by the Turks occupying the present building from 1610 to 1617. The reconstruction preserved the traditions of the Muslim bathing cult and architecture. Nowadays the Turkish Bath operates as a modern balneotherapeutic centre. It can be used mostly by a GP assignment, groups are allowed to enter only if they register in advance. From touristic point of view it would be an advantage to find the proper way of joining the establishment closer to tourism. (*Egri török fürdő* 2012); (RMC 2006)

In Egerszalók, next to the Hot spring, a 1890 m<sup>2</sup> water surface spa was made, and a 1600 m<sup>2</sup> summer and 436 m<sup>2</sup> winter lido. In addition, a 206-room five-star hotel was also accomplished, let alone an apartment village. Besides the developments the peculiarity of the spa remains unaltered, rather more emphasized. (*Egerszalóki termálfürdő* 2012); (RMC 2006)

Mezőkövesd– Zsóry Thermal Bath and Spa is the biggest one in Northern Hungary. In Zsóry Bath several new, multiple-stage refurbishment was worked out. The medicinal section received a new wing, extending the cabs and providing new services, such as effervescent bath and galvanised bathtub. Indoor medicinal pools and new outdoor ones are connected with a direct watery corridor. The reconstruction of the main entrance, the coating and building in adventure elements of the round pool with the biggest diameter in Central Europe has been completed as well. (*Mezőkövesdi Zsóry fürdő* 2012); (RMC 2006)

Miskolctapolca – Thermal Cave Bath can be found at the foot of the Bükk Mountain, in a picturesque valley. In the

thermal part there are two medicinal pools, from where we can reach the aesthetically unrivalled cave bath. By the end of 2001 the modernisation of the upstairs changing rooms and the engineering reconstruction of the whole building complex were finished. The services have been made more attractive by the jacuzzi, heated benches in the pool area, hydro-massage cabins, airtight revolving doors, restaurant, safe deposits and a beauty parlour. By September 2002 the bathing hall bordered by the main building and the cliff was completed, having a terrace on its top. The 120 m<sup>2</sup> water surface extends the cave water suitable for experience and recovery to 1267 m<sup>2</sup>. During the fourth stage of development when extending the medicinal wing, new healing services were introduced (weight bath, spinal gymnastics etc.) A new reception building is being established and the outdoor shell pool is going to be reconstructed and extended this year. Together with the renovation of the existing pool a swimming pool will also be accomplished having a whirlpool system. (*Miskolc-tapolcai barlangfürdő* 2012); (RMC 2006)

The establishers of the Demjén Thermal Valley could create the ambience of a Roman bath in the fabled landscape. The medicinal water gushing from the depth of 690 metres is regarded the latest explored medicinal water in Hungary, the effect of which has a broad spectrum. The Thermal Bath and Aquapark has five different tempered outside and two indoor pools with medicinal water. There are also a 25 meters swimming pool, a paddling pool with adventure elements, neck showers and air bowlers to provide recreation. During summer the Aquapark can guarantee perfect relaxation with its adventure elements: rubber ring rafting and kamikaze slide, multi-slide, diving pool with three different heights to jump into the 4,5 meters deep water. (*Demjéni termálfürdő* 2012)

Bogács Thermal Bath awaits visitors at Bükkalja (lower part of the Bükk). On the territory of the bath receiving 3500 guests a day there are 5 medicinal water pools, a splash pool for children and 1 waveless swimming pool. In the Service Centre guests can use 1 medicinal pool. (*Bogácsi termálfürdő* 2012); (RMC 2006)

Hungarian spas are frequently visited by foreign guests due to their reasonable prices and the high quality of services. They come mostly from Germany, Austria, Switzerland, Italy, Poland and Russia, accounting for 60-65% of all guests. (*Szűcs* 2005)

