

PASSENGERS' SATISFACTION IN COACH TRAVEL IN BOSNIA AND HERZEGOVINA - STUDY ON PERCEPTION OF UNIVERSITY STUDENTS IN SARAJEVO

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Abstract: Transportation of people was always very important aspect of human life. Today, there are many ways in which people can travel. This paper was occupied with coach travel, and passengers' satisfaction in it in Bosnia and Herzegovina. A coach is a type of vehicle used for carrying passengers on excursions, touristic journeys and trips, and on other long distance journeys such as intercity or international bus lines. The goal of this study was to find out level of passengers' satisfaction in coach travel in Bosnia and Herzegovina, and what is most important for passengers when they use coach travel services - is it price, speed, safety, comfort, or something else.

Study was performed on perception of university students in Sarajevo, because they are representative sample of passengers' population in Bosnia and Herzegovina. Focus of the study was on "on board experience", which is actually experience of passengers while they are inside of the vehicle. Research clearly indicated what aspects of coach travel are most important for passengers, and also suggested some proposals that can make coach travel more competitive and attractive.

Keywords: passengers' satisfaction, university students, coach travel

1. Introduction

Coach travel is one of the most important transportation modes in Bosnia and Herzegovina. Actually, it is important way of transportation of people in most of developing countries. In developed countries, where air and rail transportation is well organized, smaller number of passengers uses coach travel services. Anyway, coach travel finds place in organizing touristic trips, excursions and other kinds of journeys in every country, no matter is it developed or developing country. Purpose of this study was to illuminate current situation in coach travel market in Bosnia and Herzegovina, to find out what aspects of coach travel are most important to passengers and to reach level of satisfaction of passengers who travel by coach in Bosnia and Herzegovina.

Since coach travel is, as we said, one of the most common ways of transportation in Bosnia and Herzegovina, it is important to investigate current situation, to analyze reasons and to reach final conclusion in order to make it more attractive and more affordable for all segments of passengers. Although this study was focused only on university students who are studying at any of universities in Sarajevo, conclusions that were reached during the research can also be applied for some other groups of passengers.

1.1 Importance and contribution of the study

There are number of reasons that give importance to this research. First of all, this research clearly showed level of satisfaction of university students/passengers with coach travel services of Bosnian transportation companies they travel with, or they have travelled. It is important in order to motivate transportation companies to increase the level of quality of their services and to try to make users of that services more satisfied. Other reason of importance of this research is that the research showed what aspects of coach travel are the most important for university students/passengers. By this information, transportation companies can focus their efforts to improve especially those aspects of coach travel that research participants stated as most important.

This research is important because it helps both, transportation companies who provide coach travel services and passengers who use them at the end. Because coach travel is one of the most important ways of transportation in Bosnia and Herzegovina (maybe the most important one), it is crucial thing to make it attractive, affordable, comfortable and safe. This research gives its contribution to this very important issue.

1.2 Objectives of the study

We can identify several objectives of this research. First of all, objective of the research was to find out what factors or what aspects of coach travel are most important for university students/passengers in Sarajevo when they use coach travel services on intercity lines, international lines, students' trips and any other kind of journeys by coach. They were asked to fulfill the survey and to rate importance of specific factors such as price, crew, safety, etc.

Next, one of objectives of the study was to investigate and to find out level of university students' satisfaction with coach travel services of Bosnian transportation companies they travel with. University students were also asked to give their comments, proposals, suggestions, critics and experiences (good or bad). These comments were greatly useful in the process of data analysis and commenting of final results.

Finally, this research was done in order to find out what are the most common problems that passengers and transportation companies are facing with, and to try to provide some new ideas, proposals or possible solutions for those problems. There were no a lot of researches like this in the past in Bosnia and Herzegovina, so this one is very important in process of illumination of coach travel sector and passengers' satisfaction in it in this country.

