THE SERVICE GUARANTEES AFFECT ON CUSTOMERS’ EVALUATIONS OF THE PUBLIC UTILITY SERVICES

ABSTRACT

The service guarantees play an important part in service quality and attracting consumers. This paper analyses the affect of service guarantees on customers’ evaluation in pre-purchase and post-purchase situation, too.

The aim of this paper is to examine the effect of service guarantees on the customer’s satisfaction, the perceived risk, and word-of-mouth.

This paper also verified in more questions, that quality assessment of postal services led to results similar to international trends in Hungary. In case of postal services with specific guarantees, the clients evaluated better quality, than at postal services with unconditional guarantees. Quality variance of postal services does not influence significantly perceived risk. However, quality level of postal services affects a little size to clients’ satisfaction. At postal services, offering specific guarantees the risk perceived significantly differs from another ones. Word–of–mouth plays significant role in getting information of clients. There is relationship between word–of–mouth in connection with express parcel and perceived risk. Nevertheless, in case of first class letter the more favourable word–of–mouth gives higher satisfaction.

Key words: post service, service guarantees, service quality, risk, word-of-mouth, satisfaction
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1. INTRODUCTION

The changes of the past years on the public services market require a new attitude, new strategy from the organisations operating in the sphere. Similar to the developed countries, the national public service companies also have to face the new challenges soon, because of the liberalisation. The situation of the Hungarian Post is special, because on one hand it provides the classic post services as the appointed universal post services company on the other hand it is also present in the competition sphere with its continuously extending service offers. On the Hungarian market, other enterprises are allowed to offer post services as well, because of a permission or registration.

In case of post services, the EU regulations determine the category of the general service, which are to be provided for everyone and without discrimination. Beside the duties of a full-scale service, the appointed general post office has the exclusive right of a limited scale of the services. The gradual limitation of the scale of the maintainable services and the total liberalisation expected from 2009 is aiming at the further opening of the competition of the community post services.

The topic of current research comes from satisfaction surveys in Hungary. Based on the postal satisfaction surveys the clients interviewed are important reliability, simplicity, speed, accessibility, and price of post services. The consumers are unsatisfied with these attributes. There are gaps between the perceived and expected transaction time, waiting time, and price. We cannot leave output of postal measurements out of consideration. Based on post measurements the transaction time of letters and parcel was much better than the customer experience (Ercsey, 2005). In virtue of surveys, we can suppose that the majority of the clients do not know exactly the fulfilment conditions, deadlines, and guarantees in reference to the postal services. In the eyes of the European consumers, concerned price of public utility services is the most important components of service quality. The price of postal services is fair to compare with another public utility services (Gallup survey, 2002-2003).

The main idea of our research is how guarantees of public utility services influence to consumers’ evaluations pre-consumption and after service has been experienced.

This paper aims to analyse and interpret the unconditional guarantee and specific guarantee in case of postal services. We examine consumers’ feeling risk based on performance and
compensation. We use the concept of signal theory to examine the connection among the service quality evaluation, the service guarantees, and risk. In our research, we also study what the customer get information about quality of postal services from and these will contribute to the positive image pre consumption. It is important to analyse the relationship between word-of-mouth and perceived risk, too. In our research, we also analyse how specific guarantee differs from unconditional one in the customers’ satisfaction.

We can examine in practise of theoretical questions, relationships based on our primary survey. Limitations and implications are presented at the end of the paper.

2. THEORETICAL BACKGROUND

The service quality focus on the service guarantees

A small but increasing number of service companies are willing to offer a guarantee of 100% customer satisfaction and they promise a full refund, or replacement in the event of dissatisfaction. Companies that provide service guarantees have found that committing to total customer satisfaction actually helps them focus on providing it (Hart, 1988). Guarantees force firms to focus on what their customers want and expect from each element of the service. Guarantees set clear standards, both for the customers and the employees of the organization. The danger of having to compensate customers for poor service will encourage managers to take guarantees seriously, because they are directly linked to the financial costs of service failures. Guarantees reduce the consumer's risk of the purchase decision and build long-term loyalty.

It is important to mention that not all service guarantees work properly. Some of them have too many exceptions and conditions, while some others require that the customers manoeuvre through a complicated procedure in order to collect on the guarantee. In order for a service guarantee to work effectively, it must be unconditional, easy to understand, easy to invoke and easy and quick to collect on.