Thanks to the extending travelling experiences tourist expectations are increasing, too. The standard has become higher not only regarding the service providers, but also concerning the visited touristic destination itself. The failure of the expected service or experience can make guests disappointed. The fierce competition in tourism market forces service providers and managers of touristic destinations to handle visitors more prudently, to avoid or at least treat well in time guest disappointment and its unpleasant consequences. (*Michalkó and Irimiás* 2011)

Within the framework of 'Healing in Hungary- Health Industry' project of the New Széchenyi Plan we can know from the chapters of 'Natural Environment Conservation, Quality Assurance', 'Sustainable Economic Competitiveness'

and ‘Knowledge Development’ that the Hungarian health tourism should be based on the good quality of our natural conditions and human resources. In order to provide the basic criteria of the long-term international competitiveness, special attention ought to be paid to the water base protection, the regular monitoring and quality control of medicinal pools. It can provide us the strategic advantage which may be typical of our country in the future.

One of the vital elements of the quality improvement of health industry and health tourism is professional knowledge and its extension. Experts being familiar with the international trends can draw the necessity of introducing new technologies as well. (*Új Széchenyi Terv, Gyógyító Magyarország – egészségipari program 2011*)

The health tourism part of the Széchenyi Development Plan (2001–2004) also contributed to developing baths in those settlements of Hungary where it was not characteristic because of the lack of attractions and infrastructure. (*Mudruczó and Szennyessy 2005b*) The beneficial effect of it is to increase the attraction of the given settlement for the investors and enhance the economic effects of tourism.

The demand trends inspired traditional spas and spa hotels in Hungary – in Northern Hungary as well – to adapt to the new trends taking advantage of the potentials provided by the thermal and medicinal waters. Moreover, they realised the importance of establishing modern health touristic services to be different significantly from their competitors.

## The Results of the Questionnaire Survey

### Aims, Main Hypotheses

The aim of my survey was to show the bath guests’ willingness to spend on the bathing precinct in the Northern Hungarian region and their satisfaction with the bath and its elements of supply.

My further aim was to examine in seven baths of the region the guest satisfaction concerning equipment of medicinal services and the service quality.

(Eger Thermal Bath, Eger Turkish Bath, Egerszalók Salt Hill Thermal Spa, Demjén Thermal Bath, Bogács Thermal Bath, Mezőkövesd Zsóry Thermal Bath and Miskolc-tapolca Cave Bath).

I also aimed to find connection between the guests’ age, financial state and willingness to spend on the bathing precinct. It is important to state that although the profile and the affinity groups of the baths may be different, wellness and medicinal services as elements of supply can be found in each of them to a certain extent.

There have been developments accomplished in each of the seven settlements (in some of them due to the projects of the Széchenyi Development Plan) which must have contributed to the growth of guest satisfaction besides the rise of the number and standard in the elements of supply.

Developing spa and thermal tourism was a successful part within the tourism development project of the first Széchenyi

Plan, too. Health industry can serve as a break-out if there is suitable, solvent demand for its products and services. We have to rely both on domestic and foreign demand as it has been proved in the case of previous health tourism development as well. (*Új Széchenyi Terv, Gyógyító Magyarország – egészségipari program 2011*)

From the aspect of creating a positive image (and avoiding disappointment), it is crucial to have basically positive attitude and opinions from the guests. Guests can contribute to the development of a bath, as they can notice problems, mistakes, potential shortcomings earlier than the owners. They might have a stronger tendency for criticism as well. This is why the results of the bath study can be used in practice as by virtue of visitors’ opinions defects can be turned out.

During my study I wanted to find answers for the following questions, connections:

1. Which services of the bath are used by the guests mostly?
2. What is the guest satisfaction like regarding the bath therapeutic facilities, the quality of the therapeutic elements of supply and the price-value ratio?
3. What is the income background of the guests and what is their average willingness to spend like on the bathing precinct regarding their state of income and age?

