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Key determinants of the public transport user's satisfaction

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Abstract: *Socio-economic changes in society have an important impact on existence and functioning of public transport systems. In the long run, it is possible to monitor the reduction of transport performance in road public transport (especially regular) due to increase in individual transport. Road public transport, due to its current state, is losing attractiveness and competitiveness in relation to alternative modes of transport. In order to increase the satisfaction of public transport customers, stabilize transport performance, to acquire new customers. It is necessary to know the key determinants of the public transport user's satisfaction. The aim of this contribution is to identify the key factors influencing the decision-making of current and potential passengers of suburban bus transport on the basis of the research conducted with the application of the mathematical and statistical apparatus (descriptive statistics, correlation analysis, texting of hypotheses using Chi-Square test and Fischer test). Authors largely dealt with the investigation of the dependence between the socio-demographic characteristics of the respondents and the intensity of the use of public transport. Interpreted results and formulated conclusions represent the current state of demand of the population for transport services and it can be considered as important determinants of future management decision of transport companies providing public transport services.*

Keywords: public sector, road public transport, customer satisfaction, passengers of suburban bus transportation, transport services

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Introduction

Road public transport is losing its competitiveness, forcing the managers of transport companies to look for new solutions and approaches to make the transport services more attractive and increase customer satisfaction, being the prerequisite for economically sustainable operation of transport companies satisfying the public interest.

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Examining the competitiveness of public transport plays an important role because through public transport, the transport of passengers to schools, public healthcare establishments and work is ensured. In addition, transportation for vulnerable groups of passengers (students, seniors) is provided. On the other hand, public transport constitutes a financial burden on public budgets (Poliak et al., 2017).

Customer satisfaction can be defined as a difference between customer expectations and their perception of a service as provided by a transport company. For the transport company to achieve customer satisfaction, it is necessary to understand customer's expectations in the first place, such expectations may be either explicit or implicit. The way how the transport company understands customer satisfaction forms the base of transport services, followed by planning and execution. The scope of execution of transport service is perceived by customers and their expectations. They define the customer satisfaction level. It is necessary to differentiate between the transport company's view of quality of provided service and customer's perception of quality of the provided service as well as other organizational aspects since this is the second aspect determining customer satisfaction.

If the transport company strives to increase the value of its transport services, it has the following possibilities:

1. Increasing of benefit of a transport service while maintaining constant level of expenses
2. Reduction of expenses related to use of a transport service while maintaining constant level of benefits
3. Increasing of benefits while reducing transport service expenses
4. Faster increase of benefits and slower increase of transport service expenses
5. Reduction of benefits going hand in hand with significant reduction of transport service expenses

For a potential passenger in the suburban transport segment, there are several possibilities available to meet his/her transport needs. The decision regarding selection of type of transport is based on aspects (criteria) being considered as relevant in aspiration to get the highest possible value. The offer gets more successful with higher value and satisfaction provided by the service to a passenger. From the available types of transport (transport services), the passenger chooses the one of which he/she is certain to provide the highest value.

To know the public transport customers (potential customers) feedback, it is possible to apply several methodological approaches being distinct by complexity of execution, financial demands, staffing, etc. After evaluation of decisive aspects, determination of information needs, in this case, to gain primary data, the method of questioning was selected.

1. Literature Review

In the professional literature, there is an amount of studies regarding public transport user perceptions about the different transportation service aspects or performance measurement by indicators.

Under the term of satisfaction of the passenger requirements we understand the perceiving and understanding of customer expectations that have been fulfilled by services provided by transport company (Shen et al., 2016). Customer satisfaction is a really difficult indicator to be measured. Customer dissatisfaction can be measured only by his/her utterance and expressions (Paliderova, 2014; Kliestikova et. al., 2017; Kyzenko et. al., 2017).

The degree of customer satisfaction can only be estimated. Service quality can be evaluated by considering customer perceptions and expectations, or by a range of simple disaggregate performance measures which can be used for measuring the ability of the company to offer services that meet customer expectations (Transportation Research Board, 1999). Customer satisfaction is a key factor for the successful long-term survival of any company in the market and equally it can be seen as a competitive advantage. Therefore, it is necessary for the company to regularly monitor customer satisfaction. The importance of customer satisfaction is generally known and accepted fact needed for the long term success of the company in the current market environment. Currently, the customer has a choice from a number of competitive choices (De Gregorio Hurtado, 2017; Enderstein, 2017; Michailidou, 2017) for almost every purchase decision. So for the company it is no longer enough to offer only quality products and passively wait for the customers. It must do much more. The company must obtain its customers and then retain through a wide range of additional services, its approach and actions in every moment of cooperation between them (Cygler & Sroka, 2017; Gorb, 2017; Kasych & Vochozka, 2017).