Inconsistencies in definitions of service guarantees

Currently, a lack of consensus about what exactly constitutes a guarantee is evident. While some researchers view it as a policy, others suggest it is a firm promise. In addition, confusing the scope with its elements has led to inconsistent definitions of different guarantee types. For instance, an unconditional guarantee has sometimes been used to refer to the circumstances...
under which a guarantee may be invoked (e.g. "if unhappy for any reason" Ostrom and Iacobucci, 1998. "No-questions asked" Chu, Gerstener, and Hess 1998). Others have used it to refer to the firm goal of assuring complete customer satisfaction (McDougall, Levesque, and VanderPlaat, 1998; Wirtz, 2000), or assume that it implies compensation in full (Hart, 1988. 1993). This confusion has led to idiosyncratic operationalization of concepts in studies. This makes it difficult for researchers to compare results across studies, raises concerns about construct validity, and hinders replication. Thus, unconditional and specific may be used to represent the service promise (about all or specific attributes of the service respectively) guaranteed by the firm, while compensation is separately specified. Compensation and claim procedures may be either implied or explicitly stated in the guarantee.

**Summary of previous research on service guarantees**

Previous research on service guarantees can be categorized into following overlapping areas:

- **Impacts of guarantees on customer perceptions** (risk, quality and satisfaction) and purchase decision

Previous research suggests that service promises can foster and strengthen customer-firm relationships (Bitner, 1995; Gwinner, Gremler, and Bitner, 1998) due to their attention to specific attributes such as price or delivery time, or because of unconditional assurances aimed at increasing customer satisfaction (Broadcasting and Cable, 1996).

Ostrom and Iacobucci (1998) suggest that service guarantees serve as external cues (just like price or brand reputation) that are used by customers to evaluate service quality and reduce risk. In an experimental study, they found that service guarantees improved customer evaluations only in the absence of other quality information. As expected, perceptions of risk were lower when a guarantee was offered. In the same study, they also found that service guarantees had a greater impact on customer evaluations when quality variation was perceived to be high among service providers.

In addition, the uniqueness of a guarantee has been found to amplify its effect on customer evaluations (Wirtz, 1998). Wirtz (1998) notes, in general service guarantees favourably influence customer attitudes and beliefs, thereby increasing purchase intention.

However, Tucci and Talaga (1997) found that guarantees increased choice likelihood for expensive services, but negatively influenced choice when prices were low.
In a later study, Wirtz (2000) found that the impacts of service guarantees on customer evaluations of quality, risk, and purchase intention were significantly moderated by firm reputation.

In summary, these studies suggest that not all customers and firms benefit equally from service guarantees. The level of risk (which could be a function of price or degree of quality variation), availability of other information (e.g. brand, price), uniqueness of the guarantee, or firm reputation (low, high, or outstanding), may considerably moderate the ability of service guarantees to improve customer evaluations.

- **Design of service guarantees**

In an article summarizing past research, Wirtz (1998) proposed that well designed service guarantees should be unconditional, easy to understand and communicate, meaningful to customers, easy to invoke, easy to collect on and credible.

McDougall, Levesque, and VanderPlaat (1998) found that survey respondents preferred a specific service guarantee to an unconditional guarantee when their attention was focused on invoking the guarantee. In this study, specific guarantees were preferred on three dependent measures: risk reduction, ease of obtaining refunds, and confidence in dealing with the firm.

Chu (1998) derived optimal refund policies for service firms under different conditions of salvage value, complaining costs, customer dissatisfaction, frequencies of use during trial, and price.

The evidence suggests that both, specific and unconditional guarantees have positive effects on customer evaluations.

**Specific question of the service guarantee researches:**

- **When and why do firms benefit from service guarantees?**

From a firm’s perspective, it is necessary to understand why and how customers infer higher quality, value, and satisfaction when service is guaranteed.

Although previous research has identified a number of benefits sought by customers of service firms (Gwinner, 1997), not much attention has been given to specific relational benefits (or processes by which they are realized) of service guarantees.

Our framework utilizes signalling theory to explain when and how different types of guarantees communicate higher quality and lower risk perceptions.
Signalling theory assumes a rational consumer, who is both, motivated and capable of decoding firm signals (Kirmani and Rao, 2000). Consequently, service guarantees signal high service quality. These serve to reduce customer costs of search and information, too.

