



**PLOVDIV UNIVERSITY PAISII HILENDARSKI**

**FACULTY OF PADAGOGY**

**PSYCHOLOGY DEPARTMENT**



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# **Positive Cognitive Processes and Relationship Satisfaction in Young Adults**

## **ABSTRACT**

Of a Dissertation for awarding a PhD degree

Field of higher education: 3. Social, economic and legal sciences,

Professional field 3.2. Psychology

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The dissertation comprises a total of 344 pages, 315 of which constitute the main text. The bibliography includes 11 pages and 166 references – 23 in Cyrillic, 132 in Latin and 8 websites. The remaining 18 pages contain the appendices.

The main text includes 39 figures and 53 tables. The dissertation structure includes an introduction, three chapters, contributions and limitations of the current research and a conclusion. The first chapter provides a theoretical overview and theoretical framework, analyzing in depth the studied constructs and their scientific and historical roots. The second chapter covers the empirical study design, emphasizing on the methods, instruments and procedures of the study. The third chapter focuses on the analysis and interpretation of the study results.

The doctoral research was conducted at the Faculty of Pedagogy, Department of Psychology, Paisii Hilendarski, University of Plovdiv.

The dissertation was presented and approved for defense by the academic unit of the Department of Pedagogy at the Faculty of Education of Plovdiv University “Paisii Hilendarski” on June 3<sup>rd</sup>, 2025. The defense of the dissertation will take place at an open session on September 23<sup>rd</sup>, 2025 at 12:00 PM in the conference hall of the New Building of Plovdiv University “Paisii Hilendarski”. The committee for the defense will include: Prof. Maiana Milcheva Mitevska, PhD in Psychology, Prof. Kirilka Simeonova Tagareva, PhD, Prof. Margarita Angelova Stefanova - Bakracheva, PhD in Psychology, Associate Professor Stoil Liubenov Mavrodiev, PhD. The materials for the defense are available in the university library.

## INTRODUCTION

Positive psychology is one of the fastest developing directories in the psychological field. Its main aim is to ensure the possibility for building a more integrated approach to health and wellbeing through optimizing each person's individual potential. Its contributions allow the specialists to exit the psychological intervention model, based entirely on deficits, by enriching it by incorporating coping resources and increasing one's potential, rooted in the person himself.

The new modern approaches would facilitate the Bulgarians to meet the opportunity for better achievements, stronger feeling of flourish and better psychological and physical health. Martin Seligman (2020) mentions research where Bulgarians were 20<sup>th</sup> of 22 participants in meeting the criteria for flourishing. These results support the severe need for integrating positive psychology in our country as one of positive psychology main goals is aiding the person in accomplishing better wellbeing and getting closer to his own ideal of a good life.

The dissertation's main focus is on examining romantic relationships and their relation to the positive cognitive processes of optimism, hope and mindfulness. Relationships are one of the five pillars of Seligman's conceptualization of the good life altogether with positive emotions, engagement, meaning and achievements. Romantic relationships are a key component of the individual's everyday life and are considered a main resource for improving life quality. Similar work course not only extends the theoretical foundation of the construct but also allows practical application of the results, concerning society.

The current thesis is focused on the relationship between main positive cognitive processes – optimism, hope and mindfulness and relationship satisfaction levels in adults, but exceeds these limits. It is aimed at finding, identifying and satisfying the needs and requirements of modern society. The thesis topic choice is provoked by the necessity of modern society for exploring and highlighting new methods for coping with life challenges and requirements throughout the lifespan. Positive psychology offers space for those contemporary skills aimed at improving life quality and leading to wellbeing. Examining the constructs, their validity and correlations for the Bulgarian population sets a foundation for building new and innovative therapeutical and developmental approaches.

The current thesis is aimed at analyzing empirically the correlation between the levels of romantic relationship satisfaction and positive cognitive processes in young adulthood.

The following goals need to be met for fulfilling this task:

- Theoretical analysis on the problem, highlighting the main concepts. This would help identifying the appropriate methods and measures for the research.
- Reaching out to authors of the necessary scales in order to get permission for using and translating those that aren't already adapted for the Bulgarian population.

- Translating and adapting the measures for optimism, hope, mindfulness and relationship satisfaction.
- To examine the relationship between demographics and the level of positive cognitive processes.
- Examining the level of romantic relationship satisfaction.
- Examining the participants' capability of displaying positive cognitive processes.
- Analyzing the relationship between being in a relationship, optimism, hope and mindfulness.
- To seek a potential connection between age periods and the research concepts.
- Data comparison between singles/in relationship and early/late adulthood
- Following the dispositional profile of the participants with satisfying relationships in order to identify possible predicaments for improving relationship quality at each stage of the relationship itself.