Passengers evaluate services in many ways that may not be systematically associated with the amount of use of the service, because the measures of efficiency and effectiveness, as aggregate indicators of total output, implicitly assume homogeneity of service quality (Hensher, 2007). Adopting subjective indicators for measuring service quality allows considering only the customer requirements; on the contrary, considering also objective measures may be helpful in a way to meet not habitual users' needs or attract new users (Eboli & Mazzulla, 2011).

It should be added that many transport experts consider the customer's point of view the most relevant for evaluating transport performance. For example, Berry et al. (1990) argues that "customers are the sole judge of service quality". Passengers' point of view is fundamental for evaluating transport service quality because they are the real consumers of the services and for this reason they can be considered the most suitable judges of the services. Transport services are characterized by various aspects, since users have different perceptions of the service aspects and factors affecting each aspect. The heterogeneity of these

perceptions is due to the qualitative nature of some aspects characterizing the services, different attitudes of the users towards the use of transport services, different ways in which the users understand the service aspects, user socioeconomic characteristics and tastes (Eboli & Mazzulla, 2011; Stonkute et. al., 2018; Zhuravleva, 2017).

Li (2011) takes the view, that the measurement of quality is a little bit harder in the field of transport. We must consider the objective and subjective criterions. The objective criterions represent the data about the real outputs from transport services as the fact if the service or transport was done or not, if there was a delay, etc. The other so called subjective criterions are state by the passenger and also evaluated by them. Here only passenger states of such kind of transport service is adequate for his or her needs.

Sometimes can be the satisfaction with quality from the passenger point of view very subjective. This is sometimes very hard to measure, but the passenger opinion matters. Other criterions that can be measure very strictly are objective related to the transport service performance. The mix of these criterions can be useful for feedback for transport company. This can be also important for transport company in order to enhance the quality in public transport service (Gogolova & Gologa, 2016; Lukasik et. al., 2017; Mece, 2017; Moravcikova et. al., 2017). The customers' number increases with the increasing customer satisfaction. One of customers' satisfaction parts is the company's stability which is guaranteed by management system. The introduction of quality management systems in transport companies according to the expert can be expected 10-15% indicators increase such as management efficiency, clients' satisfaction, achieving their objectives, processes indicators achieving (Ginavičienė et al., 2016). Iseki & Taylor (2008) examined transport users' perceptions of the quality of service and infrastructure at bus stops and train stations around metropolitan Los Angeles. In this study, an importance–satisfaction analysis was effected to examine which stop and station attributes matter most in transit users' experience. It can be recommended to the management of public transport service to improve logistic factors of transport such as number of vehicles, frequency and service continuity to attract more passengers. The management has to keep in mind that passenger has to feel comfortable and well-informed during travelling (Pawlasova, 2015).

Friman (2004) examined whether quality improvements have effects on satisfaction with public transport services and frequency of perceived negative critical incidents. Respondents evaluated transportation services by checking a nine-point scale. The most important finding of the study is that the satisfaction people experience when using public transport services is influenced by quality improvements only to a limited extent. Beirão & Sarsfield-Cabral (2007) propose a qualitative study of public transport users and user of individual transport in order to obtain a deeper understanding of travelers' attitudes towards transport and to explore perceptions of public transport users. 24 in-depth interviews were addressed to regular and occasional users of public transport and user of individual transport. This qualitative study highlighted some key factors influencing mode

choice. In fact, the key findings indicate that in order to increase public transport usage, the service should be designed in a way that accommodates the levels of service required by customers and by doing so attract potential users. (Nica et. al., 2017; Popescu Ljungholm, 2017a; Popp et. al., 2018; Sadaf et. al., 2018)