It provides a reasonable basis for reconciling the observed findings and can guide firms seeking to incorporate guarantees into their service strategy.

3. CURRENT RESEARCH

We introduce our research is divided into five parts. First, we look over the topical questions after literature view, after than we know the model of our research and hypotheses, too. Next, there come methodology of empirical study, analysis, and valuation of our results.

3.1. Objects of empirical research

Our research aims to examine the service guarantee and the customer satisfaction at the public utility services.

Our questions are following:

- Does the customer satisfaction differ significantly between specific and unconditional guarantee at postal services?
- How does the perceived service quality influence the customer satisfaction?
- We have to make clear how do the customers evaluate the risk in the case of different types of service guarantees pre-purchase?
- What kind of role does the service guarantee have in development of positive word-of-mouth and how does this connect to risk?

We conclude the supposed relationships effects in the following model, and interpret relationships among the components of the research model.

3.2. Model of current research, theoretical approaches, definition the factors of model

Summary of domestic and foreign literature about public utility services, moreover secondary data help to draft the research questions, besides to reveal the connections among research factors (Figure 1.).
This study aims to analyse and interpret the **unconditional guarantee** in case of postal services (Table 1.). If there are service parameters which are important for clients in addition both company and consumers can measure, control (e.g. speed of mail deliveries, waiting time, accessibility), (Ercsey and Dernóczy, 2005).

### Table 1: Consumer information of postal service guarantees

<table>
<thead>
<tr>
<th>Factors of guarantee</th>
<th>Unconditional guarantee</th>
<th>Specific guarantee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transit time</td>
<td>Ordinary letter</td>
<td>First class letter</td>
</tr>
<tr>
<td></td>
<td>Parcel</td>
<td>Express parcel</td>
</tr>
<tr>
<td>Compensation:</td>
<td></td>
<td></td>
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<tr>
<td>Lost deliveries</td>
<td>Parcel</td>
<td>First class letter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Express parcel</td>
</tr>
<tr>
<td>Compensation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delay delivery</td>
<td>x</td>
<td>First class letter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Express parcel</td>
</tr>
</tbody>
</table>

Source: author
Another type of service guarantees is examined in this paper: postal services with **specific guarantees**. Specific guarantees promise superior company performance on specific attributes (e.g. delivery). Quality regulations of postal services refer to the time of forwarding: services with time guarantee within one day at mail deliveries and within two days at parcels. The compensation amount is a double of postal tariff at time guarantee services (Table 1.).

It is important to analyse how guarantees affect consumer evaluations when service fails.

We examine consumers’ feeling **risk** based on performance and compensation.

Service guarantees may magnify the effect of service success and failure on customer evaluations. Most empirical research so far suggest that defaulting on performance leads to poorer evaluations when a guarantee is offered (Kumar, Kalwani, and Dada, 1997, Smith and Bolton, 1998).

We use the concept of signal theory to examine the connection among the service quality evaluation, the service guarantees, and risk. Service guarantees may communicate higher service quality either directly or indirectly by conveying lower risk (Erevelles 1993; Shimp and Bearden 1982). Both unconditional and specific guarantees signal unobservable service quality to customers by informing them of the firm’s intention to act in a certain manner and, firm resources or collateral committed to fulfilling the promise expressed in the guarantee (Herbig and Milewicz 1992). The extent to which a service guarantee may improve customer evaluations of service quality depends on its perceived credibility (Boulding and Kirman, 1993).

In our research, we also study what the customer get information about quality of postal services from (e.g. advertisement, front-line personnel, friends,) and these will contribute to the positive image pre consumption.

It is important the nature of process at services the client is involved in the significant part of actions he or she passes through the service episode. During the evaluation process the client compares his/her expected and experienced fulfilment in reference to service. In case of the postal activities: **satisfaction** is a cognitive, emotive response based on the subjective evaluation process (Oliver, 1997). Focus of satisfaction: attributes of postal services, fulfilment parameters, physical facilities, personnel.

Therefore, we come to the most interesting phases of my study, the examination in practise of theoretical questions, relationships. Whether does clients’ opinion prove the previous relationships?
3.3. Hypotheses of this research

The discussion of model can be divided three parts. First, we examine how specific guarantee differs from unconditional one in the customers’ satisfaction. After this into the second part, we speak about hypotheses of customers’ feeling risk pre-purchase in connection with different services guarantee and service quality. In the third part, there is the relationship between word-of-mouth and perceived risk (Figure 1.).

