MASTER’S THESIS

THE ROLE OF EMOTIONAL INTELLIGENCE IN HEALTH BEHAVIOR IN BOSNIA AND HERZEGOVINA
AUTHORSHIP STATEMENT

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INTRODUCTION

In the early 20th century, with the development of social sciences, researchers around the world have started to put the focus on analyzing the benefits that individuals have, thanks to their socio-emotional skill. The pioneers in this field, Thorndike and Stein (1937), first described the concept and explained the importance of social intelligence. Shortly after, Wechsler (1939) describes two kinds of intelligence: intellectual or traditional intelligence, which is usually identified with an intelligence and socio-emotional intelligence. In the coming years Steck and Bass (1973) explained the concept of personal self-awareness, while Gardner (1983) described the concept of interpersonal intelligence.

Even so, the term and concept of emotional intelligence is most often associated with the authors John Mayer and Peter Salovey, which in 1990s defined the same. Overall, emotional intelligence is described as the way in which an individual understands, manages and uses their emotions in everyday life, while two of those authors define it as: „A form of intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions“(Salovey & Mayer, 1990, p.97).

Mayer and Salovey (1997a) presented a four-dimensional model for measuring emotional intelligence as a function of individual capability. The model includes: perception, management or integration, understanding, and facilitating of emotions. Although emotional intelligence is a very complex concept, with both a theoretical and practical level, it did not discourage authors around the world to bring it into the focus of their research and studies. Particularly important findings in the context of emotional intelligence are those of the Martinez and Cooper (1997) who argue that individual can develop and learn these abilities. Harrison (1997) went a step further, and during his studies came to prove what clearly indicates a correlation between emotional intelligence and development of the child in the context of its ability to learn and acquire new knowledge. He also speculated that the level of emotional intelligence that was adopted during childhood can further develop and improve. When it comes to emotional intelligence, research regarding its role and importance in various fields is very interesting. Sosick and Megerian (1999) described emotional intelligence as one of the major determinants of effective leadership that has a vast influence on employee motivation. Higgs (2001) states that emotional intelligence is positively correlated with the personal performance of individuals in the workplace.

Lee, Oh, Robbins, Ilies, Holland, and Westrick (2011) suggest that emotional intelligence skills are very important for the sales staff, while Lassk and Shepherd (2013) state that emotional intelligence has the same positive effect on the levels of creativity of the sales force. In addition, a large number of studies and research has been carried out in areas such as psychology, education and similar.
In recent years, emotional intelligence is becoming more and more popular to scholars in the field of health largely because the relationship of health workers with their patients (customers) and their face-to-face encounters. Berger and Hawthorne (1999) in the conclusions of their research suggest that emotional intelligence of doctor is a prerequisite for a high quality relationship between doctor and patient, which would result in improved cost efficiency. There is an interesting conclusion of the author Grossman (2000) who stated that emotional intelligence is the most important and crucial interpersonal skill of health workers. Griffith (2000) states that the emotional intelligence of health services providers positively corresponded with the quality of health services. Wagner (2006) in his research provides clear evidence in favor of finding that emotional intelligence has a positive impact on the performance of doctors.

However, one of the most interesting, but certainly least explored topic in this area is the impact of emotional intelligence on the health behavior of individuals (patients). Otherwise, health behavior corresponds to actions taken for the purpose of promoting, protecting or maintaining one's health (Steele & McBroom, 1972). According to the "Handbook of Health Behavior Research" (Gochman, 1997) health behavior is categorized by three areas: medical service use (e.g. dental / eye doctor visits, screening, vaccinations), compliance with medical regimens (e.g. dietary, taking medicine) and self-directed behaviors (e.g., smoking, drug use and alcohol consumption).

When it comes to research in this field, Brackett, Mayer and Warner (2004) found that emotional intelligence of an individual is adversely affected by poor social relationships and problem solving, and self-destructive behaviors. In their analysis, emotional intelligence is negatively associated with use of drugs, tobacco and alcohol, from which it can be concluded that there is a significant impact of emotional intelligence on medical service use and compliance as well as on dimensions of health behavior. In the context of the above, very interesting findings were shown by Mikolajczak (2014), which in its conclusion highlights the impact of emotional intelligence on the health behavior of an individual which is reflected in activities such as smoking, alcohol consumption, dietary regime, adherence to diet, exercise and the like.

Considering the need of the policy makers for identifying determinants which significantly influence the health behavior of patients in Bosnia and Herzegovina (with the aim of improving it), and clear evidence on possible relationship between emotional intelligence and health behavior it is more than interesting to look at that phenomenon and provide a science based and relevant response in regards to our country. The research problem of this study is to identify the degree of influence of emotional intelligence on the health behavior of patients in the health sector in Bosnia and Herzegovina, which would offer policymakers a new knowledge needed to create educational programs that should result with more responsible health behavior. The purpose of the thesis is to contribute to practical aspect of health
The thesis is structured as follows. The first part of this thesis deals with the emotional intelligence. I will give a brief overview of the history and development emotional intelligence, its most important definitions of various authors, its models and their measurement. The second part contains the concept of the health behavior with all related characteristics, such as dimensions of health behavior, models and changes. In the third part I will give an insight into the role of emotional intelligence in the health sector. The fourth part relates to research context, which explains the public health sector of Bosnia and Herzegovina. Section 4.1 will introduce the history and a characteristic of the health sector of Bosnia and Herzegovina, 4.2 contains information on the organization of the same and the last section 4.3 explains the health care reform. In the fifth part is the empirical research that includes research that I conducted on the basis of survey, including its results. Finally, in the conclusion part, all results and findings from this research will be obtained and explained.

Literature review will include review of appropriate texts (books, articles, available empirical studies, conference proceedings, Internet) in the field of emotional intelligence, health behavior, consumer behavior in order to establish theoretical framework of the study. Primary data will be collected using Internet based structured questionnaire. Questionnaire will consist out of the scales pre-developed and pretested in the literature. Emotional intelligence will be measured using 16 items developed by Wong and Law (2002). Health behaviors will be assessed through self-reports of physical checkups and follow ups, participation in screening programs, dental and eye visits, health insurance coverage, cigarette use, substance use, sexual behavior and medication intake. It is planned to collect above 300 full responses coming from active patients that are using the public health system in Bosnia & Herzegovina. In the process of verifying the hypotheses, the following statistical methods using SPSS statistical software will be used:

- Test reliability (Cronbach alpha), will serve to test the internal consistency of the standardized scales.
- Pearson correlation and multiple regression analysis will be used to examine interrelationalship between hypothesized variables.
1 THE EMOTIONAL INTELLIGENCE

1.1 Short history of emotional intelligence

Throughout the tradition, many psychologists considered emotion and recognition that separate individual areas, with an emotion that is a kind of threat to productive and realistic thinking. The process of separating reason and passion originates from the old Greece (Lyons, 1999). Furthermore, scientists from the mid-twentieth century interpreted the notion of emotion as intellectual diminishing strength (Young, 1943). Of course, through human social interaction and knowledge, it is known that all these assumptions have been ignored for centuries, both in the western and eastern cultures. These interactions are those that influence the person to strengthen and hide his emotions. During the seventies, many researchers considered some limitations of the intelligence coefficient - regulated estimation of the intelligence. Specifically, it has a failure to explain the diversity between individuals who are not related only to cognitive abilities.

These limitations led to the development of other intelligence theories such as Gardner's multiple intelligences theory (1983/1993) and Sternberg's triarchic theory of intelligence (1985). Scientists have begun to explore the influence of emotions and mood on thought processes. Thus, through these studies and studies, the concept of emotional intelligence began to develop (Brackett, Delaney, & Salovey, 2018).

As we deliberate the term of emotional intelligence, we refer to the time when the theory of the social intelligence has been presented by Thorndike (1920) as the liability which allows men and women to understand each other better. He did not create the theoretical basis for the social intelligence but illustrated different forms of intelligence. In that time, publications started developing and most of the studies are concentrated on explaining and evaluating social adequate behavior (Thorndike, 1920). Twenty years after, the intelligence is split into two types: intellective and non-intellective. The first type is defined as set of abilities/skills, and second type is defined as emotional skills whose definition was changed later as bonding abilities (Freshman & Rubino, 2002). Wechsler (1935) includes two subscales in his cognitive intelligence's test that is created for measuring social intelligence. One year after the announcement of that test, Wechsler (1939) explained the impact of the less intellectual elements on intelligent behavior.

The idea to develop a new concept was created in accordance with the research where it was shown that by dealing with daily situations, different skills are required from those which are measured by classic intelligence tests. When people have high results on IQ tests, that does not mean that they are very successful in their career and in private life, comparing with the people skillful in the identification, use, understanding and regulating emotions. The concept is accepted with a lot of criticism with explanation that it will create confusion within the
intelligence domain. The critics believed that two areas-cognition and emotions, should not be considered as one.

Gardner (1983) used the theory of multiple intelligence to explain seven aspects of intelligence: cognitive ability, math, kinesthetic, spatial, musical talent, verbal and communication. In 1990s, emotional intelligence was presented and got the importance/significance after Mayer and Salovey published their article Emotional Intelligence in the Journal Imagination, Cognition and Personality (Villanueva & Sanchez, 2007). According to this, many organizations and companies started to get interest in it and explored the emotional intelligence. The authors explored and developed for a long time the concept of emotional intelligence through different methodologies. The change happened when the author Goleman (1995) published the book „Emotional intelligence, why it can matter more than IQ? “ The book is consisted of the researchers conducted in different areas of science and examples from everyday life which emphasizes the importance of correct usage of emotions in solving serious problems of society and achieving satisfaction and success of each individual. According to Goleman (1995), the emotional intelligence development can be learned and practiced thus everybody has opportunity to develop emotional intelligence ability and reach the happiness and success, which immensely affected to the interests for this concept.

From the theoretical aspects, emotional intelligence relates especially to the mixture of the intelligence end emotions (Ciarrochi, Chan, & Caputi, 2000; Mayer, & Salovey, 1997; Roberts, Zeidner, & Matthews, 2001). Emotional intelligence highlights significance of the awareness, understanding and correcting lack of balance among intelligence and emotions in the life of the general Western mind (Zeidner, Matthews, & Roberts, 2004). According to Zeidner et al. (2004), emotional intelligence is connected with fields of the psychological science, involving emotion's neuroscience, theory of self-regulation, meta-cognition's studies and the examinations for the individual's capabilities outside of the universal intelligence.

1.2 Definition of emotional intelligence

The development of emotional intelligence resulted with many definitions of the notion. Emotional intelligence is notion made from different areas of an individual's capacity to keep up with emotions and it is defined in different way amongst the researchers within the field. Since 1990, the first definition was provided by authors Mayer and Salovey. They define it as the subgroup of social intelligence that includes the possibility to track and understand own and others' emotions, their diversification and how to use the data in order to conduct the way of thinking of the individual and how to make decisions (Mayer & Salovey, 1990).

In 1997, after certain revisions, Mayer and Salovey expanded the meaning of emotional intelligence: „Emotional intelligence involves the ability to perceive accurately, appraise, and express emotion; the ability to access and/ or generate feelings when they facilitate thought:
the ability to understand emotion and emotional knowledge: and the ability to regulate emotions to promote emotional and intellectual growth" (Mayer & Salovey, 1997, p.35).

Daniel Goleman followed up on the definition of Mayer and Salovey and defined emotional intelligence as the capability for understanding own and other's feelings, for motivating and for managing emotions in themselves and in a good way with other people (Goleman, 1998). Cooper and Sawaf (1997) published a definition of emotional intelligence as the capability to experience, understand, and effectively use the capacity of emotions as a source of human energy, information, relations, and impact. In the same year, Martinez (1997) defined emotional intelligence as a capacity which encircle ability that serves as a help to person in everyday activities. People who have higher intelligence and who understand emotions better are more successful in processing emotional facts in order to deal with the problems and different behaviors.

Abilities that describe emotional intelligence are different from academic intelligence which is measured by intelligence quotient, but are complementary to them. Weisinger (1998) relates to emotional intelligence as rational emotion's use, which allows individual to lead some specific behavior and think toward improving results. Bar-On (1997a) explains a non-cognitive model of emotional intelligence as line of non-cognitive abilities and capacities that have impact on the individual’s capability of handling demands of the surroundings.

According to Davies, Stankov, and Roberts (1998), emotional intelligence does not have to be expressed as uncommon person’s capacity up till there was convenient instrument for the measuring construct. Dulewicz and Higgs (1999) define emotional intelligence as being aware of own emotions and their regulation, being influential to others, maintain motivation and behave ethical and consciously. Cooper and Sawaf (1997) have set up a model of emotional intelligence which contains certain abilities and trends and lead to so-called "The Four Cornerstone Model" where emotional intelligence is defined as the capability of feeling, understanding and applying emotions as sources of human impact, information and relations. This model takes emotional intelligence from the field of psychological analysis and philosophical theories to the segment of applicability and examination (Klem & Schlechter, 2008).