2. Literature review

There are number of articles and other kinds of works written about bus and coach travel. Anyway, there are more articles that are examining issues in public and urban transportation, and less about coach travel. We already differentiated these two terms, but in order to get closer to the topic of transportation of people, in this section we will also review some articles that are focused on bus transportation, urban and public transport.

Bodiono (2009) was writing about passengers' satisfaction in public bus transport in Indonesia. The overall result showed that service quality attributes influences overall customer satisfaction in using public bus transport. The service quality could be evaluated and improved by analyzing single attributes but also by analyzing factors based on several attributes. The overall aim is to make public bus transport an attractive, satisfied, and marketable mode of transport. (Budiono, 2009)

Yusof et al. (2014) investigated factors that are affecting students' satisfaction towards bus services in University of Utara, Malaysia. The objective of this study was to explore factors that influence student satisfaction on bus services in University Utara Malaysia (UUM). A factor analysis yielded three factors which are attitude of bus driver, reliability of the buses and facilities of buses. (Zahayu Md Yusof, Masnita Misiran, Lee Pei Pei and Ho Tian Tian, 2014)

Woldeamanuel and Cyganski (2011) were writing about factors affecting travelers' satisfaction with accessibility to public transportation. This research is similar to previous two. Authors state that accessibility to public transportation is one of the important attributes to assess the effectiveness of a transit system and the integration of transportation with land use. The level of accessibility can be a determining factor for users' perception and satisfaction with the overall transit system. (Mintesnot Woldeamanuel and Rita Cyganski, 2011)

Islam et al. (2014) conducted a study about measuring costumers' satisfaction on bus transportation. The purpose of the study was to examine the factors measuring customers' satisfaction, especially the impact of service quality on customers' satisfaction in public transportation industry in the university town of Sintok located in Kedah province of Malaysia. (Rabiul Islam, Mohammed S. Chowdhury, Mohammad Sumann Sarker and Salauddin Ahmed, 2014) Authors say that service quality attributes influences overall customer satisfaction in using public bus transport.

In March 2011, Passenger Focus, which is independent national passenger web site, wanted to get a better understanding of coach passenger needs and experiences in Great Britain, so it commissioned preliminary research. This included identifying any improvements which could be made and how complaints were handled. Focus groups and depth interviews were undertaken with users several transportation companies in UK. (Coach passengers needs and experiences, 2011) Results indicated that participants of the survey used the coach because it was significantly cheaper than other modes. Also, they mentioned other advantages of travelling by coach: getting a seat is always guaranteed, the seats can be comfortable; coach travel can be a stress free and relaxing experience and the time can be used to work or read. (Coach passengers needs and experiences, 2011) Authors claim that coach travel is one of the most affordable kinds of transportation.

3. **Coach travel overview**

In order to define coach travel correctly, it is necessary to define a term "coach". Before that, terms "coach" and "bus" have to be distinguished. In Bosnian language there is no difference between these two terms, but in English language it is important to differentiate them.

Coaches and buses are both used for carrying passengers from place to place. The differences between a bus and a coach may be hard to recognize, especially when coaches are often confusedly referred to as buses and the terms are used interchangeably. However, buses and coaches differ in service, comfort and pricing. (Gianino) In American English, the word "bus" may refer to any form of public transport by road, be it a short ride through New York City or a coast-to-coast marathon. (Bus and Coach Travel in Europe: Understanding the difference, 2011)

Things are a little different in European English. A "bus route" is essentially a local service, geared to local traffic. You cannot normally reserve seats in advance. A "coach service," by contrast, is usually a longer-distance service, often one where advance booking is recommended (even if often not absolutely necessary) and usually operated by a vehicle that has more comfortable seating than you would find on a local bus service.