Hypotheses to the examination of service guarantees, the consumer’ satisfaction and perceived risk

Previous studies suggest service guarantees may communicate higher service quality directly or indirectly by conveying lower risk (Erevelles, 1993, Shimp and Bearden, 1982). Further previous researches have proved that heterogeneity of services can result quality variation of services delivered (Zeithaml–Parasuraman–Berry, 1990. Parasuraman–Zeithaml–Berry, 1985).

H1 When consumers perceive a greater variance in service quality, it will decreases consumers’ satisfaction.

H2 When consumers perceive a greater variance in service quality, a service guarantee will has a more positive impact on the perceived risk.

The moderate role of quality information at service organization

In studies of service guarantee (Innis and Unnava, 1991) it is less affect when customer has more „direct” information about the level of service quality e.g. word-of-mouth, Consumer Reports, firm reputation or strong brand name.

H3 When consumer has more word-of-mouth that is positive about public utility services, a guarantee will have less impact on consumers’ risk perceived.

This information may decrease negative impact customer perceptions. Besides it will improve consumers’ evaluation of service quality, they consider information as implicit guarantee.
3.4. Methodology of our research

Qualitative phase went before quantitative one, which constitutes of our study.

The exploratory phase of primary survey

Data collection was made with face-to-face interview in April 2006. We got in touch with subject of depth interview by informal method (e.g. ex-college, ex-student). Generally, these interviews took one hour and these ones pass off at work place of subjects or indifferent place. We looked for answers more questions during depth interviews. There was the emphases especially the customer’ evaluation standpoints of postal services, customer’ interpretation, definitions of service guarantee, furthermore the comparison of motivation and evaluation of delivered different postal services.

This qualitative phase prepared quantitative surveys. Therefore, at the same time it was managed to find time for the depth interviews and test of the planned questionnaire, too.

Quantitative phase of primary research

In the second part of primary survey, there was the questionnaire survey at the population of West part of Hungary in April – May, in 2006.

The sample size is 350 respondents, in consideration of misestimating and incomplete questionnaire. Number of respondents was 341 at our survey.

Sampling technique was combination of stratified sampling and simple random sampling in accordance with our survey in conformity with aim. Stratified sample added to the representative sample, in turn simple random sampling served the speed and simplicity. In the meantime, of stratified sample we paid attention to the adherence of correct rate to take notice of demographical characteristics (sex, place of residence), (Hungarian Central Statistical Office, 2004.). We selected more respondents with college and secondary degrees education to sample, than it would be necessary based on population distribution. In one respect, these two groups more often go post office, both to fill in exactly the questionnaires expect more education than average of respondents.

The questionnaire survey happened to interviewers with personal survey according to the project and number of questions. Therefore, it was the response rate of 98 percent at collection data.
Measurement methods
We used the attribute – oriented method, SERVPERF measured on multi item scale, from the satisfaction measurement methods. The service quality is measured to assess the perceived performance by this method (Parasuraman-Zeithaml-Berry, 1985). The aim of the measurement is subjective evaluation of the perceived service attributes. The performance measurement is engaged more often to evaluate consumers’ satisfaction in practise. We used evaluation, satisfaction and expectation scales from one to five to the basic questions of questionnaire (Hofmeister, Simon and Sajtos, 2003. Parasuraman–Zeithaml–Berry, 1988). We measured the risk of consumers, and the positive word-of-mouth on Likert scales (1-5). However, we used nominal scale with four categories to evaluate to the quality experiences of consumers. Besides, the respondents evaluated the given variables with ordinal, ratio, and nominal scales on 1 to 5 ones. We decided the variables list because of literature, researches, and previous issues. There were only closed questions in the questionnaire, because we wanted marked and ranked data for statistical analysis.

The required information, the structure of questionnaire: the assemblage of questionnaire followed the objects of our research.

We made the analyses in reference to the guaranteed delivery time postal items and non-priority ones, too.

3.5. Analyses of the results

How are the clients satisfied?