There are many people that are very smart on the written part of the job with a low level of emotional intelligence, and they are very often employed by the people who have lower intelligence quotient but have overpowering skills of the emotional intelligence. During our daily routine and tasks, people are exposed to constant stream of emotions. No matter if we are noticing emotional reactions or not, we have them to almost every action in our life. Only 36% of people are able to precisely identify their own emotions when they happen. The rest of them are usually controlled by emotions and are not capable to organize and use them for their well (Bradberry, Greaves, & Lencioni, 2009).
Mayer and Salovey emphasize that emotional intelligence is the capacity of people to understand the emotions, own and other's people connected with. When individuals are interacted with others, their behaviors are under influence of own feelings but also other people's feelings. They meet other people with optimism when they expect certain benefits, and on the other side they can alternatively start their relations with pessimism if they consider that their chances for benefits are not so high. Emotional intelligence demonstrates different types of behavior that help person to understand itself better but also other's emotions in order to become more successful in relations with people in all segments of life.

Many researches show that person cannot be born with developed emotional intelligence. The main emotional intelligence structure of person has been created during childhood but it can be developed and changed later during life. The author Goleman mentioned the skills that lead to development of emotional intelligence: capability to reduce stress, recognition of emotions, communication with other people, facing with challenges and resolving conflict in proper manner. If we use latter we one can influence on emotional intelligence increase.

Finally, we can conclude that authors are united in fact that emotional intelligence is the technique which efficiently manages the emotions. The current situation regarding the status of an emotional intelligence is slightly contradictory, because, though it is a very important tool within the companies, individuals and organizations, the science should elaborate the issue of theory, measuring and validity.

1.3. Models of emotional intelligence

Though the concept of emotional intelligence is relatively new, many explorers have different views on this topic. In the field of emotional intelligence many theories, models and attitudes are placed. The three largest models concept of the emotional intelligence which achieved the highest interests are Salovey and Mayer (1999), Goleman (1995) and Bar-On (1997a), and they represent different views (Klem & Schlechter, 2008).

1.3.1. The ability model

The ability model in the field of emotional intelligence is the most explained on the basis of various articles in the 1990s. Mayer and Salovey (1997a) presented emotional intelligence in this model through four dimensions that are shown in Figure 1.
Emotional intelligence is the main area related to expression of emotions. Emotions are important part of communication. Researchers performed many breakthroughs in segment of understanding and expressing the emotions of human beings. Recognition of emotions in voice or facial expressions by other people is very important basis for successful understanding of emotions. As emotionally intelligent individuals are capable to accurately evaluate emotions displayed by others, they will also be sensitive to the display of false or manipulative emotion (Mayer & Salovey, 1997a).

The second dimension of model-using emotions is the process of access, creation and usage of emotions with the aim to improve the process of thinking. Cognitive scientists concluded that good emotional input leads to thinking about really crucial matters, i.e. person can dedicate only to emotions leading to fulfilling certain life goal. This process of using emotions is very good indicator showing someone's emotional intelligence level. The individual is capable to recognize feelings in this dimension of model and to direct them as an advantage in order to complete certain activity in proper way and better behave in certain situations. For instance, if person feels anger and set up certain activity, that would result with spending lots of energy but also does not paying too much attention to details. That would be good example of using emotional state of person in order to increase success in different segments of life (White, 2014).
Emotional understanding is capability to understand complex emotions and their cause. Each emotion transmits the form of the possible messages including the operations related to them. We can mention as an example that individual with high emotional intelligence can feel at the same time both, love and hatred for the same person (Kiel, 2010).

People who are experienced in this area are familiar with this emotional direction and are very aware with the fact that various emotions can perform together to make some other emotion. When a person is able to separate certain negative emotions, this is a very important feature within the understanding of emotions, and this can lead to greater effectiveness within the emotion management (Feldman Barret, Gross, Christensen, & Benvenuto, 2001).

The fourth dimension – Emotional management is ability to control and manage the emotions. People have to accept all types of emotions both, good and bad, where splitting emotions from behavior. Many individuals can act feeling happy in some moment tough they are angry but they know that showing anger would not be appropriate in some situation. Ability to manage emotions will be additionally depending on the level of importance of individual's emotions. According to this model, emotional intelligence should be considered as independent of personality traits.

1.3.2. The mixed model

Goleman found the work of Salovey and Mayer in the 1990's and encouraged by their discoveries, he started to conduct his examination in that field and finally wrote a book "Emotional Intelligence" (1995), which acquainted the public and private sectors with the concept of emotional intelligence. This model is very oriented on defining emotional intelligence through the wide range of skills that have impact on leadership performance. Also, model is frequently used in corporate or some other skilled environments, in order to estimate management potential and abilities and in corporates that search to use the theories of emotional intelligence to increase their human resources. Goleman (1998) in the mixed model points out five competencies that are linked with the emotional intelligence, and those are presented in the Figure 2.
Self-awareness is a part of a mixed model that includes the acknowledgment of people's goals, values, emotions, etc. Also, the capability of recognizing their influence on others and managing decisions towards modifying emotions of the other people, are involved in this section as well. Self-regulation is explained as cognition of the negative or distracting emotions, and monitoring them in the positive goal. Part of the self-regulation is also person's competence to adjust own behavior to a specific different condition that can be changed or some specific outer factors. Self-motivation is considered as control of the emotional aspiration that makes easier for the individual to achieve certain goal. In this part of a mixed model, it is explained that person should be motivated to achieve certain goal, to success, and the ones with the high emotional intelligence will be capable of motivating themselves, they are feeling respected (Goleman, 1998).

Social awareness (empathy) is very important part of the emotional intelligence, and Goleman (1998) emphasizes when someone deals with empathy, he has a conscience about feelings that other people have, while decision making and he is ready to respect their aspects. Social skills are competencies that use self-awareness and self-regulation to maintain relations with people in our surroundings in our advantage. Goleman (1995; 1998) considers that social skills should contain tactics, good communication, conflict management and leadership skills, cooperation skills and effective opportunities, to be a part of a team.
Within these five listed competencies, there are emotional abilities that can be upgraded to reach higher performance. According to this model, people are born with cognitive abilities and qualities that present their characters. Those qualities will help individual to set a goal that can be accomplished within the progress of emotional intelligence. It is important to understand Goleman's idea of learned competence, because emotional competencies by themselves present the stage to which the individual dominates particular capacities or abilities based on his/her emotional intelligence level. Those abilities make this person more productive in his/her work (Goleman, 2001). However, Goleman's mixed model of approach lacks empirical support and proofs.

Advocate of ability model find that disadvantage of Goleman's model is involvement of individual's characteristics which are not by its nature based on emotions or intelligence. Thus, emotional intelligence is not well measured. According to them, if measuring something that is directly connected to emotions or intelligence, it will result with incorrect information and final results of the emotional intelligence itself. Supporters of mixed model have opinion that characteristics of individual should be specific to emotional intelligence. This model is becoming more important with newly published articles and studies on topic of emotional intelligence.

1.3.3. The Bar-On Model

This model refers to the potential for the successful performance and is considered process-oriented rather than outcome-oriented (Bar-On, 2002). Model is sequence of a mutually related emotional and social competencies, capabilities and moderators that have impact on other's capacity to identify and control emotions, to relate with others, to adjust to changes, to resolve complications and to handle daily requirements and pressures (Bar-On, 1997). Model also divides the capability to influence on the emotions and other's behaviors and the capability to identify and adjust own emotion.

Through the model it is mentioned that people with emotional quotient that is higher than the average are usually more successful in the requirements of the environment, and the lack of emotional intelligence leads to lack of success and the emotional difficulties (Bar-On, 2002). Bar-On considers emotional intelligence and cognitive intelligence to provide evenly to a person’s general intelligence, which then offers an indication of potential to achieve something in life (Bar-On, 2002). Components of emotional intelligence that Bar-On defines are: intrapersonal, interpersonal, adaptability, stress management, and general mood and they are shown in the Figure 3.
Intrapersonal component is representing skills related to the inner self. The area represents an individual’s capability of perceiving and guiding himself. According to this, an individual can appropriately express his feelings, live and work on his own, and has the required courage to point out his opinions and assurances easily. Subcomponents of the Intrapersonal component are: self-regard, emotional self-awareness, assertiveness, independence and self-actualization. Interpersonal component is representing interpersonal capabilities. This indicates person's competences. People who operate great in this area are often reliable, responsible and comprehensible; they cooperate well with others in different situations. Subcomponents in this area are: empathy, social responsibility, interpersonal and relationships.

Adaptability is presenting how competent is individual to handle requirements in complex situations from the environment. This field of emotional intelligence explains how successfully the respondent is capable to deal with environmental requirements and with uncertain situations as they happen. Reality testing, adaptability and problem solving are subcomponents in this part. Stress management is referring to the ability to maintain stress. This area of emotional intelligence includes an individual’s capability to cope with stress without giving up, breaking down or losing control. This area explains a person who is generally quiet, almost never impulsive and someone who handle well pressure.
These competencies are crucial in the workplace, particularly when one is constantly faced with deadlines and a diversity of demands. Subcomponents that this area consists are: stress tolerance and impulse control. General mood is the last component in this model. Possibility to have positive ideas and to make the best out of everything in life related to general mood (Ramchunder, 2014). This component relates to a person’s attitude to life, the capability to enjoy him and others and the general feeling of pleasure and enjoyment. Optimism and happiness are subcomponents.

1.4. Methods of measuring emotional intelligence

Methods of the measurement of the emotional intelligence are connected with the main models of it, but these two things may be mixed (Caruso, 2004). It is stated that any approach of the measuring emotional intelligence has the ability to affect the validity of the components of the emotional intelligence, for example in studies of intelligence, achievement scales are typical because of their foundation of the capacity for solving intellectual tasks (Brackett & Mayer, 2003).

Different measures have been established for emotional intelligence's assessment. Some of them estimate capabilities, and other includes self-report of the emotional understanding. These measures with self-report may not match with the original concepts of the intelligence, but they are less complicated to manage (Brackett & Mayer, 2003). According to MacCann and Roberts (2008), there are several important principles that need to be fulfilled by the most favorable tests of emotional intelligence. First, the performance is supposed to be in a positive way related to other forms of intelligence and regularly, intelligence tests are associated mutually. These authors state that the tests should be associated with each other but not with these other forms of intelligence. The third principle states that behavior should be predicted by the performance, in areas that refer to emotions. Lastly, the performance should only be slightly associated with the personality.

As measuring emotional intelligence, there are still different opinions among researchers. It results with lack of form for emotional intelligence measuring. Every method for measuring can affect the legality of the emotional intelligence's strategy. Dulewicz and Higgs (2000) have expressed the opinion that it is questionable in the research whether the measurement of the emotional intelligence is possible or not. According to them, there is a powerful attitude that diverse and complex nature of the emotional intelligence is not in the accordance with its measurement. Goleman (1995) stated that there was no pencil or a test that could measure emotional intelligence. He had support from other authors, for example, Steiner (1997) which stated that emotional intelligence is just a marketing phrase which is not measurable.

Evaluation of the emotional intelligence has always been a very interesting topic (Austin, Saklofske, Huang, & McKenney, 2004). That is why there are many publications about it and
less written is its measurement and its integration in the organizations and employees (Watkin, 2000). Pfeifer (2001) claims that there is no validate and stable measure that is obvious. According to him, the main disadvantage with the nowadays emotional intelligence's literature is absence of the objective measurement of its construct. Pfeifer (2001) also states that most measures have foundation on the self-report instruments and lack of norms and that there are rare measurement methods that can give data to support explanations that the test creators specifying after finishing those tests. The mostly used measuring methods are so as follows.

1.4.1. Mayer-Salovey-Caruso emotional intelligence test

First method is the Mayer - Salovey – Caruso's emotional intelligence test. This is test which is made to measure four dimensions from the Ability model, presented by Mayer and Salovey (1997): emotional perception, using emotions, emotional understanding and emotional management. Objective questions are used to estimate emotional intelligence through this test, rather than self-evaluation (true-false questions). This test allows evaluations of the individuals’ capacity for the recognition and perception of the emotions, also leading emotion into thoughts, afterward the evaluation of the capacity for better understanding the impact of different circumstances on emotional experience and also skills to manage emotions (Mayer, Caruso, & Salovey, 2000). Since this method is formed on the examples of daily routine in life, it can give us results of how people can handle and resolve problems of emotional nature, and how they can finish specific activity. This test uses many creative and interesting assignments, by examining individual's capability, in order to measure capacity for identifying emotions. Mayer-Salovey-Caruso test is very useful in examples where person might have a desire to make a good impression.

The standard report of the Mayer - Salovey – Caruso' scale expresses emotional intelligence and gives the certain results. Very often, the users of this scale are not surprised with their estimation results, because most of the other scales are self-report. That is why this scale is not like others ones. Users can find themselves confused or surprised here, after receiving results (Mayer, Caruso, & Salovey, 2000). By finishing test, 15 scores are obtained: total emotional intelligence score, two area scores, four branch scores and eight tasks score. Test includes 141 questions and takes no more than 35-40 minutes to finish. Considering the correctness of this test, there are critics on it, specifying that aim was directed to the comfort rather than to the person’s capability, according to the Chopra and Kanji (2010), although many researches are the proof that it’s a one of the best and consistent method of measuring emotional intelligence.
1.4.2. Emotional competencies inventory scale

Emotional competencies inventory scale is created to estimate individual’s competencies. It is a 360 degree reliable measuring tool created by Goleman (1998) as a measure of emotional intelligence based on his emotional intelligence competencies as well as a previous measure of competencies for managers, executives and leaders, by Richard Boyatzis and the researches at the McClelland Institute at Hay Group in Boston (1994). This scale will provide the answer how people, who are constantly in somebody’s surrounding, see them. Also, individual will understand how he can direct himself and his relations with other people. When one sees results at the end of test in terms of 18 emotional competences, the creation of the plan for improving emotional intelligence can start.