(Bus and Coach Travel in Europe: Understanding the difference, 2011) Unlike transit buses designed for shorter journeys, coaches often have a luggage hold that is separate from the passenger cabin and are normally equipped with facilities required for longer trips, including comfortable seats and sometimes a toilet. (Wikipedia - Coach, 2016)

The term "coach" was previously used for a horse-drawn carriage designed for the conveyance of more than one passenger, the passengers' luggage, and mail that is covered for protection from the elements. (Coach (Bus), 2016) Coach development could only benefit from the improvement in roads. Before turnpike trusts, coaches had been un-sprung and any journey in them was very uncomfortable as there was no suspension. Basically a wooden carriage, aided by four wooden wheels, was used to move people or produce. (Treuman, 2016)

The world's first motorized bus went into service on 18 March 1895. Father of it was Carl Benz. Technically speaking, the world's first motorized bus was in fact a converted passenger car model, fitted with what was known as a landau body – a design very familiar at that time as a carriage body. It was powered by a horizontal single-cylinder rear-mounted engine with an output of 5 hp. The drive to the rear wheels was provided by chains. The bus had space for eight people, including the driver. (Mercedes Benz - first motorized bus) Today's coaches are equipped with toilets, Wi-Fi, comfortable seats, air condition, kitchen, fridge, TV and audio systems, and many more things. Buses and coaches are an integral part of public transport and travel, and key elements in a sustainable transport system. (The role of bus and coach transport in mobility chain)

4. Methodology

This study was occupied with university students who are studying in Sarajevo. Reason for choosing university students for research sample is because they represent important part of passengers' population in Bosnia and Herzegovina. They travel from their home towns to Sarajevo and of course, they use coach travel services. They also organize student trips and excursions all around Bosnia and Herzegovina and Europe. One of reasons why university students in Sarajevo were chosen for research sample is also because they come from almost every part of the country. Because of that, we assumed that they represent good and realistic sample of student population in Bosnia and Herzegovina.

According to the data of Institute of statistics in Federation of Bosnia and Herzegovina for 2013, there were 33 919 university students in Sarajevo, studying at State University and other private education institutions. (FB&H, 2013) According to this, at least 0,01% of student population has had to be investigated. Total number of respondents was 388 which satisfy the minimum requirements of sample size.

Survey was conducted in order to find out what criteria or factors are most important for university students in Sarajevo when they use coach travel services on intercity lines, international lines, student trips and excursions. Also, goal of the survey was to explore level of satisfaction of university students with quality of coach travel services of Bosnian transportation companies they travel with, or they have travelled. Survey was divided into three parts. In first part, students were asked to rate specific criteria (factors/variables) in terms of importance to their travelling experience. There were six variables explored in this survey:

- Price and accessibility
- Crew inside of the vehicle
- Safety during the trip
- Comfort, ergonomics and visual look of the vehicle
- Equipment in the vehicle
- Speed and accuracy

Inside of each variable, there were several questions to rate them in terms of importance to university students' coach travelling experience. Participants were asked to rate them from 1 – not important to 5 – very important. In second part of survey, students were asked to rate their level of satisfaction with coach travel services of Bosnian transportation companies from 1 – very dissatisfied to 5 – very satisfied. Third part of survey was actually open question for students to give their suggestions, proposals, experiences and comments. This was very useful in process of interpretation and commenting of the results.

5. Results

Quantitative data was collected from university student respondents' surveys. Data was analyzed in Microsoft Excel using means and standard deviations, as well as comparing the means of male and female respondents. Total number of respondents was 388. Respondents were asked to give their information about gender, age and current study program. Surveys were collected via online methods using Google Forms tool for making questionnaires, and via visiting universities, students' flats and dormitories.

5.1 Analysis of variables

In the table below, we can see that „speed and accuracy“ variable has the biggest value of mean (4,213). „Crew inside of the vehicle“ is second with mean of 3,986. „Safety during the trip“ is on third place with mean of 3,923. „Comfort, ergonomics and visual look of the vehicle“ has mean of 3,766. Fifth variable is „price and accessibility“ with mean of 3,601. Equipment in the vehicle has the lowest mean (3,189).

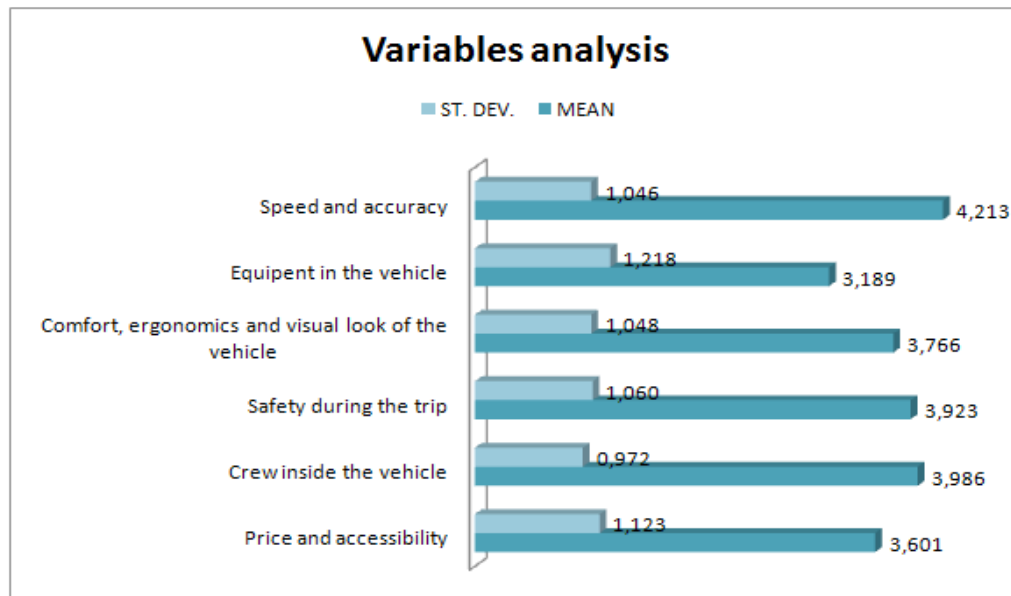
Table 1: Analysis of variables

VARIABLES	MEAN	ST. DEV.
Price and accessibility	3,601	1,123
Crew inside the vehicle	3,986	0,972
Safety during the trip	3,923	1,060
Comfort, ergonomics and visual look of the vehicle	3,766	1,048
Equipment in the vehicle	3,189	1,218
Speed and accuracy	4,213	1,046

From these results, we can conclude that speed and accuracy are most important element of coach travel for university students. Speed and accuracy of transportation companies are factors that can affect some other aspects of life of passengers. If there are delays in transportation of people, some other obligations and issues can suffer because of that. It is so important for university students to have fast and accurate coach travel, especially on regular bus lines (intercity, for example). During touristic journeys and other student trips, delays can be more accepted than during regular bus lines.

From the figure below, we can see graphical view of average means and standard deviations of each of six variable. We can notice that variable with highest value of mean actually has the second lowest value of standard deviation, and variable with lowest mean actually has the highest value of standard deviation. This value of standard deviation for „speed and accuracy“ variable supports reliability and validity issues of the research. Second most important factor for university students is nice and friendly crew inside of the vehicle. It is important for them to have kind and helpfulness drivers or tour leaders who will always be communicative.

Figure 1: Analysis of variables



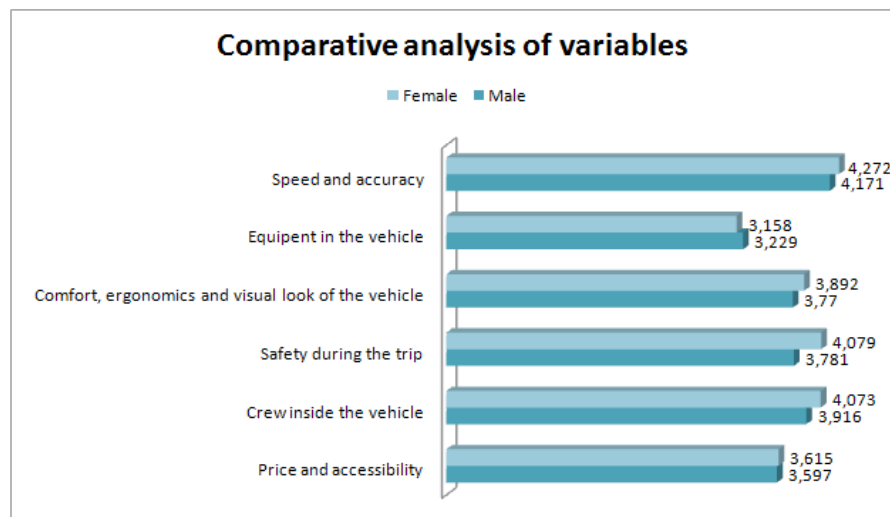
5.2 Comparative analysis of variables

In this section, data gathered from male and female respondents will be compared in order to find out what aspects of coach travel are most important for male and for female university students. As we can see from the table below, speed and accuracy are the most important factors of coach travel for both, male and female university students, but this factor is more important for female than for male respondents. We can also notice that means for females are higher than means of males in each variable except equipment in the vehicle. That means that five of six factors of coach travel are more important for female than for male university students.

Table 2: Comparative analysis of variables

VARIABLES	Male	Female
Price and accessibility	3,597	3,615
Crew inside the vehicle	3,916	4,073
Safety during the trip	3,781	4,079
Comfort, ergonomics and visual look of the vehicle	3,770	3,892
Equipment in the vehicle	3,229	3,158
Speed and accuracy	4,171	4,272

In the figure below, we can see graphical view of average means of male and female respondents for each variable. Only equipment in the vehicle, which is actually variable with lowest importance for university students, was more important for males than for females. We can say that female university students are more demanding kind of passengers than male university students.

Figure 2: Comparative analysis of variables


5.3 Analysis of university students' satisfaction in coach travel in B&H

In this section of the study, second objective of the research will be examined. Overall level of university students' satisfaction with Bosnian transportation companies they travel with or they had travelled will be discovered.

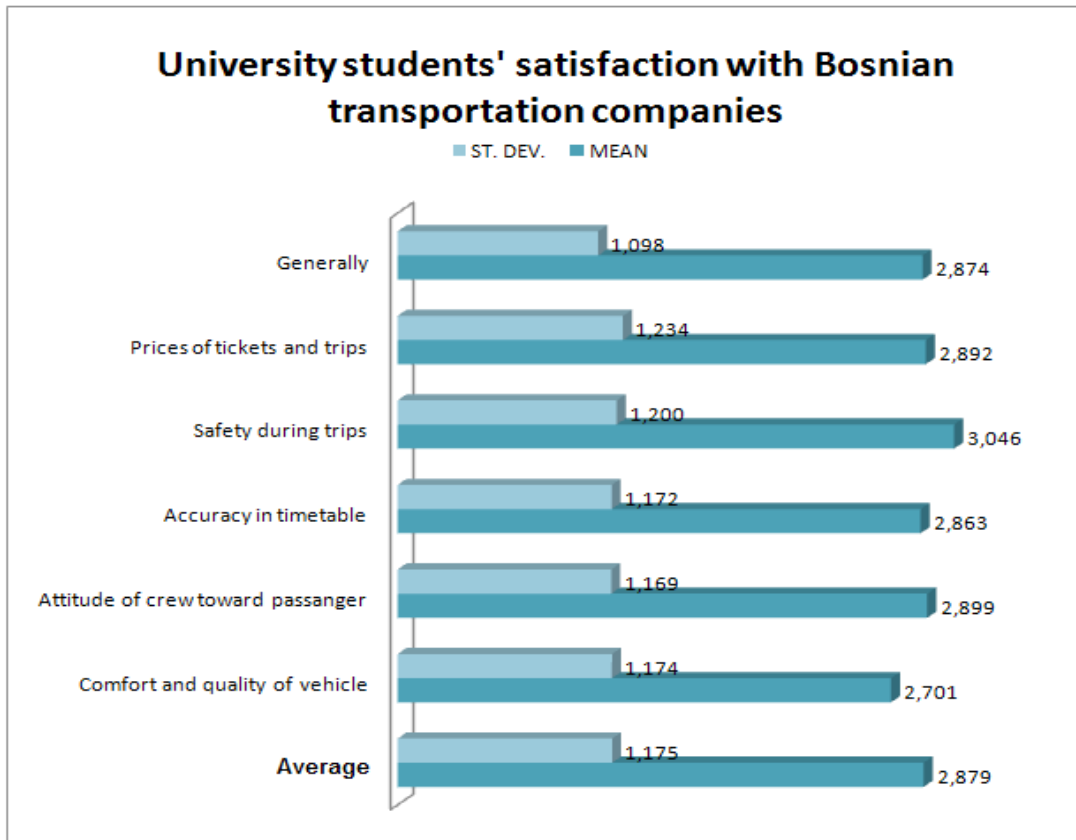
In the table below, we can see means and standard deviations of each of six question regarding university students' satisfaction with Bosnian transportation companies. Safety during the trip has the biggest value of mean (3,046) which means that university students are the mostly satisfied with feeling of safety when they travel by some of Bosnian transportation companies. Research showed that university students are the least satisfied with comfort and quality of vehicles in Bosnia and Herzegovina.

Table 3: Students' satisfaction with Bosnian transportation companies

Students' satisfaction with Bosnian transportation companies	MEAN	ST. DEV.
	2,879	1,175
Comfort and quality of vehicles	2,701	1,174
Attitude of crew toward passenger	2,899	1,169
Accuracy in timetable	2,863	1,172
Safety during trips	3,046	1,200
Prices of tickets and trips	2,892	1,234
Generally	2,874	1,098

In the figure below we can see graphical view of means and standard deviations of each question regarding university students' satisfaction with Bosnian transportation companies. We can see that the biggest value of mean is only 3,046 (safety during the trips). University students are the least satisfied with comfort and quality of vehicles. At the end, according to average mean (2,879) we can conclude that university students are very little satisfied or neither satisfied nor dissatisfied with quality of Bosnian transportation companies.

Figure 3 Students' satisfaction with Bosnian transportation companies



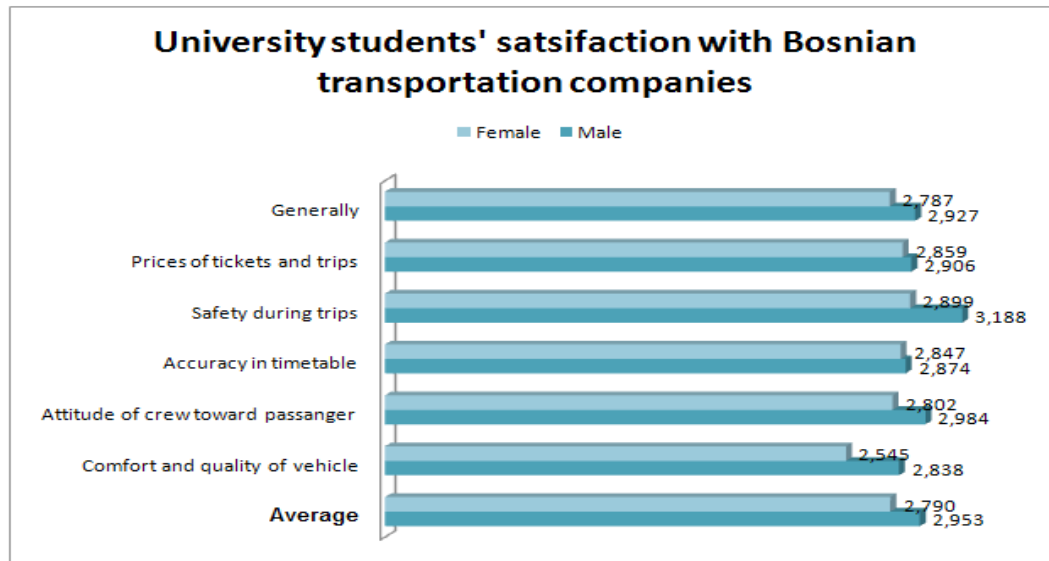
5.4 Comparative analysis of university students' satisfaction in coach travel in B&H

In this section, data gathered from male and female respondents will be compared in order to find out which of these two groups has higher level of satisfaction with Bosnian transportation companies. From the table below, we can see that females' means have lower values than males' means in each of six questions regarding university students' satisfaction with Bosnian transportation companies. Average mean of males is 2,953 while average mean of females is 2,790.

Table 4: Comparative analysis of students' satisfaction with Bosnian transportation companies

University students' satisfaction with Bosnian transportation companies	Male	Female
	2,953	2,790
Comfort and quality of vehicle	2,838	2,545
Attitude of crew toward passenger	2,984	2,802
Accuracy in timetable	2,874	2,847
Safety during trips	3,188	2,899
Prices of tickets and trips	2,906	2,859
Generally	2,927	2,787

We can conclude that female university students passengers are less satisfied with Bosnian transportation companies than male university students passengers. Not only that, females are also more demanding than males, regarding importance of variables that were investigated in the main part of research.

Figure 4 Comparative analysis of students' satisfaction with Bosnian transportation companies

6. Conclusion

After detailed process of analyzing and commenting of collected data, we can conclude that transportation sector in Bosnia and Herzegovina still needs a lot of improvements. Focus of the study was on coach travel and passengers' on-board experience. After careful analysis, we can say that research showed that speed and accuracy are the most important factors that make university students satisfied when they use coach travel services. Respondents stated that this element of coach travel has significant importance to their coach travelling experience. Second important factor which affects their satisfaction is crew inside the vehicle. Behavior of coach driver or any other member of crew is significantly important for university students. Feeling of safety during the trip is third most important element of overall travelling experience of university students. After these elements, we have comfort, ergonomics and visual look of the vehicle; price of tickets and trips; and equipment in the vehicle. It is interesting to mention that all variables except equipment in the vehicle are more important for female respondents than for male respondents, so we can conclude that female university students are more demanding than males.

When we talk about university students' satisfaction with Bosnian transportation companies they travel with or they have travelled, research clearly indicated that university students are not so satisfied with domestic coach travel. It is also interesting to mention that female students are less satisfied than male students in each of six investigated questions regarding their satisfaction with Bosnian transportation companies. This research clearly showed what aspects of coach travel transportation companies should pay attention to.

6.1 Research limitations and recommendations for future studies

This study was occupied with experiences and opinions of university students who are studying in Sarajevo. Other groups of passengers were not included into this research. That is exactly first limitation to this study. All results are based only on responses of university students in Sarajevo who are between 18 and 30 years old. Second limitation to the study is that university students from other cities were not included in this research. University students in Sarajevo were chosen to be a sample for the research because

they come from all parts of Bosnia and Herzegovina. However, not including university students from other cities in the research is surely one of limitations to this study. However, according to the number of respondents who participated in the research, we can freely say that research was effective and successful. In order to investigate overall level of students' satisfaction in coach travel in Bosnia and Herzegovina, future researches should include university students from all other university cities in the country. Of course, it will demand larger sample of university students. Also, all other groups of passengers (workers, pensioners) should be included in the research in order to find out a general level of satisfaction of passengers in Bosnia and Herzegovina and what criteria are most important for passengers when they use coach travel services.

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