Results indicate that average satisfaction of Hungarian Post Company is medium level 3.64, on a 1 to 5 scale. We further analyse different services, we can point out that at ordinary letter 3.73, at parcel 3.72, a little better at time guaranteed services, at first class mail 4.04, at express parcel 3.79. We can examine there are statistical significance of the observed differences between satisfaction degrees of unconditional and specific guarantee services.
Table 2: Difference between satisfaction degrees of the postal letter services

<table>
<thead>
<tr>
<th>Paired Samples Test</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error</td>
<td>Mean</td>
<td>95% Confidence Interval of the Difference</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td></td>
</tr>
<tr>
<td>Pair 1</td>
<td>-382</td>
<td>.998</td>
<td>.057</td>
<td>-494</td>
<td>-270</td>
<td>-6.724</td>
<td>308</td>
</tr>
<tr>
<td>Ordinary letter</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>satisfaction</td>
<td></td>
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<tr>
<td>First class letter</td>
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<tr>
<td>satisfaction</td>
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</tr>
</tbody>
</table>

Results of paired $T$ test show significant differences at average satisfaction level both ordinary and first class letter, both ordinary and express parcel, the respondents evaluated better the guaranteed delivery time services.

Table 3: Difference between satisfaction degrees of the postal parcel services

<table>
<thead>
<tr>
<th>Paired Samples Test</th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error</td>
<td>Mean</td>
<td>95% Confidence Interval of the Difference</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td></td>
</tr>
<tr>
<td>Pair 1</td>
<td>-111</td>
<td>.723</td>
<td>.052</td>
<td>-214</td>
<td>-.007</td>
<td>-2.108</td>
<td>189</td>
</tr>
<tr>
<td>Parcel satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Express parcel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>satisfaction</td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

Relationship between the satisfaction and the perceived service quality, H1 testing

Quality heterogeneity of postal services may effects the satisfaction level of the individual postal services. Quality heterogeneity (fewer or bigger) and the good stable level of observed postal service impressions satisfaction level.

However, this effect is very low: at ordinary letter 25.9 percent, at first class letter 15.6 percent, at parcel 15.2 percent, and at express parcel 5.6 percent (Table 4.). Therefore, we max state, better service quality adds to higher satisfaction.
Table 4: Relationship between the satisfaction degree and the quality experiences of postal services

<table>
<thead>
<tr>
<th>Satisfaction at different quality experiences:</th>
<th>Ordinary letter</th>
<th>First class letter</th>
<th>Parcel</th>
<th>Express parcel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable – good</td>
<td>4.38</td>
<td>4.31</td>
<td>4.11</td>
<td>4.02</td>
</tr>
<tr>
<td>Unstable – medium</td>
<td>3.69</td>
<td>3.55</td>
<td>3.62</td>
<td>3.72</td>
</tr>
<tr>
<td>Unstable – poor</td>
<td>2.79</td>
<td>3.17</td>
<td>2.75</td>
<td>3.00</td>
</tr>
<tr>
<td>Don’t know</td>
<td>4.18</td>
<td>4.14</td>
<td>3.67</td>
<td>3.64</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.110</td>
<td>0.961</td>
<td>0.852</td>
<td>0.855</td>
</tr>
<tr>
<td>Variance</td>
<td>1.233</td>
<td>0.924</td>
<td>0.725</td>
<td>0.730</td>
</tr>
<tr>
<td>F test</td>
<td>38.866</td>
<td>18,754</td>
<td>14,584</td>
<td>4.317</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.006</td>
</tr>
<tr>
<td>Eta Squared</td>
<td>0.259</td>
<td>0.156</td>
<td>0.152</td>
<td>0.062</td>
</tr>
</tbody>
</table>

By virtue of the results, first hypothesis is accepted (Table 5.).

Table 5: Hypothesis in connection with customer’ satisfaction

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 When consumers perceive a greater variance in service quality, it will decreases consumers’ satisfaction.</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Relationship between the satisfaction and the word–of–mouth

First, we see what from source the customers get information in connection services. Based on survey we can see in case of observed services, there is first front-line staff, after than friend, acquaintances of them, homepage, relatives, leaflet, the other ones are not important at mails. At parcels, homepage precedes friends, acquaintances of them, land co-workers, but leaflet only plays part in getting information at express parcels.