### Demographic Features of Bath Visitors, Their Income State and Willingness to Spend

Using the demographic data of the questionnaire (as it can be seen in Table 1) we can gain information on the sample guests’ sex, age, financial state and deriving possibly from it, on willingness to spend. These data will serve as crucial factors at correlations examinations.

Table 1: Sample distribution by sex, number of persons

| Baths                            | Male<br>(number<br>of per-<br>sons) | Female<br>(number<br>of per-<br>sons) | Total<br>(number<br>of per-<br>sons) |
|----------------------------------|-------------------------------------|---------------------------------------|--------------------------------------|
| Eger Thermal Bath                | 119                                 | 89                                    | 208                                  |
| Eger Turkish Bath                | 92                                  | 108                                   | 200                                  |
| Egerszalók Salt Hill Thermal Spa | 79                                  | 126                                   | 205                                  |
| Demjén Thermal Bath              | 80                                  | 120                                   | 200                                  |
| Bogács Thermal Bath              | 100                                 | 103                                   | 203                                  |
| Mezőkövesd Zsóry Thermal Bath    | 74                                  | 126                                   | 200                                  |
| Miskolc-tapolca Cave Bath        | 95                                  | 105                                   | 200                                  |
| Total                            | 639                                 | 777                                   | 1416                                 |

Source: Compilation by the author based on questionnaire survey

Although the willingness to respond determined who would become the member of the sample, we can say that women outnumbered men in most places. Their willingness to respond was also higher.

As most visitors are female, this might be the reason for using more health and beauty services, e.g. fitness rooms, sauna, beauty parlour, solarium etc. besides the usual services of a thermal bath.

Table 2: Sample distribution by age, number of persons

| Baths                            | Under 18 | Between 18–30 | Between 31–50 | Between 51–60 | Over 60 |
|----------------------------------|----------|---------------|---------------|---------------|---------|
| Eger Thermal Bath                | 16       | 88            | 49            | 26            | 29      |
| Eger Turkish Bath                | 0        | 8             | 47            | 84            | 61      |
| Egerszalók Salt Hill Thermal Spa | 8        | 80            | 48            | 57            | 12      |
| Demjén Thermal Bath              | 5        | 122           | 49            | 13            | 11      |
| Bogács Thermal Bath              | 19       | 49            | 57            | 41            | 37      |
| Mezőkövesd Zsóry Thermal Bath    | 11       | 43            | 61            | 65            | 20      |
| Miskolc-tapolca Cave Bath        | 2        | 66            | 78            | 40            | 14      |
| Total                            | 61       | 456           | 389           | 326           | 184     |

Source: Compilation by the author based on questionnaire survey

Table 2 shows that the different age groups were listed on a scale, thus respondents were not forced to give their exact age (which might be a tender spot for women) but simply mark the proper age category for themselves.

Because of the voluntary willingness to respond, we cannot state that we could provide a perfect representation about the age of the bath visitors, yet in the case of the different type baths, depending on whether they are spas or adventure baths, it can be seen that in Eger Thermal Bath, Egerszalók and Demjén mostly the young (18–30) can be found, whereas in the case of the Turkish Bath and Zsóry Bath the senior age groups (51–60 and over 60) are represented in a larger number. The reason for it can be partly that Turkish and Zsóry Baths are better at providing medicinal water services, which justifies the higher number of senior guests, while in the rest of the baths the pools enriched with wellness and adventure elements and other services apply to the young and families, this is why this affinity group is more characteristic.

In Table 3 we can see the average monthly income of guests. To enquire about people’s monthly income is also a tender spot. (some people are ashamed because they think it is too little, some find it embarrassing to have too much), so I applied a scale rising by 50.000 HUF in order to avoid the exact forint amounts thus making the respondents’ positions a bit more comfortable.