Regarding the companies, this scale can serve as an important instrument to ensure the assessment of the entire work team or the relevant departments within the organization, noting the total strengths and needs. When the individual assessments of a particular department are combined and united, it provides an extensive overview of the organization or emotional intelligence of a team. This all leads to the discovery of the crucial emotional deficiencies that represents barriers to the efficiency of some activity. After finishing this test, employees of the company get its own report and the current or potential leaders receive insight into fields which can develop to increase its performance in the company. It takes about 35-40 minutes to finish the test. There are two versions, first one that contains 110 items, 7-point Likert scale and second is the one with 73 items and 6-point Likert scale. (Pérez, Petrides, & Furnham, 2001).

This method includes 20 dimensions that are gathered into four groups:

- Self-awareness,
- Self-management,
- Social awareness,
- And social skills.

Emotional competencies inventory in its applicability does not include administration, e.g. advancement, payrolls etc., but only development. Competencies that are measured by this method can be significant to some particular job; therefore it is not suitable to use it for administration, for example selection, promotion, salary conditions, etc., before confirming it contrary to the performance requests for that job. This is outstanding instrument for development because of its wide applicability (Wolff, 2005). Numerous studies emphasize validity of the structure of the scale.
It is shown through the researches that this scale refers to the consequence, for instance life achievement of the individual (Sevinc, 2001), leadership’s observations (Humphrey, Sleeth, & Kellet, 2001), sale results (Lloyd, 2001) etc. Reliability of this scale relates to the measurement stability or observation. In fact, if the same person is measured twice on the same measure, the results should be nearly similar, which leads to reliability. More than once examiner can evaluate the behavior of a person and the relation between the evaluations leads to the implications of the reliability of these assessments. On the other hand, stability is reflected in the connection of the assessments by one examiner at different times. This leads to consistency of the behavior and the examiners (Rosenthal & Rosnowo, 1991).

1.4.3. Emotional quotient inventory scale

The director of the Institute of Applied Intelligences in Denmark and advisor for a diversity of organizations in Israel, Reuven Bar-On (2006) established the first measuring tool of emotional intelligence that was used as the term emotional quotient. The emotional quotient inventory scale has translations into many languages, including Spanish, French, Dutch, Danish, Swedish, Norwegian, Finnish, and Hebrew (Bar-On, 2002). It has been developed on the basis of the questions: Why do some individuals have superior emotional prosperity compared to others and why individuals are more successful than others (Bar-On, 1997)? As it is established as a measure of emotionally and socially adequate behavior that gives evaluation of the emotional and social intelligence, this scale is not determined to evaluate person's character and intellectual capacity, but to measure person's capability to be successful in handling environmental requirements (Stys & Brown, 2004).

This scale can categorize every respondent inside the area of emotional quotient points and can be used in various situations, for example educational, medical, research etc. It consists 133 brief statements and it takes about 20-30 minutes to finish it. Responses are measured with 5-point Likert type scale, and respondents should have 17 years old at least. It is based on the most comprehensive theory of emotional intelligence to date and renders an overall emotional quotient score as well as results for the 5 composite scales and 15 subscales. It is one of the most important scientific instruments of emotional intelligence on the market.

This scale includes measuring the interaction between the individual and his environment, then displaying the results in graphical and numerical form. The advantage of this method for measuring emotional intelligence is how five composite scales corresponding to the 5 main components of the Bar-On model (stress management, intrapersonal, interpersonal, adaptability and general mood components) contribute for emotional intelligence’s specialists to easily predict the behavior of individuals and identify the reasons for that specific behavior. After finishing this test, a person gets a measurable result by which he can identify his own strengths and remove any weak area that can be an obstacle in achieving maximum success (Bar-On, 1997a). Bar-On has developed various versions of the Emotion Quotient Inventory
to be used with different populations and in changeable situations. Between these are the EQ-interview, the EQ-i Short Version, the EQ-i: 125, the EQ-i Youth Version and the EQ-360 Assessment.

1.4.4. Wong and Law’s Emotional Intelligence scale

Another scale for measuring emotional intelligence is Wong and Low Emotional Intelligence Scale, developed by researches Wong and Law. Scale is not very long but can be very good measure for dimensions of emotional intelligence, and we used it in our research of this master thesis. Mostly is used in management and leadership. Factors that are foundation of this scale are:

- Self-emotion evaluation which is capability of understanding our own emotions,
- Other's emotion evaluation which presents ability of understanding other’s emotions,
- Usage of emotions which suggest using emotions adequately,
- And regulation of the emotions where the individual has skill to maintain emotions to improve performance (Wong & Law, 2002).

This scale contains two parts. The first one is consisted of the 20 scenarios and respondents should pick answer that fits to their reaction in the scenario that is offered. The second part has 20 capability pairs and respondents need to select one type of capabilities that express their own strengths (Wong & Law, 2002). Results of this scale can be accurate to predict enjoyment in life, the working efficiency and fulfillment at work (Song et al., 2010; Law et al., 2008; Wong & Law, 2002). This measurement method of the emotional intelligence is associated with managerial preferences, in performances where is emotional labor required. Wong and Law (2002) also established measures of that kind of labor.

1.4.5. Schutte self-report emotional intelligence scale

The Schutte self-report emotional intelligence scale is measure of emotional intelligence, developed by Schutte and colleagues (1998). It is originally formed according to articles by Mayer and Salovey (1990). This scale has been commented as not adequately represented on their Mayer and Salovey's model and that has different conception of emotional intelligence (Petrides & Furnham, 2000) the original self report emotional intelligence scale consisted of 62 items. Pérez et al. (2005) emphasize the fact that this scale has a widely appliance in the literature and can be used as brief measurement of the global characteristics of the emotional intelligence.

The Schutte scale consists 33 items that respondents need to choose, and responses to these items reflects trends toward emotional intelligence in accordance to a 5-point scale, with “1” that presents strong agreement and “5” presents strong disagreement (Schutte et al, 1998).
The SEIS assesses perception, understanding, expression, regulating and harnessing of emotion in the self and others (Schutte et al., 1998). The brevity of the scale and its accumulating reliability and validity evidence makes this scale a reasonable choice for those that are seeking a brief self-report measure of global Emotional Intelligence (Schutte et al., 1998, p.25). Beside this, this scale's compositional validity is arguable. According to the Petride and Furnham (2001), Schutte Self-Report Emotional Intelligence Scale is not one-dimensional and does not reflect on the Salovey's and Mayer's model of the emotional intelligence, as asserted by the scale's authors.

1.5. Applicability of emotional intelligence

There is variety of the applicability of emotional intelligence, in lot of sectors. We will mention some of the most important. Through the studies sections of the emotional intelligence, Higgs and Dulewics (1999) stated that there is indication of a large connection with leadership. Many scientists have concentrated to the connecting those two areas (George, 2000) or they have presented in which way specific components of Emotional Intelligence are crucial characteristics that can affect leadership (Kellett et al., 2002; Wolff et al., 2002). Handling its own emotions leads to capability of leading and motivating others (Bar-On, 1996). Goleman (1998) considers that handling effectively emotions can result in confidence, integrity, and some largest productivity benefits, achievements and motivation of one person, team or institution. According to Hayward (2005), essential element for prosperity in one leader is emotional intelligence. If leader has high emotional intelligence, he could help his team in increasing their emotional intelligence, with aim to become highly effective in general and to have a workplace with better conditions and relations in the organization (Momeni, 2009).

Head managers can use mechanisms to make productive and progressive surrounding in the company and establish good relations between employees. In order to maintain a positive atmosphere and motivation of employees, they should be distributed to the right position. Luthans (1998) explained the "effectiveness" as the process of completing the job with high productivity and quality, which can be done through employee’s satisfaction. From the understanding of emotions and emotional intelligence abilities depends on whether the leader to be effective and have managerial skills (Coleman, 1998). Whether the leader will be effective and have managerial skills depends on the understanding of emotions and abilities related with capabilities of the emotional intelligence (Goleman, 1998). Goleman states that for effective leadership, emotional intelligence is better than intelligence quotient in the role of differentiators. How people inside the organization face the problems, emotional intelligence can show. According to Goleman (1998), emotional intelligence determines whether a person can be effective in stressful and complicated environments or might not have the courage to become a good leader in the future work, even though the person was quite trained and has an impressive intelligence quotient.
When we associate education with the emotional intelligence, the strong bond exists between her and behavior in the educational institutions. It is hard for students with low emotional intelligence to focus and to have good communication with colleagues, and this leads to difficulties while making friendships, maintaining relationships with older people and also to the aggression in their behavior, because they do not manage properly their emotions. Most often these particular problems begin at the beginning of education, in elementary or high school and grow into serious problems later (Khosrav et al., 2011).

Many children have been expected to learn emotional intelligence from a family environment and through participation in various life activities. This learning contains their own expression of emotion which represents the ability of talking about feelings in various situations, then conflict resolution skills, as the communication about the problems that we have with a person in order to solve, and the last one - compassion, which is the skill of understanding the emotions of people who are in our environment.

Educational institutions that have programs of emotional intelligence have many advantages compared to those who do not. Difference in the behaviors of students is noticed in behavior, because those who attend these programs show less aggressive behavior than students who do not. Also after these programs lead to the progress of the environment in class, which simplifies learning and lecture a lot. Of course, it must be emphasized that learning emotional intelligence continues to further levels of education. Students who know how to control their emotions can have only positive benefit of it. They will surely be less indulged in risky behaviors, being more confident and make smart decisions (Tustin, n.d.).

Regarding relations and work within teams, emotional intelligence contributes a lot in achieving the objectives, through the understanding of their own and others’ strengths and weaknesses. For team members, process of learning emotional intelligence helps them to be better in communicating, to effectively complete their tasks, to represent information in best way, to reduce conflicts, etc. Emotional intelligence determines the way how we deal with problems in the relations with people. When individuals use it properly, the whole team in the organization has benefit from it and every problem can be solved. Every understanding of the emotional intelligence leads to overwhelming diversity of it, reducing conflicts, and making better work atmosphere.

Emotional intelligence at work leads to better functioning relationship between colleagues, between directors and employees and between the organizations and their clients, partners, suppliers, competitors, etc. Employees that have high emotional intelligence possess many positive characteristic; they are loyal, effective, focused and motivated. We can apply emotional intelligence in business, which is supposed to deal with how to evaluate people, develop their relation, and how convictions of the individuals create the experience, leadership, success, etc. In the companies where employees are emotionally intelligent, work
can be done with maximum effect, which increases the success to a large extent. Many studies has shown that in the organizations, when employer is hiring, should take into account emotional intelligence and that leads to being economic in management. According to that, hiring process has gains: to set a right employee into the appropriate work place, increase his satisfaction, to lower costs of educating individuals that will not stay for much long in the company, etc.

2 HEALTH BEHAVIOR

2.1 Definition of health behavior

Health behavior is very important variable in the researches of the health education and it is proposed in definitions of it. Social, cultural and physical environments we are surrounded with in our life and at our work immensely affect the health behaviors. Our personal choices and external restraints are defining health behaviors. Positive behaviors are encouraging promotion of health and prevention of sickness where negative behaviors are considered as risk behavior. Through constant surveillance of health behaviors in certain period of time we can foresee possible threats for population health, determine sectors of population that mostly need public health intervention and assess the efficiency of public health policies (Statistics Canada, n.d.).

In the wider sense health behavior is attributed to the activities of individuals, organizations and groups so as the determinants, correlates and repercussions of those activities which is consisted of social change, policy development and implementation, advanced coping skills and augmented life quality (The Gale Group Inc., 2002). Langlie (1970) pointed out that health behavior has to be willingly conducted separately from sanctions when a person is symptom free or dealing with perceived health threat. He disputed further that health behavior is behavioral and not an assessment of knowledge, attitude, convictions or value. His definition of preventive health behavior says: “any medically recommended action voluntarily undertaken by a person who believes himself to be healthy, that tends to prevent disease or disability and for disease detection in an asymptomatic stage” (Langlie, 1970).

Harris and Guten (1979) widened this definition to include health protective behavior, so it states: “any behavior performed by a person regardless of his or her perceived or actual health status, in order to protect, promote or maintain his/her health, whether or not such behavior is objectively effective toward that end”. Different authors have defined health behavior, as we will see further in the thesis. Conner and Norman (1996) describe it as any activity undertaken for the purpose of preventing or detecting disease or for improving health and well-being.
Gochman defines health behavior as: “Those personal attributes such as beliefs, expectations, motives, values, perceptions, and other cognitive elements; personality characteristics, including affective and emotional states and traits; and overt behavior patterns, actions and habits that relate to health maintenance, to health restoration and to health improvement” (Gochman, 1982, p.169). His definition is in the accordance with the definitions of certain divisions of health behaviors’ direct interpretation, suggested by researches Kasl and Cobb (1966). They pointed out in their articles following health behavior categories:

- Preventive health behavior: everything done by individual who considers himself / herself to be healthy, in order to prevent illness,
- Illness behavior: individual’s activities who feels sick and seek for appropriate medicine for it,
- And sick-role behavior: behavior of person who finds himself / herself sick in order of getting well and that leads to medical therapy.