Table 6: Correlation between the satisfaction and the word-of-mouth at first class letter

<table>
<thead>
<tr>
<th>Services</th>
<th>Pearson Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>First class letter</td>
<td>0.412</td>
<td>0.000 &lt; 0.01</td>
</tr>
<tr>
<td>Time guaranteed parcel</td>
<td>0.266</td>
<td>0.006 &lt; 0.01</td>
</tr>
</tbody>
</table>
After these let us see there is relationship between word-of-mouth and customers’ satisfaction. In case of first class letter (Table 6.) it is connection \( r = 0.412 \), the more good is satisfaction the more favourable is word-of-mouth and vice versa. In case of express parcels variables are correlated \( r = 0.266 \), too.

**Determination of dimensions for consumer satisfaction**

By survey, we have answers, which service factors are most important for clients at observed services. You can see, guarantee conditions are very important, there is on the first place transit time (waiting time at ordinary letter), after than service speed comes next and compensation amount is only on sixth place in case of nine factors.

We attempted to determine dimensions, components that important at evaluation of services, and results of factor analysis were positive at express parcels. At the other three services, the extracted factor model did not fit well. In case of time, guarantee parcels factor analysis resulted in three components.

**First** component relates to front-line-work (expertise, courtesy, helpful, speed of administration). **Second** component concerns to tangible factors (room is clean and orderly, informational material is well arranged) and financial factors (compensation amount, price). **Third** component refers speed (transit time) and accessibility (opening hours). (Table 7.)

<table>
<thead>
<tr>
<th>Service attributes</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening hours</td>
<td>- 0.124</td>
<td>0.149</td>
<td>0.710</td>
</tr>
<tr>
<td>Room is clean and orderly</td>
<td>0.037</td>
<td>0.620</td>
<td>0.174</td>
</tr>
<tr>
<td>Speed of administration</td>
<td>0.989</td>
<td>0.034</td>
<td>0.064</td>
</tr>
<tr>
<td>Transit time</td>
<td>0.078</td>
<td>0.097</td>
<td>0.734</td>
</tr>
<tr>
<td>Price</td>
<td>0.098</td>
<td>0.583</td>
<td>0.166</td>
</tr>
<tr>
<td>Expertise</td>
<td>0.992</td>
<td>0.058</td>
<td>0.033</td>
</tr>
<tr>
<td>Courtesy, helpful</td>
<td>0.989</td>
<td>0.071</td>
<td>-0.015</td>
</tr>
<tr>
<td>Informational material</td>
<td>0.064</td>
<td>0.768</td>
<td>-0.239</td>
</tr>
<tr>
<td>Compensation amount</td>
<td>-0.055</td>
<td>0.683</td>
<td>0.238</td>
</tr>
</tbody>
</table>
Connection between the service quality heterogeneity and the perceived risk, H2 testing

At risk analyse it is important to examine, whether quality evaluation of different postal services effects to consumer’ perceived risk.

More than half of respondents evaluated good – reliable quality of first class mails and different client clusters (poor – unstable, medium – unstable, good – stable, no answer) risk evaluation do not give large different (3.36 – 3.87, average 3.82). In case of first class letter the customer’evaluation of quality, dispersion does not affect risk significantly.

In case of express parcel, it does not affect risk, too. The customer’evaluation of quality heterogeneity does not show large differences, average 3.91, 3.83, and 3.96 at the clusters (Figure 2.). About forty percent of respondents did not know to evaluate quality of express parcel, in all probability some of them have never used this service.

On the score of these results second hypotheses is rejected (Table 8.).

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2 When consumers perceive a greater variance in service quality, a service guarantee will has a more positive impact on perceived risk.</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Figure 2: Relationship between the perceived risk and the quality experiences at guaranteed delivery time services

In case of express parcel, it does not affect risk, too. The customer’evaluation of quality heterogeneity does not show large differences, average 3.91, 3.83, and 3.96 at the clusters (Figure 2.). About forty percent of respondents did not know to evaluate quality of express parcel, in all probability some of them have never used this service.

On the score of these results second hypotheses is rejected (Table 8.).
Connection between the word–of–mouth and the perceived risk, H3 testing

Because of our hypothesis opinions about services, positive word–of–mouth favourably effect to the customer perceived risk. Results of survey did not verify this hypothesis at first class mail (3.74 – 3.82). It is not correlation ($r = 0.119$, sig.=$0.105$) in case of this letter.