It can be stated that most bath visitors have an average 50–99.9999 and 100–149.999 forint monthly income. Among the guests under 50.000 forints there are 61 under 18 and, supposedly, they do not have their own salary, this is why they marked this category. Obviously, to pay the (sometimes relatively expensive) admission fees of the baths presupposes

Table 3: Sample distribution by average monthly income, number of persons

| Baths                            | Under 50.000 HUF | 50-99.999 HUF | 100-149.999 HUF | 150-199.999 HUF | 200.000 HUF or over |
|----------------------------------|------------------|---------------|-----------------|-----------------|---------------------|
| Eger Thermal Bath                | 25               | 74            | 53              | 40              | 16                  |
| Eger Turkish Bath                | 0                | 123           | 73              | 3               | 1                   |
| Egerszalók Salt Hill Thermal Spa | 21               | 99            | 68              | 14              | 3                   |
| Demjén Thermal Bath              | 44               | 73            | 52              | 27              | 4                   |
| Bogács Thermal Bath              | 17               | 80            | 61              | 24              | 21                  |
| Mezőkövesd Zsóry Thermal Bath    | 22               | 41            | 61              | 65              | 11                  |
| Miskolc-tapolca Cave Bath        | 14               | 51            | 68              | 42              | 25                  |
| Total                            | 143              | 541           | 436             | 215             | 81                  |

Source: Compilation by the author based on questionnaire survey

certain financial comforts, not everybody can afford to do so.

Egerszalók Salt Hill Thermal Spa is regarded a rather costly establishment, this is why I found it really astonishing that relatively few guests marked the 150–199.999 and over 200.000 forint monthly income. Regarding the Eger Thermal Bath, we can see that the budget layer (mostly pensioners) use the facilities, yet in Zsóry Bath the more well-to-do guests are dominant.

As a summary we can state that the majority of visitors regard their own financial status average, although it does not necessarily mean to have an influence on guests’ willingness to spend.

Table 4: Sample distribution by spending rate, number of persons

| Baths                            | Do not spend | Spend less than 5.000 Fts | Spend between 5–10.000 Fts | Spend between 10–20.000 Fts | Spend over than 20.000 Fts |
|----------------------------------|--------------|---------------------------|----------------------------|-----------------------------|----------------------------|
| Eger Thermal Bath                | 185          | 9                         | 10                         | 1                           | 3                          |
| Eger Turkish Bath                | 5            | 166                       | 12                         | 16                          | 1                          |
| Egerszalók Salt Hill Thermal Spa | 110          | 24                        | 39                         | 0                           | 32                         |
| Demjén Thermal Bath              | 76           | 35                        | 76                         | 7                           | 6                          |
| Bogács Thermal Bath              | 111          | 17                        | 58                         | 4                           | 13                         |
| Mezőkövesd Zsóry Thermal Bath    | 87           | 87                        | 24                         | 2                           | 0                          |
| Miskolc-tapolca Cave Bath        | 83           | 26                        | 75                         | 2                           | 14                         |
| Total                            | 657          | 364                       | 294                        | 32                          | 69                         |

Source: Compilation by the author based on questionnaire survey

Table 4 shows the potential spending of visitors during their stay besides the admission fee.

This issue is in connection with that one related to the income state shown above, as it can be correlated with willingness to spend.

The previous (3) table revealed that most bathers rate themselves into the average property status yet the connections of it with willingness to spend will be seen in the crosstab analyses.

In the case of Bogács, but rather Eger Thermal Bath it can be seen clearly that most guests spend almost on the admission fee. Contrary to the Turkish Bath, where almost each guest spends additionally, not more than 5.000 forints, using the medicinal services. (Definitely, the most important motivation for these guests is to require the healing services) Examining Egerszalók Salt Hill Thermal Spa we can see that numerous guests pay only for the admission fee (being quite expensive itself), yet we can also see the greatest number (32) of those guests spending over 20.000 forints during their stay.

One of the reasons for the high willingness to spend can be the presence of families in the baths, as a family consists of at least 3–4 persons, increasing their expenses as well.