In the last years the levels of mobility have increased substantially in all European countries. Most people are now highly dependent on car travel (Anable, 2005). In general, the car is the most attractive mode of transport. Convenience, speed, comfort and individual freedom are well-known arguments (Hagman, 2003; Jensen, 1999). So it is necessary to promote activities that can reduce individual transport dependence as well as the need for driving, by providing alternatives to driving. Such activities might involve an improvement in the public transport service and promoting a shift to slower modes such as cycling or walking. Furthermore, it is necessary to promote measures to reduce the attractiveness of car use (Gärling & Schuitema, 2007). Policies which aim at increasing public transport usage should promote its image, but at the same time, public transport systems need to become more market-oriented and competitive. This requires an improvement in service quality, which can only be achieved by a clear understanding of travel behaviour and consumer needs and expectations. Therefore, it becomes essential to measure the level of service in order to identify the potential strengths and weaknesses of public systems. This can provide clues to public transport management in the process of evaluating alternative service improvements aimed at enhancing user satisfaction and increasing market share. The choice of transport is influenced by several factors such as the individual's characteristics and lifestyle, the type of journey, the perceived service performance of each transport mode and situational variables. The key findings indicate that in order to increase public transport usage, the service should be designed in a way that accommodates the levels of service required by customers and by doing so attract potential users. (Beirão & Sarsfield-Cabral, 2007). Jensen (1999) conducted 30 in-depth interviews and identified six mobility types based on behaviour and attitudes: the passionate car drivers, the daily life car drivers, the leisure time car drivers, the cyclists/public transport users of heart, the cyclists/public transport users of convenience and the cyclists/public transport users of necessity. The results of study points out that one strategy alone is not sufficient to change the transport behaviour of the population in general. Also, she stated that the expansion and improvement of the public transport system is not going to make car users in general change from driving a car to using public transport.

2. Methodology

The executed survey was used to examine the key aspects of customer satisfaction with services provided by SAD Žilina transport company together with search for new solutions to increase attractivity of transport services to eliminate decrease and, at best, provide increase of transport performance.

The goal of the survey was to understand benefits to passengers (potential passengers) from using the transport services provided by SAD Žilina. In case the transport company would like to influence passenger decision-making regarding the selection of transport in the suburban transport segment to meet his/her needs, it is necessary to find and understand determinants contributing to creation of value of the transport service. If the parameters of values perceived by the customer are known, we can provide a better offer by applying the marketing mix tools including such values.

At the same time, the survey focused to evaluation of quality of travelling - hygienic aspect (micro climate, comfort, etc.), organizational aspect (speed, reliability, etc.) and operating aspect (services). The following partial goals of the survey were related to the aforesaid:

- Evaluation of reaction of a loyal customer regarding the existing transport service
- Determination of reasons for losing customers and reasons of impossibility to attract new customers
- Determination of solutions that could lead to attracting new customers.

Distribution of a questionnaire and data collection took place from 13 November 2017 until 1 December 2017. The target group included inhabitants of the Žilina Self-governing Region (districts of Žilina, Martin, Čadca, Kysucké Nové Mesto, Bytča, Turčianske Teplice) covered by transport services provided by SAD Žilina. The target group was specifically divided into 2 strategic, mutually exclusive groups, with a separate questionnaire for each group.

1. Current customers of SAD Žilina (regular users of public bus transport)
2. Potential customers of SAD Žilina (users of individual transport or other types of public transport respectively)

By creating 2 different questionnaires, we eliminated structuring of a possible single questionnaire for both categories of respondents that would increase its complexity, extent as well as possibility of logical mistakes made by a respondent.

When determining the size of a sample, we took into account the size of the basic statistical data set (number of inhabitants of the region: 424,067 inhabitants as of 2016, according to the Statistical Office of the Slovak Republic) at the selected confidence interval of 5% and confidence level of 95%, expressing the level of certainty regarding responses. Due to the size of basic set and selected criteria, the required size of respondent sample was quantified at 384 questionnaires. The selected sample size of the executed survey is 3,205 of complete and correctly filled questionnaires, i.e. at the 95% confidence level, the confidence interval was at 1.72%. This fact represents 95% certainty that if the same questions would be provided to the whole population of the selected region, their answers would be ±1.72% identical to answers of respondents of the sample set. Upon the aforesaid we can state say that results of the survey are of an extremely high evidential value, since the reference value of the sampling set was 8.34 times higher.

The method of distribution of the questionnaire was via Slovenská pošta, a.s. in case of printed form and electronically by using links at selected servers and portals. After completion of the questionnaire collection and distribution stage, there were 3,673 printed copies and 1,079 electronic copies of the questionnaire available. Due to incomplete, duplicate or logically incorrect filling of printed questionnaires failing to meet the acceptance criteria, 1,547 questionnaires were excluded. In such way, we eliminated also questionnaires failing to provide true information and they may not be considered as trustable sources for evaluation of survey and formulation of conclusions. The filtered database included 3,205 questionnaires, they were subject to further processing and analysis.

The survey included the whole region covered by SAD Žilina. The survey included inhabitants of 203 towns, villages and boroughs of the region in question. In all 6 districts served by SAD Žilina, the recommended number of respondents was exceeded, i.e. from the point of statistical importance and evidential value, it is possible to say that the survey was successful (see Table 1). Moreover, we achieved balance of sample size when it comes to number of inhabitants for particular districts.

Table 1. Yield of selected statistical data set by districts

District	Basic statistical data set/Number of inhabitants (as of 30 June 2016)		Recommended number of respondents	Selection statistical data set (size of sample)/number of questionnaires	
	person	%	pcs	pcs	%
Žilina	156,618	36.93	142	1,258	39.25
Martin	96,742	22.81	88	498	15.54
Čadca	90,849	21.42	82	781	24.37
Kysucké Nové Mesto	33,075	7.80	30	284	8.86
Bytča	30,712	7.24	28	271	8.46
Turčianske Teplice	16,071	3.79	15	113	3.53
TOTAL	**424,067**	**100**	**384**	**3,205**	**100**

(*Source:* Authors' results, 2018)

3. Empirical results and discussion

3.1. Overall results of the survey

Evaluation of the data and interpretation of results of the survey took place at the following levels:

1. Overall (cumulative) evaluation of response rates recorded in questionnaires for current as well as potential bus transport users.
2. Independent evaluation of response rates recorded in questionnaires filled by current bus transport users.
3. Comparative evaluation of response rates recorded by regular and occasional bus transport users.

4. Independent evaluation of response rates recorded in questionnaires filled by potential bus transport users.
5. Independent evaluation of response rates by regular bus transport users.
6. Comparison of answers of respondents with permanent address in towns and villages included in the railway and bus transport to selected questions (questionnaires of both versions).
7. Mathematical and statistical assessment of dependences between selected factors (quantitative and qualitative characteristics gained by answers of respondents).

Due to the scope of survey and depth of processing of acquired data, it is not possible to present all findings within this contribution. From the point of socio-demographic data of respondents, the following data was evaluated: sex, age, economical status, highest education, net monthly income, permanent address (district, town/village), number of persons living in one household and number of passenger cars used within one household. When it comes to classification according to sex of respondents, the majority of respondents were females (2,078; 64.8%). When it comes to classification according to age, the majority of respondents were aged within the range of 27-64 (1,718; 53.6%). The age intervals reflected current offer of services by SAD Žilina in relation to its customers, mainly regarding provision of benefits within the pricing policy. Since the respondents in the group have regular income and make decisions regarding the structure of their expenses, they may be considered as significant group of customers. At the same time, this group of customers pays the full price and decides what kind of transport the other family members would use. The most dominant economic status of respondents was the status of an employed person (1,537; 48.0%). From the point of the highest education, the majority of respondents had secondary education (1,246; 38.9%). Despite the fact that question regarding net monthly income was not compulsory, as many as 1,605 respondents (50.1%) were willing to provide an answer. Within the survey, the net monthly income of majority of respondents was up to 600 Euro (32.3%). The majority of respondents live in a household of 4 persons (1,220; 38.1%). From the point of demographics development in Slovakia, this is a standard household. The largest number of households within the survey uses one passenger vehicle (1,530; 47.7%). However, there are a significant number of households with two passenger vehicles (1,043; 32.5%). Only 11% of respondents stated they had no passenger vehicle in the household at all. The average number of vehicles per household was calculated to 1.42 vehicles, with a high value of standard deviation at 0.903.

3.2. Hypothesis testing

The acquired primary data enabled us to carry out the formulated statistical hypothesis test with the goal to identify mutual causations between the selected socio-demographic characteristics of respondents and their opinions regarding transport services or their behaviour respectively. The analysis and processing of

primary data of the survey in this form provides new facts that have not been evaluated yet.