Table 9: Correlation between the perceived risk and the word-of-mouth at express parcel

<table>
<thead>
<tr>
<th></th>
<th>Express parcel risk</th>
<th>Word-of-mouth at express parcel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Express parcel risk</td>
<td>Pearson Correlation</td>
<td>$1$</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>$0.385^{**}$</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>$168$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$0.000$</td>
</tr>
<tr>
<td>Word-of-mouth at express parcel</td>
<td>Pearson Correlation</td>
<td>$0.385^{**}$</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>$0.000$</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>$90$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$148$</td>
</tr>
</tbody>
</table>

**: Correlation is significant at the 0.01 level (2-tailed).

But there is relationship between perceived risk (3.91) and word–of–mouth (3.70) at time guaranteed parcel ($r = 0.385$), although the strength of association shows, the more favourable is word-of-mouth in connection with time guarantee parcel the more better perceived risk, and vice versa (Table 9.).

In virtue of above, third hypothesis is accepted partly (Table 10.).

Table 10: Hypothesis in connection with the perceived risk

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>H3 When consumer has more word-of-mouth that is positive about quality level of public utility services, a guarantee will have less impact on consumers’ risk perceived.</td>
<td>Accepted partly</td>
</tr>
</tbody>
</table>

Connection between the perceived risk and the satisfaction

It may be hypothesized risk degree also influences satisfaction with services. Respondents do not concern risky postal services on time guarantee (3.91 and 3.82) to take the fulfilment and compensation conditions into consideration.
There is a relationship between satisfaction and risk degree at first class mail. A recoded risk scale and made three categories: low, medium, and high risk. We can see, that better risk perceived adds to higher satisfaction (Table 11.). However, this connection is very low.

**Table 11: Relationship between the satisfaction and the perceived risk at first class letter**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups (Combined)</td>
<td>7,207</td>
<td>2</td>
<td>3,604</td>
<td>3,991</td>
<td>.019</td>
</tr>
<tr>
<td>Within Groups</td>
<td>264,573</td>
<td>293</td>
<td>.903</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>271,780</td>
<td>295</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Measures of Association**

<table>
<thead>
<tr>
<th>First class letter satisfaction * recode risk</th>
<th>Eta</th>
<th>Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>,163</td>
<td>,027</td>
</tr>
</tbody>
</table>

3.6. Analysis of the quality experiences, the risk and satisfaction at heavy users

We divided the respondents into two parts: heavy users, and non-heavy users. The heavy users send letters or parcels every day or several times a week. The papers about this subject point at the usage level affect the evaluation of services and firms, the heavy users indicate equity (Kolos-Demeter, 1995). In this research, we analyse, how the client’s status plays a role at the evaluation of examined variables.

Relationship between the quality experiences and the usage level at first class letter

There is association between the usage level and the quality experiences at letter and parcel services, too. It may be concluded that heavy users are the ones who have a better opinion about first class letter. The type of user status is significantly associated with the quality experiences of this postal service (Figure 3.).
Relationship between the perceived risk and the usage level at guaranteed delivery time services

The usage level is not significantly associated with the perceived risk, but tendency can be seen. In the search of association between the variables, we can see the heavy users perceived lower risk (3,91), but average users (3,82) show a higher risk at first class letter (Figure 4.).

**Figure 4: Relationship between the perceived risk and the usage level at guaranteed delivery time services**
As concerns perceived risk, it can be seen that the heavy users demonstrate a higher risk (3.80), than the average ones (3.91).

**Relationship between the satisfaction and the usage**

It is interesting to see that usage of delivered services influence to the satisfaction degree. In case of time guaranteed parcel the clients have better satisfaction (4.67) who more often use this, and significantly fewer one who rarely or never send express parcel (3.77). Variance analysis shows there is significant relationship between usage of postal services and satisfaction, but this impact is very low ($\eta^2 = 3.2 \%$). (Figure 5.)

**Figure 5: Relationship between the satisfaction and the usage level at express parcel**

![Graph showing satisfaction levels for heavy users, non-heavy users, and average satisfaction](image)

After different client clusters examined we did not discover large differences at first class mails. Average satisfaction with first class mail is between 4.03 and 4.10, low, medium and high usage.

**Summary**

Four research questions were stated at the beginning of this research. We re-examine these questions in light of the results from our survey.

1. *Does the customer satisfaction differ significantly between specific and unconditional guarantee at postal services?*
In general, the clients evaluated better quality in case of postal services with specific guarantees, than at postal services with unconditional guarantees. The respondents’ satisfaction level is higher in connection of guaranteed delivery time services.