**Medicinal Services Guests Use**

Guest satisfaction and willingness to spend and consume are influenced by the disposable elements of supply, services, their quality, this is why I also wanted to know which medicinal services are especially popular among guests. The figure below shows these services marked by guests representing all the baths. The guests were allowed to mark several services which they use.

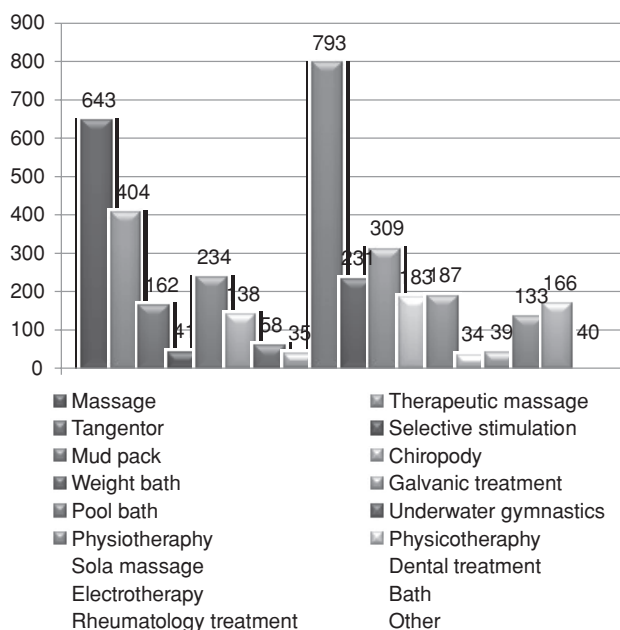


Figure 1: Medicinal applied by the sample (pieces)

Source: Compilation by the author based on questionnaire survey

In the virtue of the figure (Figure 1) it can be seen that the most commonly applied services are the massage, therapeutic massage and the pool bath. They can be required in most baths regardless their profile. There are special therapeutic massages, available only in certain places (e.g. Turkish Bath), the relatively low application of these services can be explained by this fact.

**Guest Satisfaction Regarding Therapeutic Equipment, Supply and Price/Value Ratio**

In the issue examining guest satisfaction there are questions in connection with the therapeutic equipment of baths, quality and shortcomings of therapeutic treatments and products, satisfaction with the price/value ratio of services. This way it can be seen from the answers, to what extent the guests are satisfied with the given bath.

In this part visitors had to rate the coefficients related to the bath services, on a 1–5 scale, where the best grade was 5.

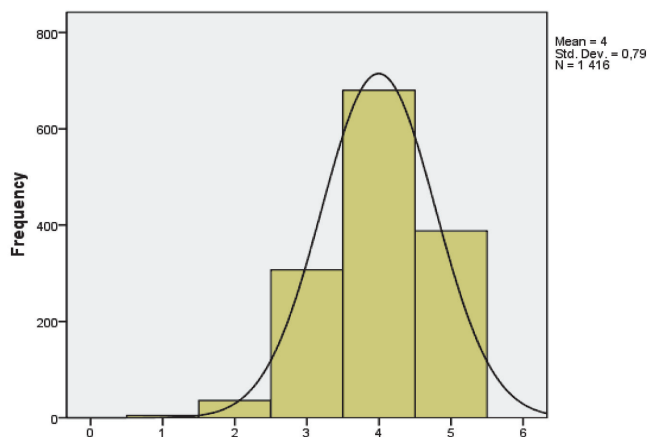


Figure 2: Therapeutic equipment-related satisfaction in the baths/ health resorts in the Northern Hungarian region  
Source: Compilation by the author based on questionnaire survey (PASW)

The therapeutic equipment-related satisfaction (Figure 2) received an average 4-grade, most 5-grades were given to the Turkish Bath. It is surprising that most people graded 4 the Eger Thermal Bath, although therapeutic services do not belong to the main profile of this bath.