H_0: There is no relation between the number of persons living in one household and number of passenger vehicles used.

H_1: There is a relation between the number of persons living in one household and number of passenger vehicles used.

The verification of the H_0 hypothesis was carried out using the Chi-Square test of independence between the number of passenger vehicles and number of persons living in one household (ordinal variables getting categorical values, however, such values are arrange able and deductible). Due to meeting the conditions for application of the test (the minimum theoretical rate), it was necessary to integrate the number of passenger vehicles category from the value of 3 and more; at the same time, it was necessary to integrate the number of persons living in one household category from the value of 8 and more (see Table 2).

Table 2. Integrated test categories - determined respondent answer rates

		Number of persons living in a household								
		1	2	3	4	5	6	7	8+	Total
Number of vehicles	0	49	70	60	93	39	24	11	7	353
	1	32	141	266	597	308	119	50	17	1,530
	2	2	28	143	454	251	122	28	15	1,043
	3+	1	4	21	76	81	47	24	25	279
Total		84	243	490	1,220	679	312	113	64	3,205

(*Source:* Authors' results, 2018)

In column Asymp. Sig. (2-sided) of Table 3, there is the resulting p-value of test of independence of number of persons living in one household and number of passenger vehicles. Based on the p-value we reject the H_0 hypothesis regarding independence of attributes and accept the alternative H_1 hypothesis, i.e. t**he attributes are dependent.**

Table 3. Chi-Square Tests 1

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	527.327	21	0.000
Likelihood Ratio	425.743	21	0.000
Linear-by-Linear Association	262.670	1	0.000
N of Valid Cases	3,205		

(*Source:* Authors' results, 2018)

Table 4 includes correlation coefficients (associations) between number of people living in one household and number of passenger vehicles used in one household. Upon quantified values of association coefficients, we can say it is a **moderate direct correlation**, i.e. the higher the number of persons living in one

household, the higher the number of passenger vehicles. The association coefficient significance test, showing causality between the monitored attributes upon p-value, i.e. correlation between attributes is moderate (low) but significant (systematic), confirming it is not an accidental occurrence.

Table 4. Directional Measures 1

			Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Ordinal by Ordinal	Somers' d	Symmetric	0.226	0.015	14.720	0.000
		Number of vehicles Dependent	0.208	0.014	14.720	0.000
		Number of members Dependent	0.247	0.016	14.720	0.000

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.
(*Source:* Authors' results, 2018)

Within the dependency testing, the goal was to determine t**he number of people living in one household for which there is increase of number of passenger vehicles to 2 and more.** The created linear regression model enables mathematical expression of dependency of such relation.
The R Square value in Table 5 is a determination coefficient, expressing the regression model quality, i.e. the percentage of number of passenger vehicles variable variability is captured by such model. From this point of view, the presented model is not totally suitable since the R Square value is only 8.9%.

Table 5. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.298[a]	0.089	0.089	0.862

a. Predictors: (Constant), number of persons
(*Source:* Authors' results, 2018)

Table 6 shows results of the regression model significance test. Sig. is the p-value of the regression model significance test as a whole. Upon this criterion, the created model, as a whole, is statistically significant.

Table 6. ANOVA[b] – significance test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	232.119	1	232.119	312.625	0.000[a]
	Residual	2378.173	3203	0.742		
	Total	2610.291	3204			

a. Predictors: (Constant), number of persons
b. Dependent Variable: number of vehicles
(*Source:* Authors' results, 2018)

Table 7 shows p-value of significance test of particular regression coefficients. It is the value confirming statistical significance of both regression coefficients listed in Column B.

Table 7. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.652	0.046		14.099	0.000
	Number of persons	0.182	0.010	0.298	17.681	0.000

a. Dependent Variable: Number of Vehicles
(*Source:* Authors' results, 2018)

The sought for dependency between the number of vehicles in a household and number of people is as follows:

$$Q = 0,182 \times c + 0,652 \quad (1)$$

where:
Q - Number of vehicles used in a household
c - Number of people living in a household

The next test was carried out with a goal to evaluate the effect of respondent's age to frequency of using the suburban bus transport (regular/occasional user, non-user). From the point of all socio-demographic data subject to survey, the age is the decisive variable having the greatest influence to preference of public transport. The statistical hypothesis subject to testing was formulated as follows:

H_0: There is no dependency between the intensity of suburban bus transport usage and respondent's age.
H_1: There is a dependency between the intensity of suburban bus transport usage and respondent's age.

For testing of the hypothesis, we used analogical method of Chi-Square test. Table 8 shows number of answers by respondents to the question of bus transport usage intensity, taking into account age categories selected in such way to reflect the currently applied price differentiation of the operator according to the passenger's age.

Table 8. Number of responses to the question related to bus transport usage intensity

		Bus transport usage			Total
		Not using	Regularly	Occasionally	
Age	Up to 14 years of age	6	266	183	455
	Up to 26 years of age	43	412	213	668
	Up to 64 years of age	50	483	514	1,047
	Up to 69 years of age	1	17	18	36
	Over 70 years of age	3	15	12	30

		Bus transport usage			
		Not using	Regularly	Occasionally	Total
Age	Up to 14 years of age	6	266	183	455
	Up to 26 years of age	43	412	213	668
	Up to 64 years of age	50	483	514	1,047
	Up to 69 years of age	1	17	18	36
	Over 70 years of age	3	15	12	30
Total		103	1,193	940	2,236

(*Source:* Authors' results, 2018)

Less than 20% of theoretical occurrences are below 5, i.e. the test condition has been met. Upon the p-value of Chi-Square independence test (Table 9), the H_0 hypothesis regarding the attribute independence is excluded, i.e. the alternative hypothesis stating that respondent's age and suburban bus transport usage intensity are dependent values is accepted.

Table 9. Chi-Square Tests 2

	Value	df	Asymp. Sig.(2-sided)
Pearson Chi-Square	68.908[a]	8	0.000
Likelihood Ratio	73.024	8	0.000
N of Valid Cases	2,236		

a. 2 cells (13.3%) have expected count less than 5. The minimum expected count is 1.38.
(*Source:* Authors' results, 2018)

Upon the executed tests and contingency coefficient values (Tables 10 and 11) we can confirm that there is a moderate direct dependency between the evaluated variables (respondent's age and suburban bus transport usage intensity), being statistically significant.

Table 10. Directional Measures 2

			Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Ordinal by Ordinal	Somers' d	Symmetric	0.082	0.019	4.280	0.000
		age Dependent	0.091	0.021	4.280	0.000
		bus Dependent	0.075	0.018	4.280	0.000

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.
(*Source:* Authors' results, 2018)

Table 11. Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	0.082	0.019	4.280	0.000
	Kendall's tau-c	0.073	0.017	4.280	0.000
	Gamma	0.139	0.032	4.280	0.000
N of Valid Cases		2236			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.

(*Source:* Authors' results, 2018)

Respondents aged 15-26 are more likely to use the suburban bus transport regularly. To the contrary, the respondents aged 27-64 are more or less occasional users.

4. Conclusions

One of the most current threats for transport companies is a long-term decline of performances, mostly shifting towards the individual vehicle transport instead. Attracting new customers is extremely difficult and limited. The results of the survey also prove it; portion of respondents regularly preferring using individual transport stated there was no reason whatsoever to persuade them to use the public transport. Persons using bus transport occasionally or regular users of railway transport are more significant group of potential customers. Therefore, it is necessary to focus to such strategic groups and apply the marketing mix tools that would enable to prepare an alternative offer for the potential customers, comparable with the currently preferred type of transport. The survey and processing of results yielded a large volume of valuable data, direct feedback of customers including verification of the existing assumptions. Among other things, the statistical hypothesis test approved that increase of people living in one household goes hand in hand with increase of passenger vehicles. From the point of demographic characteristics, the age is a significant variable having impact to intensity of use of the suburban bus transport. On the other hand, sex has no significance whatsoever. Increasing level of education and net monthly income of respondents is reflected in decrease of regularity of using the suburban bus transport.

If the providers of public transport would like to eliminate the long-term drop of performance, they have to come up with an offer respecting the passenger requirements. That is possible by provision of marketing-oriented management based on regular monitoring of ever changing customer behaviour (Campbell et al., 2017; Popescu Ljungholm, 2017b) and knowing his/her requirements. Thinking of people, their preferences and life style also play a significant role, all of them being aspects very difficult to influence.

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