2. **How does the perceived service quality influence the customer satisfaction?**

Based on the results we conclude, that the quality level of postal services affects a little size to clients’ satisfaction. Interestingly, this effect is fewer in case of specific guarantee. We can establish, better service quality adds to higher satisfaction.

Furthermore, there is relationship between consumers’ satisfaction and risk degree at first class mail.

3. **We have to make clear how do the customers evaluate the risk in the case of different types of service guarantees pre-purchase?**

Indeed, the quality parameters, guarantee conditions mitigate the risk of service received, but generally, there is effective, the clients consider very low the risk of postal services. At postal services, offering specific guarantees the risk perceived significantly differs from another ones. However, the quality experiences of postal services do not influence significantly perceived risk. The clients think fewer risk at express parcel (light usage, relative bigger value) to take performance and compensation conditions into consideration.

4. **What kind of role does the service guarantee have in development of positive word–of–mouth and how does this connect to risk?**

Similarly, to other services, word–of–mouth plays significant role in getting information of clients. The findings presented in Table 9, there is relationship between word–of–mouth in connection with express parcel and perceived risk. The more favourable is word-of-mouth with time guarantee parcel the more little perceived risk, and vice versa.

Nevertheless, in case of first class letter the more favourable word–of–mouth gives higher satisfaction.

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In accordance with our expectancy, the **heavy users’** satisfaction is higher level, and they evaluate the important service attributes better, than the non-heavy ones.

In this research, personal interviews were conducted with individual consumers. We can see the letter mail and parcel volumes indicate reduction in turnover, but Hungarian Post supplies the elementary needs of consumers, and the positive and negative opinions in connection with postal services conduce to the formation of supplier goodwill.
In the following of our researches, we would like to take emphases to model creation, because determining parameters of our model can help to make suitable strategically decision.

**Managerial Implications**

Drawing from the results, we offer the following strategic suggestions for managers seeking to build positive word-of-mouth, to redact the perceived risk, and to increase the satisfied consumers.

- The service organization may be able to focus on postal services with specific guarantees, and managing of service quality. However, for larger organizations (e.g. Hungarian Post) this can be more difficult. One tactic that these service providers are pursuing to measure the service quality, particularly the guarantee attributes, and the consumers’ needs.
- The improvement in operations and service quality contributes to an increase in supplier loyalty, and positive word-of-mouth. The improved quality and reduction in perceived risk allow the service organization to charge a price premium.
- By implications, it should be take in price-performance ratio services. These may also serve more satisfaction level.
- The results of this paper imply that frontline communicate to prospective consumers what standard they expect to deliver. This helps set the tone for the supplier as well as informing the consumer of the service organization’s service mission.

The liberalisation of the European post market leads attention of postal organizations to improving the level of service quality.

**Limits of this research, and implications for further research**

We assumed the followings:

- We measured the consumers’ satisfaction with public utility services as perceived fulfilment. It can be assessed as a summation of satisfaction with various attributes.
- We measured the perceived risk in indirect method. We examined the consumers’ risk in fulfilment and financial aspect.

We have to take some questions to determine the limitations and further research of our paper.
1. It can be examined the pre-purchase and post-purchase consumer’ evaluation with a quantitative model?
This research represent that results of questionnaire gave answers for major aims by exploration the important relationship between variables. For deep analysing of consumer’ satisfaction it should be know complain situation before consumer interview, and complain experiences. It can be used focus group interview for analyses the extraordinary situation.

2. The current model, and method can be applied to examine the consumer’ evaluation at other public utility services?
We can establish, it has to take into consideration the flavour of examined services at operationalisation of model variables. For example at measurement of the perceived risk associated with public town transport, it plays part another types of risk, physical and social, besides the performance and financial ones.
Whereas the extension of research field gives possibility to refer to behaviour-personality features of variables, too. The components of consumer behaviour, risk aversion and risk taking, can be assessed at examination of perceived risk.
Furthermore, the guarantee not only influences satisfied consumers, but also dissatisfies customers. A guarantee provides consumers with clear bases for performance assessment and promises compensation if standards are not met. This increase the strength of the belief that complaining if dissatisfied with performance. Pas research showed that consumers who complain are less dissatisfied, less likely to engage in negative word-of-mouth. Future research should explore the nature of word-of-mouth and the attitude of complaining in case of different public utility services.

Bibliography:


