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MASTER'S THESIS

THE ROLE OF INTERNAL AND EXTERNAL FACTORS INFLUENCING STUDENTS' DECISION-MAKING PROCESS IN HIGHER EDUCATIONINSTITUTION SELECTION

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LIST OF ABBREVIATIONS

B&H – Bosnia and Herzegovina

BME – Business/Management/Economics

BME1 - Business/Management/Economics as the First Choice of Studies

CDM – Consumer decision making

DB – District Brcko

FB&H – Federation of Bosnia and Herzegovina

HEI – Higher Education Institution

ITCS – Information Technology/Computer sciences

ITCS – Information Technology/Computer sciences as the First Choice of Studies

LS – Law studies

LS1 – Law studies as the First Choice of Studies

ME – Marginal effects

RS – Republic of Srpska

SPSS - Statistical package for Social Sciences

INTRODUCTION

Labour market has become a very competitive place for young students thinking about their future careers and employment possibilities. Those who decide to pursue a university degree are faced with a very challenging process of decision-making. As mentioned earlier, this process is affected by various different factors, internal and external, based on which the final choice is made. The decision whether to continue with the post-secondary education, in other words whether to pursue university degree and also which university and study program to choose are one of the critical decisions students have to make at this point in their lives (Johnson & Chapman, 1979).In order to make the decision-making process more understandable, marketers have developed a number of different models through the years, among which the most popular one has been the Five-step model consisted of following steps involved in the decision-making process: problem recognition, information search, evaluation of alternatives, purchase and post-purchase evaluation (Kotler & Keller, 2012).

The factors underlying the decisions made by students concerning university choice has been a topic of many researches throughout the years, however in Bosnia and Herzegovina, there have not been any similar studies which focus on this particular topic. Cross-continental literature review in following chapters provides insights to what the determining factors were for students from around the world. Some researches prefer an economic-based approach, which assumes that students make a rational decision based on economic parameters such as costs and assumptions about their future earnings and benefits (Hossler, Schmit & Vesper, 1999). However, this model is considered simplistic by some researchers because it is important to take into consideration limitations which every person has due to different skill levels, sets of values and goals, as well as socio-cultural environment which influences individuals in the decision-making process (Čičić, Husić & Kukić, 2009).

Koudelka (1997) has defined three sets of factors which interfere in the decision-making process, which can also be defined as internal factors: social factors, personal factors and psychological processes. Social factors reflect in the social circles a person is surrounded with, such as family members and acquaintances (Kesić, 1999). Moreover, Kotler and Armstrong (2009) consider demographic or personal factors, which are unique to each person, to have a significant impact on the final choice. These factors are age, gender, income and education. Finally, psychological factors such as motivation, perception, attitudes and personality are set of factors which are intrinsic traits, beliefs or feelings which cannot be measured, however influence the decision making process (Pride & Ferrel, 2007).

Other models often described and used in literature are the combined models in decision-making process: Chapman's model (1981), Jackson's model (1982) and Hansen and Litten's model (1989). In this master thesis the Hansen and Litten's model is used as a baseline for development of the questionnaire, which is the focal point of the primary

research. This model is considered to have given most contribution to literature through defining the decision-making process of each student when selecting a Higher Education Institution (hereafter: HEI): higher education aspirations, starting the search process, gathering information, sending applications and finally, enrolling (Hansen & Litten, 1989). Moreover, the model defines a set of variables which are specific to each of the stages mentioned, defined through eight categories: student characteristics, highschool characteristics, influences/media used, personal attributes, environment, aid and tuition policy, university actions and university characteristics.

Literature review of this master thesis is two-fold, in one part reviewing studies and researches conducted around the world in order to make a cross-continental overview. Its objectives are defining factors, which have been proven to be of most influence in the process of decision making, when it comes to selecting HEI and developing a set of dependent and independent variables based on these findings. In the second part, an empirical literature review is made with the objective of examining studies which have found relationship between the variables in consideration.

This master thesis focuses on students of Bosnia and Herzegovina studying either at private or public university one of the following study programs: Law faculty (hereinafter: LS), Business/Management/Economics (hereinafter: BME) and Information Technology/Computer sciences (hereinafter: ITCS). This study was retrospective, which means the undergraduate students of the earlier mentioned study programs from Bosnia and Herzegovina have been asked to reflect and recall decisions they had made in the past regarding the factors which have influenced their decision of choosing the particular HEI and study program they are enrolled in.

The purpose of this master thesis is to determine:

- internal and external factors that had the strongest influence on students during their HEI selection process
- the factors which influenced students to choose a public HEI
- the factors which influenced students to choose a private HEI
- most important factors which influenced the final choice of students who selected the study program Business/Management/Economics as their first choice of studies(hereinafter: BME1)
- most important factors which influenced the final choice of students who selected the study program BME1 at a private HEI
- most important factors which influenced the final choice of students who selected Law studies as their first choice of studies (hereinafter: LS1)
- most important factors which influenced the final choice of students who selected the study program LS1 at a private HEI
- most important factors which influenced the final choice of students who selected the study program Computer sciences/Information technology as their first choice of studies (hereinafter: ITCS1)

- most important factors which influenced the final choice of students who selected the study program ITCS1 at a private HEI.

Based on the description of the problem, research objectives have been defined:

- to examine whether and to what extent socio-cultural factors motivated students' final choice of HEI;
- to examine whether and to what extent institutional factors motivated students' final choice of HEI;
- to examine whether and to what extent the students' choice of HEI was affected by career prospects/employability;
- to examine whether and to what extent are financial resources a motivating factor of students' final choice of HEI;
- to examine whether and to what extent was the students' choice of HEI affected by study environment;
- to determine whether the students choosing public university affected by different set of factors compared to students who chose public university;
- to create recommendations for HEI on how to target students based on the factors which have a strongest influence in the students' decision-making process.

In this regard, the following research questions are defined:

- To which extent was the influence of socio-cultural factors, in particular the influence of parents significant in the decision-making process of selecting public or private HEI?
- To which extent did socio-cultural factors, or in particular parents, influence the decision of choosing BME, LS or ITCS as a first choice of study program?
- Did internal factors, determined through variables of socio-cultural factors and institutional factors influence the likelihood of choosing the selected study programs at a private HEI?
- Did internal factors, determined through variables of socio-cultural factors and institutional factors influence the likelihood of choosing the selected study programs at a public HEI?

In order to reach the master thesis's objectives, a systematic review of literature on consumer decision-making process, models of decision-making, internal and external factors influencing the decision-making process is made, as well as a cross-continental literature providing observations and insights given by similar studies and papers. Moreover, quantitative research method will be used through a questionnaire. The primary data was conducted by most part online, through an online questionnaire, which targeted undergraduate students from 44 faculties, which are part of 16 universities from all over Bosnia and Herzegovina (hereinafter: B&H). The sample size the research was set on 500 responses from undergraduate students studying one of the three study programs mentioned earlier. In the empirical analysis selected variables were introduced and analysed through the method of logistic regression, using Statistical package for Social

Sciences (hereinafter: SPSS) after which results of empirical analysis have been presented, followed by the main findings of the analysis and recommendations.

1 CONSUMER DECISION-MAKING PROCESS

1.1. Basic Terms of Consumer Decision Making Process

Each person during his or her lifetime is faced with a numerous decisions and some may be more difficult than other ones, however in each decision making process a number of steps is being followed until the final decision is made. These steps are a part of the consumer decision-making process (hereinafter: CDM). Over the course of time, a great number of studies have been conducted on CDM process and theories and models have been developed which describe these steps. This chapter will provide basic introduction to basic terms, theories and most commonly used models of CDM process and factors, which influence the final decision. Furthermore, this chapter will provide a literature review of the CDM process in selecting HEI. Simon (1976) defined the CDM process in terms of administration processes by stating that when any task requires efforts of several different persons, a process must be developed in order to organize effort to the group task. CDM process is a very complex process and the essence of it is choosing one option out of two or more that are being offered, or identifying and choosing alternatives based on the values and preferences of the decision maker (Harris, 2012). It presents a series of sequence influences and decisions which result in a certain, or preferred action. In other words, people do not strictly choose between two or more options of particular products or services. Instead, what they do is choose to buy, recommend, sell or return a particular product, hence CDM process in that understanding is about evaluating and selecting alternative behaviours or actions (Reynolds & Olsen, 2001, p. 6).

Throughout the years, many different models have been developed, some more simple than the others, however their aim was to define or show variables which affect and influence the decision making process and their inter-relation. Schiffman and Kanuk (2004) explain that every model has in common three basic phases, which are input, processing and output phase. Further in this chapter, it will be explained in more details why some CDM processes are more complex than others. The basic determinant is type of purchase that is being made: test purchase, repeated purchase or complex purchase. In other words, the complexity will be defined by whether the consumer is purchasing a specific product or service for the first time, or it is a routine purchase. In essence, the number of factors influencing the decision and the phases through which the consumer will go through do not vary significantly, however the level of psychological engagement and time invested in the analysis of each of the steps or phases that follow will become higher when the consumer is faced with a complex decision (Kesić, 1999, p. 12). Hence, the CDM process requires different levels of engagement of the consumer.

The consumer is under different types of influences during the decision-making process. According to Čičić, Husić and Kukić (2009, p. 23-27), the key influences, or determinants of influence can be divided in two basic groups:

- group determinants (cultural influences and society)
- individual determinants (personal influences and demographics)

These influences will be described in more details and broken down to factors that can affect the final decision made by consumers.

1.2 Levels of Engagement in CDM process

According to Čičić, Husić and Kukić (2009, p. 212-213), depending on the complexity of the decision, different levels of engagement will be invested and the main determinant of engagement level is how well the consumer has defined the selection criteria. Criteria is developed based on the amount of information the consumer has collected about the specific product or service category which leads to three possibilities, or categories of engagement, explained in more details in following pages.

1.2.1 Routinized Choice Behaviour

Routinized choice behaviour is the kind of behaviour consumers are almost faced daily during which they either make an instant decision without any previous research about the product or service that is being purchased, or the consumer searches for additional information about the specific product or service, however that information will not necessarily affect the final purchase decision.

Routinized decision-making is normally characteristic to purchasing products or service that the consumer has already purchased earlier on one or more occasions and hence is confident in purchasing the same once again. Examples are buying the same brand of clothes, or choosing the same cable TV provider based on previous good experience. Peter and Olson (1996, p. 219) further explain that routinized behaviour is typical to consumers who think they already know everything about the product or service category, hence they do not need to search for additional information and make the decision based on a stored plan in memory due to previous experiences.

1.2.2 Limited Decision Making

A more complex level of decision making compared to the routine behaviour is limited decision making and is normally typical to a consumer who has already defined a certain selection criteria, in which case the consumer needs to conduct a research, or search for information about the products and services required, based on which the final decision will be made. In case of selecting HEI, the student will be faced with a sequence of decisions that need to be made, among which the major ones would be: which university, which faculty and which study program to choose. Prior to decision-making the student

will search for information about all the options he or she has based on which a final decision will be made.

1.2.3 Extensive Decision Making

The most complex level of decision-making is extensive decision making, which involves extensive search for information about all alternatives that are being offered in the market before the consumer makes the final decision due to undeveloped or poorly developed criteria. Hence, the consumer will invest substantial cognitive and behavioural effort in making a final choice, or decision. Very few consumer decisions involve extensive decision making, where the consumer needs information about more or less everything, such as which end goals are important, goal hierarchies, which choice alternatives are relevant, and so on (Peter & Olsen, 1996).

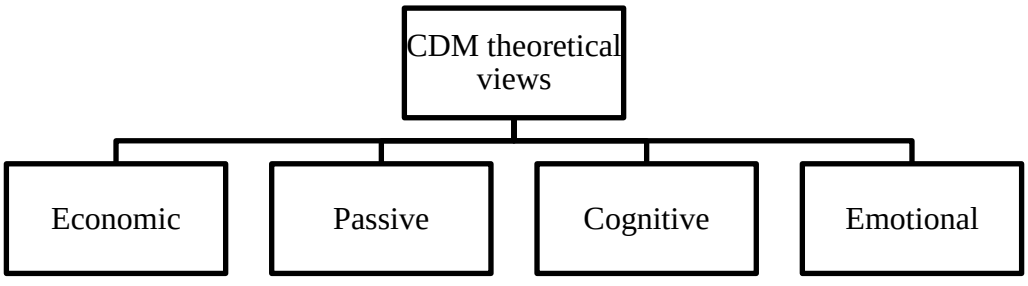
CDM process can also be treated as problem solving if we assume that consumers have goals, which will come as a result from the decision they make. Hence, consumers make decisions on which actions to take in order to achieve those goals and by doing so to find a solution to the defined problem, which makes the CDM a goal-directed, problem-solving process (Peter & Olsen, 1996).

1.3 Theoretical Approach to CDM Process

There are three main categories of consumers: individual, group and institutional or organizational. Individual and group consumers are involved in product or service purchase with the intent to complete the process of reproduction and consuming or using the product or service that is being purchased. However, organisational or institutional consumers purchase products and services, which will be put into further production and/or development and processing.

Čičić, Husić and Kukić(2009, p. 212-218) explain that theoretical approaches to CDM can be divided into four main views: economic, passive, cognitive and emotional view, presented in Figure 1 and explained in more detail below.

Figure 1: Theoretical Approaches to CDM



Source: Adapted from Čičić, Husić and Kukić(2009).

1.3.1 Economic View

The economic view is based on the theory of so-called economical person which states that a person is a rational being who makes decision based on economic parameters such as price, guarantees, payment deadlines, purchase conditions (Hossler, Schmit & Vesper, 1999). However, critics of this approach find it too simplistic and idealistic because if the consumer was able to make a purely economic decision, that would mean that a person is capable of making the "perfect decision", which in practice is impossible due to a number of different kinds of limitations which every person has due to limited skill levels, different set of values and goals, or limited knowledge which vary from one person to the other. Due to these limitations, there is no possible way of making a perfectly economic purchase decision because different other factors such as education, social factors, and personality traits will also affect the final choice. More often than not, consumers do not have adequate of sufficient information, or even the adequate degree of involvement of motivation to search for information to make the decision (Čičić, Husić & Kukić, 2009, p. 212-218).

1.3.2 Passive View

Čičić, Husić and Kukić2009, p. 212-218) further explain that in contrast to economic view, the passive viewsees the human being as a completely irrational and impulsive being who is passive and very submissive to promotional efforts of marketers through different kinds of advertisement. Passive view completely disregards the role of the consumer in the purchase decision, or the decision-making process and the fact that consumers do, in fact, make pre-purchase search for information and evaluation before making the final decision.

1.3.3 Cognitive View

Cognitive view explains decision making from the thinking problem solver's perspective. As Peter and Olsen (1996) explain, the consumer has pre-defined goal and after the consumer has defined the problem, which is the perceived difference between ideal and actual state of affairs, the consumer searches for relevant information about potential solutions to the problem from external environment. In this stage, the knowledge from memory is activated and is used to evaluate competing alternatives, possible consequences until the best alternative is chosen. At this point the purchase is carried out and after the product or service has been used, the consumer re-evaluates the decision again, in light of its performance.

1.3.4 Emotional View

Based on the belief that life in reality is not the same as life in theory and that there are certain emotions attached to every purchase decision, the emotional view has been developed. These emotions can be positive such as joy, happiness, and nostalgia; or negative such as fear, hate, and jealousy. In both cases, the consumer takes those feelings and emotions into account when making the final purchase decision (Čičić, Husić & Kukić, 2009, p. 212-218).

Over the years, marketers have used emotions in their advertisements to influence consumers' personality and attitudes. For example, the Economic faculty in Sarajevo markers itself as being a part of the community of 5% best economic and business schools in the world, after it had been granted the recognition by AACSB International, which was founded by US leading universities. This specific advertisement affects the future and current students by evoking emotions such as pride for being a part of that small community, or desire to become a part of that community.

1.4 CDM Models

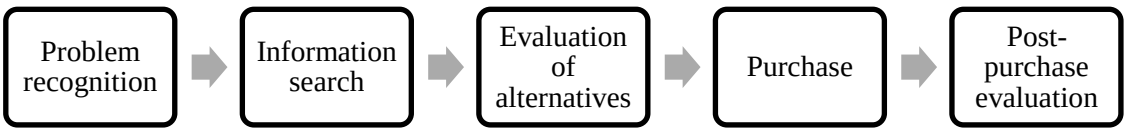
With the rise of computer technology, information technology and the Internet, consumers have a much better access to information than ever before. Any product or service information is just one click away and hence, the decision-making process has become more complex and for companies, and hence marketers the task of attracting consumers has become more challenging. Due to this, more complex approaches to consumers' decision-making process have been developed and explained to numerous models, which aim to explain, and often, graphically present the process of decision-making, internal and external influences, which affect the final choice. CDM models are, hence a simplistic representation of reality and as such do not cover all the influences and factors which influence a consumer in real life.

Over the years, academics have developed models among which some are less complex, consisting of only few steps in decision-making process and some are more complex consisting of several steps. However, as it will be later explained, all the theories are based on three main stages, which involve search and purchase of the product or service and evaluation during the post-purchase stage. In order to later understand better the CDM process in selecting HEI, a few basic models in consumer buyer behaviour will be analysed in more detail below.

1.4.1 Five-stage CDM Model

One of the most commonly models of CDM used today is the Five-stage model, also known as the traditional model is used as a central pillar of consumer behaviour (Kotler & Keller, 2012). The flow of CDM process is presented in Figure 2, followed by explanation of each step.

Figure 2: Five-step CDM Model



Source: Adaptedfrom Solomon, Bamossy, Askegaard andHogg (1999).

The separate stages are described in details below:

- Problem recognition - The first and very important part of CDM process because in this stage a need is recognised and without need the purchase cannot take place. Bruner and Pomazal (1988) explain problem recognition as being the moment when an individual realises the difference between the current state and the desired state. According to Solomon, Bamossy, Askegaard and Hogg(1999) human needs can be classified into two categories based on the needs, so psychological need is an outcome of emotions and functional or physical need is a result of necessity. In other words, needs can either be internal or external, for instance the feeling of hunger is an internal need, or physical need that leads to purchasing a sandwich, hence satisfying the physical need of hunger; whereas word-of-mouth is an example of external stimuli, where a consumer is stimulated to make a purchase due to a recommendation from a friend, which makes it a psychological need that the consumer is trying to satisfy (Lumen Learning, n.d.).
- Search for information - In order to create basis for making a decision, the consumer has to make research on a specific product or service group through either internal or external channels (Oliver, Volschenk & Smith, 2011; Cox, Granbois, & Summers, 1983). In this stage we can go back to the levels of engagement in CDM process, where the possibilities are the consumer has already at least once before purchased the same product or service, which makes his search for information more internal and the consumer relies on the past experiences with a specific company, brand, etc. If the consumer is purchasing a service or product for the first time, with no prior experience the information search phase can be long and complex (Lumen Learning, n.d.).
- Evaluation of alternatives - According to Loundon and Della (1993) the consumer evaluates products and services on a scale of attributes, which have the ability to deliver the benefit that the consumer is seeking based on which the purchase decision will be made. Depending on the consumers' personal preferences, conditions and behavioural characteristics, the consumers will decide which attributes are most important to them.
- Purchase - After evaluating alternatives, the consumer will choose which product or service most satisfies the criteria against which they were scored, after which a final decision will be made, which results in the purchase action,
- Post-purchase evaluation - This is the final stage of the process and it occurs after the purchase has been made. This stage is very important for future actions of the consumer. According to Maclnnis, Pieters and Hoyer (2014), in this stage consumers correlate their expectations to perceived value and then look for opinions from friends and family, which they then sum up and use in the next shopping experience. Depending on the level of satisfaction with the product or service, the consumer will make a decision whether or not to choose the same product or service in future.

1.4.2 Eight-step CDM Model

Another commonly used model in CDM, developed in 2001 is the eight-step CDM model, which explains that decision-making should start with identifying stakeholders and

decision makers in the CDM process, after which the process is divided into eight steps(Baker and others, 2001),explained in detail below:

- Defining the problem - According to Baker and others (2001) defining the problem is a crucial first step in making a good decision. The problem should is properly defined if it summarises the actual and desired states of both, the decision makers and stakeholders, in one single sentence. The key to successful problem definition is asking the right questions which identify the root causes, limiting assumptions, boundaries and interfaces and any stakeholder issues;
- Determining requirements - Requirements are set of conditions which need to be met in order for any solution to be acceptable, which means all other solutions which do not meet these set requirements will be discarded;
- Establishing goals - goals go beyond the basic requirements and should reflect wants and desires that will be essential in defining alternatives and the goals identify what the end results should be;
- Identify alternatives - Alternatives represent all the acceptable possibilities, which meet the requirements and goals. In other words, they meet a certain criteria which has been pre-defined and upon which the alternatives will be defined:
- Define criteria – A set of criteria needs to be defined, which according to Baker and others (2001) should be able to contribute to the comparison between performances of alternatives. Moreover, the criteria should include goals and have to be operational and to have a certain meaning. It is also essential that the number of criteria is not too high, because then it makes the evaluation process more complicated;
- Select a decision-making tool - Depending on the complexity of the decision problem, the adequate decision-making tool will be selected and the possibilities vary from very simple to very complex ones. Selection of a decision making tool is no easy task which also needs to consider objectives of the decision maker;
- Evaluate alternatives against criteria - When evaluating alternatives against pre-defined criteria, there are two possibilities of the outcome, or assessment. It can either be objective, or it can be subjective. If the assessment is objective, then it shows facts, which are quantifiable; however if the assessment is subjective, then it is reflecting the subjective or personal assessment of the evaluator. Once the alternatives have been evaluated against the defined criteria, the selected decision making tool will be used and applied to rank the alternatives based on the number of criteria they satisfy, based on which the evaluator will one, two or more alternatives which best satisfy the criteria;
- Validate solutions against problem statement - Despite having evaluated alternatives against criteria, still it does not necessarily mean that the best alternatives have been chosen. In this case, Baker and others (2001) suggest it is necessary to go back to steps where the requirements and goals have been set, in order to make sure the decision making tool was not misapplied. In this step, decision makers and stakeholders might be consulted and if necessary add further goals and requirements to the decision-making tool.

1.4.3 Three-phases Process

As mentioned earlier in this chapter, Schiffman and Kanuk (2010, p. 37) define the consumer decision making process through three phases presented in Figure 3.

Figure 3: *Three-phase CDM process*

Source: Adapted from Schiffman and Kanuk (2010).

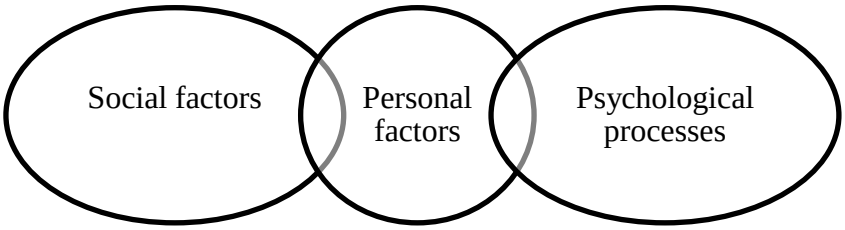
- Input phase - This is a phase during which the consumer recognises the need for a product or service. The consumer is under influences of companies and their marketing efforts during this phase, which are measurable and simple to detect. However, the consumer is also under influences, which come from the environment and can be cultural and/or social influences, which are more complex and difficult to measure;
- Process phase-During this phase, processing of these inputs occurs, which are the information and influences that present the basis for understanding the decision making process. Psychological factors have the key role, such as motivation, perception, attitudes, etc., as well as other steps which are an integral part of this phase, such as defining the need for a particular product or service, search for information and evaluation of alternatives.
- Output or exit phase - Finally, the last phase entails all purchase and post-purchase steps. Quite obviously, step of purchasing a product or service comes as a result of action or processes from the previous phase (Schiffman & Kanuk, 2010).

1.5 Factors Influencing CDM Process

In the process of decision-making, consumers are under many influences coming from different sides, which interact and affect one another, and in the end affect the consumers and these influences are CDM factors or variables. Models of CDM have been developed in order to make the process itself more understandable and less complex to the wider audience, which includes the consumer and marketers. However, one of the reasons why the afore mentioned economic view is hardly ever applicable and why the person, or consumer cannot behave in a purely rational way is exactly because of all the influences and factors that will shape the final decision.

Literature divides these factors in many different ways. Figure 4 shows how Koudelka (1997) divides them in inner and outer factors, distinguishing three basic categories: personal, psychological and social factors (City College of San Francisco, n.d.).

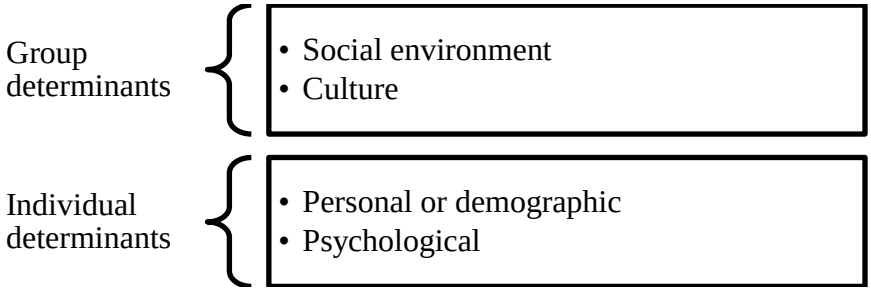
Figure 4: Division of CDM Factors



Source: Adapted from Koudelka, (1997).

Kotler (2001) adds the cultural factors as the independent category. Furthermore, these factors have separated these factors into two groups, as shown in Figure 5, based on how they influence the consumer; either as factors of influence on consumer as part of a group, or factors of influence on the consumer as an individual (Čičić, Husić & Kukić2009, p. 23-27).

Figure 5:Group and Individual Determinants of CDM process

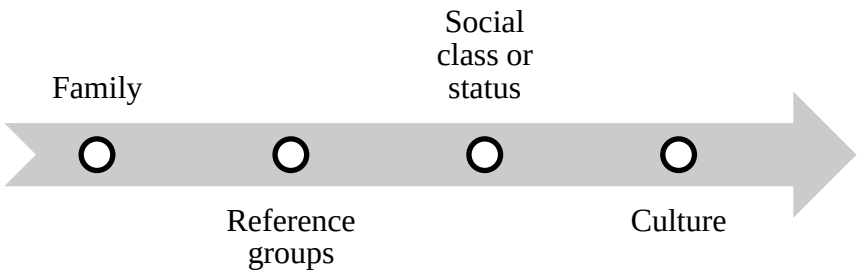


Source: Adapted from Čičić. Kukić and Husić (2009).

1.5.1 Social Factors

People live in a very complex environment, which affects the way they behave and make decisions. There are many different circles of people and social influences that make an impact on the CDM process and in literature are also called external factors and group determinants. Whether it is a recommendation made by a family member, or it is a representation of a social class or status, people rarely make decisions without consulting at least one of the social factors which also is perceived as giving the person either inferior or superior position within social class (Kotler, 2010). These social factors are graphically presented in Figure 6 below.

Figure 6: Social factors of CDM Process



Source: Adopted from Kesić (1999, p. 7-12).

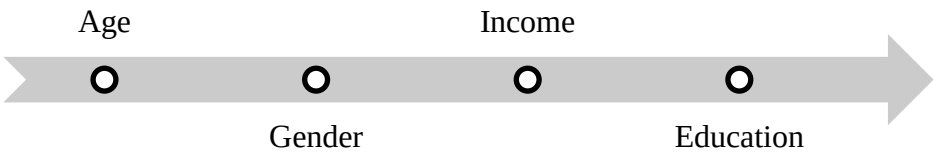
Each of the social factors presented is thoroughly explained below:

- Family - The key reference group that a person becomes a part of with the act of birth and hence has the strongest influence in the early years of development, which shapes the behaviour of a person, is the family. Furthermore, the core values and beliefs are acquired in the family and they direct the behaviour of the individuals in more or less every segment of their lives, and hence the person's decision-making process. In addition, family also represents an intermediate in transferring wider cultural and social values to the individual (Kesić, 1999, p. 7-12).
- Reference or social groups - These are all groups that one individual socialises through. They can be either primary or secondary, in which they are either formal or informal and in a way define the role of an individual in the society. Belonging or aspiring to belong to a certain social group sometimes is the crucial determinant to the consumer behaviour. Later in this chapter, it will be explained how the choice of a particular university, or a study program can be defined by this factor.
- Social status or class - This is a group of individuals who share similar values, interests and behaviour. They are differentiated by their socio-economic status and can range from higher class to lower class. Depending on which social class a person belongs to, the decision-making process will vary and the way in which marketers target a particular social group. Furthermore, it also has an impact on people who do not belong to that particular social class, but aspire to be a part of it (Kesić, 1999, p. 7-12).
- Culture - One of the basic components of human behaviour in general is culture and as such, it reflects on the consumer behaviour. It is a common understanding that everything that a person perceives and takes as taught behaviours. Čičić, Husić and Kukić (2009) explain that culture is consisted of different sub-cultures or individual components, such as religion, nationality, race, etc. Besides of these intrinsic components, there are also visible objects and symbols that represent a certain culture and can sometimes be the crucial factor determining the consumer behaviour. All of these individual factors have a strong influence on the consumers' in the same way as its members influence the culture and change it.

1.5.2 Personal or Demographic Factors

Personal or demographic factors are unique to each person and the most obvious demographic data are: sex, race, age, occupation, etc. Besides the data such as age, gender, place of domicile, occupational and economic conditions, also personality and self-consciousness can be found in this category (Horska & Sparke, 2008). Kotler and Scheff (1997, p. 38) suggest that demographic factors, which influenced CDM, are the internal factors including gender, age, income and education level, as shown in Figure 7.

Figure 7. Demographic Factors which Influence CDM Process



Source: Adapted from Kotler and Scheff (1997).

Other factors often used in literature are also religion, race, generation, nationality and social class. However, literature reviews has proved that age, gender, income and education are the most dominant personal or demographic factors (Essay UK, n.d.), which will be explained in more detail below:

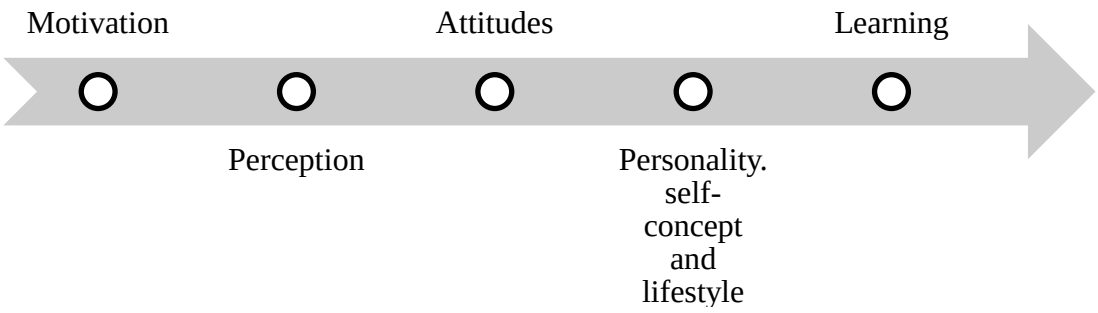
- Age -an important factor, which brings changes to the lifestyle and changes to personal needs, is age of the consumers. Kotler (2010) explained that the different needs and wants change withthe different age groups and hence, require and purchase different goods and services.
- Gender - market segmentation based on gender is often used due to very different buying patterns of men and women. The most obvious industries would be clothing, cosmetics or automobile industry and many other industries in the market. A neglected market segment can offer new opportunities to companies (Kotler & Armstrong, 2009, p. 219).
- Income - one of the variables, which can be used to identify a status of a person and is one of the most important socio-economic variables which is easily quantifiable is income, according to Statt (1997, p. 160-161). He also explains that income, education and occupation are the determinants of socio-economic status because naturally, people with higher income tend to hold managerial positions and high-ranked jobs, which generate high incomes, which also means that these people received a higher education. Of course, there are always exceptions to the rule. Needless to say, the buying patterns of people with higher incomes are different from people who have lower income.

– Education - studies have shown that educated customers tend to find more information about the product or service they are purchasing. Even though today information is very easily accessible, higher educated consumer will think more before making a decision. Dunne and Lusch (1999) give an example of graduate and undergraduate students and their spending patterns, explaining that even though they might belong to the same age group, the spending patterns of the graduate student will be more conscious of the quality, price and services.

1.5.3 Psychological Factors

Another set of factors that influences CDM process are personal factors, which are also internal factors, or individual determinants. These factors are referred to as the ones which are unique to each consumer. Figure 8 gives an overview of these factors.

Figure 8:Psychological Factors that Influence the CDM process



Source: Adapted from Pride and Ferrel (2007).

An overview of the above-mentioned factors is made in the following paragraphs:

– Motivation - Many studies focused on finding out what drives people to purchase a particular product or service, or in other words what are their motives behind the conscious decision to invest physical and psychological energy into a certain act which will lead to their goal. A motive can be defined as an internal energizing force that orients a person's activities toward satisfying a need or achieving a goal (Pride & Ferrell, 2007, p. 178). There are many classifications of motivation; however the most commonly in literature is intrinsic and extrinsic motivation. Deci, Koestner and Ryan (1999, p. 653) explains intrinsic motivation as motivation that is animated by personal enjoyment, interest, or pleasure. Researchers often contrast intrinsic motivation with extrinsic motivation, which is motivation governed by reinforcement contingencies.
– Perception - The readiness of a consumer to have a positive or negative reaction to a certain product service or situation. During this process, information inputs are beings selected, organised and interpreted in order to create an output, which is a meaning (Pride & Ferrell, 2010, p. 200). They further explain that perception is a three-stage

process during which the person receives a certain amount of inputs from different sources and these inputs are later going through a process of selective exposure during which the individual, in fact, chooses which information will reach their awareness. After certain information has reached the awareness of the consumer, this information will be stored and mentally organised in such way that they produced meaning to the consumer, and integrate with the information that has already been stored in memory. The final stage is interpretation, during which meaning is given to a certain set of information on what is expected, or what is familiar. Perceptions cannot be controlled by marketers, however can be influenced by the information that is sent out to the consumer.

- Attitudes - The knowledge and positive or negative feelings about a certain object or activity are attitudes (Pride & Ferrell, 1991). Attitudes cannot be changed easily, as Shuffman and Kanuk (2007) explain, because it is a learned predisposition to behave in an either favourable or unfavourable manner towards a certain object or activity. These attitudes are learned through interaction with other people, and the strongest influencers to forming attitudes are family, friends, peers, etc. For this reason, marketers cannot easily change attitudes of consumers, however can learn about the factors which influence them and hence variables and methods that can be used to change them.
- Personality and self-concept – According to Pride and Farrell (2010), personality is a set of intrinsic traits that makes one person unique and is influences by personal experiences and heredity. Furthermore, personality is a set of distinct behavioural tendencies that results in similar behaviour patterns in certain situations, or towards certain objects or activities. Examples of personality traits are introversion, extroversion, friendliness, competitiveness, etc. Each of these personality traits produces a certain behaviour pattern, or in other words, influences the consumer to behave in a certain way. Marketers may often target certain personality traits through advertisement. Self-concept, in literature also called self-image, is the way one perceives oneself. Individuals develop and alter their self-image based on interaction between psychological and social dimensions (Pride & Farrell, 2010). Research has shown that buyers make decisions based on their self-image in order to enhance and maintain a stable self-concept. Čičić, Husić and Kukić.(2009) define lifestyle as a specific trend or pattern of behaviour that individuals choose under certain influences of culture, social, personal and psychological factors. Pride and Farrell (2010), further explain lifestyle as a set of all activities, interests, opinions and patterns that people follow in their lives. People may belong to very similar economic and demographic groups; however live completely different lifestyles such as healthy lifestyle, ecology-oriented lifestyle, artistic lifestyle, etc. Hence, lifestyle is a combination of factors of group and individual importance.
- Learning - Collecting information, which is stored in the memory of a consumer in a meaningful way, is the process of learning (Kesić, 1999). The information stored can be related to the product brand, or service provider, type of product, price lists, reputation of the company and many more. Marketing communication directed towards the consumer has an important role in forming the desired knowledge about the product or service a company or institution provides and can shape different levels of awareness and knowledge about certain products and/or services.

2 THEORETICAL FRAMEWORK OF THE RESEARCH

2.1 Modelling the CDM Process

Each year hundred thousands of students graduating from high school face one of the most important decisions, which will in one way or the other define the course of their life path. This decision is first of all whether to pursue a university degree and second of all, enrolment to tertiary education, or selection of HEI where the student will pursue a university degree. The selection process typically does not last only a few months, but sometimes even a few years, during which the students consider many different factors. For those students who decide to attend university, this decision is assumed to be high priority (Beswick, 1973). The importance and value of higher education is unquestionable and is becoming more important each year, with the development of technology and emergence of new career options.

Furthermore, globalisation and the Internet have contributed to higher mobility of students and has led to internationalizing the tertiary education (Rashkov, 2010). In addition, scholarships offered worldwide by governments, universities and different kind of non-governmental funds are giving many possibilities to outstanding students. Furthermore, many private universities are emerging each year worldwide and this way of governance of higher education system is transforming from dependency on government funding to competitive markets (Maringe, 2006). It is safe to say the competition among HEI sector has increased over the years and both, public and private universities see students as their consumers to whom they need to market their institution.

In addition, De Fraja and Iossa (2002) argue in a study that university performance does not only depend on the accreditations, research quality, but it is also depended on the achievements of its students. For this reason, universities are developing tools that not only educate and train successful students, but also to attract the best school leavers (Veloutsou, Lewis & Paton, 2004). From the applicant's perspective, one of the most crucial things is availability of information, which will lead to a well-informed decision-making (Briggs & Wilson 2007). Moreover, Murray (1991) explains, from marketers' perspective, the pre-purchase phase is when the students are under most influence and it is critical that information is channelled properly in order to reach the students. It has been shown that students do not make this life-changing decision on their own, or in isolation, they are highly affected by numerous factors ranging from internal factors such as family, friends, peers and external factors such as cost, location and many more. Moreover, over time different models have been developed which explain exactly how this process occurs and which are the steps involved in the decision-making process, which will be explained in more details in the following pages.

2.2Theoretical and Conceptual Approaches to Modelling the Choice of HEI

Any exchange of goods or services has two sides and these are service or product provider on one end and the consumer or customer on the other. Looking at higher education as

such process, service providers are universities or educational institutions and the customer is the student. Moreover in higher education industry just like in any other industry, it is crucial to be familiar with the fundamental marketing concepts and to know the target group. As Eagle and Brennan (2005) explain, students are customers and should be treated as such, which means that once the institutions identify the wants and needs of their customers, in this case students, satisfying these wants and needs becomes more feasible, as well as attracting the institution's target group of students.

However, in order to understand these wants and needs, it is necessary to know exactly which process takes place in deciding which higher education to pursue. Over the years, many studies have tackled this topic ad many new models arise from literature on higher education management, among which the most popular ones are: economic models, status attainment models and combined models. There are a number of combined models in literature, and this master's thesis will address the three of most widely used: Jackson model, Chapman model and Hanson and Litten´s model.

2.2.1 Economic Model

The core idea of economic or econometric model of choice was first proposed by Becker (1975) and its core idea lies in the argument that students are rational beings who make careful cost-benefit analysis when choosing a university in order to make the best choice of university, or in other words choosing a university which provides the highest value by maximising their utility and minimising their risks (Raposo & Alves, 2007).

A number of researchers (Hossler, Schmit & Vesper, 1999; Fuller, Manski & Wise 1982; Schwartz, 1985; Vrontis, Thrassou, & Melanthiou, 2007) suggest that students make their choice based on the level of value that each university has to offer. This rough calculation takes into account several different factors such as individual's personal tastes and preferences, benefits one perceives to enjoy from a particular institution, as well as the costs associated with a particular institution (Manski & Wise, 1983). However, in order for this calculation to take place, these costs and benefits must take numerical values or measurable values, which can be analysed using these econometric or economic models with the objective of examining the decision to enrol in university.

Most of economic models reviewed (Fuller, Manski & Wise, 1982; Willis &Rosen, 1979; Hossler, Schmit & Vesper, 1999; Schwartz, 1985) describe the students' choices through determinants, which have been developed before the selection process, suggesting their choice is based on earlier choices, feedback evaluations and financial variables. However, Payne (2007) argues that the students' choice is not based on these preconditioned factors, but on factors which appear during the application process during which students make a rational decision based on the highest value obtained from a particular institution related top future career prospects, accreditation social acceptance, etc.

2.2.2 Status-attainment Models

Another understanding of underlying factors of university choice are more utilitarian in nature suggesting that students go through a decision-making process specifying a variety of social and individual or personal factors which lead to educational, hence occupational aspirations (Jackson, 1982). However, according to Bowers and Pugh (1972), this argument is nothing new on the market, but dates back to a study conducted in 1958 which suggested that "prestige" was the most important factor of student's choice. To this date, prestige and reputation of the institution play an important role, especially in such a competitive environment that the students are faced with today due to globalisation, better access to education and many other factors.

According to Sewell and Shah (1978), in determining students' aspirations there is an interaction between behavioural variables of students (e.g. students' academic performance) and background variables (e.g. social status of parents). A number of studies have supported the sociological model of university choice and the strong influence of the students' social environment: parental encouragement (Sewell & Shah, 1978), influence of significant others (Chapman, 1981) and academic performance (Sewell, Haller & Portes, 1969, p.89).

2.2.3 Combined Models

The third category is self-explanatory, it combines the two models explained above: economic and sociological model. This means that the rational assumption of decision making process from economic model and status attainment from the sociological model are utilized to provide a conceptual framework which predicts what effects do policy-making interventions make to the decision making process. Needless the say, the main argument for models, which combine both views, give a better insight than single perspective ones (Hossler, Braxton & Coopersmith, 1985).

According to Jackson (1982), most combined models divide the decision making process into three phases, where some phases incorporate more than one step. First phase includes two steps: development of aspiration and evaluation of alternatives. Second phase focuses on considering options available and the third phase incorporates evaluation of remaining options and the final decision. In the following section the combined models most often cited in literature will be explained in more details: Chapman's model, Jackson's model and Hanson and Litten's model of students' decision-making process of HEI.

2.3 Combined Models in CDM Process

Over the years, many combined models have emerged, however in literature most often used and quoted ones are: Chapman's, Jackson's and Hanson and Litten's, explained in more detail below.

2.3.1 Chapman's Model

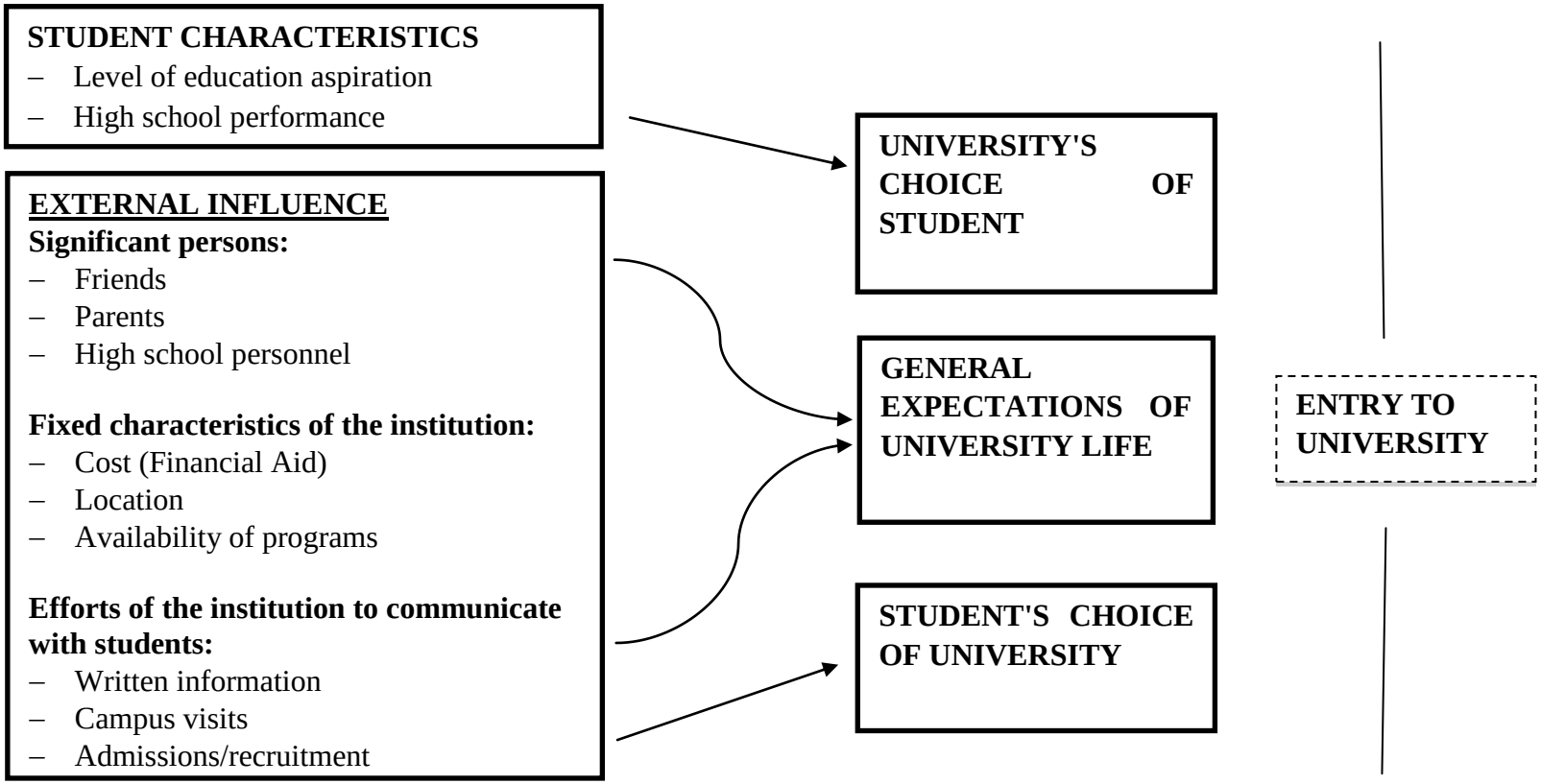
The Chapman's model (1981) explains the students' HEI choice through a longitudinal three-stage process which suggests that in order to gain understanding, it is necessary to consider first of all background and current characteristics, followed by student's family and finally characteristics of the institution. Moreover, this model is comprised of two basic components, which are student characteristics and external influences. The student characteristics include the level of education aspiration and high school performance. In other words, what level of education does the student want to hold, but also how well did the student perform in high school.

Moreover, the external characteristics are divided in three categories: significant persons, fixed characteristics of the institution and efforts of the institution to communicate with the student. Significant persons such as friends and family, who are the closest social circle of the student, can define the first category through influences. Fixed institution characteristics such as cost have a significant role in the process of deciding which HEI to choose. Furthermore, location of the HEI or campus is considered to be an important factor in this model, as well as availability of the program the student wants to study. Finally, institution's efforts to communicate with the student is defined through written letters, campus visits, admission and recruiting activities. These are basically the advertising or recruiting activities conducted by the HEI in order to reach their target group (Beswick, 1973).

It is important to stress that in this model, all the above-mentioned categories and factors affect different stages of the decision-making process. Student characteristics are important to the HEI because based on those characteristics the HEI decided whether the student is a good enough candidate based on their entry requirements. Furthermore, external influence is significant because it relates to the general expectations of university life. Finally, efforts of the institution to communicate with the student affect the student´s choice of choice of university. After all these requirements and expectations have been satisfied, the student reaches the final stage, which is entry to the university.

This process is graphically presented in Figure 9 below. This model has been criticised for its simplicity of having only two sets of influencing factors, student characteristics and external influences, however many researchers have agreed that the complexity in fact lies in the simplicity of the model, due to variety of variables in each of the sets (Beswick, 1973).

Figure 9: Chapman's Model of Students' HEI Choice



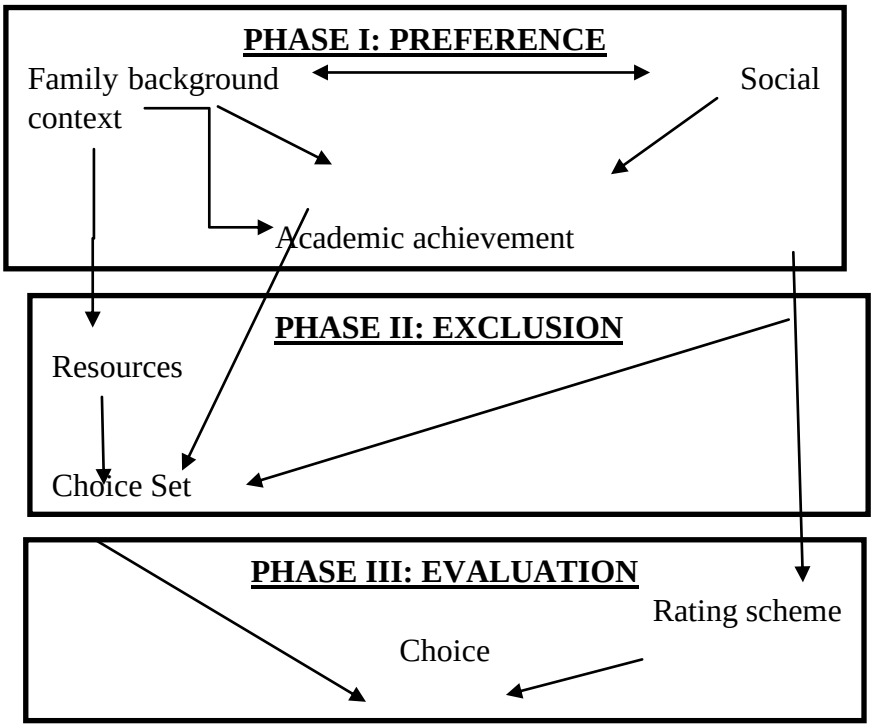
Source: Adapted from Beswick (1989).

2.3.1 The Jackson's Model

This model proposes that students go through three main stages before they make the final choice: preference stage, exclusion phase and evaluation phase. Jackson (1982) explains that in the first stage, as visible in Figure 10,there is a strong correlation between the educational preferences of the student and the academic achievement. Family background and social context also play an important role in this stage due to strong influence of parents, peers, neighbourhood and other influential persons in the students' lives. In the second phase, the exclusion stage, the student has a list of institutions on a prospective list and it is time to exclude institutions from the list due to various reasons. For example, some tuition fees might be too high, so this would be a ground for excluding those institutions.

The list is later downsized to a certain set of institutions, which satisfy all the criteria the student has set which will be a subject of the third stage, or evaluation. This means that each institution from the formed set will be ranked or rated by the student using a rating scheme the student develops based on the preferences. Finally, a hierarchical order of choices emerges within the choice set and the student is ready to make the final decision.

Figure 10: Jackson's Model of Students' HEI Choice



Source: Furukawa, (2011).

2.3.2 The Hanson and Litten's Model

The Hanson and Litten´s model (1989) is to have given most contribution to literature through its three stages: student's intention to apply, development of set of candidate institutions and final stage is process of applying. However, what sets this model apart from earlier mentioned models is the five-step model which is embedded in these stages through which every student goes through which are the following: college aspirations, starting the search process, gathering information, sending applications and finally enrolling.

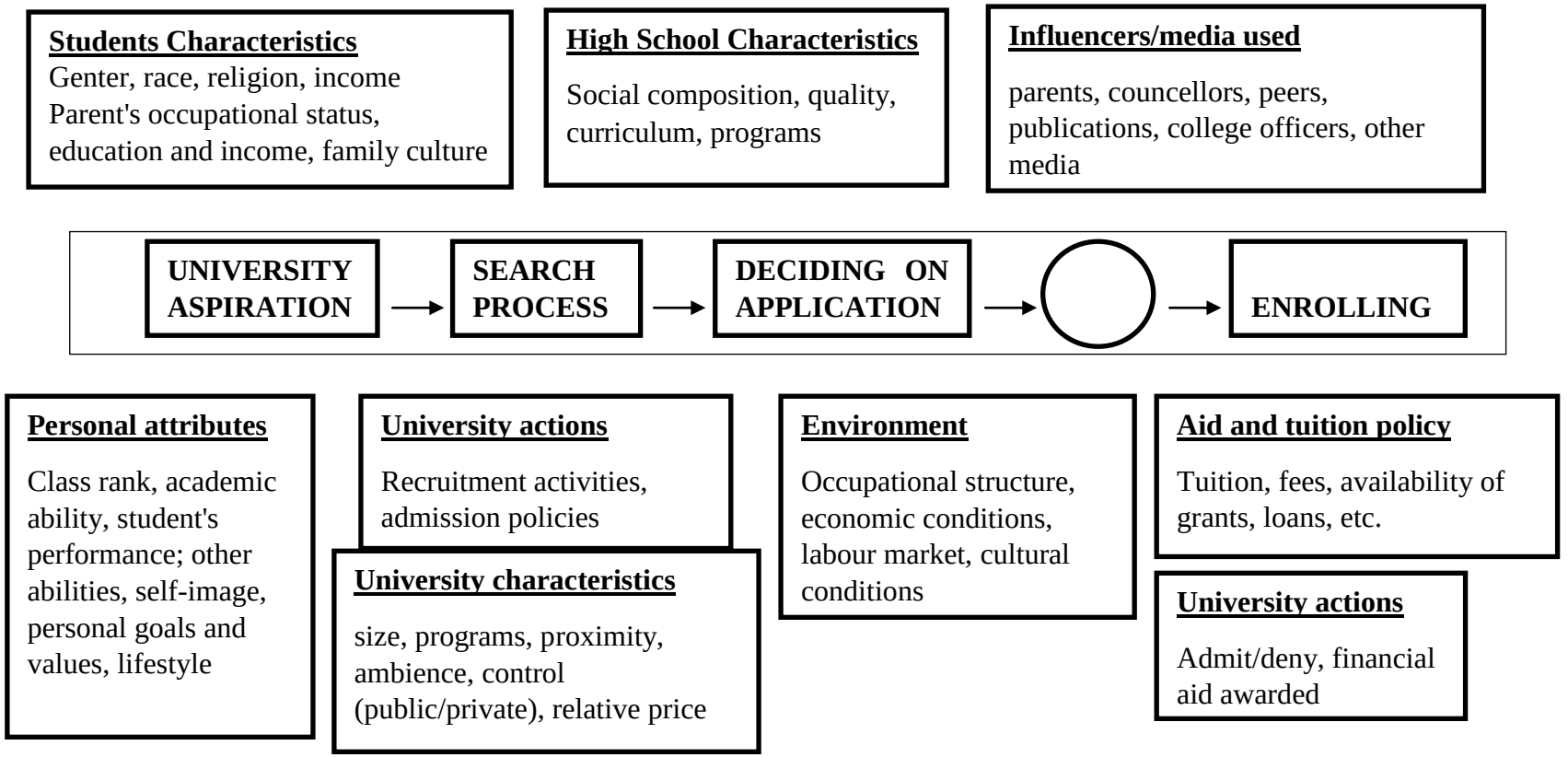
Hanson and Litten (1989) also identified sets of variables to each of the categories from earlier mentioned models, and assigned each category to specific stage of the process. The variables are distributed in each of the categories as follows: background characteristics (e.g. socioeconomic status, gender, parents' education.); personal characteristics (e.g. academic ability, personality, and self-image); high-school characteristics (e.g. social composition, quality, and program) and institution characteristics (e.g. cost, location, size).

Besides these variables, they have also introduced public policy (e.g. financial aid) and environment (e.g. cultural environment) as intervening variables, due to the increasing financial aid provided by public and private universities, as well as the presence of multi-cultural environment in many countries worldwide. Hanson and Litten´s model is a cross between the previously described models: student-based Jackman's model and institution-based Chapman's model. The model is below presented graphically in Figure 11.

This model is more complex in terms of the number of different sets of factors considered during the process of selecting HEI. It comprises in total of nine categories, which are defined as following: student characteristics, high school characteristics, influencers or media used, personal attributed, university actions, university characteristics, environment, university actions and finally aid and tuition policy. There is a significant amount of different factors considered, which have not been used in earlier models, one of them being the environmental factors, which are defined through the cultural conditions, or university characteristic defined also through control, or in other words is it a public or private institution.

Due to its complexity, the Hansen and Litten´s model has been used as a baseline for developing the questionnaire, which is the main tool of primary research in this master thesis, incorporating all the various sets of factors, which can influence the CDM process.

Figure 11: Hanson and Litten's Combined Model of Students' HEI Choice



Source: Adapted fromCremonini,Westerheijden and Enders (2008).

2.4 Cross-continental Assessment of CDM Process in Selecting HEI

Literature review has shown that many researchers around the world have studies the factors, which drive students to choose a particular HEI. Moreover, the choice of higher education, hence the choice of future career is given much emphasis. Furthermore, the students are under a lot of pressure from their close social circles, such as parents, family and peers, but also from media which is sending the message on the importance of being successful in the labour market, so it is an understatement to say high school students today are under a lot of pressure to make the right choice of career.

As earlier mentioned, factors affecting particular decision-making process are vast, and can be divided in two main categories: internal and external. Internal factors can be summarised in three groups: social, personal or psychological factors; whereas external factors can be grouped in institutional, economic and environmental/cultural factors, as well as employability or career prospects. Higher institutions have also recognised the importance of understanding what the decision of students is based on in terms of selection of tertiary education and particular institution where to pursue a degree. Private universities, but also public universities, as well as colleges invest into market researches in order to identify the factors, which affected the students' final decision, and based on the data collected, they develop marketing and recruitment strategies.

The factors of influence of university selection is a topic that has been researched in many countries all around the world, and the literature review in Table 1summarises finding of the following country-specific studies.

Table 1: Cross-continental Assessment of CDM in Selecting HEI

Country	Literature review
Pakistan	Rizwana, Atif, Muhammad and Shoaib, 2013; Saeed & Ehsan, 2010
India	Mudhoklar, 2012; Nyaribo, Prakash and Edward 2012
Indonesia	Kusumawati, 2013; Joseph & Joseph, 2000
Malaysia	Kusumawati, 2013; Joseph & Joseph, 2000
China	Sidin, Hussin & Soon, 2003; Ming, 2010; Wagner & Fard, 2009
Thailand	Lee & Morrish, 2012; Ji & Koblinsky, 2009
	Agrey & Lampadan, 2014
USA	Kinzie, Palmer, Hayek, Hossler, Jakob & Cummings, 2004; Fischer, 2011; Chapman, 1981; Griffith & Rask, 2007; Kinsler & Pavan, 2011
Spain	Sanches, 2012
Portugal	Simones & Soares, 2010
Finland	Keskinen, Tiuraniemi & Liimola, 2008; Soutar & Turner, 2002
United Kingdom	Veloutsou, Lewis & Paton 2004; Briggs & Wilson, 2007
Australia	Bailey, Ifenthaler, Gosper & Kretzschmar, 2014;Baron and Corbin, 2012

(table continues)

(continued)

Table 1: Cross-continental Assessment of CDM in Selecting HEI

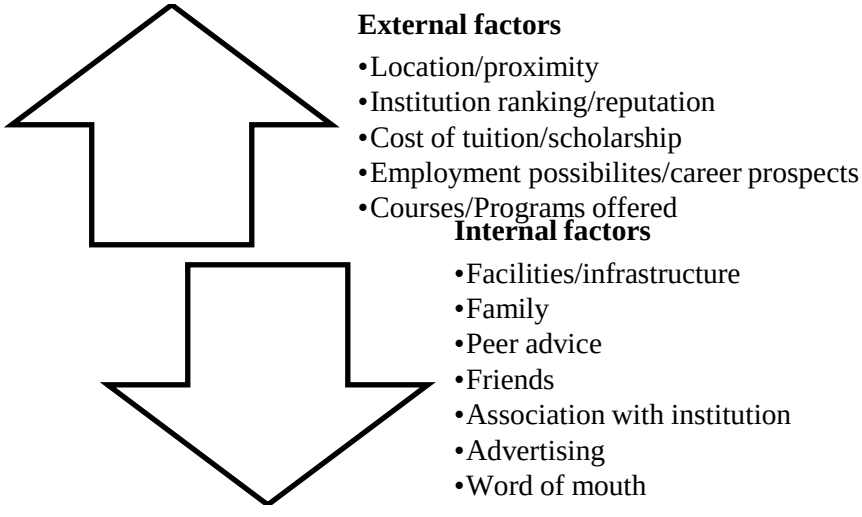
Country	Literature review
New Zealand	Joseph & Joseph, 1998
Kenya	Nyaribo, Prakash and Edward, 2012
South Africa	Wiese, van Heerden, Jordan and North, 2009; Beneke and Human, 2010

Source: own work.

The findings of researches and studies afore mentioned will be explained in more detail below in the form of country clusters based on their geographical location with the objective ofproviding a deeper understanding of differences, but also similarities between strongest influencing factors among students from around the world. In different societies and culture, different factors will prove to be more important than others. For instance, in some countries or some parts of the world, parents might have a strong influence when it comes to choosing HEI, whereas in other countries their influence is insignificant.

Furthermore, in some countries the variety of programs offered is more important than the prestige or reputation of the institution, whereas in other countries it is the other way around. The most general division of factors of influence used by most of studies and researches above mentioned is the division on internal and external factors. This division is shown in Figure 12, however many different studies include many other factors such as opportunities on the labour market, institutional infrastructure, specialisation, exchange programs and many other which will be mentioned further in literature review.

Figure 12: Internal and External Factors that Influence Students' Choice of HEI



Source: Adapted from Rizwana, Atif, Muhammad and Shoaib(2013).

2.4.1 Asia: Pakistan, India, Malaysia, Indonesia, China and Thailand

Many researchers have tackled the topic of factors influencing the students' choice of HEI and tertiary education in Asia.Rizwana, Atif, Muhammad and Shoaib (2013) explain that in Pakistan many students are unaware of why they made a particular HEI choice, or which the most significant factors for their final choice were. They researched internal and external factors of decision-making process among students and the research has proved that both have a strong impact, however that external factors had more influence than internal. Furthermore, the study has shown that family is the most influential internal factor, followed by friends and word of mouth, whereas the most influential external factors are location and ranking of the institution. Saeed and Ehsan (2010) have found that other important factors are also name of the university, research opportunities, as well as qualification of the university.

In India, a research conducted by Mudholkar (2012) has shown that there is a difference between genders when it comes to significance of particular factors that influenced their final choice of HEI. Male students have proven to be more influenced by the factors of placement, reputation of the institution, infrastructure, specialisation and faculty, whereas female students were most influenced by reputation, faculty, tuition fee structure, location of the institution and placement. Furthermore, a Mudhoklar (2012) concludes based on the findings that the most influential factors for Indian students are placement, image and faculty. Another study conducted by Nyaribo, Prakash and Edward (2012) reaffirms that Indian students are influenced strongly by financing, but also the employability, or opportunities for employment on the labour market, institutional infrastructure and influence of acquaintances in order of ranking.

Kusumawati (2013) has conducted a study in Indonesia on factors influencing students' choice and the results have shown that Indonesian students make choices based on a combination of factors. Indonesian students were most influenced by external factors such as cost (total expenses), reputation of the institution, proximity (location of the institution) and finally by opportunities for employment or job prospects. However, the study also revealed that Indonesian students are under a strong influence of parents during the decision-making process and they are the ones stimulating the choice and the reasons are most often financial-related factors. Earlier study conducted by Joseph and Joseph (2000) has found that other factors that influence students' choices are also physical aspect, facilities and resources of the institution, as well as the content and structure of the study program and finally the value of education attained.

Similar studies have also been conducted in Malaysia, among which Ming (2010) has found a number of factors of influence, which he later divided into two broad factors, which he named "Fixed College Characteristics and College Effort to Communicate with the Student" (Ming, 2010, p.34). Fixed college characteristic included a number of namely external factors such as location, reputation, facilities, academic program, cost and employment opportunities, whereas the second factor included factors of advertising, institution representatives and campus visits. Another interesting study was done by Sidin, Hussin and Soon(2003) tackled the relationship of HEI choice with gender and ethnicity,

family income, pre-university qualification and the perception of various university and college characteristics and how it relates to choice between public and private universities. The results have shown that gender and ethnicity are not likely to affect students' HEI choice. However family income is likely to affect the choice between public-private institutions, thus the lower the family income, the less likely would students enrol into private universities. The strong influence of the family, as well as friends and peers, has also been proved by Wagner and Fard (2009); including cost of education, but also the physical appearance of the university. Moreover, Sidin, Hussin and Soon (2003) also proved that pre-university qualification affects the final decision and the four most influential factors are facilities, procedures and policies, entry requirements and extra-curricular activities.

Lee and Morrish (2012) did a study on cultural values and higher education in China and ground for this study was the gap in literature, which tackles the in-grained cultural values, which have a very strong influence on Chinese students. The results of this study were very interesting suggesting that the whole decision making process related to education is governed by Confucius' teaching of filial piety, or in other words, deference to parents. The hierarchical social structure is still very evident today in many Asian cultures, which means in the case of parents and children that children are supposed to obey elders, respect their parents. Due to the deeply rooted Confucianism in Asian families, when it comes to education, this study has shown that children are likely to submit to parents' wishes in terms of education, which means that parents are the strongest influencing factors in decision making process for HEI.

Thailand is another Asian country where researchers have decided to investigate the determinant factors, which contribute to students' choice in selecting university and Agrey and Lampadan (2014). The ground for their study was the ever-growing interest in pursuing international education, which has faced Thai universities with challenges of attaining students' interest in pursuing tertiary education in Thailand. Research has been conducted based on which it was concluded that there are five factors with strongest influence to choice of HEI and these are listed in order of importance: support systems, learning environment and job prospects, sporting facilities, student life and activities and lastly, safe and friendly environment. Interestingly, in Thailand some new significant factors have emerged, which so far have not been identified as being of high significance in other Asian countries reviewed earlier, for example safe and friendly environment and student life and activities.

2.4.2 The United States

In American society education is considered as a long-term investment and the higher education market has become very competitive on the 21st century and students are faced with many different possibilities on studying private or public university, attending a college or vocational school or pursuing their education online (Kinzie and others, 2004). Furthermore, HEI rely heavily on tuition fees and many universities have suffered during the financial crisis (Fischer, 2011).

In the early 80s, Chapman (1981) has already pointed out the importance of family income and tuition fees, combined with financial aid which very often is a an obstacle for many students who would like to pursue higher education, which has been reaffirmed by many later studies which attempted to research how significant factor is family income and cost of tuition. Kinsler and Pavan (2011) conducted a study which tackled this issue and the results have shown that first of all, costs of tuition have increased significantly over the years, but so have financial aid grants and the availability of need-based tuition offered by reputable higher institutions increased the likelihood that students from a low-income family would attend high-quality institutions. Furthermore, Griffith and Rask (2007) found that cost of tuition was the most crucial factor in the higher education decision-making process for students who come from low-income families and could not afford to pay full price, whereas for students coming from high-income families this factor was insignificant.

Another significant factor is also parental education, which has proved to strongly affect the students' decision-making process, as well as the expectations parents have, their own university financing experiences, involvement in information search, but also their understanding of university costs and aid and their actual ability to provide financial support to their children's education (Kinzie and others., 2004). In addition, students' academic achievements and aspirations also influence the final choice and students with higher academic achievements in high-school tended to invest more time and effort in information search and to select more alternatives, hence their decision-making process was far more complex than to students with lower academic achievements and aspirations (Chapman, 1981; Kinzie, and others, 2004).

2.4.3 Europe: Spain, Portugal, Finland and the United Kingdom

Similar studies have been conducted all around Europe as well, whether to investigate factors influencing a decision-making process and final selection of a particular faculty, study program or HEI in general. Sanches (2012) did a research on factors influencing a student's decision to pursue a communication degree in Spain and the results have shown that Spanish students see reputation and quality of programs as most influential factors. Furthermore, they also preferred public universities to private universities and the main source of information on higher education option was university websites. In contrary to many similar researches conducted in Asian countries, results of this study have shown that vast majority of Spanish students who were surveyed indicated they made their own decision concerning which degree they would like to pursue, without a significant influence of parents, family and friends (Sanches, 2012).

Simones and Soares (2010) did a research about sources of information and choices of factors that influence the decision-making process for HEI in Portugal. The results related to sources of information were quite similar to the study conducted in Spain, indicating that Internet was the key source of information used. However, the most influential choice factor proved to be geographical proximity, which Simones and Soares (2010) relate to students wanting to stay home or closer to home, mainly for economic reasons. Moreover, the second most important choice factor was academic reputation, not just for the university, but also for the degree, which the students are pursuing. Veloutsou, Lewis and

Paton (2004) have identified university and department's reputation as one of the most researched themes by students collecting information prior enrolment to HEI.

In Finland a study was conducted by Keskinen, Tiuraniemi and Liimola (2008), who attempted to find out which factors influenced the university selection process in Finland and which factors contributed to the students' final decision to pursue degree in Psychology. The results have shown that the most influential factor for Finnish students were the special characteristics of the teaching and research in the psychology departments. These results have proved conclusions of an earlier study by Soutar and Turner (2002) who suggested that the key determinants of university choice among students were course sustainability, reputation of the university, job opportunities and prospects and quality of teaching. As earlier mention for Portuguese students, in Finland the results have also shown that location of the university is a significant factor and that distances from home play an important role. In addition, the results have also shown that for Finish students pursuing degree in Psychology, entrance examination was not a significant factor determining the students' final choice.

University selection process has also been researched widely in the United Kingdom, specifically in England and Scotland. Veloutsou, Lewis and Paton (2007) examined the requirements and importance of various types of information the students are looking for during the decision-making process when selecting a HEI. The results have shown that for UK students most important factors are university reputation, content of specific courses and accommodation provided by the campus. Furthermore, results also suggested that local infrastructure, in specific safety concerns and how well the transportation is organised is also an important factor influencing the final decision. Furthermore, students were interested in local social life, which relates closely to costs of living and activities, which they can pursue in the vicinity. Other important factors was career prospects or job opportunities once completed studies, in particular there was a high interest in average earning of the graduates. Briggs and Wilson (2007) studied the influence of cost and information factors on Scottish undergraduate choice and the results were more or less confirming the earlier mentioned factors of importance for students from the UK. They indicated that the six most important factors for Scottish students were: academic reputation, distance from home, own perceptions, graduate employment and social life in the vicinity.

2.4.4 Australia and New Zealand

Bailey, et al. (2014) made a research in Australia about factors influencing tertiary student's choice of study mode and attempted to investigate students' motivations to choose a particular HEI through analysing six factors: personal, logistics, teaching and learning, learning support, environment and advice and marketing. The results have shown that the factors of highest importance for Australian students participating the research were teaching and learning, which indicated the importance for all students of the quality teaching and mode of syllabus delivery. Furthermore, logistics is the second most important factor due to the factor of distance and ability to balance work, life and study (Baron & Corbin, 2012). Personal factors, learning support and environment proved to not be a significant factor when choosing tertiary education.