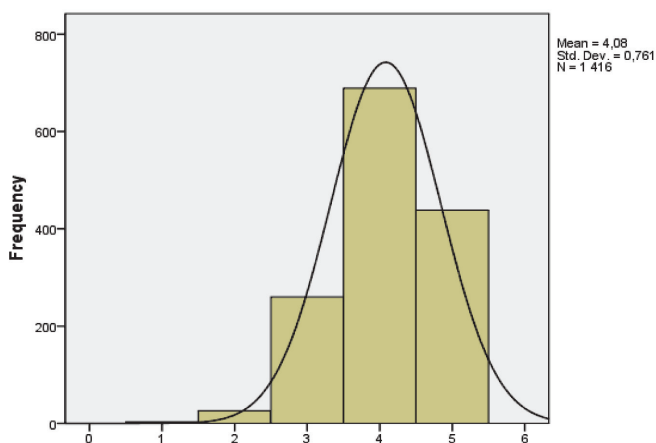


Figure 3: Quality-related satisfaction of the therapeutic units in the baths/ health resorts of the Northern Hungarian region  
Source: Compilation by the author based on questionnaire survey (PASW)

The satisfaction with the level of the therapeutic units of the bath / health resort (Figure 3) received a 4,08 average. Most visitors (114) rated the most high-standard (grade 5) the Turkish Bath. The rest of the baths were rated 4 by most

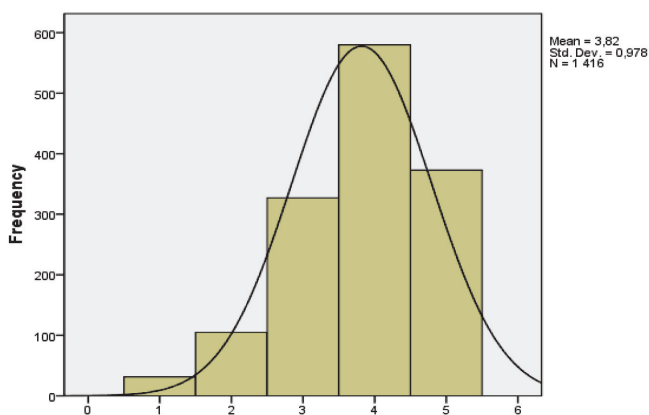


Figure 4: Satisfaction with the price/value ratio of admission fee of the baths/ health resorts in the Northern Hungarian region  
Source: Compilation by the author based on questionnaire survey (PASW)

guests. (I highlighted the Cave Bath, Bogács Thermal Bath and Egerszalók Thermal Spa).

The satisfaction with the price/value ratio of admission fee of the baths / health resorts (Figure 4) received a 3,82 average, which means that guests accept prices, however, they find them expensive in many places. Many sample participants rated 4 or 3-grade the prices of the Eger and Bogács Thermal Baths. In the case of the Turkish Bath guests are basically satisfied with the prices of the bath. (90 persons rated 5 grade, 97 persons 4 grade).

It can be seen from the analysis that bath visitors are satisfied with the therapeutic equipment and the level of the therapeutic supply, but they are not completely satisfied with the prices everywhere, which is no wonder, knowing the consumer value of the Hungarian average wages.

### Correlation Tests Concerning Guest Satisfaction and Willingness to Spend

The results of the questionnaire themselves call attention to several curiosities, yet we can get more sophisticated information from the point of view of the study preparing a correlation test. The test is based on the results of above described questionnaire, the use and combination of which can result in further valuable information, which either verify or reject the hypotheses. The crosstab examination reveals the correlation between the several responses, the respondents' sex, age and income state. In the following, I examine the guest satisfaction related to the price/value ratio of the bath services and their willingness to spend concerning age and monthly income.

The intensity of the correlations between criteria is examined with the help of Cramer's V associate co-efficient.