Health behavior is everything that can be done either once or at certain times, for example, the immunization process or occasionally getting flu. This includes also some other processes that we do to ourselves, such as the use of the protective sunscreen in the summer, or processes that protect others. Activities that we are performing a long time, such as training, a healthy diet and avoiding harmful substances for the organism are also types of health behavior. Not all people bring specific healthy or risky behaviors to a maximum, some of them for example has a physical activity but smoke, and some of them may have stopped smoking but they started to eat sweets, as a replacement. Certainly it can be concluded that an individual leads a healthy lifestyle if he perform different behaviors to improve health (The Gale Group Inc., 2002).

Dietary behaviors relates to consuming habits. The difference from other types of behavior is because this is vital for life, unless of course risky dietary behavior, such as the habit of consuming alcohol or cigarettes. When people suffer from the certain diseases for a long time, dietary behavior is important for their prevention or handling. A few issues about dietary behavior can be mentioned. Quite of diet related risky factors does not have direct and dramatic symptoms. Improving health does not aspire only to changes in the quantity of food that is consumed, but also to the quality. Lastly, this process of change and controlling dietary behaviors is demanding a lot of information about food, so that information gathering is more complicated in this case of dietary change than in any other kind of behavior, for example, physical activity (The Gale Group Inc., 2002).

Careless behavior is also part of health behavior that includes performance of individuals who are daily damaging their health and increasing the chances of disease. "Risk taking behavior" and "risky behavior" are phrases that are often linked to this behavior. Careless behavior is usually analyzed and studied with the younger people, especially men. This behavior includes
drunk driving, weapon and prohibited substances use, etc. The propensity of the individual toward impulsiveness and searching for the emotions is closely associated with this kind of behavior (The Gale Group Inc., 2002).

2.2 Dimensions of health behavior

2.2.1. Medical service use

Using medical service includes the use of public health services and services of medical care professionals. This type of behavior is the continuity of the process of moving from the implementation of the preventive services up to the serious surgeries and treatments. Many elements influence the use of services, thus exploration of this behavior includes testing of the user of the service, time and reason of the use of these services and the level of satisfaction with the outcome. Numerous factors should be investigated in order to understand them better, considering the complexity of the process of using health care. The model developed by the Andersen and Aday (1974) is the foundation for the understanding these factors. Some of these factors are: the characteristics of people, many economic factors, for example health insurance, then availability and quality of the medical service, as well as its location. The size of the need for health service is essential information in choosing medical care (The Gale Group Inc., 2002).

2.2.2. Compliance with medical regimens

Compliance with medical regimens relates to accuracy where patient pursue recommended regimen. This happens in case where regimen is prescribed according to therapy and that will help patient to get well. Almost always compliance includes process of changing patient’s behavior, from taking medicaments to those more complicated, for example starting dietary regimens or exercising. Having medicaments for therapy is some kind of process that is happening during our illness, we must take exact number of our medicaments at the right time, or even having a few different medicaments at the same time (Agras, 1989).

Compliance relates to situation where patient follows the instructions he received through a specific therapy, and behaves accordingly (Haynes, 1979). Compliance is very functionalized when it comes to the research; as the level where regimens are followed, and expressed as percentages or ratios; categorical appearance, or an index evaluation of the combining various behaviors. A lot of research has oriented to the medicament’s compliance and most of the health related behaviors that goes further than having prescribed medications are also included in the compliance (Sabate, 2001).

Compliance behavior includes five factors: starting the therapy, arranging visits to doctor, taking medicament in accordance with prescription, change life habits and not consuming unhealthy products. If we avoid any of these factors, good result of the treatment will be
questionable. Health workers have been trying to reduce problems with compliance. Compliance by itself indicates the stage of correspondence between patient's behavior and therapy's demand (Agras, 1989).

Certain studies have defined the correlates of compliance and non-compliance. Those are the complexity and duration of the treatment, the type of disease, treatment consequence, costs, health service's features and relation between the doctor and patient. Most of these correlates are changeless. If people have low compliance, health workers should be able to propose a specific process itself of providing treatment, in order that patients continue to follow the treatment. The only bad thing is that these health workers can not know which patients may have no compliance to therapy (Mushlin & Appel, 1977; Caron & Roth, 1968; Davis, 1967).

Compliance decreases when number of medication rising, or when it comes to more complicated behaviors, it is even more decreasing. The longer patient use the medication during therapy, the lower is the compliance because patients are taking medication improperly and incorrectly after some time, not like in the beginning. According to Agras (1989), the reason may be that they really got tired of this treatment or maybe some event that interferes compliance, such as: problems or death in the close family, some hidden disease, job change etc. In addition, patients may consider that they are cured if their symptoms subside, when they in fact need to continue to take medication to prevent future complications.

2.2.3 Self-directed behavior

Self-directed behavior means taking care of personal health, which is very important. This behavior includes health prevention and health improvement, which means healthy life habits. Through this self-care individual can try to get well without going to clinics, for example consuming soup and liquid, or having antibiotics for flu, if it is necessary. Small wounds are also involved in this kind of behavior, because a person can heal it itself, without professional care. Health care at home means direct involvement in the whole care practice (Encyclopedia of Public Health, 2002).

Potential patients are controlling their health better and behave in a way where they can avoid illnesses in the future when they are encouraged to take care of themselves more and to go to the doctor only when they really need. Most of the time individuals are handling their less risky illnesses on their own, without going to clinics, what allows doctors to be dedicated more to older people and those with some serious health problems (Self Care Forum, 2017). Self-care can be enlarged through the satisfying demands of society, such as advising patients for frequent illnesses and selection of healthy style of living. Including patients in their own care through mutual deciding at the general practice consulting turned out as outstanding access (Self Care Forum, 2017).
Self-care describes why its activities are essential for health and prosperity for person. Self-care is defined as „the practice of activities that individuals initiate and perform on their own behalf in maintaining life, health, and well-being“ (Orem, 1985, p.86). When self-care is not controlled, illness may appear. That is intentional act, which represents behavior that is goal and result oriented and contains making decisions of what should be done. When it comes to connecting general practice, for example clinics with these self-care behavior, must be mentioned that nurses employed in that clinics, should have insight in patient’s behavior and in relationship between nurse and patient (Orem, 1985).

2.3 Models of health behavior

Human behavior is critical in taking care of health and certain prevention of diseases. In order to influence people to change their behavior, many proofs imply that competent programs which are in charge of change of health behavior should have multiple accesses. We can set an example of strategies for implementing healthful eating routine among children that can be largely powerless for modifying non-adaptive consuming behavior, specifically, when they can alternate patterns in one population (Jeffery et al., 2000). Models of health behavior are established towards promoting health behaviors and simplifying adequate adjustment and handling disorders. These models are oriented towards cognitive components in the behavior change context, and consider that convictions and prediction of eventual happenings and results are definitely very important factors of health behavior (Stroebe, 2000). According to these models, person will choose the activity that will result most often to affirmative event. In the following text, I will explain some of the most important.

2.3.1. The health belief model

One of the commonly used frameworks in researches of health behavior is health belief model, that has the aim to explain the changes regarding health behavior. In the meantime this model is extended. It is used for explanation and prediction of health behavior relating to individual’s beliefs. It was developed in the 1950s by psychologists Hochbaum, Rosenstock and Kegels. Through years, this model has been adjusted for researching different health behaviors.

Health belief model explains that individual will undertake activity related to health if person thinks that his/her bad health conditions can be avoidable; to expect that certain moves can avoid bad health condition and considers that he/she can perform recommended activity properly (Glanz et al, 2002). This model has turned into famous concept in nursing studies that are oriented towards patient’s accordance and preventive health care systems. The health belief model is based on the idea that value and expectancy beliefs guide behavior. Model assumes that health behavior is determined by an individual’s perception of a risk caused by a health issue and the value related with performances that are planned for reducing that threat.
(Becker, 1978). Construction of this model is explained through several dimensions that interpret why people will undertake something to prevent or control sickness, that are presented in the Figure 4.

Figure 4. Health belief model


First dimension, perceived susceptibility presents individual's notion of a health problem or precise diagnose (Becker, 1978). Perceived Severity is somebody's conclusion of condition's seriousness and the effects. Its appliance is determining risk effects and the requirement (National Institutes of Health, 2005). Third dimension is perceived benefits that present conviction of a patient that the specific advised therapy will heal his disease or ease it. In the health belief model the aim is higher life quality for an individual, in many segments. Besides enhanced health that results from the change, there could be more elements. Perceived barriers are individuals’ point of view of material and psychological expense for recommended treatment, which includes its complexity, duration and accessibility.

Barriers can be decreased throughout support, additional encouragement, etc. (National Institutes of Health, 2005). Additionally, two dimensions were added: “Cues to action” and “Self-efficacy”. Cues to action are causes why a person comprehends that he might be exposed to some dangerous illness. This dimension involves everything that activates decision to transform behavior. The last dimension, Self-efficacy presents courage of the individual to take specific action and this dimension ensures instruction and supervision in operating action
Self-efficacy can specifically relate to specific common behavior such as physical activity, eating etc. (Rosenstock, Strecher, and Becker, 1988), but it is not necessary for health behaviors that are not hard to achieve.

This model does not determine how different convictions affect each other and how mixed descriptive elements can have impact on behavior, which is one of its disadvantages. The result is diverse kind of studies that use various methods of evaluating variables: multiplying vulnerability and severity (Conner & Norman, 1994) or subtracting barriers from benefits (Wyper, 1990). Additional disadvantage is the fact that the authors did not provide functional variable's description and this guided researchers toward applying a different methods in their studies. Through the focusing on the perceptions of the individuals, this scale does not specifically focus on the important social matters. The examination is suitable for health behavior theories that are individually directed. Crucial factors that are not basically related to health but presents a relevant role in the forming health behaviors can also be missed (Glanz et al, 2008). Although this model has some theoretical issues, it has practical support for foresight of a broad scope of health behaviors. According to Sheeran and Abraham (1996), the components of this model are very often very important behavior’s predictors with limited effects.}

Among certain limitations of this model, it does not consider the attitudes and other elements that determine the person’s approval for health behavior, does not consider usual behaviors. It does not apply to behaviors that are pursued for non-health related circumstances, such as social acceptability. It also does not take into account environmental factors that may forbid or encourage a particular recommended activity. It is assumed through this model that each person can access the same number of data about a particular disease. The second assumption is that the dimension cues to action is widespread in the supporting people to perform some behavior and that the main goal in the decision-making process are health activities.

This model is more periphrastic than it is interpretive and does not propose strategies for changing health-related activities. Considering preventive behaviors, dimensions: perceived susceptibility, benefits, and barriers were usually related to the required health behavior, while the dimension of perceived severity is less related to the same. Every particular dimension of the model can be useful, depending of what the health outcome of concern is, but the most appropriate usage of the model is to combine it with other models that examine the environmental framework and recommend strategies for some particular change (LaMorte, 2016).
2.3.2. Theory of planned behavior

Theory of planned behavior is the widest applied theory in various fields of health behavior. Determinants of health are much better clarified through this theory. This theory is actually a psychological model of behavior used for a forecasting and describing broad areas of health behavior (Ajzen, 1991). The theory says that people by themselves choose how to behave and rationally make decisions and plan different processes, that is very important advantage by comparison with other theories. According to this theory, direct determinant of behavior is an individual's intention is closely connected with process of the behavior. Theory of planned behavior secures a standardized approach in identifying the most important issues for a decision about behaviors. Since many opinions can change anytime, it's perfect for the following interventions.

Measurement methods of this theory have pilot work, containing personal interviews and requests more components than some modernized survey can adjust. Even this can be helpful, it is a tough procedure and can decrease participation rates. Considering the fact that this theory is outcome of a rational planning, not all crucial health behaviors can be explained by this theory. Despite the fact that some of the experimental work should be tested, this theory is backed up with the current data from the experiments, different studies etc. (Glanz et al, 2008). Variables that determine intentions are: behavioral intentions, attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991) and they are presented in the following Figure 5.

*Figure 5. Theory of planned behavior*

According to these model, behavioral intention is affected by a person’s attitude and this is the most important determinant. Attitudes relates to universal positive or negative individual's behavior estimation. Subjective norms presents experienced social pressure from other people that are relevant to operate or not operate specific behavior. Forth variable, perceived behavioral control relates to the understanding of the individual over control of the behavior. It has been joined to the former version of the "Theory of reasoned action" (Ajzen & Fishbein, 1988), to expand the model to the forecast of non-willing behaviors. It is added in order to explain situations where behavior or behavior intention can be influenced by elements that are out of people's control. It is discussed that person will try more during the performance of some behavior if he/she thinks that they have large control level over it. Nevertheless, its appliance can be outside this kind of situations.

Person's attitude about control can have crucial effect on the behavior (Ajzen & Driver 1991). The theory of planned behavior provides obvious relation between attitudes, intentions and behavior and that is why it is extensively used. Fishbein and Ajzen (1975) stated that change of the behavior that is successful can be accomplished when the tendencies are modified over attitudes, subjective norms or perceived behavioral control. They also represent strategies toward changing convictions: proposing new salient beliefs and adjusting current featured convictions of the target community.

Most of the researches on this topic explain behavioral intention’s prediction, and not so much behavior. Advantage of this model is that by dividing process of change into levels and researching which determinants are most strongly related with progress through the stages, this model provides important tools for both research and intervention development. This model explains connection among: states of change, processes of change, decisional balance, situational confidence and situational temptations.

According to LaMorte (2016), some of the limitations of this theory are the assumptions that a particular person has gained the ability and resources to successfully perform certain behavior, regardless of intentions; then it does not consider the behavioral factor, e.g. mood, fear, etc. It also does not take into account factors of the environment that also affect the intention of a particular behavior. The next limitation is that it is assumed that behavior can not change over a certain period and that is the result of a linear decision-making process. This theory also does not touch certain control of behavior. It has contributed to public health more than Health belief model, but it still has limitations in the incompetence to consider the environmental impact.

### 2.3.3 Social cognitive theory

Within the research by Miller and Dollard (1941) and Rotter (1954), social cognitive theory was acknowledged as social learning theory, because it is established on the activity of the
founded learning principles inside the human social context (Bandura, 1977). The name of social cognitive theory emerged when the concepts of cognitive psychology are integrated to adapt to an increased understanding of the capacity of human information processing and dedication that affect learning, perception, and symbolic communication (Bandura, 1986). After a certain time, this theory has accepted sociological and political concepts to advance a better understanding of the functional and adapted capacity of the community (Bandura, 1997).

Also, from this theory, the concepts of humanistic psychology are developed through the evaluation of procedures that are the basis of self-determination, selflessness and ethical behavior (Bandura, 1999). Social cognitive theory explains that individual can learn not only from their own life experience, but also that environment, people and behavior are continuously interacted and how specific behavioral patterns can be gained and kept. It can be easily applied to advisory centers for disease avoidance and management. This theory provides possibility for social support through implantation expectations, self-efficacy and use of study researches and other amplifications that lead to change of behavior. Theory is fundamental for creation health education and program of the health behavior. Social cognitive theory describes behavior regarding the three-way model where personal factors, environmental influences and behavior continually interact, as shown in the Figure 6 (Bandura, 1986).

*Figure 6. Social cognitive theory*

This theory illustrates how people obtain and control certain behavior patterns. Social cognitive theory also focuses on behavioral and cognitive skills for dealing with changes and different situations in health behavior. For example, a person who is willing to quit smoking, but does not have enough these skills to deal with difficult situations without smoking, will probably continue with smoking despite his desire to change his smoking behavior. Social cognitive theory provides a complete and supported theoretical foundation in order to understand the elements that have an impact on human behavior and learning processes, contributing to a better insight into a wide range of health-related issues. Another good side of this theory is its use to create interventions to meet practical challenges in public health and medicine.

Theory has a wide range of benefits in promoting health, focusing on individual and the environment. Without making any difference to other theories, the application of the factors of this theory to a particular health problem can be challenging especially when it comes to public health promotion. Some of the limitations of this theory are that it assumes that certain changes in the environment can lead to changes in people, which in fact is not always true.

It is not overly well organized and is based entirely on the active interaction between the environment, behaviors and people. It is not completely clear to what level the elements of this theory lead to certain behavior and whether a one factor has more influence than the rest. Among the limitations is also that social cognitive theory ignores biological affinities that might affect behavior, regardless of past experiences, and places a great focus on learning processes (LaMorte, 2016).

2.3.4 The transtheoretical model

While changing old and accepting new habits we pass through different levels of change. This model is described 20 years ago and more by psychologists Di Clemenete, Prochaska et al. (1992) as explanation of change’s stadium of one behavior to another, which is more effective. This model assumes several different stages and procedures of change and individual's moving over previous stages before achievement (Sutton, 1997). The model is been used all around the world and it is very useful for researchers. Model explains that changes of health behavior are outcome of reasonable process, separated in the stages which present various turning points (Heimlich & Ardoin, 2008) that are presented in the Figure 7.
At the stage of precontemplation, the person has no intention of taking any action in the near future, approximately six months. This level actually means “not ready”. A person often does not consider that his behavior has a negative impact and that is why he is at this level. Here people often underestimate the benefits of changing behavior, and point out the negative things of that change. Some other theories describe people from this stage that they are not willing to help and they are not motivated, and various programs are not adapted to this group, and cannot meet their needs (Prochaska et al., 2002).

Unlike the first stage, in contemplation people plan to make health changes in the near future. They become aware that their behavior can become problematic and they are looking at the positive things of the change, and they are taking them into account even though they know about the negative sides. Despite this, they can also feel doubtful about changing behavior. Balancing between these positive and negative changes can cause that people stay at this level for a long time, and this phenomenon can be explained as a constant contemplation. People at this stage are not prepared for action-oriented programs where they need to perform at the moment (Prochaska et al., 2002).

At the stage preparation people are prepared for some performance in the near future, for example in the next month. They begin to take some action about behavioral change, and they are aware that this modification may lead to healthier lifestyle. At this stage, people have some plans, such as starting with some physical activity, consulting with professional staff and these people should be involved in action-oriented programs (Prochaska et al., 2002).
According to Prochaska et al (2002), action is the level at which people make serious lifestyle changes through the last six months of their life and continue with it. They can manifest it through changing their behavior or adoption a new health habits. Since certain actions or performance are visible, complete process of changing behavior can often be viewed as the action also, but in this model, the action is only one stage in the whole cycle. All the behavior changes do not apply as action in this model. People need to reach a certain criterion that experts say is enough to reduce the risk of some diseases, for instance. This can include a reduction of cigarette consumption, or usage of cigarettes with a small amount of nicotine, but now only a complete abandoning the bad health habits seem proper.

The last stage in this model Maintenance refers to the fact that people at this stage maintain for a long time their behavior’s change and intend to continue to do the same. They work on it to avoid returning back to the previous stage of this model, with increasing their self-confidence to go further. People do not apply so often the processes of change as a person in the stage Action. The researchers found that this stage lasts about six months to about five years (Prochaska et al., 2002).

This model was in the beginning created for area of smoking behavior, and afterwards was broaden to the other high risky behaviors, and has a philosophy that every person at the same level is dealing with the comparable issues, but can have the same kind of solution (Nisbet & Gick, 2008). Practitioners prefer more this model than researches because its structure and approach are not specifically good interpreted. This model can be applied to different individual behaviors, as well as on organizational changes. This kind of circular model explains that an individual does not have to go from one level to another to complete a process. He may instead join the process of change at any level, even go one level back or start the process over again. Through this process, an individual can go through more than once, and he can stop it. In the model is confusing how somebody changes or why specific individuals changes faster comparing to others. Issue of this model is also that it is self-centered and therefore excludes social, economic and ecological elements which have influence on the capability of person to change his own behavior. This does not mean that impact of these elements is not accepted by the model, but they are definitely beyond the framework (Prochaska et al., 1992).

This model has an impact on certain areas of the implementation and developing interventions, and this is one of its strengths. It’s is suitable for recruiting certain groups because it brings changes in the willingness of different people. This leads to the fact that an individual should be part of the intervention group that is formed on the basis of certain stages of the transtheoretical models. It is pointed out that a people can identify themselves at different levels and in order to meet their expectations and needs, interventions should be modified. Traditional interventions are not successful because they do not meet those specific needs. Another advantage of this model is that it provides certain sensitive measures of the
improvement. It contains outcome's measures and also increases parts of the process of the behavioral changes that an individual undertakes. Model provides transition's analysis of the samples from the one phase to another and determines interventions for specific phase (Briedle et al., 2005).

When this theory is used in the context of public health, there are certain limitations within it; for example the context where change appears is not taken into account, such as the revenue; link between stages may be optional without criteria of determining the stage of change of the individual; usually, questionnaires are not standardized or confirmed; it is not determined how much time does the person needs for each stage or how long can person stay at the specific stage; it is assumed that individuals make reasonable choices in the decision making process. The transtheoretical model ensures strategies of the intervention of public health in order to refer to people at the different stages. That leads to customized and productive interventions. Model supports evaluation of the present stage and takes for deteriorate and the decision process (LaMorte, 2016).

2.4 Changes and use of health behavior due to emotional intelligence

Models from the previous chapter explain the main cognitive determinants of health behavior. Considering the extent in which these models highlight the main determinants of health behavior, this study drives to Social cognitive theory arguing that personal factors (such as emotional intelligence) might increase individual’s sensibility to negative health behavior and making them aware of the seriousness of that results, will stimulate positive health behaviors (Glanz et al, 2002). Therefore, it is assumed in this study that:

H1: Emotional perception has a positive effect on health behavior of patients in the health system in Bosnia and Herzegovina;
H2: Emotional management or integration has a positive effect on health behavior of patients in the health system in Bosnia and Herzegovina;
H3: Emotional understanding has a positive effect on health behavior of patients in the health system in Bosnia and Herzegovina;
H4: Emotional facilitating (or using) emotion has a positive effect on health behavior of patients in the health system in Bosnia and Herzegovina.

2.5 Emotional intelligence in the health sector

Of great importance for a productive life are social and personal skills. Awareness and optimism influence on improving satisfaction at the workplace, and besides that, generally in life. The work presents a major role in the life cycle of a person, considering that majority of people spend most of their time at work and therefore, work experience leads to the development of these competencies. People want to increase the social and emotional skills
when they are aware that those skills will actually just lead to more successful career. On the other side, if the employer noticed that emotional intelligence of his employees significantly contributes to the work of the company, he will decide to introduce programs that will contribute to greater emotional intelligence (Consortium for Research on Emotional Intelligence in Organizations, 2015).

Frequently linked with emotional intelligence is business success that is one of the very important criteria in life. Many analyses show that, the connection between emotional intelligence and professional success is significant, with the control of all fundamental variables (Bharwaney, Bar-On, R., & MacKinlay, 2007). Generally, in every context where it is needed to comprehend people on one side and to be effective in the management on the other side, emotional intelligence is extremely important. There are numerous studies that research the emotional intelligence, and its connection with elements and the quality of health care provided by health workers. In order for medical care for the patient to be effective, the relationship between him/her and nurse should include emotional understanding of the patient and the use of the same. Fulfilling emotional and social needs of the patient are part of care, in addition to those medical ones.

High self-awareness, assessment of events and submission of their own emotions are skills that should nurses possess. It is pointed out that emotional intelligence improves the development of a therapeutic relationship with patients, and leads to handling stress in a better way. Also the reduction of the "burn out" syndrome is related with emotional intelligence, as well with the greater job satisfaction and better health of the nurses. Druskat and Wolff (2001) emphasize how important is emotional intelligence of the nurses with different responsibilities, that work in a team and coordinate with other members of the health institution. In addition, Gardner and Stough (2002) consider that it is significant for nurses who lead a team, to improve the ability of recognizing their own emotions and to express those feelings towards other people. This allows them to use positive emotions to affect others and to improve performance.

Through nursing literature, concept of training of emotional intelligence is considered with excitement. It is assumed that enhancing emotional intelligence at health staff can guide to efficient administration and better operating team of experts, with advantages for patient. Valuation of this training represents many challenges (Birks & Watt, 2007). Reaction of the emotional intelligence to the training is still questionable. Of course that some skills that can be developed through trainings exist, but there are some person's traits that can be changed very hard, with indication that emotional intelligence could not be extremely affected by training. Considering the fact that emotional intelligence can be changeable and easy to learn, that can be helpful for solving interaction between doctor and patient that is not very successful. Amount of variability in health staff that can be described from emotional intelligence is doubtful and also what empathy and self-awareness can explain. But definitely,
to understand emotional intelligence’s influence on the health care, there must be lengthwise evaluation of it in the health care (Birks & Watt, 2007).

3 HEALTH SECTOR IN BOSNIA AND HERZEGOVINA

3.1 Historical development of health sector in Bosnia and Herzegovina

The breakup of Yugoslavia in April 1992 led to a formation of an independent Bosnia and Herzegovina, which was formally confirmed by the United Nations. In the same year, the country became a member of the World Health Organization. According to Dayton peace agreement, Bosnia and Herzegovina is consisted of two entities – Federation of Bosnia and Herzegovina and Republic Srpska, and a third administrative unit District of Brčko (Ivanković et al., 2010). Former Yugoslavia had centralized health system. Primary health care was provided by general practitioners in municipal health care institutions and their smaller clinics, secondary care was provided in municipal health institutions and hospitals, while the third level, the tertiary health services have been provided in hospitals that were associated with universities (Ljubic & Hrabac, 1998). The state was controlled by health insurance, and all citizens had the right to use entire health care.

When democracy arrived, the structure of the health care system has not changed in many ways, except the people who occupied the most important positions in the Ministry of health and the whole health system (Šimunović, 2007). Abilities and standards of the health care workers in the former Yugoslavia were mainly acceptable. The processes of diagnostics and treatments of patients were carried out by the forms that were used in many other more developed countries. Patients were not registered only at one general practitioner and appointment system did not occur, so the patients could go to different doctors depending on their present availability (Račić, 2015). Doctors who have worked then were not a very famous, most of them had only undergraduate education, but some of them had been receiving occasional trainings in some of the best clinics in the world (Ljubic & Hrabac, 1998).

The Federation of Bosnia and Herzegovina is divided into ten administrative cantons and each of them has its own separate Government and the Assembly. The cantons are divided into 79 municipalities. Health care finance, management, organization and provision in Bosnia and Herzegovina are the responsibility of each entity, and Brčko District leads a health care system over which neither entity has control. Bosnia and Herzegovina has 13 ministries of health and health systems for its population: one for Republic Srpska, one for Brčko District, one for the Federation level and ten cantonal ministries in the Federation of Bosnia and Herzegovina (Cain, Duran, Fortis, & Jakubowski, 2002). In Republic Srpska health system is centralized, with planning, controlling and management functions held by the Ministry of Health and Social Welfare in Banja Luka.
In the Federation of Bosnia and Herzegovina, health system administration is decentralized, and every cantonal administration has responsibility for the provision of primary and secondary health care through its own ministry. The central Ministry of Health of the Federation of Bosnia and Herzegovina organizes cantonal health administrations at the Federation level. The district of Brčko provides primary and secondary care to its citizens (Cain, Duran, Fortis, & Jakubowski, 2002). Institutions that are registered in the public sector of the Federation of Bosnia and Herzegovina: 2 clinical centers, 1 clinical hospital, 11 Public Health Institutes, 7 cantonal hospitals, 8 general hospitals, 2 special hospitals, 11 institutes for specific health services, out of which 6 are occupational medicine institutes, 79 health centers, and 64 pharmacies (Federal Health Insurance Fund, Sarajevo, 2010). Health care system in the Bosnia and Herzegovina is now decentralized, and mostly relied on the public providers (Slipicevic & Malicbegovic, 2012).

Working conditions in the public sector are not satisfactory, with not so modern equipment (Federal Health Insurance Fund, Sarajevo, 2010). In various departments of the hospital there are mostly waiting lists for some services, especially for those more demanding or for specific serious examinations. Most patients are not satisfied with the care quality and often with medical staff also. There are a lot of employees who are employed in the public health sector, and along with it, work in private sector also, and they sometimes invite patients to their ordination, where of course, patients must pay for their examination. Some of them works in registered private ordinations, and some have ordinations at their home.

Salaries of the employees in public health institutions are fixed, regardless the quality and amount of work, which of course leads to dissatisfaction and lack of motivation, therefore less commitment toward patients. Medical providers in the private sector open private practices usually in the modern territories of the city where the population is richer. There is skepticism among private and public system, especially among workers who are employed in only one sector. Owners of private ordinations are not happy with the fact that public sector employees are working at the same time in private sector also, since they do not pay taxes on these additional revenues (Slipicevic & Malicbegovic, 2012).

Regarding the financial sustainability, as other countries of Southeastern Europe, Bosnia & Herzegovina has social insurance model where employees and employers pay contributions into funds with public governance, where is the majority of health services financed from, and therefore health financing relies on the taxation of the salaries and capacity of the tax authorities to collect the fee (Federal Ministry of Health, 2012). In both entities, the main source of financing health care are health insurance funds, which most of the revenues (75-80%) comes from the payroll tax. According to the Federal Ministry of Health (2012), in both entities income, health insurance funds are significantly insufficient to cover all the legal rights, which leads to an implicit limitation of rights and accumulating debts towards service providers. This is largely consequence of the: inefficient allocation of resources, caused by the excessive and fragmented network of the service providers and system of the provider's
payment, which fails to ensure stimulation to improve the efficiency and consolidation at the level of service providers. Inefficiencies in the provision of services are enhanced by the model of expenditure which puts focus on secondary and tertiary health care instead of the preventive and primary.

The low quality of services provided at the primary level of care and the lack of the coordination of health professionals result that the large number of health care problems is directed to higher levels of health care protection and that is treated with unnecessarily high expenses. Basic health services continue to be provided on the basis of age, gender or disease subspecialist dispensaries, which are not the most effective way to use the available resources (Federal Ministry of Health, 2012). Considering that the legal rights of the publicly funded health insurance significantly exceed the funds available, many people cannot achieve the level of publicly funded health care that is provided by law. As a result, many who can afford it, seek health care in the private sector, some people try to gain access to public institutions through informal payments or there are people who simply do not seek medical care.

Estimation of poverty also found that the need for significant payments out of pocket can represent a significant barrier to achieving health services (Federal Ministry of Health, 2012). The need for significant payments from the individual's pocket can present a significant barrier for accessing health services. Lack of portability of health care has created significant access problems for people who are insured in one entity or canton, but work in another. Beside the adoption of inter-entity and inter-cantonal arrangements in order to solve this issue, until now, they have not been implemented because of the lack of administrative and financial arrangements.

### 3.2 Organization of the health sector in Bosnia and Herzegovina

The basic form of the health care of the Bosnia and Herzegovina has not changed extremely from the period before the country has become independent. Uniformity before prewar and postwar health systems appears besides the reform process, decentralization and recentralization as a part of the Dayton Agreement. As we already mentioned, the health system was centralize, before the breakup of the former Yugoslavia (Cain, Duran, Fortis and Jakubowski, 2002). The health system in Federation is now decentralized and most of competencies (functions and responsibility) have been given to the cantons. However, the Ministry of Health of the Federation of Bosnia and Herzegovina and the Health Insurance and Reinsurance Federation of Bosnia and Herzegovina has the function of defining the network of health care in terms of optimizing the capacity to provide medical services. According to regular health statistics (Federal Office for Statistics, 2014), in 2014 in the health institutions in the public sector in the Federation of Bosnia and Herzegovina employed a total of 26,464 workers, which is increase of 3,4% compared to 2010. According to the Health Insurance Fund of Federation of Bosnia and Herzegovina (2014), the health insurance funds in the Federation of Bosnia and Herzegovina in 2014 employed 836 workers.
While the Ministry of Health of the Federation of Bosnia and Herzegovina has functions for formulating health policy and proposing laws, these functions are duplicated at the cantonal level. Determination of the need for health services, and functions relating to provision of health services (such as the establishment of institutions) are allocated to the cantons, but, in principle, the function of the coordination is at the level of the Federal Government. Department of Public Health is the leading educational institutions in the area of the public health. Its functions also include health promotion and monitoring the health status of the population.

Cooperation between federal and cantonal Public Health Institutes exists in the area of monitoring and research, especially in the field of medical statistics and epidemiology research. Ministry of Health at the cantonal level are responsible for the cantonal legislation in health care, providing advice on technical issues, implementation provision, organization of health services, health policy planning when we are talking about cantonal hospitals, health centers, clinics, pharmacies and other health institutions. Import, supply, distribution and control of pharmaceutical products are under control Department of medications within the Federal Ministry of Health. This department is also responsible for medication registration, their control and herbal products and issuance of work permits for pharmacies, control and issuance of licenses for the import of medications and herbal products in the Federation.

The public health care system in Bosnia and Herzegovina is organized on three levels. The first level of health care is provided by local first aid center -infirmary, which offers limited medical treatment at the municipalities that cannot offer a community health center. These infirmaries generally have one general practitioner and several nurses (International Organization for Migration, 2014).

Community health centers are the second level and functions with few general practitioners, specialists and dentists. Branches of medicine that are provided in these centers are: general medicine, pediatric, gynecology, tuberculosis control, occupational health, dentistry, epidemic diseases, psychiatric treatments, ears, nose and throat, ophthalmology and radiology. Within the health centers, there is family medicine center, where family doctors examine their patients and referee them further to a specialist. The third health care level includes hospitals (General Hospital and Clinical University Centre in Sarajevo, Clinical Hospital Centre in Banja Luka and other hospitals at cantonal/regional level). Patients that cannot get a help for their diseases at health centers, go to hospital for a treatment that is necessary. In these institutions all usual surgeries and interventions can be provided (International Organization for Migration, 2014).

Starting from the basic principles on which the organization and implementation of health care is based, in accordance with the regulation of the Health Care Law of the Federation of Bosnia and Herzegovina, which primarily relate to the availability, comprehensiveness, equity
of health care, as well as the effectiveness and continuous development of health care, the health care system in cantons, in accordance with the constitutional competences, must be organized in such a way that citizens provide a timely, adequate and quality health service, in accordance with the accessible financial resources for health care.

### 3.3 Reform of the public sector in Bosnia and Herzegovina

One of the fundamental determinants of health reform in Federation of Bosnia and Herzegovina is strengthening primary health care with a focus on health promotion and disease prevention. Numerous legal acts and strategic documents support the implementation of the commitment to reform health care in the Federation, and the rights of citizens, defined by the Law, are mostly financed from mandatory health insurance (Federal Ministry of Health, 2008.) According to regular health statistics for 2014 (Institute for Public Health, 2014), the population of Federation of Bosnia and Herzegovina used primary care within 924 geographical location / clinics. Primary health care services are provided through 79 health centers with respective regional infirmaries. The results showed that the distance of residence to the nearest clinic is less than 1,500 meters for the half of the population, for one-quarter of the population the distance is between 1,500 and 5,000 m, while one-fifth of the population live more than 5,000 m from the first clinic.

This indicates on the present inequality in geographical access to primary health care for the population of the Federation. In post-conflict and transition period, the mental health reform started, which is focused on rehabilitation in the community. In accordance with this, centers for mental health and for physical rehabilitation are established in the community. The law does not clearly define their role, which represents a threat of the loss of their original purpose of community and turn into psychiatric services and offices for physical therapy (Federal Ministry of Health, 2008.)

In order to meet the requirements and needs of the population that are increasing daily, it is necessary through amendments to the Law on Health Care and the adoption of appropriate regulations to redefine their role. Also, the law allows establishment of the maternity department and department for enhanced care for temporary accommodation of patients, within the health center. Their place needs to be redefined in the future, in accordance with the Strategy of Primary Health protection and rationalization of the network of hospitals, taking into account geographical characteristics of the specific area and the needs and demands of the population (Federal Ministry of Health, 2008.)

At the end of 2006, the Government of the Federation of Bosnia and Herzegovina adopted the Strategy on primary health care that is focused on the development of family medicine and services in community (Federal Ministry of Health, 2008). According to this strategic document, the key services, besides family / family medicine in the community are: services
for mother and child centers mental health, physical rehabilitation centers, multi-purpose
dental health care, laboratory, emergency medical service and other services in the
community that would be defined based on the demands of the population, and based on the
opinion of public health institutes and institutes of health insurance. However, it should be
noted that in spite of a large number of educated doctors and nurses, and enhanced
infrastructure, implementation of reform orientation is difficult. The reasons are numerous,
from the evident problems of lacking personnel and constant staff turnover, slow process of
reorganization of services in health centers, to non-stimulating payment mechanisms.

One of the most important functions in the health system is management of health facilities,
because the efficiency and effectiveness of the system depends on it. Based on several surveys
conducted in Bosnia, it was stated that one of the disadvantaged of the health system is just a
lack of knowledge and management skills of the manager of health institutions. This is the
reason why since 2010 the legal obligation is that the principals of the health care institutions,
as a condition for performing this function, must have a certificate of completed education in
health care management (Federal Ministry of Health, 2008).

At the moment, the health situation in Bosnia and Herzegovina is so unsatisfactory that a new
reform is needed as soon as possible. Patients are waiting plenty of time for examinations and
interventions. They are increasingly displeased with the health service and lack of good
medical staff in hospitals. It is not unknown fact that patients are unhappy that there is still a
situation where patients who have some kind of connection with employees of the hospital are
always preferable and are always among the first.

All levels of health care are definitely on a low level and strive for some serious changes that
would prevent poor performance of the overall health system. The poor financial situation and
the bad conditions for medical workers make them more likely to leave current jobs and leave
the country for better working conditions. Public institutions are very often informing
publicity that positive changes will occur in the overall system and that the upcoming reforms
will certainly improve the current situation but the time will show. The prediction is that
citizens will be more satisfied than before and employees in medical institutions also will not
have a need to leave their jobs.

Through many analysis where the critical factors, which have the greatest impact on the
health sector’s performance, are defined, some of the threats are misconception and
disapproval of healthcare reform measures in the area of Federation of Bosnia and
Herzegovina and Canton Sarajevo, then released decrease in the contribution rate for health
care system, not enough health education for the population of Canton Sarajevo, demographic
changes (aging of the population with consequent increase in the need for health care, etc.),
the appearance of new diseases and risk factors from the environment (air, water, etc.). The
problems of the existing health care organization are reflected in the disordered system of
financing, the lack of adjustment of the organization and activities of health institutions with the Health Care Act, the difficult and undefined path of the patient through the health system, incompetent distribution of personnel potentials, dissatisfaction of patients and employees in health institutions, patient care that is not regulated in an adequate way, irrational consumption of medicines and medical devices, long waiting lists for diagnostic examination, etc.

Some more threats to the health system is the already mentioned abandonment of current jobs by medical staff and the increasing costs of medication for patients. During the recent years, Bosnia and Herzegovina is definitely on a serious road to joining the European Union, and that is reason more why it is necessary for health care reform to be launched and adopted and that it will help Bosnia and Herzegovina in further progress.

4 EMPIRICAL RESEARCH ON THE ROLE OF EMOTIONAL INTELLIGENCE IN HEALTH BEHAVIOR

4.1. Data Collection

Research of the influence of emotional intelligence on the health behavior of patients in the health system of Bosnia and Herzegovina, was conducted in the period from September 2015 until February 2016. In this research, convenience sampling is used. This type of sampling is non-probability method of sampling that is most often used and very useful in research methodology. It relies on the data obtained from individuals who provide it or observe it (Hair et al., 2009), in our case, patients. The aim of this method is to determine characteristics of a population, using a small sample. Survey was conducted using Internet based questionnaire, through a list of private e-mails of the respondents. During the research, 473 usable questionnaires were collected.

4.2. The research sample

Sample units were adult individuals (aged 18 years and above) with active residence in Bosnia and Herzegovina. It is important to mention, that it was emphasized to the respondents that their answers are related to their last visit to doctor, while filling out the survey. The majority of respondents (83.70%) visited a doctor in the last year, which contributes to the relevance of the obtained results. As a reason for doctor visits for 82.70% of sample respondents was their personal health, while 86.30% of respondents remember the exact problem they had with their health, when they went to doctor. The average age of the respondents in the sample was 25 years (standard deviation 7 years), the youngest respondent was 18 years old and the oldest was 57 years old. Below are presented other characteristics of respondents in Table 1: gender of the respondents, the relationship status, the employment status, and the average monthly income of the respondent’s family.
Table 1. Demographic characteristics of the respondents

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Frequency in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>322</td>
<td>68.10</td>
</tr>
<tr>
<td>Male</td>
<td>151</td>
<td>31.90</td>
</tr>
<tr>
<td>Current relationship status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>205</td>
<td>43.30</td>
</tr>
<tr>
<td>In a relationship</td>
<td>190</td>
<td>40.20</td>
</tr>
<tr>
<td>Married</td>
<td>71</td>
<td>15.10</td>
</tr>
<tr>
<td>Separated</td>
<td>2</td>
<td>0.40</td>
</tr>
<tr>
<td>Divorced</td>
<td>4</td>
<td>0.80</td>
</tr>
<tr>
<td>Widowed</td>
<td>1</td>
<td>0.20</td>
</tr>
<tr>
<td>Employment status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>148</td>
<td>31.30</td>
</tr>
<tr>
<td>Full time employed</td>
<td>152</td>
<td>32.10</td>
</tr>
<tr>
<td>Part time employed</td>
<td>67</td>
<td>14.20</td>
</tr>
<tr>
<td>Retired</td>
<td>14</td>
<td>3.00</td>
</tr>
<tr>
<td>Student</td>
<td>92</td>
<td>19.50</td>
</tr>
<tr>
<td>Family’s average monthly income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 1.600,00 KM</td>
<td>213</td>
<td>45.00</td>
</tr>
<tr>
<td>1.601,00 - 2.400,00 KM</td>
<td>212</td>
<td>44.80</td>
</tr>
<tr>
<td>Over 2.400,00 KM</td>
<td>48</td>
<td>10.10</td>
</tr>
</tbody>
</table>

When it comes to the gender of the respondents, the dominant group are women (322 or 68.10%), while 31.90% are men, giving a total of 473 respondents. Results in numbers are presented in a Figure 8.

Figure 8. Gender of respondents
Most of the respondents in our sample, regarding their relationship status, are single (205 or 43.30%). In a relationship are the 40.20% of respondents, while 15.50% of respondents are married. Other results are presented in the Figure 9.

*Figure 9. Current relationship status*

![Figure 9](image)

Most of the respondents in our sample, by employment status, is employed full-time (152 or 32.10%), while 31.30% of respondents were unemployed. Other results are presented in the Figure 10.

*Figure 10. Employment status*

![Figure 10](image)
When it comes to the average monthly income of family respondents, the dominant groups are respondents with an income of 1,600.00 KM and less (213 or 45.00%), while 44.80% of respondents have an income of 1,601.00 KM to 2,400.00 KM. Results are presented in the Figure 11.

*Figure* 11. Family’s average monthly income

![Bar chart showing average monthly income](chart.png)

**4.3. Descriptive analysis of the research results**

**4.3.1. The frequency of health services use of the respondents**

For the purpose of the analysis of the frequency of health services use of the respondents, three issues are used, that are related to the visit to a general practitioner, a specialist doctor and dentist. The questions are designed as an ordinal scale with five offered answers to the respondents (1 - Few times per month, 2 - Once per month, 3 - Once in three months, 4 - Never, 5 - Other). The following Table 2 presents the results for each of the three questions.

*Table* 2. Frequency of health services use of the respondents

<table>
<thead>
<tr>
<th>Question</th>
<th>Few times per month</th>
<th>Once per month</th>
<th>Once in three months</th>
<th>Never</th>
<th>Other</th>
<th>Total N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How frequently you visit your general doctor?</td>
<td>14 (3.00)</td>
<td>54 (11.40)</td>
<td>268 (56.70)</td>
<td>48 (10.10)</td>
<td>89 (18.80)</td>
<td>473 (100.00)</td>
</tr>
</tbody>
</table>

Table continues
Table 2. Frequency of health services use of the respondents continued

<table>
<thead>
<tr>
<th>How frequently do you visit a specialist doctor?</th>
<th>10 (2.10)</th>
<th>24 (5.10)</th>
<th>180 (38.10)</th>
<th>119 (25.20)</th>
<th>140 (29.60)</th>
<th>473 (100.00)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How frequently do you visit your dentist?</td>
<td>36 (7.60)</td>
<td>97 (20.50)</td>
<td>230 (48.60)</td>
<td>37 (7.80)</td>
<td>73 (15.40)</td>
<td>473 (100.00)</td>
</tr>
</tbody>
</table>

The results indicate that respondents (patients in the health system of Bosnia and Herzegovina) visit a doctor usually once in every three months: general doctor (56.70%), a specialist doctor (38.10%) and dentist (48.60%). When it comes to mutual comparison of visits to doctors by the respondents, they mostly visit the dentist (few times per month 7.60%, once per month 20.50%), general doctor (few times per month 3.00%, once per month 11.40%), and a specialist doctor (few times per month 2.10%, once per month 5.10%).

4.3.2. Emotional intelligence of the respondents

For purposes of analysis the degree of emotional intelligence (its dimensions) of respondents (patients in the health system of Bosnia and Herzegovina), was used standardized Likert scale with 16 questions (4 questions for each of the dimensions of emotional intelligence: emotional perception, emotional management, emotional understanding, and facilitating (or using) emotion) by Wong and Law (2002). The scale had offered answers that were from 1 (strongly disagree) to 7 (agree).

The following Table 3 presents the values of the mean and standard deviation for each of the 16 individual questions from the scale, the value of the mean, standard deviation and the reliability of the scale for the 4 dimensions of emotional intelligence, and the value of the mean, standard deviation and the reliability of the scale of the overall emotional intelligence for 473 respondents from the sample.

Table 3. Emotional intelligence of the respondents

<table>
<thead>
<tr>
<th>Code</th>
<th>Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEA1</td>
<td>I always know my friends’ emotions from their behavior.</td>
<td>5.30</td>
<td>1.322</td>
</tr>
<tr>
<td>OEA2</td>
<td>I am a good observer of others’ emotions.</td>
<td>5.44</td>
<td>1.347</td>
</tr>
<tr>
<td>OEA3</td>
<td>I am sensitive to the feelings and emotions of others.</td>
<td>5.40</td>
<td>1.439</td>
</tr>
<tr>
<td>OEA4</td>
<td>I have good understanding of the emotions of people around me.</td>
<td>5.42</td>
<td>1.351</td>
</tr>
</tbody>
</table>
Table 3. Emotional intelligence of the respondents continued

<table>
<thead>
<tr>
<th>OEA</th>
<th>Emotional perception (α = 0.874)</th>
<th>5.39</th>
<th>1.164</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE1</td>
<td>I am able to control my temper and handle difficulties rationally.</td>
<td>5.20</td>
<td>1.450</td>
</tr>
<tr>
<td>ROE2</td>
<td>I am quite capable of controlling my own emotions.</td>
<td>5.05</td>
<td>1.472</td>
</tr>
<tr>
<td>ROE3</td>
<td>I can always calm down quickly when I am very angry.</td>
<td>4.80</td>
<td>1.669</td>
</tr>
<tr>
<td>ROE4</td>
<td>I have good control of my own emotions.</td>
<td>5.15</td>
<td>1.542</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ROE</th>
<th>Emotional management (α = 0.913)</th>
<th>5.05</th>
<th>1.368</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEA1</td>
<td>I have a good sense of why I have certain feelings most of the time.</td>
<td>5.14</td>
<td>1.430</td>
</tr>
<tr>
<td>SEA2</td>
<td>I have good understanding of my own emotions.</td>
<td>5.29</td>
<td>1.454</td>
</tr>
<tr>
<td>SEA3</td>
<td>I really understand what I feel.</td>
<td>5.23</td>
<td>1.492</td>
</tr>
<tr>
<td>SEA4</td>
<td>I always know whether or not I am happy.</td>
<td>5.46</td>
<td>1.403</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEA</th>
<th>Emotional understanding (α = 0.896)</th>
<th>5.28</th>
<th>1.216</th>
</tr>
</thead>
<tbody>
<tr>
<td>UOE1</td>
<td>I always set goals for myself and then try my best to achieve them.</td>
<td>5.27</td>
<td>1.449</td>
</tr>
<tr>
<td>UOE2</td>
<td>I always tell myself I am a competent person.</td>
<td>5.22</td>
<td>1.477</td>
</tr>
<tr>
<td>UOE3</td>
<td>I am a self-motivated person.</td>
<td>5.34</td>
<td>1.467</td>
</tr>
<tr>
<td>UOE4</td>
<td>I would always encourage myself to try my best.</td>
<td>5.51</td>
<td>1.463</td>
</tr>
</tbody>
</table>

| UOE | Facilitating (or using) emotion (α = 0.914) | 5.34 | 1.306 |

| EI | Emotional intelligence (α = 0.943) | 5.26 | 1.068 |

A reliable instrument performs in a consistent and predictable manner, as mentioned by DeVellis (2012). Cronbach’s (1951) coefficient alpha (α), which is typically equated with internal consistency, was used to measure reliability. According to Nunnally (1978), Cronbach alpha values should exceed a minimum value of 0.70, which suggests good internal consistency reliability for the scale. In this study, as seen in Table 3, the Cronbach Alpha values of the scales range between 0.874 and 0.943, hence indicating very good internal consistency reliability.

The results of descriptive analysis show that respondents (patients in the health system of Bosnia and Herzegovina), that are including all four dimensions, they have a moderate level of emotional intelligence (Mean = 5.26). Individually, the subjects (patients in the health system of Bosnia and Herzegovina), have the highest level in terms of emotional perception (Mean = 5.39), then facilitating (or using) emotion (Mean = 5.34), emotional understanding...
(Mean = 5.28), while the lowest level they have in terms of emotional management (Mean = 5.05).

4.3.3. Health behavior of the respondents

For purposes of analysis of health behavior of respondents (patients in the health system of Bosnia and Herzegovina), standardized Likert scale with 5 questions was used. The scale had offered answers to respondents that were from 1 (none of the time) to 5 (All of the time). It is important to note that, according to the results of the analysis of reliability $\alpha < 0.700$ for five issues, two questions were excluded from the scale: "I had a hard time doing what the doctor suggested I do" and "I was unable to do what was necessary to follow my doctor's treatment plans," so the health behavior of respondents (patients in the health system of Bosnia and Herzegovina) was measured with 3 questions.

The following Table 4 presents the values of the mean and standard deviation for each of the three individual questions from the scale and value of the mean, standard deviation and the reliability of the scale for overall health behavior for 473 respondents of the sample.

<table>
<thead>
<tr>
<th>Code</th>
<th>Item</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA_2</td>
<td>I found it easy to do the things my doctor suggested I do.</td>
<td>3.44</td>
<td>1.167</td>
</tr>
<tr>
<td>GA_4</td>
<td>Generally speaking, how often during the past 4 weeks were you able to do what the doctor told you?</td>
<td>3.40</td>
<td>1.241</td>
</tr>
<tr>
<td>GA_5</td>
<td>I followed all of my doctor’s suggestions exactly.</td>
<td>3.68</td>
<td>1.176</td>
</tr>
<tr>
<td>GA</td>
<td>Health behavior ($\alpha = 0.808$)</td>
<td>3.51</td>
<td>1.016</td>
</tr>
</tbody>
</table>

The results of reliability analyzes show that in the case of health behavior, the condition of scale reliability $\alpha = 0.808 > 0.700$ is fulfilled, and their propensity for the same, is moderate (Mean = 3.51).

4.4. The results of hypothesis testing

Taking into account the scientific assumption according to which there is a link between emotional perception, emotional management or integration, emotional understanding and facilitating (or using) on the one side, and health behavior on the other, hypothesis is defined: „Emotional perception, emotional management or integration, emotional understanding and facilitating (or using) emotion have a positive effect on health behavior of patients in the
health system in Bosnia and Herzegovina”. Multiple regression analysis, which explains the values of a dependent variable in terms of multiple independent variables (Boddy & Smith, 2010), was done using SPSS to examine the influence of emotional perception, emotional management or integration, emotional understanding and facilitating (or using) emotion on the health behavior of patients in the health system in Bosnia and Herzegovina.

In order to examine applicability of the independent variables in the model, a preliminary analysis of testing the association between the independent and dependent variables (Pearson's correlation method) is made. The results are presented in Table 5.

**Table 5. Correlations matrix**

<table>
<thead>
<tr>
<th>Pearson Correlation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 437</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Health behavior</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Emotional perception</td>
<td>0.260**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Emotional management</td>
<td>0.222**</td>
<td>0.532**</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Emotional understanding</td>
<td>0.290**</td>
<td>0.681**</td>
<td>0.594**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>5. Facilitating (or using) emotion</td>
<td>0.301**</td>
<td>0.567**</td>
<td>0.605**</td>
<td>0.634**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Note: * Indicates significance at 5 percent; **Indicates significance at 1 percent

Based on these results, we can conclude that the four dimensions of emotional intelligence: emotional perception (R = 0.260, p = 0.000 <0.05), emotional management or integration (R = 0.222, p = 0.000 <0.05), emotional understanding (R = 0.290, p = 0.000 <0.05) and facilitating (or using) emotion (R = 0.301, p = 0.000 <0.05), are statistically significantly associated with health behavior, so their inclusion in the regression model is justified. Results of regression analysis are presented in Table 6.

**Table 6. Regression results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>B</th>
<th>T</th>
<th>p</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.886</td>
<td>0.228</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional perception</td>
<td>0.062</td>
<td>0.054</td>
<td>0.071</td>
<td>1.150</td>
<td>0.251</td>
<td>0.496</td>
<td>2.018</td>
</tr>
<tr>
<td>Emotional understanding</td>
<td>-0.001</td>
<td>0.044</td>
<td>-0.001</td>
<td>-0.016</td>
<td>0.987</td>
<td>0.549</td>
<td>1.823</td>
</tr>
</tbody>
</table>

Table continues
Table 6. Regression results continued

<table>
<thead>
<tr>
<th></th>
<th>0.103</th>
<th>0.054</th>
<th>0.128</th>
<th>1.902</th>
<th>0.058</th>
<th>0.420</th>
<th>2.379</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional understanding</td>
<td>0.140</td>
<td>0.048</td>
<td>0.180</td>
<td>2.913</td>
<td>0.004</td>
<td>0.501</td>
<td>1.995</td>
</tr>
<tr>
<td>Facilitating (or using) emotion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Model Summary

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>0.331</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.109</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.102</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>1.845</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ANOVA

<table>
<thead>
<tr>
<th>F</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (p)</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Based on the coefficient determinant $R^2 = 0.109$, we can conclude that the emotional perception, emotional management or integration, emotional understanding and facilitating (or using) emotion are explaining only 10.90% of changes that occur in the health behavior of patients in the health system in Bosnia and Herzegovina. Adjusted $R^2 = 0.102$, this indicates that the relationship between the combination of the independent variables and the dependent variable is not strong. Although in our case the results don't have huge statistical power, our regression model is statistically significant ($F = 14.362; p = 0.000 <0.05$), and it is better to use it for prediction of health behavior of patients in the health system in Bosnia and Herzegovina than average.

Also, it is important to emphasize that the requirements of the complex regression analysis related to autocorrelation and multicolinearity of variables in our model are fulfilled. Durbin-Watson coefficient is 1.845 (close to the value of 2), which indicates that there is no autocorrelation between independent variables. When it comes to the reliability of our model, requirements in this case have been fulfilled also. Tolerance is 0.420 to 0.549 (exceeding the required value of 0), while VIF has a value from 1.823 to 2.379 (located in the interval 1-10). Tolerance and VIF values indicate that in our case multicolinearity is not present.

Beta values are used to compare the contribution of each independent variable. According to Pallant (2011, p.161), large beta values indicate that the variable “makes the strongest unique contribution to explaining the dependent variable, when the variance explained by all other variables in the model is controlled for”. In our case, the greatest impact on the dependent variable had a variable facilitating (or using) emotion $\beta = 0.180$ and emotional understanding $\beta = 0.128$. The significance p-value is used to determine whether the variable is making a significant and unique contribution to the prediction of the dependent variable.

When a p-value is lesser than 0.05, that indicates that the variable is making a statistically significant contribution to the prediction of the independent variable and a p-value lesser than 0.10 indicates that the variable is making a contribution that is statistically less significant.
(Pallant, 2011; Argyrous, 2011). It should be noted that only in the case of facilitating (or using) emotion, the condition p < 0.05 is fulfilled.

Based on the results, emotional perception, emotional management or integration, emotional understanding and facilitating (or using) emotion do not have equal impact on health behavior of patients and the health system in Bosnia and Herzegovina. Emotional understanding and using emotions are significantly influencing health behavior.

CONCLUSION

Most performances handled by the individuals in life are in the most cases based on their own emotions and their emotional intelligence. Emotional intelligence affects a lot on the quality of our lives, because it has an impact on the general behavior and relations with other people. Emotional intelligence is well known and interesting topic in many areas, but in the context of the health sector, education or anything else regarding the health, it should be more tested and examined. Through the reading of the literature and conducting survey, it is familiar that it can be very useful for the health care workers, and the patients, there is a lot of potential. Researchers have given a many literatures about emotional intelligence and the health behavior separately, but not so many about their connection in the health context.

This master thesis analyzes the role of emotional intelligence and health behavior and Bosnia and Herzegovina. Since the connection between these two items has not yet been investigated as it should, I believe that with this thesis, I will contribute at least partly in the further surveys and research, because when we look at the total, these two variables have connections, which may not seem at first so much. Emotional intelligence in many aspects has a great impact on the health behavior. General practitioner can give a treatment advice to a patient about his health behavior. That kind of advice can have positive results in changing his behavior, to the better of course. A very important characteristic during that kind of consultation is to identify the different needs of all patients, in order to lead to some improvement. Emotional intelligence of a patient plays an important role in this process.

The reason why it is important to study the relationship between the emotional intelligence of patients and their health behavior is that in everyday life more and more people do not follow the recommendations received from their doctor, and it is very important to know the characteristics of patients who adhere to. One of the factors can be emotional intelligence in the way that if they understand themselves and their own emotions, their behavior will be more rational and in line with the recommendations of the doctor, and they will understand that doctors' advices are presented with the best intention.

Compliance with these consultants leads to efficiency of the treatment of a particular patient. But of course many people are taking those advices for granted, and do not adhere to it,
probably they even forget it right after leaving the doctor’s ordination. Some of the reasons may be the confusion of patients about their treatment or excessive demands of changing health behavior on a daily basis, which they can not handle. Emotional intelligence means that a person is aware of his own feelings and has control over them. Emotional intelligence is helpful for health behavior, and when it is increasing, that leads to higher level of taking care of individuals’ own health. It can be used for the examination of the activeness in the health context. Some of the features contained in emotional intelligence are: optimism, self-respect, motivation etc. People with the opposite characteristics do not take care of their health and do not implement healthy habits at home or even in public. People with higher emotional intelligence actually have a positive attitude towards health behavior and its habits.

Through the reviewing the literature in the field of the impact of emotional intelligence on health behavior in Bosnia and Herzegovina, community and did not have interest to explore these two variables. Identification of the elements that influence largely the health behavior of patients in Bosnia and Herzegovina, with the intention of improving and linking emotional intelligence and health behavior, I think that there should be a contribution in this relation, and encourage further research and testing on these variables. Regarding the public health sector of Bosnia and Herzegovina, I did not have access to a large amount of the information when it comes to emotional intelligence of the patients and health behavior in the health care, which can be definitely a recommendation for the future to be a little more dedicated to this topic.

Regarding our main hypothesis "Emotional perception, emotional management or integration, emotional understanding and facilitating (or using) emotion have a positive effect on health behavior of patients and the health system in Bosnia and Herzegovina", these dimensions do not have equal impact on health behavior of patients and the health system in Bosnia and Herzegovina. Emotional understanding and using emotions are significantly influencing health behavior, taking into account the results of the survey from the thesis. We defined a research problem as: The scientific research problem was to identify the degree of influence of emotional intelligence on the health behavior of patients in the health sector in Bosnia and Herzegovina, which would offer policymakers a new knowledge needed to create educational programs that should result with more responsible health behavior. Specific advanced programs which will result into change of the individual's health behavior affected by the emotional intelligence demand a various access in the way of helping people accept, and manage his behavior.

Although the study has reached its objectives, there are always certain limitations that can not be avoided. Respondents had answered the questions online, on the link where the survey is set up. They received it by an e-mail, and it was the only way of research, without conducting interviews with anyone or implementation of any other type of research. Research limitations may occur because of disadvantages of this survey with closed questions, because the
respondent can choose one or multiple answers, and there is no modification in the questionnaire during the study. There is a chance that the respondents did not feel encouraged to give accurate and honest answers, if those answers have been characterizing them in a bad way, although the survey was anonymous. This kind of customized research may have the risk of a number of errors, and as the creator of the survey, I hope that respondents answered in the way like it is actually, but there is no way to know whether each answer is correct and whether the respondent thought about the question before he selected the answer. Respondents answered questions through a subjective scale, that is, they assessed themselves, by the selection of their responses. Another limitation is that the appropriate sample that was used my not be representative, especially regarding the age group of the regular users of the medical services, who are certainly much older than those who completed the survey.

Many criticisms for doctors include bad communication and lack of clinical professionalism. Improving this in health sector should be a main field of interest in the practice. Considering the knowledge of individual's and other's emotions, it can be answer on why some health care workers come out to be superior in the healthcare, comparing to others (Howie, Heaney, Maxwell, Walker, Freeman, Rai, 1999). Quality and the precision of the health history and diagnosis of the patient depend of the evaluation and selecting their emotions. Furthermore, if health staff can understand patient's emotional response to treatments or health advices, that will lead to better understanding the level of acceptability of specific treatments for patients. Maintaining and understanding emotions is significant ability for every health specialist and can improve patient care, relation between health staff and patient and level of satisfaction with health care that he received (Howie, Heaney, Maxwell, Walker, Freeman, Rai, 1999). The way how medical practitioner comments our findings and conducted tests is very important, especially if we did some serious tests. Practitioner’s reaction can immensely contribute that all patients who did not care a lot before about their health condition change the way of thinking and do something for their health. Therefore, one can expect that perceived emotional intelligence of doctor can influence on trust and medical adherence of the patients. Practitioner with high emotional intelligence could be more appreciated and more trusted by patients and this could be examined in further research.
REFERENCES


Appendix: Survey questionnaire

In the following part of this thesis, the survey questions necessary for the research, are presented. They have been sent by an e-mail to all potential respondents. Answers were automatically saved and there was no option of returning to questionnaire more than once, to correct the answer. Submission was allowed only once. The questionnaire is divided into three sections: First part is about general demographic characteristic of the respondent, second part is about respondent's emotional intelligence, and third one is about his general health behavior.

1. Gender
   a. Female
   b. Male

2. Current relationship status
   a. Single
   b. In a relationship
   c. Married
   d. Separated
   e. Divorced
   f. Widowed

3. Employment status
   a. Unemployed
   b. Full time employed
   c. Part time employed
   d. Retired
   e. Student

4. Family’s average monthly income
   a. 0 - 1.600,00 KM
   b. 1.601,00 - 2.400,00 KM
   c. Over 2.400,00 KM

5. How frequently you visit your general doctor?
   a. Few times per month
   b. Once per month
   c. Once in three months
   d. Never
   e. Other
6. How frequently do you visit a specialist doctor?
a. Few times per month  
b. Once per month  
c. Once in three months  
d. Never  
e. Other

7. How frequently do you visit your dentist?
a. Few times per month  
b. Once per month  
c. Once in three months  
d. Never  
e. Other

8. Emotional intelligence (1 - strongly disagree, 7 - agree)

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
<td>I always know my friends’ emotions from their behavior.</td>
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<tr>
<td>I am a good observer of others’ emotions.</td>
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<tr>
<td>I am sensitive to the feelings and emotions of others.</td>
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<tr>
<td>I have good understanding of the emotions of people around me.</td>
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<tr>
<td>I am able to control my temper and handle difficulties rationally.</td>
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<td>I am quite capable of controlling my own emotions.</td>
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<td>I can always calm down quickly when I am very angry.</td>
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<td>I have good control of my own emotions.</td>
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<tr>
<td>I have a good sense of why I have certain feelings most of the time.</td>
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<tr>
<td>I have good understanding of my own emotions.</td>
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<tr>
<td>I really understand what I feel.</td>
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<td>I always know whether or not I am happy.</td>
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(table continues)
8. Emotional intelligence (1 - strongly disagree, 7 – agree) continued

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<tbody>
<tr>
<td>I always set goals for myself and then try my best to achieve them.</td>
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<td>I always tell myself I am a competent person.</td>
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<td>I am a self-motivated person.</td>
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<td>I would always encourage myself to try my best.</td>
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9. Health behavior (1 - none of the time, 5 - All of the time)

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<tr>
<td>I had a hard time doing what the doctor suggested I do.</td>
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<td>I found it easy to do the things my doctor suggested I do.</td>
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<td>I was unable to do what was necessary to follow my doctor's treatment plans.</td>
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<td>Generally speaking, how often during the past 4 weeks were you able to do what</td>
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<td>the doctor told you?</td>
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<tr>
<td>I followed all of my doctor’s suggestions exactly.</td>
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