Similar study has been conducted in New Zealand, investigating factors influencing intentions to study higher education and the results proved that the three most significant factors were value of education, degree (content and structure) and cost of education, followed by facilities of the institution (Joseph & Joseph, 1998). Even though this study has been conducted two decades ago, the results are still relevant and are in fact showing how despite globalisation, increasing number of private and public universities emerging all around the world, the factors of influence have not changed too much and all of the studies which tackled this issue in the following years evolved around pretty much the same factors.

2.4.5 Africa: South Africa and Kenya

This topic has also been tackled by many researches and studies in African countries. In South Africa the three dominating factors of influence on the final choice of HEI are reputation of the institution, quality of teaching and geographic location, followed by campus safety and tuition fees. (Wiese and others, 2009; Beneke &Human, 2010).

Nyaribo, Prakash and Edward (2012) researched the highest influencing factors in Kenya and the results proved that the strongest influencing factors were social circles (parents, family, friends, etc.), institutional infrastructure, and costs of study, and employability or job prospects. The study in Kenya also explains why the influence of social circles is so strong and the reason is lack of information about various programs due to limited written and online information. Furthermore, in Kenya most of the HEI are new, hence the strong importance of institution infrastructure which is often being compared to American and European standards by students attempting to enrol in a particular higher institution in Kenya.

2.5 Review of Empirical Research

The previous chapter summarises the findings of literature review based on papers and studies conducted around the world on the topic of selecting faculty, which in essence is the future career path of an individual. The results have shown that two groups of determinants proved to be of highest influence on the final decision outcome in terms of university choice almost in every country-specific study. These are internal factors (social circles such as family, friends and peers) and external factors (reputation of the university and study program, costs/tuition fee, career prospects or employment opportunities, proximity/location, facility infrastructure and quality of teaching). Vast majority of the studies mentioned above used the means of questionnaire for data collection and qualitative and quantitative methods of data analysis. Moreover, different models of empirical data analysis have been used, depending on the sample and research questions or hypothesis. Below, three studies have been selected as a baseline for the methodological framework of this master's thesis. The reasoning behind is the use of regression model, which has been chosen for the means of empirical analysis for this master's thesis.

A study by Nyaribo, Prakash and Edward(2012) has been mentioned earlier in this master's thesis and has been used as a baseline for development of the methodology of this

master thesis. The aim of this comparative study of Kenya and India was to examine the motivators of pursuing a management course. The research was guided by a structured questionnaire used as instrument to collect data. The researchers employed a stratified random sampling in order to reach the target sample of 197 Master in Business Administration students from Kenya and India. This study employed three statistical analysis methods: factor analysis, multivariate analysis of variance (MANOVA) test, and logistic regression modelling, using computer statistical packages. The factor analysis of the motivators aimed at extracting the critical factors in the study and the logistic regression method modelling was applied in order to examine the nature of the relationship between the motivators and choice to pursue an MBA course. Two motivators emerged from the combined data set: influence of acquaintances and employability. Furthermore, a logistic analysis revealed that two predictors were statistically significant: institutional infrastructure and employability.

Another study, which used regression model for data analysis, was a Bachelor thesis that had the aim of investigating factors, which influenced international students to choose Aarhus School of Business (Rashkov, 2010). A structured questionnaire was developed for the process of data collection. The model presented three general categories, which influence the choice of education: individual characteristics, institutional characteristics and environmental determinants. Each of these was defined by specific set of variables, which have later been cross-referenced to literature review and the ones, which were persistently present, were selected for further research. A logistic regression was adopted in this study to examine the dependency of the categorical choice variable from the multiple general determinants of choice. SPSS was used for checking multicollinearity with the aim of showing correlation between the variables. Once all the assumptions were checked, a logistic regression was used to test the hypothesis. The findings have revealed that five critical factors influenced the international students' choice of selecting Aartus Business School: availability of preferred study program, adequate application policy, the high ranking of the university (reputation of the institution), siblings direct influence and family members' (graduates of similar schools) influence.

Navratilova (2013) applied the theory of planned behaviour to the university selection process in a paper, which aimed at analysing and comparing factors influencing the university choice. The paper focused on two types of universities: economic and technical and the comparison between students was carried out based on the values of standardised regression coefficient for each of the factors defined by the research. The results have indicated that the values of standardised regression coefficient was often similar between the students of economic and technical universities, however significant differences have reflected in the underlying motivation for choosing a particular university. In the case of technical faculty students a greater interest in the study field was shown, compared to students of economic faculty which had shown more focus on promising career prospects and succeeding in their future career (employment and career prospects).

Based on the empirical research, a conclusion can be made that factors which most influence the CDM process among students, in terms of choosing HEI, are: reputation of the institution and reputation of the study program. Furthermore, internal factors such as

direct influence of family and acquaintances. Moreover, prospects of employment and successful career seem to be significant factors when choosing a HEI.

2.6 HEI in B&H

Higher education has a long history in Bosnia and Herzegovina and the first HEI established in Bosnia and Herzegovina was the Gazi Husrev-bey School of Sufism in 1531, which was followed by establishment of other religious schools. In 1887, during the Austrian-Hungarian rule of the territory of B&H, the School of Shariah Law was established and began with its five-year long education plan (Gazi Husrev-begova Medresa, n.d.). In the 1940s, University of Sarajevo had become the first secular institute of higher education in the capital city of Bosnia and Herzegovina (Univerzitet u Sarajevu, n.d.). During the 1950s, a range of five post-graduate programs was available to students. During the 1992-1995 war, University of Sarajevo was severely damaged, however has been fully recovered with the financial aid from European countries and EU funds (Grad Sarajevo, n.d.).

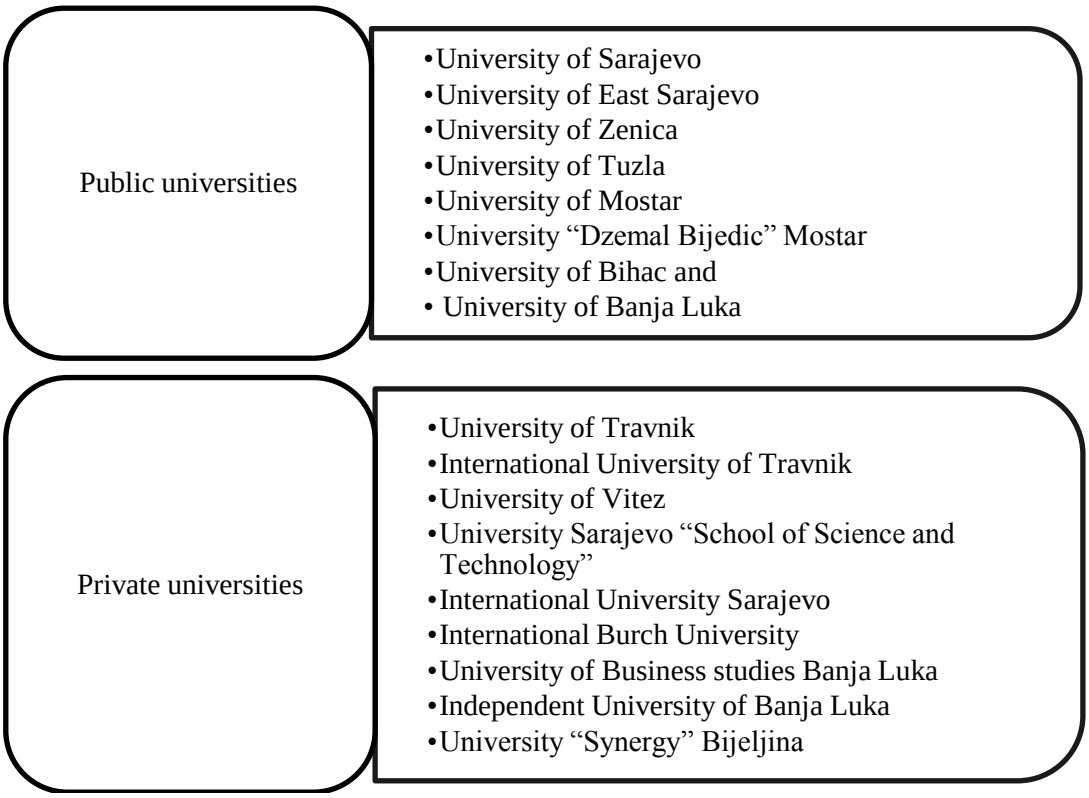
According to the European Commission (2017b) the B&H system is defined by the B&H constitution and is very decentralised because it is not entirely under governance of the state, but also by the two cantons of Bosnia and Herzegovina: Federation of B&H (hereinafter: FB&H) and Republic of Srpska (hereinafter: RS), and each of the 10 cantons within FB&H has governance over the education sector, which means each of the 10 cantons has their own Ministry of Education. According to the laws and regulations, institutions of higher education are financed by the governments of RS and FB&H. Hence, all the activities of higher education are governed by the laws of RS or FB&H, while on the state level the Ministry of Civil Affairs overtakes the task of coordinating activities related to higher education between the two entities. The regulatory and institutional framework will be explain in more detail later on.

2.6.1 Types of HEI and Enrolment Procedures

B&H higher education system is comprised from two types of institutions: universities and two-year post-secondary education (bos. *viša skola*), which has been in literature review defined as college. The main difference between university and two-year post-secondary education is that university offers academic in all three cycles and studies in at least five different subject groups in at least three scientific areas. These include natural sciences (e.g. biology, chemistry), technical sciences (e.g. information technology, electrical engineering), biomedicine and health, biotechnical sciences, social sciences (e.g. political science, economy), and humanities (e.g. philosophy, literature). On the other hand, two-year post-secondary education offers diplomas and degrees for only the first cycle of education in at least one subject group in one scientific area. The focus of this master's thesis are universities, therefore more information will be provided about this tertiary education institution (European Commission, 2017a).

The Agency for Development of Higher Education and Quality Insurance is the institution, which is in charge of certifying and licensing HEI. According to their official data, currently in Bosnia and Herzegovina there are 8 public universities and 22 accredited private HEI. Out of 22, only 9 of these institutions are classified as university, and together with all public universities, they have been the focus of the research conducted as a part of this master's thesis and these were all public universities and on 9 private HEI, which are in the university category of tertiary education, listed in Figure 13 below:

Figure 13: Accredited Public and Private Universities in B&H



Source: Adapted from Agency for Development of Higher Education and Quality Assurance of Bosnia and Herzegovina (2018).

Access to higher education is given to all students who have completed a four-year secondary education in Bosnia and Herzegovina. The students can either complete their secondary education in a general high school or vocational school. Those students who have completed secondary education abroad need to submit and evidence of completed secondary education to the relevant institution, which runs the documents through diploma recognition criteria and procedures. This procedure is conducted in accordance to The Convention on the Recognition of Qualifications concerning Higher Education in the European Region. Hence, through the notification process it is deliberated whether based on the completed secondary education the student can continue the tertiary, or higher education in a particular HEI.

Criteria for enrolment in to a HEI are created by the university senates, based on the suggestions of the science and education council of the faculty. There are three possible criteria for enrolment. First is genera criteria (GPA, or Grade Point Average from secondary education); individual criteria (average grade from one to three subjects relevant to a particular study program) and finally, the entrance exam (written exam from one to three subjects relevant to a particular study program). Thus, based on the enrolment policy of the university/faculty faculties apply one, two or all three criteria for enrolment.

Ministries based on the suggestions made by the university/faculty define enrolment quota. If the student has been admitted to a particular faculty, or study program, there are two possible categories the student can fall into: regular or irregular student. The students are ranked based on merit and they can either fall into the quota for regular students, which means their studies will be funded from public funds; whereas, the other who did not make the cut for regular students, will fall into the category of irregular students and pay for the studies from their private funds. Higher education can be obtained through regular studies, irregular studies, distance learning or the combination of the three.

2.6.2 Bologna Cycle

Directorate for European Integration B&H (2010) offers a thorough breakdown of the higher education system or tertiary education in B&H, which is based on primarily based on principles of the Bologna Declaration and aims to develop a coherent and compatible European higher education. As agreed upon by the Bologna Process, HEI is based on transferable credits, called ECTS, which is short for European Credit Transfer and Accumulation System (Trinity College Dublin, n.d.). Each semester comprises of 30 ECTS in each cycle of studies. This system is comprised of three levels, or cycles explained below (European Commission, n.d.):

- First cycle or Bachelor's is undergraduate studies program, which normally lasts 3 or 4 years, based on the system "3+2+3", which means 3 years of undergraduate studies followed by two years of postgraduate studies and concluded with three years of doctorate studies. Another option is "4+1+3", where the same principle applies. The total number of credits earned at the end of first cycle is from 180 to 240 ECTS credit. Upon completion of undergraduate studies, the title of Bachelor (BA) is earned, combined with the field of completed study program.
- Second cycle or Master's is the postgraduate studies program, which normally lasts 2 years and holds 120 ECTS credits. Upon completion of the postgraduate studies, the title of Master of Arts (MA) or Master of Science (MSc) is earned.
- Third cycle or Ph.D. is the last level of higher education is doctorate, which lasts for 3 years and upon completion of the studies, the title of Doctor of Philosophy (PhD) and comprises of 180 ECTS.

According to the Directorate of European Integration (n.d.), Bosnia and Herzegovina signed the Bologna Declaration in 2003, and since 1999 when Bologna Process had begun, 46 countries have signed the Declaration. By entering this circle, Bosnia and Herzegovina

had made a significant step forward in higher education reform process. The main benefits are:

- Compatibility of issued diplomas (adopting a system of easily readable and comparable degrees;
- Establishment of ECTS credit system;
- Establishment of two levels of studies: undergraduate and postgraduate;
- Promotion of mobility (opportunities to study abroad and apply for various different student exchange programs);
- Promotion of European cooperation in quality assurance;
- Promotion of European values through higher education.

2.6.3 Regulatory and institutional framework

Institutional image of the education system in Bosnia and Herzegovina is a reflection of the state, which is defined by the Constitution of B&H, constitutions of the entities and cantons, as well as the Statute of Brcko District, which lawfully define the governance and competences in the area of education. The two entities, RS and FB&H, together with 10 cantons which are the constitute part of FB&H and Brcko District have full and undivided governance in area of education. According to the Law on Ministries and Other Bodies of Administration of B&H, the Ministry of Civil Affairs is responsible for carrying out tasks within jurisdiction of B&H related to defining of the basic principles of activity coordination, harmonising the plans of entity governing bodies and defining strategy at the international level in field of education (Parlamentarna skupština Bosne i Herzegovine, 2016).

The Federal Ministry of Education and Science is in charge of administrative, professional and other tasks related to many different subjects, to mention only a few: preschool education; elementary, secondary and tertiary education, pedagogical standards and spatial norms, as well as validation and equivalence of international diploma, professional education and training of teachers, implementation of Bologna process, maintaining the standards in education and many other relevant tasks (Vlada Federacije Bosne I Hercegovine, 2003; Federalno Ministarstvo Obrazovanja i Nauke, n.d.).

The Ministry of Education and Culture of Republic of Srpskais the institution in charge of the education in the territory of the second entity of B&H, Republic of Srpska, Except of the administrative tasks, it holds the responsibilities and duties for: preschool education, elementary, secondary and tertiary education, education of children of citizens of RS about labour abroad, validation and equivalence of foreign diploma and certificates, cooperation with international organisations, preparation of syllabus in cooperation with FB&H, and many other tasks and responsibilities (Government of Republic of Srpska, 2002).

Finally, the Department for Education in the Government of Brcko District B&H is responsible for performing professional and administrative duties and tasks within the competence of the Government, such as enforcement of laws and regulations of the

competent authorities and institutions of B&H and the Brcko District area in the area of education. Under the supervision and direction of the mayor of the District, the following tasks are performed: financial, technical and personnel support to educational institutions, adoption of curricula in accordance to the standards of a modern, democratic and multi-ethnic society, cooperation between parents and personnel, providing educational programs in the District, as well as many other duties in line with the laws and regulations of B&H and Brcko District if B&H Assembly (Vlada Distrikta Brcko, 2013).

3. METHODOLOGY OF THE RESEARCH

The research methodology was based on a number of papers, which tackle the topic of internal and external factors involved in decision making process in HEI. The key studies this master's thesis followed for questionnaire development were Hilden (2011), Beswick (1989), Rashkov (2010) and Sanches (2012). An in-depth assessment of earlier studies revealed that the factors of influence can be categorized in two broad groups: internal and external factors of influence, which are further subdivided into five categories which fall within the realm of socio-cultural factors, factors specifically or directly related to institutional features (such as institutional and program reputation, recruitment and promotion, and financing), employability, financial resources and study environment which fall within the realm of external, primarily non-institutional factors. More specifically, following the literature review a conceptual framework has been developed which attempts to reflect on these five crucial dimensions defined. The conceptual framework is graphically presented in Figure 14 and explained thoroughly in Section 3.3 of this chapter.

The research process consisted of the following stages:

- Selection of the sample – The sample were undergraduate students enrolled in universities from all over B&H studying one of the following programs: Law students, Business/Management/Economics students and Information Technology/Computer sciences students;
- Designing the questionnaire – The questions have been formulated in a clear and understandable way in order to receive valid responses which are comparable. The questionnaire had the aim of collecting socio-demographic data and attitudes and opinions of respondents regarding internal and external influences which influenced their decision making process when selecting HEI education;
- Conducting the questionnaire–The questionnaire has been conducted by one part conducted online and by the other distributed in hard copy at target universities in the period between October 1st 2017 and December 1st2017.
- Response collection –The responses have been collected until the goal of minimum 500 responses has been achieved, in order to have a representative sample, which could be analysed and interpreted.

- Revision, formatting, data entry – In order to prepare the data collected for analysis, a thorough revision of collected data has been conducted in order to validate the quality of the questionnaires filled by respondents to make sure only valid questionnaires, in other words fully completed responses, were used in the analysis.
- Analysis and presentation of data – The data was analysed through the use of statistical methods and techniques of testing the data to research questions.

The collected primary data was analysed by using a software package MS Office Excel 2013, Statistical package for Social Sciences (SPSS) and the Stata statistical software package. Research results have been tested through means of statistical tests and parameters, through which the validity of the research process has been determined and the research questions have been investigated. The methodology, which will be used for statistical analysis of data, is:

- descriptive statistics;
- cronbach's alpha;
- regression analysis.

Before proceeding to data analysis, the design of questionnaire will be explained in order to provide insight in the design of questions and categories which have been created in order to collect the necessary data from respondents. Furthermore, the sample will be described, as well as measures used to ensure the sample and responses used for further analysis were representative.

3.1 Research Process

3.1.1 Questionnaire Design

In order to obtain the necessary data, the questionnaire was designed using a combination of open-ended questions, closed-ended questions multiple-choice questions and Likert-type scales. The questionnaire consisted of 9 categories, which were labelled with letters A-I, which contained questions about different sources and factors of influence, demographic data and questions related to the current study program. In Table 2, the main categories are listed, which represent the 21 questions used to collect the data will be explained in more details in the following paragraphs.

Table 2: Questionnaire Design

Research construct	**N of items**	**Items/questions format**	**Code**	**Scale developed by**
General information (Demographic data)	7	Closed-ended, open-ended and multiple choice questions	A 4-11	Beswick (1989), Rashkov (2010) and Hilden (2011)

(table continues)

(continued)

Table 2: Questionnaire Design

Research construct	N of items	Items/questions format	Code	Scale developed by
Parents and family members	3	Closed-ended and multiple choice questions	B 12-14	Beswick (1989)
Values and goals	1	Closed-ended questions	C 15	Beswick (1989)
Sources of information and influence	1	5-point Likert scale	D 16	Rashkov (2010
Reputation of the HEI	2	5-point Likert scale	E 17-18	Beswick (1989), Rashkov (2010) and Hilden (2011)
Reputation of the study program	2	5-point Likert scale	F 19-20	Hilden (2011)
Recruitment activities	2	5-point Likert scale	G 21-22	Sanches (2012)
Other factors	1	5-point Likert scale	H 23	Rashkov (2010), Beswick, (1989) and Hilden (2011)
Determinants of final decision/choice	2	Closed-ended and multiple choice questions	I 24-25	Sanches (2012)

Source: own work.

A number of studies have used questionnaires as primary data collection methods, which have been thoroughly analysed in order to conclude which categories the questionnaire should consist of and which type of questions should be used for each of the categories in order to maintain a high accuracy and response rate. Therefore, a set of questions was developed based on the combination of questions used in previous researches conducted by Beswick (1989), Rashkov (2010), Hilden (2011) and Sanches (2012).

The first category consisted of a series of open-ended, closed-ended and multiple choice questions which attempted to collect demographic variables and data related to the respondents' current studies were gathered: gender, study program, secondary education completed, secondary education GPA, enrolment into private or public university, name of the HEI, canton or region of origin, year of study and average household income.

As in studies mentioned above, a combination of closed-ended, open-ended and multiple choice questions have been used. Where appropriate a selection has been given in form of multiple choice questions and for some questions possibility has been given to give a different answer from what was offered. The category B "Parents and family" had the main objective of examining the academic background of the respondents' family members,

whereas category C "Values and goals" attempted to answer the question of where higher education is something that was considered of high importance in the family, as well as whether the parents expected from the respondent to study university, therefore a closed-ended "Yes" or "No" question, which was guided by research conducted by Beswick (1989).

Likert scale has been used to measure the importance of each variable defined. This type of question give the possibility to measure respondents' attitudes through asking to which extent the respondent agrees or disagrees with a certain statement, in which 1 signifies the respondent "strongly disagrees" with a particular statement, and 5 signifies the respondent "strongly agrees" with the statement in hand. For this reason, the earlier mentioned studies have used this type of question to investigate the importance of variables which have been defined through the following categories:

- D – Sources of information and influence (Rashkov, 2010);
- E – Reputation of the HEI (Rashkov, 2010; Beswick, 1989; Hilden, 2011);
- F – Reputation of the study program (Hilden, 2011);
- G – Recruitment activities (Sanches, 2012);
- H–Other factors such as distance from home, accommodation possibilities, costs of accommodation and tuition fee (Rashkov, 2010; Beswick, 1989; Hilden, 2011).

The last category focuses on the final choice of the respondents and offers two questions, which attempt to determine which factor the students consider to have been most influential during their process of final decision-making (multiple choice question) and whether or not the respondent is currently studying the desired study program, or their first choice of study program constructed in the form of a closed-ended question (Sanches, 2012).

Thorough summary of the data collected is presented below, with the main purpose of gaining insight in the background of respondents.

3.1.2 Sample Description

The research conducted as a part of this master's thesis attempted to investigate the underlying factors that influenced graduate students from all around B&H to select the particular HEI they are currently enrolled into. In total 16 universities across B&H have taken part in the questionnaire.

The focus of the study were three groups of students based on faculty, or study program of choice, which included Law students, Economics/Management/Business students and Computer sciences/Information Technology students. The main reason for focusing on these faculties or study programs is because they all universities which took part in the research offer at least two of the three study programs in focus in Table

Table 3: Availability of Chosen Programs for Research at Universities in B&H

Study program	Public	Private
Business/Management/Economics	8	9
Law	8	8
Information Technology/Computer Sciences	6	7

Source: own work.

The target group of the questionnaire were graduate students of the above-mentioned faculties from all accredited universities in Bosnia and Herzegovina. The data collection process was conducted in three ways:

- student service of selected institutions;
- social media;
- hard copies of questionnaire.

Student services of 44 faculties have been informed and kindly asked to distribute the questionnaire online link to the undergraduate students. Attached to the email was letter explaining the purpose of the study, questionnaire structure, target group, anonymity statement and contact details in case of additional inquiries. Furthermore, a social media campaign was designed through which students from the territory of Bosnia and Herzegovina were reached through the use of specific target filters, as well as direct contact to official Facebook pages of faculties and/or faculty student councils which were followed by the target group of this study. Moreover, a total of 100 copies was handed out at three faculties, where the Teaching Assistants showed interest and gave permission to conduct the questionnaire at the beginning of the class. These copies were handed out at faculties: Law faculty at University of Travnik, Law faculty at University of Tuzla and Law faculty at University of Mostar.

The questionnaire was completed by 800 respondents, however in order to assure that the sample was representative and the target group was reached, three measures of analysing answers has been implemented. First was question structure, which ensured the target group was reached. This was achieved through two elimination questions were asked at the very beginning of the questionnaire. The objective of question one was to make sure all respondents were graduate students, hence choosing "postgraduate student" option would lead the respondent to the end of the questionnaire. The second question had the objective to make sure the respondents were studying one of the three faculties which are focus of this master's thesis: LS, BME or ITCS, hence choosing "other faculty/study program" would once again lead the respondent to the end of the questionnaire. A total of 192 responses did not match these criteria.

The second measure implemented was related to hard copies collected from some universities. These results were revised and questionnaires, which have been fully completed, have been merged with the other electronic responses. A total of 65 out of 100

questionnaires collected in hard copy have been fully and correctly completed, following instructions given as part of each question, which means 35 responses were eliminated.

The third, and final measure used to ensure reliability of data was a thorough data screening. Special attention was paid to missing values and cases where the respondent checked the same option in most of the variables that were tested, particularly in questions which were designed Likert scale ranking. An overall of 34 responses were eliminated and after implementing all the measures above, a total of 539 responses was left for final analysis.

3.2 Socio-demographic Characteristics of the Sample

The first part of the questionnaire focused on providing socio-demographic of the respondents. A summary of most significant data is presented below:

- Gender - The highest level of questionnaire response rate, 65.5% was obtained from the female population.
- Study program distribution - Questionnaire results have shown a fairly equal response rate students enrolled in the selected study programs: BME (39%),ITCS (35%) and LS (26%).
- Secondary education - More than half respondents have graduated from high school, 58.6% whilst the remaining 41.4% have completed vocational secondary education.
- Secondary education GPA -In most universities across B&H, students enrol based on merit and/or entrance exam, hence is the GPA a relatively important factor. This explains why 84.7% of respondents had completed secondary education with the highest GPA, between 4.0 and 5.0.
- Private or public university - Vast majority of respondents (88.7%) are studying at public HEI, which was expected due a higher overall number of students enrolled in bigger cities of B&H and lower tuition fees compared to private HEI.
- Distribution based on institution -Highest number of respondents were from University of Sarajevo (45,4%), followed by University “Dzemal Bijedic” Mostar (13,7%), which was expected because these two universities also enrolled the highest number of students.
- Geographical distribution -The highest populated area in B&H is Canton Sarajevo, which proportionally also has the largest student population, so it does not come as a surprise that the highest response rate came from this area, a total of 42.7%. Second and third largest group of respondents came from Zenica-Doboj Canton with 13%, followed by Tuzla Canton with 9.5%.
- Year of study -The sample was fairly equally distributed throughout the years of study of graduate program, with 25.9% of respondents studying first year of studies, 23.7% studying second year, 33.6% studying third year and 16.8% studying forth year, which is also due to the fact that not all three study programs are three-year programs.
- Average household income - The final question in this section attempted to attain information about the average household income of the respondents. Table 4 summarises the results.

Table 4: Distribution Based on Average Household Income

Income (KM)	Responses (%)
500 or less	11.1%
500-1,000	24.3%
1,000-2,000	34.1%
2,000-3,000	16.2%
3,000 or more	11.5%
Other	2.8%

Source: own work.

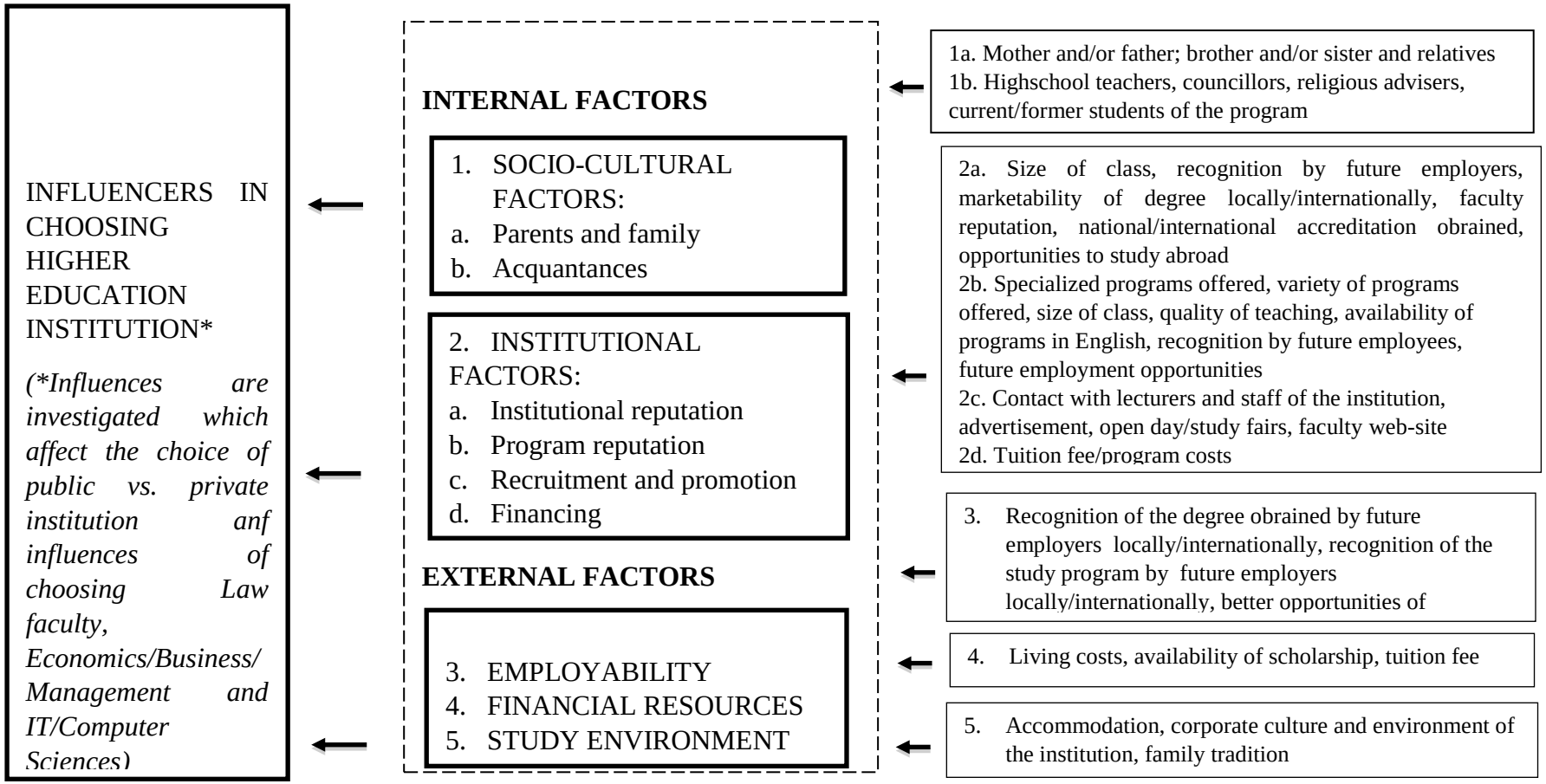
- Highest level of formal education of mother and father - This question revealed a very interesting fact about the respondents' family background. More than half respondents (65.7%) stated that the highest level of formal of education of the father was secondary education and almost the same percentage of respondents had the same response regarding the education of the mother (62.2%). Only 13.1% respondents stated their father, and 26.15% stated that their mother had completed higher education (gradual, post-gradual or doctorate).
- Family members who studied the same study program - Questionnaire has shown that in 78.3% of cases, choice of the faculty or study program was not encouraged by one or more family members completing the program of choice.
- Values and goals - this section of the questionnaire comprised on one very simple question, which had the main goal of revealing whether there were any pressures coming from within the family and whether the students who responded to the questionnaire have been expected to enrol in HEI after completing secondary education. The results were quite remarkable because the vast majority of students agreed with this statement and only 16.1% of respondents did not feel pressured, or expected to continue their education pursuing higher education.

Other sections of the questionnaire were designed using Likert scale in order to identify the importance of each of the five independent variables, which influenced the CDM process, which will be presented in detail through the conceptual framework explained in the following pages.

3.3 Conceptual Framework

The literature review contributed to the development of conceptual framework (Nyaribo, Prakash & Edward, 2012), which summarises the dependent and independent variables as shown in Figure 14. This master thesis considered the influence of five independent variables on the dependent variables, defined as choice of Private or Public HEI and choice of the particular study programs mentioned earlier: BME, ITCS and LS.

Figure 14: Conceptual Framework



Source: Adapted from Nyaribo, Prakash and Edward (2012).

By using means of descriptive analysis the independent variables will be defined in the following pages of this master's thesis, as well as the dependent variables based on the conceptual framework graphically presented above.

3.4. Description of Dependent Variables

The purpose of this thesis is to investigate the factors, which influence the choice of HEI. Four dependent variables have been defined:

- choice of public or private HEI;
- choice of Law studies as the first choice of studies;
- choice of Business/Management/Economics as the first choice of studies;
- choice of Information Technology/Computer Sciences as the first choice of studies.

The empirical research attempts to reveal the reasons why some students opted for studying at public university and other for private universities through defining factors of influence are underlying these decisions, whether it is the reputation of the institution or the programs it offered, or opportunities for employment after finishing the studies, or a set of other factors, which have been broken down in details as part of the conceptual framework. Furthermore, this master's thesis attempts to give insight needed for better understanding of the factors influencing the choice of afore mentioned study programs. The dependent variables are influenced by number of internal and external factors, or independent variables which were subdivided into five categories, which will be explained in detail in the following sub-section.

3.5 Description of independent variables

Following earlier research and specifically the systematic literature review presented in earlier sections of this thesis, five broad categories have been defined, that are most commonly considered as important or influential factors in the decision making process when choosing a HEI. Each of the independent variables was defined based on the analysis of indicator using SPSS software which was used to calculate the minimum and maximum value mean value, standard deviation and variance coefficient of each indicator.

3.5.1 Socio-cultural Factors

In this master's thesis independent variables have been divided into two broad categories of internal and external variables. Sewell and Shah (1978) and Chapman (1981) define internal factors through social circles of the students, which includes parents and siblings, as well as acquaintances such as high school teachers and councillors and institutional factors, which relate to the characteristics of the institution and programs it offers and the level of significance these factors had in the CDM process (Rizwana, Atif, Muhammad & Shoaib2013). Guided by the literature review, the internal factors in this master's thesis have been defined through socio-cultural factors, more specifically two social circles of the

students: parents and family and acquaintances (high-school teachers, high-school councillors, religion advisors, current/former students of the program).

Table 5: Importance of Socio-cultural Factors in the Process of Selecting HEI

Socio-cultural Factor	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Parents	539	1.00	5.00	3.4294	1.39690	1.951
Family and/or siblings	539	1.00	5.00	2.5372	1.46061	2.133
Highschool teachers	539	1.00	5.00	2.2955	1.29483	1.677
High school councillors	539	1.00	5.00	1.5985	.97866	.958
Religious teachers	539	1.00	5.00	1.4907	1.00413	1.008
Current/former students	539	1.00	5.00	2.5799	1.35313	1.831
Valid N (listwise)	539					

Source: own work.

As visible in Table 5, mean values show that the influence of parents and family and/or siblings have obtained the highest mean value, which means their influence was significant in the process of choosing HEI, whereas the influence of other social groups or acquaintances did not play a significant role. These social groups are assumed to reflect through high school teachers and councillors as well as religion advisors, among which the least significant are religion advisors. Standard deviation ranges from 0.97866 to 1.46061, which is within the acceptable range of the arithmetic mean, in other words the responses by individuals do not vary or deviate significantly from the mean.

3.5.2 Institutional Factors

Institutional factors have been defined by four sub-categories, each representing a separate set of indicators and these represent the characteristics related to the institution itself and efforts made by the institution to attract students. According to Payne (2007) and Jackson (1982) reputation of the institution and programs offered are some of the things student may find important, whereas others can be more influenced by the financial factors such as program costs and tuition fees.

In this master's thesis institutional factors have been defined through four different subcategories: institutional reputation, program reputation, recruitment and promotion and financing. Different indicators have been rated by the respondents in order to identify the importance the sub-categories. Table 6 presents the descriptive statistics of institutional factors.

Table 6: Importance of Institutional Factors in the Process of Selecting HEI

Institutional Factor	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Institutional reputation	539	1.00	5.00	3.6936	1.01073	1.022

(table continues)

(continued)

Table 6: Importance of Institutional Factors in the Process of Selecting HEI

Socio-cultural Factor	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Program reputation	539	1.00	5.00	3.2029	1.01988	1.040
Recruitment and promotion	539	1.00	5.00	2.9642	1.15493	1.334
Financing	539	1.00	5.00	2.9642	1.15493	1.334
Valid N (listwise)	539					

Source: own work.

Based on the mean values, institutional reputation is considered to be the most significant factor to students and program reputation the second most significant one in the process of selecting HEI. In contrast, recruitment and promotion did not play a significant role in the CDM process. Standard deviation is within the acceptable arithmetic range of mean, hence the responses by individuals do not vary or deviate significantly from the mean.

3.5.3 Employability

Another set of independent variables is considered to represent the external factors, which have been defined based on the classification made by Rizwana, Atif, Muhammad and Shoaib (2013), and these include employability which reflect through the future prospects students have upon completing their studies, as well as the recognisability of the degree obtained in the local market, but also in the international labour market. In Table 7 are presented all indicators, which have been used thesis to define employability.

In this master's thesis, employability is defined by all indicators, which are considered to raise the value of the education or acquired degree, such as recognition of the degree by future employee in the local and international market, and recognition of the study program on both markets as well, combined with the increased opportunities for finding employment once acquiring the degree. Payne (2007) identifies future career prospects or opportunities for employment as a significant factor in the process of CDM.

Table 7: Importance of Employability in the Process of Selecting HEI

Employability	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Better opportunities for employment/job prospects	539	1.00	5.00	4.1245	1.21687	1.481
Career development/better career prospects at local market	539	1.00	5.00	4.1636	1.12061	1.256
Career development/better career prospects at international mark	539	1.00	5.00	3.8587	1.32130	1.746
Valid N (listwise)	539					

Source: own work.

Employability has overall achieved the highest mean values, which signifies that students take strong considerations of the value of their degree on the labour market. The mean values have proved that students find better opportunities for employment/job prospects and career development/better career prospects at the local market as most significant factors in the decision-making process. Standard deviation is within the acceptable arithmetic range of mean, which means the responses by individuals do not vary or deviate significantly from the mean.

3.5.4 Financial Resources

Handson and Litten (1989) defined financial aid as one of significant factors in the process of selecting HEI, however scholarships are not offered by public universities in B&H and only by a few private universities, so it is no wonder that availability of scholarships has not been ranked as an important factor by the respondents.

Table 8: Importance of Financial Resources in the Process of Selecting HEI

Financial Resources	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Availability of scholarships	539	1.00	5.00	2.8810	1.57960	2.495
Living costs	539	1.00	5.00	2.8290	1.55462	2.417
Tuition fee/Program costs	539	1.00	5.00	3.2007	1.46858	2.157
Valid N (listwise)	539					

Source: own work.

The mean values, as visible in Table 8, show that financial resources as a variable do not carry a strong importance to the students. The reasoning behind these low mean values for tuition fee indicator lies in the overall low tuition costs in B&H. According to Al-Jazeera Balkans (2012)in Republic of Srpska the tuition fee ranges from €22 to €750 per year, whereas in FB&H it ranges from €500 to €1500 per year. Standard deviation ranges from 1.46858 to 1.57960, which also indicates there are no significant deviations from the mean value. (Smiljanović, 2012).

3.5.5 Study Environment

Hansen and Litten (1989) combined model incorporates the cultural environment as a factor due to the presence of multi-cultural environment in many countries worldwide. Due to globalisation and migration of students, a growing number of institutions is attempting to appeal to a students with different cultural backgrounds.

Table 9: Importance of Study Environment in the Process of Selecting HEI

Study Environment	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Corporate culture/environment of the institution	539	1.00	5.00	2.6747	1.51821	2.305
Family tradition	539	1.00	5.00	1.9164	1.30714	1.709
Accommodation possibilities	539	1.00	5.00	2.6301	1.57194	2.471
Valid N (listwise)	539					

Source: own work.

As it is evident from the mean values visible in Table 9,students did not consider this variable as an important factor. Family tradition was rated as least important factor by majority of students, which was an expected result due to the results of demographic analysis that has shown that in most cases the highest level of formal education by parents of the respondents was secondary education. Standard deviation is within the acceptable range of arithmetic range of mean, meaning the responses do not vary significantly.

3.6 Empirical Analysis

3.6.1. Reliability Analysis

A reliability analysis has been conducted to measure the consistency of variables; more specifically to measure how closely related a set items are as a group. Cronbach's Alpha is used to test the reliability of Likert scale questions and it ranges from 0 to 1 and the higher the value of Cronbach's Alpha, the higher the internal of variables (Hildén, 2011). The minimum acceptable value of Crombach's Alpha is ca 0.60 and the maximum expected value is somewhere around 0.90 and this value is considered as a strong, positive association between the targeted variables (Gliem and Gliem, 2003). All values above this are considered as redundancy or duplication. Based on the values of Cronbach's Alpha test, which are presented on Table 10, a conclusion can be made that the internal consistency between the variables is on a satisfactory level, or in other words the consistency level is acceptable or good, depending on each separate item or variable.

Table 10: Reliability Analysis – Factors Influencing the Choice of HEI

Variable	N of Items	Cronbach's alpha
Institutional reputation	7	.895
Employability	3	.848
Financial resources	3	.824
Reputation of program	6	.846
Recruitment activities	4	.885
Socio-cultural factors	6	.794
Study environment	3	.623

Source: own work.

As visible in the table above, the highest level of consistency is expressed in Institutional reputation variable equalling to 0.895, whereas employability shows the highest consistency in external variables tested with the value of 0.845 and the lowest value was measure at Socio-cultural factor variables, however still giving the value of 0.794, which is considered as a high, positive correlation between the variables. Overall all reliability test results show alpha values exceeding 0.60, which is the lowest level of acceptability, indicating a strong, positive internal correlation between the variables. However, considering the Cronbach's Alpha value obtained for the Study environment variable this variable was treated with caution as composed of complementary and consistent factors. Therefore in estimated regression models the effects of both were explored, integrated Study environment variable as well as of its individual component factors. Given the non-significance of Study environment variable as well as of its individual factors, the results of variable are not presented and integrated in final models discussed in the following pages.

3.6.2 Logistic Regression Analysis of Factors Motivating Students to Pursue HEI

In the literature review multiple general determinants of choice have been defined and in order to examine the dependency of categorical choice variable from the multiple general determinants of choice, a logistic regression model has been adopted. Similarly, considering the binary nature of dependant variables used in empirical models in this analysis, logit model as method of investigation has been perceived as the preferred method. First a multicollinearity analysis was carried out in Stata to examine the correlation between the independent variables. Noteworthy, due to high correlation between Program-reputation and Institutional-reputation variables (i.e. 0.71), the influence of these was examined by integrating these variables singly into regressions to be estimated. The correlation matrix is given in Appendix9. The baseline logit model estimated is presented in the equation (1) below:

$$Y_i = \beta_0 + \beta_1 SOCIOCULTURAL + \beta_2 INSTITUTIONALREPUTATION + \beta_3 PROGRAMREPUTATION + \beta_4 RECRUITMENT\&PROMOTION + \beta_5 FINANCING + \beta_6 EMPLOYABILATY + \beta_7 GENDER_i + \beta_8 INCOME + \varepsilon_i \quad (1)$$

Where Y is dependent variable which takes the value of 1 in either cases, specified in individual models: Public HEI, BME1, LS1, ITCS1, otherwise 0 as explained earlier in the conceptual framework of the model (see Figure 14) and the description of variables provided in Table 11 below). For the benefit of clearer results and insights in the CDM process of selecting HEI, new variables have been generated in the models. Precisely, we also estimated the individual effect of Parents variable by including Parents variable singly into regression to be estimated, following the objectives of this research and previous literature pointing to the importance of Parents let alone Socio-cultural factors. Similarly,

in an attempt to investigate the importance of income variable we generated additional Income variable (Income 2) in order to assess the effect of above the average income in selecting HEI. The detailed description of variables is provided in Table 11 below.

Table 11: Definition of Variables

Variable	Description	Definition
Sociocultural	Ordinal	The importance assigned to parents and acquaintances on the scale from 1 to 5.
Parents	Ordinal	The importance assigned to parents and acquaintances on the scale from 1 to 5.
Gender	Binary	Gender takes value of 1 when female, otherwise 0. has been assigned a binary value, where female equals 1 and male equals 0
Institutional reputation	Ordinal	The importance assigned to institutional factors on the scale from 1 to 5
Program reputation	Ordinal	The importance assigned to program reputation acquaintances on the scale from 1 to 5
Recruitment and promotion	Ordinal	The importance assigned to recruitment and promotion on the scale from 1 to 5
Financing	Ordinal	The average importance assigned to financing on the scale from 1 to 5
Employability	Ordinal	The importance assigned to employability acquaintances on the scale from 1 to 5
Income2	INCOME>2,000	Variable is assigned a value of 1 in case income levels of the household are higher than KM 2,000
LS1	Binary (LS*FINALCHOICE)	Variable is assigned a value of 1 in case Law studies was the first choice, not the alternative study program, 0 otherwise
BME1	Binary (BME*FINALCHOICE)	Variable is assigned a value of 1 in case Business/ Management/ Economics was the first choice, not the alternative study program, 0 otherwise
ITCS1	Binary (ITCS*FINALCHOICE)	Variable is assigned a value of 1 in case Information Technology/ Computer sciences were the first choice, not the alternative study program, 0 otherwise
PrivateLS1	Binary (PRIVATE*LS1)	Variable is assigned a value of 1 in case Law studies as the first choice of study program at a private HEI was chosen, 0 otherwise
PrivateBME1	Binary (PRIVATE*BME1)	Variable is assigned a value of 1 in case Business/ Management/ Economics as the first choice of study program at a private HEI was chosen, 0 otherwise
PrivateITCS1	Binary (PRIVATE*ITCS1)	Variable is assigned a value of 1 in case Information Technology/ Computer Sciences as the first choice of study program at a private HEI was chosen, 0 otherwise
PublicLS1	Binary (PUBLIC*LS1)	Variable is assigned a value of 1 in case Law studies as the first choice of study program at a public HEI was chosen, 0 otherwise
PublicBME1	Binary (PUBLIC*BME1)	Variable is assigned a value of 1 in case Business/ Management/ Economics as the first choice of study program at a public HEI was chosen, 0 otherwise

(table continues)

(continued)

Table 11: Definition of Variables

Variable	Description	Definition
PublicITCS1	Binary (PUBLIC*ITCS1)	Variable is assigned a value of 1 in case Information Technology/ Computer Sciences as the first choice of study program at a public HEI was chosen, 0 otherwise

Source: own work.

Logistic regression has been adopted to assess the impact of factors identified in this master's thesis based on the literature review above on motivation to pursue HEI. Eight models have been developed with the purpose of responding to the research questions. In the following pages, the results of the estimated marginal effect coefficients will be presented for each of the models. The marginal effect coefficients (hereinafter: ME) show how a dependent variable changes when a specific independent variable or explanatory variable changes. After obtaining logit regression outputs in Stata, ME has been calculated and its coefficients are presented in the following tables, based on which the significance level of each variable has been estimated. The 95% confidence interval is interpreted, as indicating a range within which there is a 95% of certainty that the true effect lies. A logical correspondence is shared between the confidence level and the P value, which represents the probability of obtaining the observed effect, where 95% confidence interval for a particular effect excludes the null value in case the test of significance gives a P value which is less than 0.05 (Higgins & Green, 2011). For the purpose of interpreting the logit regression and marginal effects outputs, the 99% confidence interval, which means $P<0.01$, 95% confidence interval, which means $P<0.05$, as well as the 90% confidence interval, which means $P<0.10$ will be taken as statistically significant.

In total eight models will be presented, however the baseline model and most significant one is Model 1 (see Table 12), which determines the factors affecting the probability of choosing to study private over public university, where Public takes the value of 1, and Private takes the value 0. Moreover, the models focusing on determinants of choosing to study LS1 (see Table 14), BME1 (see Table 16) and determinants of choosing ITCS1 (see Table 18) are significant models of this research. In order to gain better insight in determinants for choosing Private over Public universities, additional models have been developed which tackle these determinants.

3.6.2.1 Model 1: Determinants of Private HEI versus Public HEI

The first model attempted to address the first research question, which attempts to define to which extend was the influence of socio-cultural factors, in particular the influence of parents, significant in the CDM process of selecting a Public or Private HEI. The binary dependent variable was defined as Public=1 and Private=0.

In order to measure the influence of parents on choosing public or private HEI, this item has been isolated from the socio-cultural factors and used as an isolated variable in the logit regression. Logistic regression has been used to describe data and explain the relationship between the dependent variable and the independent variables. Moreover, ME coefficients have been derived, based on which the significance of each of the independent variables has been estimated.

The variables which have P<0.05 are considered statistically significant which means three variables are significant in Model 1 and in total four observations have been made: Parents (P=0.013), Institutional reputation (P=0.30), Recruitment and promotion (P=0.06) which have a positive effect on likelihood of choosing HEI and Employability (-0.30), which has a negative effect on likelihood of choosing private over public HEI. The interpretation of results is explained in more details below.

Table 12: Factors affecting the probability of choosing Private HEI: results of Logit regression and marginal effects

Variable	Logit Coef. (P>|z|)	Marginal effects (P>|z|)
Parents	.2837** (0.016)	0.0222** (0.013)
Institutionalreputation	.6983** (0.035)	0.0546** (0.03)
Recruitmentandpromotion	.3002* (0.064)	0.0235* (0.06)
Tuitionfeeprogramcosts	.0650 (0.541)	0.0051 (0.541)
Employability	-.5924** (0.034)	-0.0463** (0.03)
GenderF1	.02496 (0.936)	0.0019 (0.936)
Income	-.0632* (0.597)	-0.0049* (0.597)
Notes: dy/dx is for discrete change of dummy variable from 0 to 1; *,**,*** denotes significance at the level of 10%, 5%, and 1% respectively		

Source: own work.

Based on the results acquired from logistic regression, the variable Parents is statistically significant which means when this variable is increased by one unit, the probability of choosing to study at a private HEI increases by factor 0.222, holding all other variables constant. A conclusion can be drawn that parents influence the decision-making process when it comes to choosing between public and private HEI and that in fact those students who were influenced by their parents during the CDM process were more likely to choose private over public HEI.

Moreover, when the variable Institutional reputation is increased by one unit, the probability of choosing to study at a private HEI increases by factor of 0.546. This result shows that the higher the perceived reputation of the institution is, the higher is the probability of students choosing a private over public HEI.

Variable Employability has also shown to be statistically significant within 95% interval, however with a negative effect on choosing private over public HEI. When this variable increases by one unit, the probability of choosing a public HEI decreases by factor of

0.463. This is a very interesting observation because it means that when students had expectations of higher employability, in other words better employment possibilities, on the labour market upon the completion of their studies, they were less likely to choose a private institution.

Recruitment and promotion resulted in a P value below 0.10, which means this variable has shown to be statistically significant within 90% interval. With one unit increase in Recruitment and promotion variable, the likelihood of choosing private HEI increases by factor of 0.024.

3.6.2.2 Model 2: Determinants of Public HEI versus Private HEI

In the second model, the effects of following independent variables on dependent variable have been examined: Parents, Institutional reputation, Recruitment and promotion, Tuition fee and program costs, Employability, Gender and Income. The dependent variable in this model is choice of university, where Public=1 and Private=0. This model represents the statistically significant variables which affect the choice of Private university over Public university.

Table 13: Factors affecting the probability of choosing Public HEI - results of Logit regression and marginal effects

Variable	Logit Coef. (P>|z|)	Marginal effects (P>|z|)
Parents	-.2837** (0.016)	-0.0222** (0.013)
Institutionalreputation	-.6983** (0.035)	-0.0546** (0.03)
Recruitmentandpromotion	-.3002* (0.064)	-0.0235* (0.06)
Tuitionfeeprogramcosts	-.0650 (0.541)	-0.0051 (0.541)
Employability	.5924** (0.034)	0.0463** (0.03)
GenderF1	-.02496 (0.936)	-0.0019 (0.936)
Income	.0632* (0.597)	0.0049 (0.597)
Notes: dy/dx is for discrete change of dummy variable from 0 to 1; *,**,*** denotes significance at the level of 10%, 5%, and 1% respectively		

Source: own work.

In total four observations have been made. The following independent variables have shown to be statistically significant within 95% confidence interval: Parents (P=0.013), Institutional reputation (P=0.030) and Employability (0.030), whereas Recruitment and promotion is statistically significant within 90% confidence interval (P=0.060). Variables Parents, Institutional reputation and Recruitment and promotion have all shown a negative effect on the likelihood on choosing public HEI, which makes these results very interesting for interpretation.

The observation shows that when variable parents is increased of one unit, the probability of choosing a public HEI is expected to decreases by factor of 0.022. As it appears, the

students who were under stronger influence of their parents were less likely to choose a public institution.

Moreover, Recruitment and promotion have shown to be a significant factor, but also with a negative effect on the likelihood of choosing a public HEI. With a unit increase in Recruitment and promotion, the probability of choosing public HEI decreases by 0.235.

In this model variable Employability has a positive effect on the likelihood of choosing public HEI over private HEI. This means that when students had expectations of higher employability on the labour market upon the completion of their studies, the students were more likely to choose a public institution by a factor of 0.046.

3.6.2.3 Model 3: Determinants of LS1

The third model investigates the factors, which influenced students to choose LS1, meaning the student did not want to study anything other than Law school. As previously defined in Table 11, the dependent variable LS1 is assigned a value of 1 in case Law studies was the first choice, not the alternative study program, 0 otherwise. Two variables have shown to be statistically significant within 95% interval. These variables are: Program reputation (P=0.031) and Employability (P=0.024), as shown in Table 14 below.

Table 14:Factors affecting the probability of choosing to study LS1- results of Logit regression and marginal effects

Variable	**Logit Coef. (P>|z|)**	**Marginal effects (P>|z|)**
Sociocultural	-.0796 (-0.509)	-0.0125 (0.557)
Programreputation	.3492** (0.042)	0.0546** (0.031)
Recruitmentandpromotion	.1143 (0.443)	0.0179 (0.365)
Tuitionfeeprogramcosts	.0253 (0.773)	0.0040 (0.749)
Employability	-.3004** (0.031)	-0.0470** (0.024)
GenderF1	.6006*** (0.16)	0.0888*** (0.009)
Income	.0957 (0.311)	0.0150 (0.303)
Notes: dy/dx is for discrete change of dummy variable from 0 to 1; *,**,*** denotes significance at the level of 10%, 5%, and 1% respectively		

Source: own work.

Unit increase in Program reputation increases the probability of choosing LS1 by factor of 0.055, which means that choosing LS1 is positively affected by Program reputation. The higher the perceived reputation of the selected program, the higher the probability of choosing LS1.

Employability shows interesting results in this model as well, as it also had a negative slope, indicating that the higher the perceived odds of employability on the market, the less likely were the students to choose LS1.

In this model, Gender has also shown to be a statistically significant variable in determining the choice of LS1, specifically among female students, who were by factor of 0.09 more likely to choose LS1 as compared to male colleagues.

3.6.2.4 Model 4: Determinants of Private LS1

The fourth model investigates the major determinants of choosing to study Law on a private HEI, where PrivateLS1 holds the value of 1. Two observations were made, in which significant and positive effect on choosing a private Law school were: Parents (P=0.033) and Gender (0.036). Income has shown to be statistically significant within 90% confidence interval (P=0.68), as well as Recruitment and promotion (P=0.060).

Table 15: Factors affecting the probability of choosing to study LS1 at a private HEI: results of Logit regression and marginal effects

Variable	Logit Coef. (P>|z|)	Marginal effects (P>|z|)
Parents	.6426** (0.016)	0.0065** (0.033)
Institutionalreputation	.7180 (0.286)	0.0072 (0.305)
Recruitmentandpromotion	.7198* (0.027)	0.0072* (0.06)
Tuitionfeeprogramcosts	.2301 (0.242)	0.0023 (0.276)
Employability	-.8420 (0.126)	-0.0085 (0.157)
GenderF1	1.8842** (0.018)	0.0163** (0.036)
Income	.4686* (0.031)	.00472* (0.068)
Notes: dy/dx is for discrete change of dummy variable from 0 to 1; *,**,*** denotes significance at the level of 10%, 5%, and 1% respectively		

Source: own work.

The Program reputation has shown to be significantly significant to students who selected LS1, whereas the same determinant is no longer significant for students who chose LS1 on a private HEI. However, the variable Parents has shown to be statistically significant within 95% interval, which means with the unit increase of Parents the probability of choosing to study LS1 on a private HEI. The higher the impact of parents, the higher was the probability of affected students choosing to study LS1 on a private HEI.

Moreover, also in this model female students were more likely to choose LS1 on Private HEI, compared to their male colleagues. With a unit increase of Gender variable, the probability of choosing to study LS1 on Private HEI increases by factor 0.005.

3.6.2.5 Model 5: Determinants of BME1

The fifth model investigates the major determinants of choosing BME1. As previously defined in Table 11, the dependent variable BME1 is assigned a value of 1 in case

Business studies was the first choice, not the alternative study program, 0 otherwise The statistically significant variables in this model are: Parents (P=0.052), Gender (P=0.000) and Income2 (P=0.054). As explained earlier in description of variables, Income2 refers to households with income level of KM 2,000 or higher.

Table 16: Factors affecting the probability of choosing to study BME1- results of Logit regression and marginal effects

Variable	Logit Coef. (P>|z|)	Marginal effects (P>|z|)
Parents	.1404** (0.053)	0.0279** (0.052)
Programreputation	-.0982 (0.481)	-0.0195 (0.481)
Recruitmentandpromotion	.1114 (0.323)	0.0221 (0.322)
Tuitionfeeprogramcosts	-.0392 (0.574)	-0.0078 (0.574)
Employability	.1150 (0.343)	0.0228 (0.343)
GenderF1	.8202*** (0.000)	0.1527*** (0)
Income2	.3412** (0.054)	0.0677** (0.054)
Notes: dy/dx is for discrete change of dummy variable from 0 to 1; *,**,*** denotes significance at the level of 10%, 5%, and 1% respectively		

Source: own work.

Gender is statistically significant within 99% confidence interval, which means that female students have greater likelihood of choosing BME1, as compared to their male colleagues. Furthermore, Parents and Income2 are statistically significant within the 90% confidence interval. As influence of parents on the students' increases, they are by 0.028 more likely to choose BME1.

Additionally, those who come from households with income level of KM 2,000 or higher, are more likely choose BME1. With an increase of Income2 by one unit, the probability of choosing BME1 increases by factor of 0.068. This may suggest that BME cost of financing are somewhat higher compared to other HEI studied in this analysis.

3.6.2.6 Model 6: Determinants of Private BME1

The sixth model investigates the determinants of choosing to study BME1 on a private institution. As earlier defined in Table 11, the dependent variable Private BME1 is assigned a value of 1 in case Business/ Management/ Economics as the first choice of study program at a private HEI was chosen, 0 otherwise. The only significant determinant is Program reputation, which falls within 90% confidence interval. In this model Income2 holds the value of 1, otherwise 0, which represents students coming from households, which earn more than KM 2,000 per month.

Table 17: Factors affecting the probability of choosing to study BME1 at a Private HEI: results of Logit regression and marginal effects

Variable	Logit Coef. (P>|z|)	Marginal effects (P>|z|)
Parents	-.0459 (0.857)	-0.0004 (0.856)
Programreputation	1.0567** (0.052)	0.0087** (0.075)
Recruitmentandpromotion	-.0985 (0.787)	-0.0008 (0.788)
Tuitionfeeprogramcosts	.3630 (0.205)	0.0030 (0.219)
Employability	.17209 (0.777)	0.0014 (0.774)
GenderF1	-.3022 (0.653)	-0.0026 (0.671)
Income2	.4919 (0.229)	0.0041 (0.294)
Notes: dy/dx is for discrete change of dummy variable from 0 to 1; *,**,*** denotes significance at the level of 10%, 5%, and 1% respectively		

Source: own work.

The variable Program reputation has a positive effect on the likelihood of choosing BME1 on Private HEI. With a unit increase of Program reputation, the probability of choosing BME1 on a Private HEI increases by factor of 0.009.

3.6.2.7 Model 7: Determinants of ITCS1

The seventh model investigates the determinants of choosing to study ITCS as first choice of studies. The dependent variable ITCS1 has previously been defined in Table 11 and is assigned a value of 1 in case Information Technology/ Computer sciences were the first choice, not the alternative study program, 0 otherwise.

Table 18: Factors affecting the probability of choosing to study ITCS1: results of Logit regression and marginal effects

Variable	Logit Coef. (P>|z|)	Marginal effects (P>|z|)
Parents	-.1793* (0.011)	-0.0374* (0.01)
Programreputation	-.1020 (0.470)	-0.0213 (0.047)
Recruitmentandpromotion	-.0228 (0.837)	-0.0048 (0.837)
Tuitionfeeprogramcosts	.0692 (0.325)	0.0144 (0.325)
Employability	.0631 (0.588)	0.0132 (0.588)
GenderF1	-1.3320*** (0.000)	-0.2918*** (0)
Income2	-.0160 (0.848)	-0.0033 (0.848)
Notes: dy/dx is for discrete change of dummy variable from 0 to 1; *,**,*** denotes significance at the level of 10%, 5%, and 1% respectively		

Source: own work.

In explaining the factors affecting the probability of choosing ITCS1, two variables have proved to be significant: Parents (P=0.010) and Gender (P=0.000). The variable Parents is negatively related to the choice of ITCS1, with the odds decreasing on average by a factor of 0.03 for every point of stronger disagreement on Likert scale. Moreover Gender has a high significance level of 99% confidence interval and has a negative slope, which means the likelihood of choosing ITCS1among male students in comparison to their female colleagues. In this model Income2 holds the value of 1, otherwise 0, which represents students coming from households which earn more than KM 2,000 per month.

3.6.2.8 Model 8: Determinants of Private ITCS

In the final model, the determinants of studying ITCS1 on a private institution were investigated. As defined in Table 11, the dependent variable PrivateITCS1 is assigned a value of 1 in case Information Technology/ Computer Sciences as the first choice of study program at a private HEI was chosen, 0 otherwise. In this model the independent variables seem to have no statistically significant effect on the dependent variable.

Table 19: Factors affecting the probability of choosing to study ITCS at a Private HEI - results of Logit regression and marginal effects

Variable	Logit Coef.	Marginal effects (P>|z|)
Socioculturalfactors	-.2133 (0.747)	-0.0006 (.731)
Programreputation	-.8635 (0.245)	-0.0025 (0.324)
Recruitmentandpromotion	.5551 (0.827)	0.0016 (0.361)
Tuitionfeeprogramcosts	.0676 (0.827)	0.0002 (0.828)
Employability	-.0295 (0.950)	-0.0001 (0.095)
GenderF1*	-2.2381 (0.049)	-0.0112 (0.195)
Income	-.7904 (0.069)	-0.0023 (0.188)
Notes: dy/dx is for discrete change of dummy variable from 0 to 1; *,**,*** denotes significance at the level of 10%, 5%, and 1% respectively		

Source: own work.

CONCLUSION

In this master thesis the process of selecting HEI and study program is examined through an online questionnaire targeting undergraduate students of three specific study programs: BME, LS and ITCS. The questionnaire has incorporated private and public HEI from the territory of B&M. Many different factors are influencing every decision we make in our daily lives, whether it is an insignificant decision or a very important decision, such as

choosing at which university to study or which study program to choose. Based on the literature review, two broad categories of influencing factors have been examined: internal and external (Johnson & Chapman, 1979; Koudelka, 1997; Kotler & Scheff, 1997; Solomon, Bamossy, Askegaard & Hogg).

The socio-demographic analysis has given an insight in the profile of respondents. The response rate was highest among female students as compared to their male colleagues. Furthermore the response rate was fairly equally distributed among BME and ITCS students, with a slightly lower response rate by LS students and the vast majority of respondents were students of a public HEI. The respondents were asked a series of questions, structured in such way to give insight in the underlying factors of their decision to study the selected study program and HEI. The respondents were asked to rate on a 5-point Likert scale the significance of each of the factors used to define five independent variables: Socio-cultural factors, Institutional factors, Employability, Financial resources and Study environment and how these factors influenced their final choice of studying on either Public or Private HEI, as well as their choice of studying the study program they are currently enrolled to. Logistic regression was used to describe the relationship between the dependent binary variables and each of the independent variables.

The main theoretical contributions of this master thesis lies in understanding the CDM process, the stages the consumer goes through before reaching the final decision and how significantly do internal and external factors influence the consumers' final decision. The practical contributions of this master thesis are manifested through the results obtained from the empirical analysis, which provide HEI a better understanding of the CDM process of their prospective students, based on their retrospective reflection on factors which influenced their final choice of HEI. During the formulation of the research questions of this thesis, the two broad categories of influencing factors have been considered: internal and external and their relationship with selecting either public or private HEI or one of the three study programs that this master thesis focuses on: BME, ITCS and LS.

Literature review has led to defining a set of most significant factors through which these internal and external influences are defined. Sewell and Shah (1978) and Chapman (1981) observe internal factors through the socio-cultural influences such as parents and siblings, but also councillors and teachers. On the other hand, external factors are reflected through influences such as Institutional reputation and Program reputation, which are also seen as important factors by some students, whereas others are more affected by Financial factors such as tuition fees, etc (Payne, 2007 and Jackson, 1982) or availability of some sort of financial aid or scholarships (Handson & Litten, 1989). Moreover, Employability is another factor which highly influences the final choice, as it is defined through future career prospects and recognition of the obtained degree by the future employer (Rizwana, Atif, Muhammad & Shoaib, 2013). Finally, Study environment has been proved to be a significant factor by Hansen and Litten (1989), who suggest that corporate culture of the HEI and presence of multi-cultural environment.

Conclusions drawn as a result of the empirical analysis are summarised below:

- Students who are under a higher influence of their parents are more likely to choose private HEI over public HEI, and they are also more likely to study BME or LS1 on a private HEI, whereas those who choose to study ITCS are less likely to have been influenced by parents.
- The higher the perceived reputation of the institution, the more likely are students to choose a private HEI over public HEI. This is finding seems of crucial importance considering the heterogeneous profile of private HEI in terms of program quality and perceived institutional reputation. Investments in program quality and institutional reputation seem worthy.
- Employability proves to have a negative slope for private HEI and for LS1, which makes a very odd conclusion that the higher the perceived opportunities of employment, that is employment opportunities and carrier prospects, on the labour market, the less likely were students to choose a private HEI and the less likely were they to choose to study LS1. The plausible explanation for the former results can be related to the poor regulatory framework of the higher education system in B&H, and the fact that often private HEI are perceived of poor or rather dubious quality.
- Recruitment and promotion is perceived as a statistically significant factor for private universities. This is very important finding and indeed consistent with a priori expectations and earlier empirical findings.
- Program reputation is a significant factor for selecting LS1, indicating the higher the perceived Program reputation, the higher the probability of selecting LS1, and is also a significant factor for opting to study BME1 at a private HEI.
- Those respondents who come from households which earn KM 2,000 or more are more likely to choose to study BME1, while this income variable does not seem to discriminate between other HEI choices. This may suggest that BME cost of financing are somewhat higher compared to other HEI studied in this analysis
- Female students are more likely to choose to study LS1 and BME1, whereas their male colleagues are more likely to choose to study ITCS1.

From the aspect of HEI, the results of this research indicate that students are under a strong influence of Parents, as it is also suggested by a number of similar studies conducted worldwide (Kusumawati, 2013; Lee & Morrish, 2012; Sanches, 2012 and Nyaribo, Prakash & Edward, 2012). This means that all the HEI should be targeting and reaching out to parents as well during their Promotion and recruitment activities. This has a strong probability of yielding in a higher interest by students in the particular HEI and study programs.

Moreover, Program reputation seems to hold a high significance to students, which indicates that students find the quality of teaching, size of class and recognition of the HEI or particular study program by the future employer significant. This has important policy implication that assigns significant effect of both program and institutional reputation as factors driving students'decision in opting for specific HEI study program. The importance of investment in HEI programs offered in order to attract higher interest by not just students, but also the labour market. This also leads to the factor of Employment, which is perceived as a significant one, however with a very interesting negative slope. This suggests that those who perceive the opportunities for employment to be high will be less

likely to study at a private HEI and LS1. In order to attract more students, public HEI and Law faculties in particular need to use promotional activities in order to change this perception among the prospective students as it has a potential of negatively affecting their reputation.

Results of the analysis have also shown Gender to have a significant role when it comes to the selection of HEI and study program. Female students are more likely to choose LS and BME, whereas male students opt more frequently for ITCS compared to their female colleagues. This opens doors policies and quality upgrading, in particular seems worthwhile. Similar conclusions have been made by Payne (2007) and Jackson (1982). HEI should continuously work on improving the quality of classes and to work hard on maintaining a high reputation of particular of possibilities to HEI, as this insight helps better define their target audience. Moreover, BME was more likely to be chosen by students coming from households earning income KM 2,000 or higher, which means HEI can consider developing specialised programs for smaller groups of students who are able to afford a high-quality study programs for which tuition fees are higher.

This study also has a set of limitations, due to which further research is advised. First of all, the research focuses only on only three study programs: BME, ITCS and LS. The reason for this was the availability of all three study programs in most public and private HEI in B&H, which created solid grounds for research framework. It is advised to replicate the model with regards to all study programs offered by universities in B&H. In this way a deeper understanding would be gained about the CDM process and influencing factors for every study program and which factors appear to be significant across all study programs.

Furthermore, in some of the factors which were identified, due to uncertainties in the final results, which should be further examined, such as Employability, in terms of assigned or estimated importance when it comes to public HEI. Although seemingly in dubious or odd, the obtained result is somewhat expected considering two B&H context specific factors. The first one is possibly related to rather bleak general employment market, with youth unemployment rate close to 50%, according to the data of The World Bank (2018). The second factor could be associated with apathetic attitude and low expectations the students have about employment possibilities in B&H upon completing higher education. Having said that, the suggested importance of Employability when choosing public HEI may be explained through institutional quality assigned to public HEI as opposed to rather heterogeneous profile of private HEI, in terms of institutional reputation, overall quality or quality of specific study programs.

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APPENDIX

Appendix 1: Povztek v slovenskom jeziku

Trg dela je postal zelo konkurenčen prostor za mlade študente, ki razmišljajo o svoji prihodnji karieri in možnostih zaposlitve. Tisti, ki se odločijo za univerzitetno izobrazbo, se soočajo z zelo zahtevnim procesom odločanja. Nanj vplivajo različni dejavniki, ki jih lahko na splošno opredelimo kot notranje in zunanje dejavnike, na podlagi katerih se odloči končna izbira. To magistrsko delo poskuša raziskati te dejavnike med študenti, ki so vpisani v samostojni ali javni visokošolski zavod (v nadaljnjem besedilu: VŠZ) v Bosni in Hercegovini in študirajo enega izmed naslednjih študijskih programov kot svojo prvo izbiro študija: študij prava (v nadaljnjem besedilu: ŠP1), poslovanje/ management/ ekonomija (v nadaljevanju: PME1) in informacijska tehnologija/ računalništvo (v nadaljevanju: ITR1). Na podlagi opisa problema so bila opredeljena naslednja raziskovalna vprašanja:

- V kolikšni meri je bil vpliv družbeno-kulturnih dejavnikov, zlasti vpliv staršev, pomemben v postopku odločanja o izbiri javnega ali samostojnega VŠZ?
- V kolikšni meri so družbeno-kulturni dejavniki ali zlasti starši vplivali na odločitev o izbiri PME, ŠP ali ITR kot prvo izbiro študijskega programa?
- Ali so notranji dejavniki, določeni s spremenljivkami družbeno-kulturnih dejavnikov in institucionalnimi dejavniki, vplivali na verjetnost izbire izbranih študijskih programov na samostojnem VŠZ?
- Ali so notranji dejavniki, določeni s spremenljivkami družbeno-kulturnih dejavnikov in institucionalnimi dejavniki, vplivali na verjetnost izbire izbranih študijskih programov na javnem VŠZ?

Za dosego ciljev magistrska dela je bil narejen sistematičen pregled literature o postopku odločanja potrošnikov, modelov odločanja, notranjih in zunanjih dejavnikov, ki vplivajo na postopek odločanja. Poleg tega je bila na šesnajstih univerzah v Bosni in Hercegovini izvedena kvantitativna raziskava s pomočjo vprašalnika. V empirični analizi so bile izbrane spremenljivke uvedene in analizirane z metodo logistične regresije, na podlagi katere so bili ugotovljeni naslednji sklepi:

Študenti, ki so pod večjim vplivom svojih staršev, imajo večjo verjetnost, da bodo izbrali zasebno pred javno VŠZ in bolj verjetno bodo študirali PME1 ali ŠP1 na samostojnem VŠZ, medtem ko na tiste, ki se odločijo za študij ITR1, manj verjetno vplivajo starši.

- Zaposljivost ima negativni upliv na vezjetnost izbora zasebnega VŠZ in pri ŠP1, kar pomeni, če so večje možnosti za zaposlitev na trgu dela, je manj verjetno, da študentje izberejo zasebni VŠZ in manj verjetno je, da bodo najprej izbrali kot prvi študijski program študijski programŠP1.
- Zaposlovanje in napredovanje se dojema kot statistično pomemben dejavnik za samostojne VŠZ.
- Ugleden program je pomemben dejavnik pri izbiri ŠP1 in PME1 pri javnem VŠZ, kar kaže, da kot je zaznani ugled programa višji, je večja verjetnost, da se bo odločil za študij PŠ1 na splošno in PME1 na zasebnem VŠZ.

- Študenti, ki prihajajo iz družin, ki imajo dohodek višji od 2.000 KM, se pogosteje odločijo za študij PME1, medtem ko se ta spremenljivka dohodka ne razlikuje med drugimi odločitvami za VŠZ.
- Za študentke je večja verjetnosti, da izberejo ŠP1 ali PME1 kot prvo izbiro študija, medtem ko je za njihove moške kolege večja verjetnost, da izbirajo ITR1 kot svojo prvo izbiro študija.

Appendix 2: Descriptive Statistics for Variable Gender (F-1)

Descriptive Statistics						
	N	Min.	Max.	Mean	Std. Deviation	Variance
Gender (F-1)	539	.0	352.0	1.306	15.1410	229.250
Valid N (listwise)	539					

Appendix 3: Descriptive Statistics for Variable Gender with Cumulative Percentage

Variable Gender (F-1)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	186	34.4	34.5	34.5
	1	352	65.2	65.3	99.8
	352	1	.2	.2	100.0
	Total	539	99.8	100.0	
Missing	System	1	.2		
Total		540	100.0		

Appendix 4: Descriptive Statistics for Variable Public/Private University

Descriptive Statistics								
	N	Range	Min.	Max-	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
PUBLIC	539	483.0	.0	483.0	1.792	.8945	20.7678	431.302
PRIVATE	539	55.0	.0	55.0	.204	.1027	2.3839	5.683
Valid N (listwise)	539							

Appendix 5: Descriptive Statistics for Variable LS

Law studies					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	398	73.7	73.8	73.8
	1.0	140	25.9	26.0	99.8
	140.0	1	.2	.2	100.0
	Total	539	99.8	100.0	
Missing	System	1	.2		
Total		540	100.0		

Appendix 6: Descriptive Statistics for Variable BME

Business/Management/ Economics					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	329	60.9	61.0	61.0
	1.0	209	38.7	38.8	99.8
	209.0	1	.2	.2	100.0
	Total	539	99.8	100.0	
Missing	System	1	.2		
Total		540	100.0		

Appendix 7: Descriptive Statistics for Variable ITCS

Information Technology/ Computer Sciences					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	349	64.6	64.7	64.7
	1.0	189	35.0	35.1	99.8
	189.0	1	.2	.2	100.0
	Total	539	99.8	100.0	
Missing	System	1	.2		
Total		540	100.0		

Appendix 8: Descriptive Statistics for Variable Income

Descriptive Statistics								
	N	Range	Min.	Max.	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Income	537	5.000	.000	5.000	2.88806	.051631	1.196453	1.431
Valid N (listwise)	537							

Appendix 9: Correlation for Independent Variables

	PUBLIC	Socioc~s	Instit~n	Progra~n	Recrui~n	Tuitio~s	Financ~s	Employ~y	GenderF1	Income
PUBLIC	1.0000									
Sociocultu~s	-0.0978	1.0000								
Institutio~n	-0.1074	0.3298	1.0000							
Programrep~n	-0.1233	0.4117	0.7072	1.0000						
Recruitmen~n	-0.1397	0.3704	0.5705	0.6279	1.0000					
Tuitionfee~s	-0.0595	0.2468	0.2279	0.2253	0.2699	1.0000				
Financingr~s	-0.0563	0.2387	0.1682	0.1875	0.1858	0.7580	1.0000			
Employabil~y	-0.0406	0.2612	0.8515	0.6124	0.4597	0.1878	0.1279	1.0000		
GenderF1	0.0002	-0.0200	0.0336	0.0196	0.0134	-0.0448	-0.0250	0.0980	1.0000	
Income	-0.0008	0.0065	0.0935	0.0902	0.1009	0.0348	-0.1309	0.0594	-0.1138	1.0000

Appendix 10: Logit Regression and Marginal Effects for the Dependent Variable Public University

```
logit       PUBLIC       Parents          Institutionalreputation   Recruitmentandpromotion
TuitionfeeProgramcosts Employability GenderF1  Income

Logistic regression                               Number of obs   =        536
                                                  LR chi2(7)      =      23.44
                                                  Prob > chi2     =     0.0014
Log likelihood = -165.57883                       Pseudo R2       =     0.0661

------------------------------------------------------------------------------
                PUBLIC |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-----------------------+------------------------------------------------------------------
               Parents |  -.2837884   .1176059    -2.41   0.016    -.5142916   -.0532851
Institutionalreputation |  -.6983358   .3313284    -2.11   0.035    -1.347728    -.048944
Recruitmentandpromotion |   -.300245   .1618979    -1.85   0.064    -.6175591    .0170691
 TuitionfeeProgramcosts |  -.0650546   .1065324    -0.61   0.541    -.2738543     .143745
          Employability |   .5924279    .280003     2.12   0.034     .0436321    1.141224
               GenderF1 |  -.0249681   .3127517    -0.08   0.936    -.6379501    .5880139
                 Income |   .0632381    .119683     0.53   0.597    -.1713363    .2978124
                  _cons |   4.456798   .8921154     5.00   0.000     2.708284    6.205312
------------------------------------------------------------------------------

. mfx

Marginal effects after logit
y  = Pr(PUBLIC) (predict)
         =  .91450769
------------------------------------------------------------------------------
variable |      dy/dx    Std. Err.     z    P>|z|  [    95% C.I.   ]       X
---------+--------------------------------------------------------------------
 Parents |  -.0221875      .00889   -2.50   0.013  -.039612 -.004763   3.43657
Instit~n |  -.0545982       .0252   -2.17   0.030   -.10399 -.005206   3.69163
Recrui~n |  -.0234742      .01247   -1.88   0.060  -.047918  .000969   2.96315
Tuitio~s |  -.0050862      .00831   -0.61   0.541  -.021381  .011208    3.1959
Employ~y |    .046318      .02137    2.17   0.030   .004425  .088211   4.04726
GenderF1*|  -.0019459       .0243   -0.08   0.936  -.049566  .045674   .654851
  Income |   .0049442      .00936    0.53   0.597  -.013404  .023293   2.88806
------------------------------------------------------------------------------
(*) dy/dx is for discrete change of dummy variable from 0 to 1
```

Appendix 11: Logit Regression and Marginal Effects for the Dependent Variable Private University

```
logit      PRIVATE      Parents          Institutionalreputation   Recruitmentandpromotion
TuitionfeeProgramcosts Employability GenderF1  Income


Logistic regression                               Number of obs   =        536
                                                  LR chi2(7)      =      23.44
                                                  Prob > chi2     =     0.0014
Log likelihood = -165.57883                       Pseudo R2       =     0.0661

------------------------------------------------------------------------------
             PRIVATE |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
---------------------+--------------------------------------------------------------
             Parents |   .2837884   .1176059     2.41   0.016     .0532851    .5142916
Institutionalreputation |   .6983358   .3313284     2.11   0.035      .048944    1.347728
Recruitmentandpromotion |    .300245   .1618979     1.85   0.064    -.0170691    .6175591
 TuitionfeeProgramcosts |   .0650546   .1065324     0.61   0.541     -.143745    .2738543
          Employability |  -.5924279    .280003    -2.12   0.034    -1.141224   -.0436321
               GenderF1 |   .0249681   .3127517     0.08   0.936    -.5880139    .6379501
                 Income |  -.0632381    .119683    -0.53   0.597    -.2978124    .1713363
                  _cons |  -4.456798   .8921154    -5.00   0.000    -6.205312   -2.708284
------------------------------------------------------------------------------

. mfx

Marginal effects after logit
y  = Pr(PRIVATE) (predict)
         =  .08549231
------------------------------------------------------------------------------
variable |      dy/dx    Std. Err.     z    P>|z|  [    95% C.I.   ]       X
---------+--------------------------------------------------------------------
 Parents |   .0221875      .00889    2.50   0.013   .004763  .039612   3.43657
Instit~n |   .0545982       .0252    2.17   0.030   .005206   .10399   3.69163
Recrui~n |   .0234742      .01247    1.88   0.060  -.000969  .047918   2.96315
Tuitio~s |   .0050862      .00831    0.61   0.541  -.011208  .021381    3.1959
Employ~y |   -.046318      .02137   -2.17   0.030  -.088211 -.004425   4.04726
GenderF1*|   .0019459       .0243    0.08   0.936  -.045674  .049566   .654851
  Income |  -.0049442      .00936   -0.53   0.597  -.023293  .013404   2.88806
------------------------------------------------------------------------------
(*) dy/dx is for discrete change of dummy variable from 0 to 1
```

Appendix 12: Logit Regression and Marginal Effects for the Dependent Variable LS1

```
logit     LS1     Socioculturalfactors          Programreputation     Recruitmentandpromotion
TuitionfeeProgramcosts Employability GendErF1  Income PRIVATE


Logistic regression                                 Number of obs   =        536
                                                    LR chi2(8)      =      20.03
                                                    Prob > chi2     =     0.0102
Log likelihood = -260.67731                         Pseudo R2       =     0.0370

------------------------------------------------------------------------------
                 LS1 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
---------------------+--------------------------------------------------------------------
   Socioculturalfactors |  -.0890445   .1349112    -0.66   0.509    -.3534656    .1753766
      Programreputation |   .3321944   .1631219     2.04   0.042     .0124814    .6519074
Recruitmentandpromotion |   .0979488   .1277606     0.77   0.443    -.1524575    .3483551
 TuitionfeeProgramcosts |   .0228227   .0792596     0.29   0.773    -.1325233    .1781688
          Employability |  -.2898731   .1345578    -2.15   0.031    -.5536016   -.0261447
               GenderF1 |   .6004443   .2483041     2.42   0.016     .1137771    1.087111
                 Income |   .0944153   .0931458     1.01   0.311    -.0881471    .2769777
                PRIVATE |   .6259885   .3205208     1.95   0.051    -.0022207    1.254198
                  _cons |  -2.208935   .5628565    -3.92   0.000    -3.312114   -1.105757
------------------------------------------------------------------------------

Marginal effects after logit
y  = Pr(LS1) (predict)
         =  .19271989
------------------------------------------------------------------------------
variable |      dy/dx    Std. Err.     z    P>|z|  [    95% C.I.   ]       X
---------+--------------------------------------------------------------------
Socioc~s |  -.0138535      .02098   -0.66   0.509  -.054972  .027265   2.32245
Progra~n |   .0516824      .02518    2.05   0.040   .002321  .101044   3.20056
Recrui~n |   .0152388      .01985    0.77   0.443  -.023663   .05414   2.96315
Tuitio~s |   .0035507      .01233    0.29   0.773  -.020616  .027717    3.1959
Employ~y |  -.0450982      .02072   -2.18   0.029  -.085704 -.004492   4.04726
GenderF1*|   .0882652      .03402    2.59   0.009   .021593  .154937   .654851
  Income |    .014689      .01447    1.02   0.310  -.013668  .043046   2.88806
 PRIVATE*|     .11219      .06454    1.74   0.082  -.014306  .238686   .102612
------------------------------------------------------------------------------
(*) dy/dx is for discrete change of dummy variable from 0 to 1
```

Appendix 13:Logit Regression and Marginal Effects for the Dependent Variable Private LS1

```
logit      PrivateLS1      Parents      Institutionalreputation      Recruitmentandpromotion
TuitionfeeProgramcosts Employability GenderF1 Income


Logistic regression                                 Number of obs   =        536
                                                    LR chi2(7)      =      35.27
                                                    Prob > chi2     =     0.0000
Log likelihood = -61.145589                         Pseudo R2       =     0.2239

------------------------------------------------------------------------------
             PrivateLS1 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
------------------------+-----------------------------------------------------------------
                Parents |   .6426031   .2671496     2.41   0.016     .1189995    1.166207
Institutionalreputation |   .7180083   .6726075     1.07   0.286    -.6002782    2.036295
Recruitmentandpromotion |    .719843   .3257153     2.21   0.027     .0814527    1.358233
 TuitionfeeProgramcosts |   .2301327   .1966481     1.17   0.242    -.1552904    .6155558
          Employability |  -.8420536    .550869    -1.53   0.126    -1.921737    .2376298
               GenderF1 |   1.884261   .7955742     2.37   0.018     .3249645    3.443558
                 Income |   .4686861   .2174524     2.16   0.031     .0424872     .894885
                  _cons |  -11.48461   2.130313    -5.39   0.000    -15.65994   -7.309271
------------------------------------------------------------------------------

. mfx

Marginal effects after logit
y  = Pr(PrivateLS1) (predict)
         =  .01017433
------------------------------------------------------------------------------
variable |      dy/dx    Std. Err.     z    P>|z|  [    95% C.I.   ]       X
---------+--------------------------------------------------------------------
 Parents |   .0064715      .00304    2.13   0.033   .000514  .012429   3.43657
Instit~n |   .0072309      .00705    1.03   0.305  -.006585  .021047   3.69163
Recrui~n |   .0072494      .00385    1.88   0.060  -.000295  .014793   2.96315
Tuitio~s |   .0023176      .00213    1.09   0.276  -.001856  .006492    3.1959
Employ~y |  -.0084802        .006   -1.41   0.157  -.020233  .003272   4.04726
GenderF1*|   .0163323       .0078    2.09   0.036   .001042  .031623   .654851
  Income |     .00472      .00259    1.83   0.068  -.000347  .009787   2.88806
------------------------------------------------------------------------------
(*) dy/dx is for discrete change of dummy variable from 0 to 1
```

Appendix 14: Logit Regression and Marginal Effects for the Dependent Variable BME1

```
logit      BME1  Parents  Programreputation  Recruitmentandpromotion  TuitionfeeProgramcosts
Employability GenderF1 Income2


Logistic regression                                     Number of obs   =        538
                                                        LR chi2(7)      =      26.12
                                                        Prob > chi2     =     0.0005
Log likelihood = -308.15049                             Pseudo R2       =     0.0407

------------------------------------------------------------------------------
                BME1 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
---------------------+--------------------------------------------------------------------
             Parents |   .1404362    .072539     1.94   0.053    -.0017376      .28261
      Programreputation |  -.0982542   .1395164    -0.70   0.481    -.3717014    .1751929
Recruitmentandpromotion |    .111433   .1126755     0.99   0.323     -.109407     .332273
 TuitionfeeProgramcosts |  -.0392926   .0699838    -0.56   0.574    -.1764584    .0978731
          Employability |   .1150878   .1213753     0.95   0.343    -.1228035    .3529791
               GenderF1 |    .820295   .2243186     3.66   0.000     .3806387    1.259951
                Income2 |   .3412206   .1773113     1.92   0.054    -.0063032    .6887444
                  _cons |  -2.562374   .5385252    -4.76   0.000    -3.617864   -1.506884
------------------------------------------------------------------------------

. mfx

Marginal effects after logit
y  = Pr(BME1) (predict)
         =  .27297658
------------------------------------------------------------------------------
variable |      dy/dx    Std. Err.      z    P>|z|  [    95% C.I.   ]       X
---------+--------------------------------------------------------------------
 Parents |    .027871      .01434    1.94   0.052  -.000228   .05597   3.42937
Progra~n |  -.0194996      .02768   -0.70   0.481  -.073744  .034745   3.20291
Recrui~n |    .022115      .02234    0.99   0.322  -.021676  .065906   2.96422
Tuitio~s |   -.007798      .01389   -0.56   0.574  -.035014  .019418   3.20074
Employ~y |   .0228404      .02406    0.95   0.343  -.024325  .070006   4.04895
GenderF1*|   .1526937      .03823    3.99   0.000   .077773  .227614   .654275
 Income2 |   .0677188      .03513    1.93   0.054  -.001131  .136569   .611524
------------------------------------------------------------------------------
(*) dy/dx is for discrete change of dummy variable from 0 to 1
```

Appendix 15:Logit Regression and Marginal Effects for the Dependent Variable PrivateBME1

```
logit PrivateBME1 Parents Programreputation Recruitmentandpromotion TuitionfeeProgramcosts
Employability GenderF1 In
> come2


Logistic regression                                     Number of obs   =        538
                                                        LR chi2(7)      =      14.21
                                                        Prob > chi2     =     0.0475
Log likelihood = -42.652584                             Pseudo R2       =     0.1428

------------------------------------------------------------------------------
         PrivateBME1 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
---------------------+--------------------------------------------------------------
             Parents |  -.0459199   .2549239    -0.18   0.857    -.5455614    .4537217
  Programreputation |   1.056708   .5435603     1.94   0.052    -.0086502    2.122067
Recruitmentandpromo |  -.0985348   .3638772    -0.27   0.787    -.8117209    .6146514
TuitionfeeProgramco |   .3630655   .2861841     1.27   0.205     -.197845    .9239761
      Employability |   .1720943   .6088958     0.28   0.777     -1.02132    1.365508
           GenderF1 |  -.3022885   .6723017    -0.45   0.653    -1.619976    1.015399
            Income2 |   .4919176     .40892     1.20   0.229    -.3095509    1.293386
              _cons |  -9.676144   2.686333    -3.60   0.000    -14.94126   -4.411027
------------------------------------------------------------------------------

mfx

Marginal effects after logit
y  = Pr(PrivateBME1) (predict)
         =  .00833241
------------------------------------------------------------------------------
variable |      dy/dx    Std. Err.     z    P>|z|  [    95% C.I.   ]      X
---------+--------------------------------------------------------------------
 Parents |  -.0003794      .00209   -0.18   0.856  -.004485  .003726   3.42937
Progra~n |   .0087316      .00491    1.78   0.075  -.000884  .018347   3.20291
Recrui~n |  -.0008142      .00302   -0.27   0.788  -.006736  .005108   2.96422
Tuitio~s |       .003      .00244    1.23   0.219  -.001783  .007783   3.20074
Employ~y |    .001422      .00495    0.29   0.774  -.008276   .01112   4.04895
GenderF1*|  -.0026244      .00618   -0.42   0.671  -.014732  .009483   .654275
 Income2 |   .0040647      .00387    1.05   0.294  -.003526  .011655   .611524
------------------------------------------------------------------------------
(*) dy/dx is for discrete change of dummy variable from 0 to 1
```

Appendix 16: Logit Regression and Marginal Effects for the Dependent Variable ITCS1

```
logit    ITCS1    Parents Programreputation Recruitmentandpromotion TuitionfeeProgramcosts
Employability GenderF1 Income

Logistic regression                                 Number of obs   =        536
                                                    LR chi2(7)      =      54.77
                                                    Prob > chi2     =     0.0000
Log likelihood =    -305.91                         Pseudo R2       =     0.0822

------------------------------------------------------------------------------
                ITCS1 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
----------------------+-------------------------------------------------------
              Parents |  -.1793018    .070198    -2.55   0.011    -.3168873   -.0417162
     Programreputation |  -.1020463   .1412837    -0.72   0.470    -.3789573    .1748647
Recruitmentandpromotion |  -.0228292    .110929    -0.21   0.837     -.240246    .1945877
 TuitionfeeProgramcosts |   .0692727   .0704305     0.98   0.325    -.0687686     .207314
          Employability |   .0631619   .1166157     0.54   0.588    -.1654007    .2917245
               GenderF1 |  -1.332008   .2018238    -6.60   0.000    -1.727575   -.9364402
                 Income |  -.0160018   .0834974    -0.19   0.848    -.1796537    .1476502
                  _cons |   .5874103   .5239562     1.12   0.262     -.439525    1.614346
------------------------------------------------------------------------------

. mfx

Marginal effects after logit
y  = Pr(ITCS1) (predict)
         =  .29640362
------------------------------------------------------------------------------
variable |      dy/dx    Std. Err.     z    P>|z|  [    95% C.I.   ]       X
---------+--------------------------------------------------------------------
 Parents |  -.0373931      .01459   -2.56   0.010  -.065989 -.008798   3.43657
Progra~n |  -.0212816      .02946   -0.72   0.470  -.079015  .036451   3.20056
Recrui~n |   -.004761      .02313   -0.21   0.837  -.050101  .040579   2.96315
Tuitio~s |   .0144467      .01468    0.98   0.325  -.014322  .043216    3.1959
Employ~y |   .0131723      .02432    0.54   0.588  -.034489  .060834   4.04726
GenderF1*|  -.2918295      .04382   -6.66   0.000  -.377723 -.205936   .654851
  Income |  -.0033371      .01741   -0.19   0.848  -.037467  .030793   2.88806
------------------------------------------------------------------------------
(*) dy/dx is for discrete change of dummy variable from 0 to 1
```

Appendix 17: Logit Regression and Marginal Effects for the Dependent Variable PrivateITCS1

```
logit     PrivateITCS1     Socioculturalfactors   Programreputation  Recruitmentandpromotion
TuitionfeeProgramcosts Employability GenderF1 Income


Logistic regression                               Number of obs   =        536
                                                  LR chi2(7)      =      10.78
                                                  Prob > chi2     =     0.1483
Log likelihood = -22.957777                       Pseudo R2       =     0.1902

------------------------------------------------------------------------------
           PrivateITCS1 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
------------------------+-----------------------------------------------------------------
   Socioculturalfactors |  -.2133474   .6041518    -0.35   0.724    -1.397463    .9707683
      Programreputation |  -.8635101   .7426436    -1.16   0.245    -2.319065    .5920446
Recruitmentandpromotion |   .5551907   .5054777     1.10   0.272    -.4355274    1.545909
 TuitionfeeProgramcosts |   .0676977   .3106216     0.22   0.827    -.5411096    .6765049
          Employability |  -.0295626   .4734719    -0.06   0.950    -.9575505    .8984253
               GenderF1 |  -2.238176   1.138754    -1.97   0.049    -4.470092   -.0062605
                 Income |  -.7904688   .4344768    -1.82   0.069    -1.642028    .0610901
                  _cons |  -.5675469   2.113665    -0.27   0.788    -4.710255    3.575161
------------------------------------------------------------------------------

. mfx

Marginal effects after logit
y  = Pr(PrivateITCS1) (predict)
         =   .0029192
------------------------------------------------------------------------------
variable |      dy/dx    Std. Err.     z    P>|z|  [    95% C.I.   ]       X
---------+--------------------------------------------------------------------
Socioc~s |   -.000621      .00181   -0.34   0.731  -.004166  .002924   2.32245
Progra~n |  -.0025134      .00255   -0.99   0.324  -.007504  .002477   3.20056
Recrui~n |    .001616      .00177    0.91   0.361  -.001853  .005085   2.96315
Tuitio~s |    .000197       .0009    0.22   0.828  -.001576   .00197    3.1959
Employ~y |   -.000086      .00138   -0.06   0.950  -.002787  .002615   4.04726
GenderF1*|  -.0111694      .00861   -1.30   0.195  -.028046  .005708   .654851
  Income |  -.0023008      .00175   -1.32   0.188  -.005728  .001126   2.88806
------------------------------------------------------------------------------
(*) dy/dx is for discrete change of dummy variable from 0 to 1
```

Appendix 18: Questionnaire about Internal and External Factors Influencing the Choice of Higher Education Institution/Study Program

I am student from University of Sarajevo, School of Economics and Business conducting a survey on internal and external factors which influenced students in choosing the Higher Education Institution/undergraduate study program you are currently enrolled in. I would appreciate it very much if you could take 10-15 minutes of your time and participate in my survey-

Note: The focus of this survey are only citizens of Bosnia and Herzegovina. It is entirely anonymous and the responses will be used exclusively for the research purposes of a master thesis.

In the questions below it is possible to choose only one answer.

Question 1: Are you a student of I cycle of studies (undergraduate/Bachelor studies)?

- YES
- NO

Question 2: Which of the following programs/faculties do you study?

- Economics/Management/Business studies
- Law studies
- Computer sciences/Information Technology (IT)
- Other*

Question 3: Please write down in the blank space below the exact name of the study program you are currently enrolled to.

A. GENERAL INFORMATON

Question 4: Gender

- Female
- Male

Question 5: Which secondary education have you completed?

- High school
- Vocational school

Question 6: Which GPA (Grade Point Average) did you obtain in secondary education?

- Between 2.0 and 3.0
- Between 3.0 and 4.0
- Between 4.0 and 5.0

Question 7: Currently you are a student of which university?

- Public university
- Private university

Question 8: Which of the following universities are you currently enrolled to?

- University of East Sarajevo
- University of Sarajevo
- University of Tuzla
- University of Mostar „Džemal Bijedić“
- University of Mostar
- University of Bihać
- University of Travnik
- University of Banja Luka
- University of Zenica
- International University of Travnik
- University of Vitez
- University Sarajevo “School of Science and Technology”
- International University Sarajevo
- International Burch University
- University of Business studies Banja Luka
- Independent University of Banja Luka

Qustion 9: Which of the following cantons/regions of Bosnia and Herzegovina are you from?

- Una-sana Canton
- Central Bosnia Canton
- Sarajevo Canton
- Tuzla canton
- Zenica-Doboj Canton
- Posavina Canton
- Hercegovina-Neretva Canton
- Bosanian-Podrinje Canton
- Canton 10
- Banja Luka region
- Doboj-Bijeljina region
- Sarajevo-Zvornik region
- Trebinje-Foca region
- District Brcko

Question 10: Which year of undegraduate studies are you currently a student of?

- First year
- Second year
- Third year
- Fourth year (if applicable)

Question 11: What is the avrerage income of your household?

- KM 500 or less
- KM 500-1,000
- KM 1,000-2,000
- KM 2,000-3,000
- KM 3,000 or more
- Other

B. PARENTS AND FAMILY: In the second part of this questionnaire you will be answering to questions related to the education of your parents and family members

Question 12: What is the highest level of formal education completed by your father?

- Elementary school
- Secondary education
- Two-year post-secondary education (bos. viša škola)
- Bachelor studies (First Cycle of Higher Education/BSc)
- Master studies (Second Cycle of Higher Education/MSc)
- Doctoral studies (Third Cycle of Higher Education/PhD)
- Other

Question 13: What is the highest level of formal education completed by your mother?

- Elementary school
- Secondary education
- Two-year post-secondary education (bos. viša škola)
- Bachelor studies (First Cycle of Higher Education/BSc)
- Master studies (Second Cycle of Higher Education/MSc)
- Doctoral studies (Third Cycle of Higher Education/PhD)
- Other

Question 14: Did any of your close family member study the same faculty, which you are currently a student of? (It is possible to mark more than one answer).

- Mother
- Father
- Sister
- Brother
- None of my close family members studied at the faculty of which I am currently a student of

C. VALUES AND GOALS: In the third part of this questionnaire you will be answering the questions related to values and goals which you have been guided by in the process of selecting the faculty/study program you are currently enrolled to.

Question 15: Do you agree with the following statement: "In my family it has always been implied that upon completion of secondary education I would continue my education and pursue a university degree"?

- Yes
- No

D. SOURCES OF INFORMATION AND INFLUENCE: Depending of the level of importance of each of the factors mentioned below had on your choice of the faculty/study program you are currently enrolled in, please mark the appropriate field according to the scale described in points below:

1. Not at all important
2. Low importance
3. Moderately important
4. Important
5. Very important

Question 16: Using the scale above, define the importance of each of the factors below by marking the appropriate field.

	1	2	3	4	5
High school teachers					
High school councillors					
Mother and/or father					
Relatives/brother and/or sister					
Religion teacher					
Recommendations made by current or former students of the faculty					

E. REPUTATION OD THE INSTITUTION: Depending of the level of importance of each of the factors mentioned below had on your choice of the faculty/study program you are currently enrolled in, please mark the appropriate field according to the scale described in points below:

1. Not at all important
2. Low importance
3. Moderately important

4. Important
5. Very important

Question 17: Define the importance of reputation of the study program by marking the appropriate field below, according the scale explained above.

	1	2	3	4	5
Reputation/recognition of the institution					

Question 18: Define the importance of each of the factors listed below by marking the appropriate field according to the scale explained above.

	1	2	3	4	5
Size of class (student-teacher ratio)					
Recognition of the degree/possibilities of employment at local labour market					
Recognition of the degree/possibilities of employment at international labour market					
Reputation of the institution					
Local accreditations that the institution holds					
International accreditations that the institution holds					
Opportunities to study abroad/opportunities for student exchange					

F. REPUTATION OF THE STUDY PROGRAM: Depending of the level of importance of each of the factors mentioned below had on your choice of the faculty/study program you are currently enrolled in, please mark the appropriate field according to the scale described in points below:

1. Not at all important
2. Low importance
3. Moderately important
4. Important
5. Very important

Question 19: Define the importance of reputation of the study program by marking the appropriate field below, according the scale explained above.

	1	2	3	4	5
Reputation/recognition of the study program					

Question 20: Define the importance of each of the factors listed below by marking the appropriate field according to the scale explained above.

	1	2	3	4	5
Specialised programs offered (for example financial management, criminal law, software development etc.)					
Variety of study programs/courses offered					
Size of class (student-teacher ratio at the chosen study program)					
Teaching quality					
Possibility to study in English language					
Recognition of the study program by the future employee					
Better opportunities for employment/job prospects					

G. RECRUITMENT ACTIVITIES: Depending of the level of importance of each of the factors mentioned below had on your choice of the faculty/study program you are currently enrolled in, please mark the appropriate field according to the scale described in points below:

1. Not at all important
2. Low importance
3. Moderately important
4. Important
5. Very important

Question 21: Define the importance of recruitment activities conducted by the institution you are currently enrolled in during your decision making process, by marking the appropriate field below, and according to the scale explained above.

	1	2	3	4	5
Recruitment activities conducted by the institution					

Question 22: Define the importance of each of the factors listed below by marking the appropriate field according to the scale explained above.

	1	2	3	4	5
Preliminary contact with professors and staff of the institution					
Information the institution provided through promotion activities (advertisement, open-day, etc.)					
Information the institution provided at Higher Education Fairs					
Information available at the official website of the institution					

H. OTHER FACTORS: Depending of the level of importance of each of the factors mentioned below had on your choice of the faculty/study program you are currently enrolled in, please mark the appropriate field according to the scale described in points below:

1. Not at all important
2. Low importance
3. Moderately important
4. Important
5. Very important

Question 23: Define the importance of the other factors listed below in the process of making your final choice of Higher education institution/study program.

	1	2	3	4	5
Distance of the institution from home					
Cost of accommodation					
Living costs					
Tuition fee					
Availability of scholarships					
Corporate culture/environment of the institution					
Family tradition					

I. FINAL CHOICE OF HIGHER EDUCATION INSTITUTION/STUDY PROGRAM: In the final part of this questionnaire it is possible to choose only one answer to the question.

Question 24: Which of the following factor had the strongest influence on the final choice of the faculty/study program you are currently studying?

- Distance from home
- Influence of family members – support or approval by family members
- Study programs/courses offered (it offered the desired study program), and/or reputation of the institution, and/or quality of the acquired education
- Simple enrolment procedure (no entrance exam or less demanding entrance exam, and/or GPA not significant or does not carry high importance) and/or the study program is not demanding
- Tuition fee (low tuition fee/affordable tuition fee or no tuition fee)
- None of the above

Question 25: Are you studying your first choice of Higher education institution/study program?

- YES
- NO

Question 26: Which is the main reason you are not studying the desired institution/study program?

- Influence of family and/or relatives
- Distance from home
- Costs (high living costs, tuition fee, etc.)
- Demanding enrolment procedure (difficult entry exam, not fulfilling the required enrolment criteria – low GPA, etc.)
- Limited employment possibilities upon completion of studies (the desired study program is not in high demand at the labour market)
- Insufficient level of English fluency

J. OVERALL SATISFACTION WITH YOUR FINAL CHOICE

Question 27: How satisfied are you with the institution/study program you are enrolled to?

- Very satisfied
- Satisfied
- Neutral
- Not completely satisfied
- Very unsatisfied

Thank you for the time you have devoted to completing this questionnaire!

Appendix 19: Upitnik o Internim i Eksternim Faktorima koji Utiču na Odabir Visokoškolske ustanove/Studijskog programa

Moje ime je Belma Ćemalović i studentica sam Ekonomskog fakulteta U Sarajevu. Ova anketa je dio magistarskog rada, čija je tema ispitati faktore koji su uticali na odabir visokoškolske ustanove i studijskog programa koji trenutno pohađate. Bila bih vam jako zahvalna ukoliko biste izdvijili 10-15 minuta svoga vremena da odgovorite na set pitanja koja će pružiti uvid u one faktore koji su bili presudni prilikom donošenja odluke, ali i one koji nisu imali značaja uticaj na istu.
Napomena: Istraživanje se odnosi na državljanine Bosne i Hercegovine. U potpunosti je anonimno i biće iskorišteno isključivo u svrhu istraživanja izrade magistarskog rada.

Pitanje 1: Da li ste student I ciklusa studija (dodiplomski/bakaleaurat)?

- Da
- Ne

Pitanje 2: Student ste kojeg od navedenih fakulteta/studijskog programa?

- Ekonomija/menadžment/biznis
- Pravo/pravne nauke
- Računovodstvo i informatika/IT
- Ostalo

Pitanje 3: U nastavku navedite tačan naziv studijskog programa koji pohađate:

A. OPŠTI DIO: U opštem dijelu odgovarate na opšta pitanja vezana za studij.

Pitanje4: Spolna struktura ispitanika:

- Ženski
- Muški

Pitanje5: Koje ste srednjoškolsko obrazovanje završili?

- Opšta gimnazija
- Srednja usmjerena škola (npr. ekonomska škola, zubotehnočka škola i sl.)

Pitanje6: Koliki ste prosjek ocjena imali u srednjoj školi?

- Između 2.0 i 3.0
- Između 3.0 i 4.0

- Između 4.0 i 5.0

Pitanje7: Trenutno ste student/ica:

- Državnog univerziteta
- Privatnog univerziteta

Pitanje8: Studentica ste kojeg od navedenih univerziteta:

- Univerzitet u Istočnom Sarajevu
- Univerzitet u Sarajevu
- Univerzitet u Tuzli
- Univerzitet Džemal Bijedić
- Sveučilište u Mostaru
- Univerzitet u Bihaću
- Univerzitet u Travniku
- Univerzitet u Banjoj Luci
- Univerzitet u Zenici
- Univerzitet za poslovne studije Banja Luka
- Nezavisni univerzitet Banja Luka
- Univerzitet Sinergija Bijeljina
- University Sarajevo School of Science and Technology
- Internacionalni univerzitet u Sarajevu
- Internacionalni Burč univerzitet
- Internacionalni univerzitet u Travniku

Pitanje9: Stanovnik ste kojeg kantona/regije/distrikta u BiH:

- Unsko-sanski kanton
- Srednjobosanski kanton
- Sarajevski kanton
- Tuzlanski kanton
- Zeničko-dobojski kanton
- Posavski kanton
- Hercegovačko-neretvanski kanton
- Bosansko podrinjski kanton
- Kanton 10
- Banjalučka regija
- Dobojsko-bijeljinska regija
- Sarajevsko-zvornička regija
- Trebinjsko-fočanska regija
- Distrikt Brčko

Pitanje10: Koju godinu dodiplomskog studija trenutno pohađate?

- Prva godina
- druga godina
- treća godina
- četvrta godina (Ukoliko stidorate četverogodišnji dodiplomski program)

Pitanje11: Prosječno mjesešno primanje domaćinstva kojeg ste član iznosi:

- 500 KM ili manje
- 500-1000 KM
- 1000-2000 KM

- 2000-3000 KM
- više od 3000KM
- ostalo

B. RODITELJI I PORODICA: U drugom dijelu upitnika odgovarate na pitanja vezana za obrazovanje Vaših roditelja i članova porodice.

Pitanje12: Naznačite najviši nivo formalnog obrazovanja oca:

- Osnovna škola
- Srednjošklsko obrazovanje
- Viša škola (Viša stručna sprema – VSŠ)
- Visoka stručna sprema (I ciklus studija/bakeleaurat/VSS)
- Magistar (II ciklus studija/Master studj)
- Doktor nauka (III ciklus studija)
- Ostalo

Pitanje13: Naznačite najviši nivo formalnog obrazovanja majke:

- Osnovna škola
- Srednjošklsko obrazovanje
- Viša škola (Viša stručna sprema – VSŠ)
- Visoka stručna sprema (I ciklus studija/bakeleaurat/VSS)
- Magistar (II ciklus studija/Master studj)
- Doktor nauka (III ciklus studija)
- Ostalo

Pitanje14: Da li je ijedan član Vaše uže porodice studirao na fakultetu koji trenutni pohađate? (Moguće je obilježiti više od jednog polja)?

- Otac
- Majka
- Brat
- Sestra
- Nijedan član uže porodice nije studirao na ovom fakultetu

C. VRIJEDNOSTI I CILJEVI: U trećem dijelu upitnika odgovarate na pitanja koja se vezuju za vrrijednosti i ciljeve koji su bile vodilje u odabiru fakulteta/studijskog programa koji studirate.

Pitanje15: Slažete li se sa sljedećom izjavom: „U mojoj porodici se podrazumijevalo da ću nakon završenog srednjoškolskog obrazovanja upisati fakultet“?

- Da
- Ne

D. IZVORI INFORMACIJA I UTICAJA: Ovisno o tome koliko su značajan uticaj imali navedeni faktori na odabir fakulteta/programa koji trenutno pohađate, obilježite odgovarajuće polje vodeći se skalom opisanom u nastavku:

1. Nimalo bitan uticaj
2. Neznačajan uticaj
3. Relativno bitan uticaj
4. Bitan uticaj i
5. Jako bitan uticaj

Pitanje16: Koristeći gore navedenu skali, definište značaj svakog od navedenih faktora odabirom odgovarajućeg polja zadate skale.

	1	2	3	4	5
Profesori u srednoj školi					
Savjetnici/pedagozi u srednjoj školi					
Majka i/ili otac					
Rodbina/brat i(ili) sestra					
Vjerski učitelj (svećenik, imam, i sl.)					
Preporuke studenata koji su trenutni ili bivši studenti programa/fakulteta koji studirate					

E. REPUTACIJA INSTITUCIJE: Ovisno o tome koliko su značajan uticaj imali navedeni faktori na odabir fakulteta/programa koji trenutno pohađate, obilježite odgovarajuće polje vodeći se skalom opisanom u nastavku:

1. Nimalo bitan uticaj
2. Neznačajan uticaj
3. Relativno bitan uticaj
4. Bitan uticaj i
5. Jako bitan uticaj

Pitanje17: Koristeći gore navedenu skalu, definišite značaj reputacije institucije na odabir fakulteta koji studirate.

	1	2	3	4	5

Reputacija institucije/prepoznatljivost institucije					

Pitanje18: Ocijenite svaki od pojedinačnih faktora u nastavku koristeći gore definisanu skalu:

	1	2	3	4	5
Velićina klase/razreda (odnos broja studenata po profesoru/programu)					
Prepoznatljivost diplome/mogućnost i prilike zaposlenja na lokalnom tržištu rada					
Prepoznatljivost diplome na internacionalnom tržištu/mogućnost i prilike zaposlenja na internacionalnom tržištu rada					
Reputacija institucije					
Državne akreditacije koje institucija posjeduje					
Internacionalne akreditacijei/ili priznanja koja institucija posjeduje					
Mogućnost studojskog boravka ili razmjene van BiH koje institucija nudi					

F. REPUTACIJA PROGRAMA: Ovisno o tome koliko su značajan uticaj imali navedeni faktori na odabir fakulteta/programa koji trenutno pohađate, obilježite odgovarajuće polje vodeći se skalom opisanom u nastavku:

1. Nimalo bitan uticaj
2. Neznačajan uticaj
3. Relativno bitan uticaj
4. Bitan uticaj i
5. Jako bitan uticaj

Pitanje19: Koristeći gore navedenu skalu, definišite značaj reputacije studijskog programa prilikom donošenja konačne odluke.

	1	2	3	4	5
Reputacija studijskog programa/prepoznatljivost studijskog					

Pitanje20: Ocijenite svaki of pojedinačnih faktora u nastavku koji su uticali na odabir institucije koristeći gore definisanu skalu:

	1	2	3	4	5
Mogućnost/dostupnost (usko) specijaliziranih studijskih programa (npr. finaksije, menadžment, međunarodni odnosi, poslovno pravo i sl.)					
Veliki izbor ponuđenih programa					
Veličina klase/razreda (odnos broja studenata po profesoru/programu)					
Kvalitet predavanja/predavača					
Mogućnost studiranja na engleskom jeziku					
Priznavanje/prepoznavanje kvaliteta programa od strane budućeg poslodavca					
Bolje prilike za posao nakon završenog programa					

G. REGRUTACIJSKE/PROMOTIVNEAKTIVNOSTI: Ovisno o tome koliko su značajan uticaj imali navedeni faktori na odabir fakulteta/programa koji trenutno pohađate, obilježite odgovarajuće polje vodeći se skalom opisanom u nastavku:

1. Nimalo bitan uticaj
2. Neznačajan uticaj
3. Relativno bitan uticaj
4. Bitan uticaj i
5. Jako bitan uticaj

Pitanje21: Koristeći gore navedenu skalu definišite koliko su značajne bile aktivnosti koje je fakultet proveo prilikom procesa regrutacije studenata za fakultet/program koji trenutno studirate.

	1	2	3	4	5
Aktivnosti regrutacije/privlačenja studenata					

Pitanje22: Koristeću gore navedenu skalu, definišite značaj svakog od pojedinačnih faktora u dabeli ispod.

	1	2	3	4	5
Preliminarni kontakt sa profesorima i/ili osobljem institutcije					

Informacije koje je institucija nudila u sklopu promotivnih aktivnosti (Dani otvorenih vrata fakulteta, reklame i sl)					
Informacije koje je institucija nudila na sajmovima visokoškolskih institucija					
Informacije dostupne na fakultetskoj web stranici					

H. OSTALI FAKTORI: Ovisno o tome koliko su značajan uticaj imali navedeni faktori na odabir fakulteta/programa koji trenutno pohađate, obilježite odgovarajuće polje vodeći se skalom opisanom u nastavku:

6. Nimalo bitan uticaj
7. Neznačajan uticaj
8. Relativno bitan uticaj
9. Bitan uticaj i
10. Jako bitan uticaj

Pitanje23: Koristeći gore navedenu skalu, definišite koliko su značajmo bili ostali faktori prilikom donošenja konačne odluke odabita fakulteta/programa koji trenutno studirate.

	1	2	3	4	5
Udaljenost institucije od kuće					
Trošak smještaja					
Troškovi života/niski troškovi života					
Školarina/pristupačna školarina					
Mogućnost stipendiranja					
Institucionalna/korporativna kultura ustanove (npr. dinamičnost, multikulturalna sredina, religijska osviještenost, i sl.)					
Porodična tradicija					

I. KONAČAN ODABIR FAKULTETA/PROGRAMA: U zadnjem dijelu uptinika moguće je odabrati samo jedno polje kao odgovor na pitanje.

Pitanje24: Koji od dole navedenih faktora je imao presudan značaj na odabir fakulteta/studojskog programa koji studirate?

- Udaljenost od kuće
- Uticaj porodice/rodbine – odobravanje/podrška roditelja

- Ponuđeni programi (dostupnost željenog programa) i/ili reputacija institucije i/ili kvalitet stečenog obrazovanja
- Jednostavnost upisa (upisa bez polaganja prijemnog ispita, ili manje zahtijevan upis, prosjeka ocjena nepitan ili manje bitan) i/ili nizak nivo zahtijevnosti programa
- Trošak školarine – besplatno studiranje ili mala školarina, odnosni pristupačna školarina
- Ništa od navedenog

Pitanje25: Da li studirate svoj prvi izbor fakulteta/studijskog programa?

- Da
- Ne

Pitanje 26: Ukoliko ne studirate svoj priv izbor fakulteta/studijskog programa, koji je od navedenih faktora bio glavni razlog za to?

- Uticaj porodice i/ili rodbine
- Udaljenost od kuće
- Troškovi (visoki troškovi školovanja, visoki životni troškovi i td.)
- Zahtijevne procedure upisa (prijemni isput, ne ispunjavanje osnovnih uslova upisa, npr nizak prosjek ocjena iz srednje škole i td.)
- Ograničene mogućnosti zaposlenja po završetku studija (željeni studijski program nije tražen na tržištu rada)
- Nedovoljno poznavanje engleskog jezika

J. OPĆE ZADOVOLJSTVO ODABIROM FAKULTETA

Pitanje26: Koliko ste zadovoljni fakultetom/programom koji studirate?

- U potpunosti zadovoljan/na
- Relativno zadovoljan/na
- Niti zadovoljan/na, niti nezadovoljan/na
- Nisam u potpunosti zadovoljan/na
- Nisam uopšte zadovoljan/na

Hvala Vam na vremenu koje ste izdvojili za ispunjavanje ovog upitnika!