#### Hypotheses

1. I assume that guests having higher average monthly income (150-199.999 and over HUF) are more price-taking

because of their more secure financial state. Consequently, they are more satisfied with the price/value ratio compared to those with lower income.

2. I assume that elderly guests (51-60 and over 60) are more price-taking, conflict avoiders because of their age. This is why they are more satisfied with the price/value ratio compared to the younger (18-30).

3. I assume that guests with higher monthly income (150-199.999 and over HUF) spend more on the services compared to those with lower income.

4. I assume that younger guests (18-30) spend more on the services (regardless their age and financial state) compared to the elderly (51-60 and over).

### Correlation Tests Results

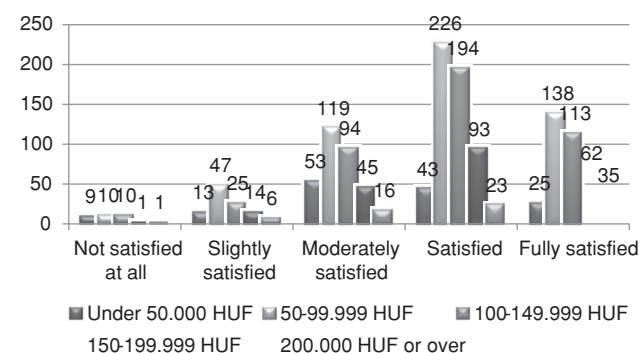


Figure 5: Correlation concerning guests' monthly income and satisfaction with the price/value ratio of the services  
Source: Compilation by the author based on questionnaire survey

The hypothesis according to which guests with higher monthly income are more price-taking and thus more satisfied with the price/value ratio than those having lower income, seemed to be true among guests with 200.000 forint monthly income (Figure 5). Most of them represented the „Fully satisfied” category. However, it is also true that they were the fewest among bath guests and several of them gave the price/value ratio grade 4. In the highest number guests were simply „satisfied” (4) with the price/value ratio. The value of Cramer associate co-efficient is 0,098 marking a weak correlation between the two criteria.

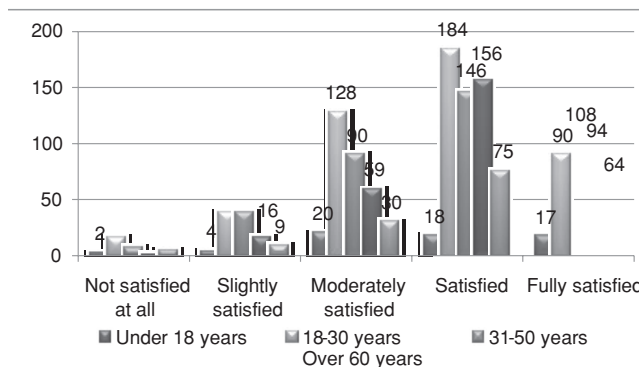
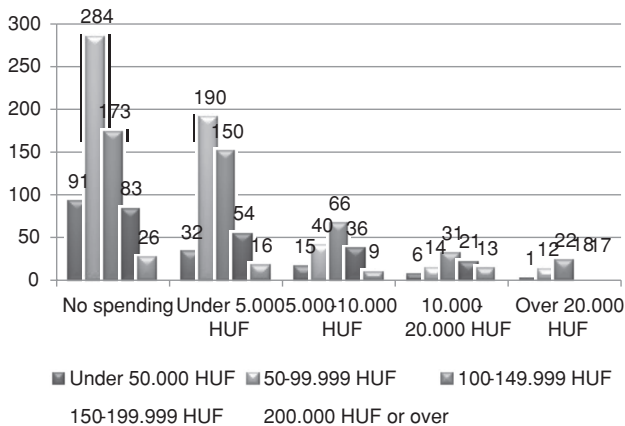


Figure 6: Correlation concerning guests' age and satisfaction with the price/value ratio of services  
Source: Compilation by the author based on questionnaire survey

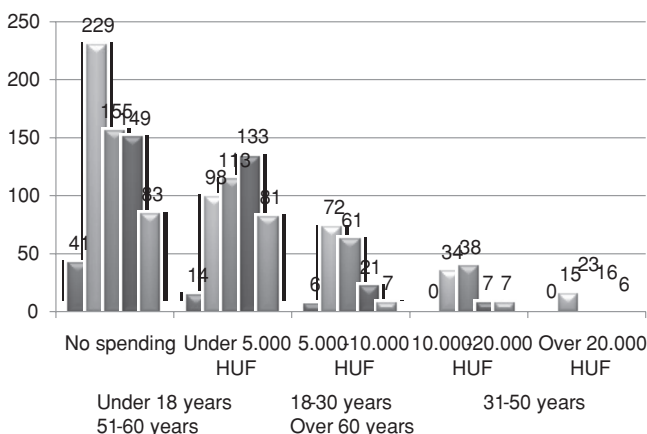


The hypothesis according to which the elderly guests (51–60 and over 60) are more price-taking and conflict avoiders because of their age, meaning being more satisfied with the price/value ratio compared to the younger (18–30), was partly verified (Figure 6). Most of them rated the price/value ratio grade 4 or 5, though it was the same with the other age groups, too. There may have been more guests in the 18–30 age group (compared to other age groups) to rate their satisfaction medium concerning price/value ratio. The value of Cramer associate co-efficient is 0,096 marking a weak correlation between the two criteria.



**Figure 7:** Correlation concerning guests' average monthly income and willingness to spend on therapeutic services  
Source: Compilation by the author based on questionnaire survey

I assumed that guests with higher average monthly income (150–199.999 and over) spend more on services than those having lower income of the above mentioned (Figure 7). The hypothesis was not verified as even among those having 150–199.999 forint income there is a declining tendency in willingness to spend (most of them spend nothing) and among those having income over 200.000, cannot be stated clearly that they spend more (there are a lot of them spending nothing, either). The value of Cramer associate co-efficient is 0,164, marking a weak correlation between the two criteria.



**Figure 8:** Correlation concerning guests' age and their willingness to spend on therapeutic services  
Source: Compilation by the author based on questionnaire survey

I assumed that younger guests (18–30) spend more on services (regardless their sex and financial state) compared to the elderly (51–60 and over 60). It can be seen well from the diagram (Figure 8) that the elderly spend nothing or a maximum of 5000 forints during their stay. It is also characteristic of most younger guests not to spend anything and in their willingness to spend a falling tendency can be observed (moving towards higher spending possibilities). It means we cannot say that the younger age group would be willing to spend far more than the elderly. The value of Cramer associate co-efficient is 0,135, marking a weak correlation between the two criteria.

## Results and Conclusion

To the hypotheses the following result were found:

1. Which services of the bath are the most popular among guests?

Among guests massage, therapeutic massage and pool bath are in rated as the first three most popular ones.

2. What is guest satisfaction like concerning therapeutic equipment, quality of therapeutic elements of supply and price/value ratio?

The overall rating of bath guests shows an average 4, i.e. basically they are satisfied with the therapeutic equipment and service quality as well.

3. What income background do guests have and what is their average willingness to spend like on the bath precinct, concerning their income state and age?

The majority of guests belong to 50–99.999 and 100–149.999 forint income groups, representing the average income of today's Hungary. Thus we can speak about services available for people having average income and going to baths is not the privilege of the richer ones.

The results of the correlation tests could be summarised the following:

Guests regardless financial state and age give grade 4 to price/value ratio, but despite their positive judgement spending is not characteristic (most guests spend nothing additional besides admission fee, if so, they do not exceed the 5000 forint amount) even among those who belong to the 'upmarket' category. Both younger and elderly guests can be characterised with the economical approach, i.e. "Make both ends meet" although seemingly they could extend these "ends".

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