**The subject** of the current study are the positive cognitive processes of optimism, hope and mindfulness as well as the level of romantic relationship satisfaction.

**The object** of the thesis is examining individuals in early adulthood – single and in relationships as well as individuals in adulthood and late adulthood serving as control group.

**The main hypothesis** of the current work: The study suggest that higher romantic relationship satisfaction will correlate positively with higher results in optimism, hope and mindfulness in everyday life in adult participants.

Statistical methods include: Descriptive statistics, including mean and standard deviation; factor Analysis; Psychometric properties for each scale, including Kronbach's alpha, ANOVA, correlation matrices. The data is analyzed with IBM SPSS Statistics, v. 19.

The dissertation has standard structure: First chapter builds a theoretical framework. The foundations and specifics for each of the constructs of optimism, mindfulness and hope are outlined in it. It also sets foundation for the main theories for different social relationships, narrowing down to the specifics of love and romantic relationships exclusively. The second chapter consists of the design of the scientific study, describes the used methods and specific stages of conducting the study of positive cognitive processes and relationship satisfaction. The third chapter provides information about the results and analysis of the collected data. It ends with conclusion, concerning the hypotheses of the study, its contributions and limitations as well as future directions.

## **CHAPTER ONE: Theoretical Overview and Conceptual Framework**

### **1.1 Optimism**

Optimism is usually considered a desired and useful characteristic in modern society. From historical point of view, that belief wasn't always so popular. Ancient philosophers frequently had negative approach to optimism. They considered it a characteristic of the

unwise and delusional. Nevertheless, the old and new ideas of optimism both consider it a trait, based on future *expectations*.

### 1.1.1. Historical views of optimism

**Etymologically** *optimism* derives from the Latin „*optimum*” (best, the greater good) with the root “*op*” (work, create). Later the use of two main terms – “*optimiste*” in French and „*optimum*” (optimal, best or best possible) in English leads to the modern use of the term “*optimism*”.

The idea of optimism and pessimism as a world view is rooted in the modern philosophical streams in 17th and 18<sup>th</sup> century (1.1.1.1.). More specific, Rene Descartes postulates that the belief in better future for humanity is set in progress worldwide. He demonstrates his optimism in stating that human stives and science would facilitate the development and growth of the human race as well as discovering the cure to many deceases. The term “optimism” was first found in Gottfried Leibniz’s Theodicy, where it is used to mark the absolute maximum or minimum in a group of infinite probabilities (in Domino & Conway, 2001). Later, Voltaire opposes that idea in his *Candide* (2016 in Bulgarian). In his work, Voltaire does not only criticize optimism but also pessimism – he states both are based on ideas with no empirical proof. In the 19th and 20th century (1.1.1.2) the most outstanding theories are Hegel’s and Schopenhauer’s. Hegel’s theory of consciousness and world history is similar to Leibniz’s ideas, but according to Hegel, human consciousness and development have theological roots and the severe life circumstances have their own place in the modern world.

**Arthur Schopenhauer** displays one of the most remarkable examples of pessimism by stating that the world we live in is the worst possible. He theorizes that it is impossible for a person to come up with something that would make the world worse than it already is – every change would lead either to the dissolution or improvement of the existing world. **Friedrich Nietzsche** has similar understanding to Shopenhauer’s idea that blind optimism could be considered an illusion, facilitated by the incapability of the person for accepting the absurd of his own existence and his own desire to give purpose to his life and seeking that purpose in different philosophical and religious nonsense.

### 1.1.2 Contemporary optimism conceptualizations

Optimism is considered a leading strength, aiding successful coping with adversity and life challenges in modern psychology. This understanding makes optimism a desired quality and skill.

There are two main different theories concerning optimism, despite of the fact that they share some common beliefs and ideas. The first one is that of Martin Seligman et al. (1.1.2.1) that focuses on the future expectations as a product of person’s explanatory style. The second one is Charles Carver’s and Michael Scheier’s theory of optimism, concentrating mainly of generalized future expectations.

Seligman’s (2001) main idea of optimism and its effects are rooted in his theory of personal control and its basics – learned helplessness and explanatory style (optimistic or pessimistic). Seligman defines them as follows: „*Learned helplessness is a losing reaction,*

*deriving from the belief that whatever you do, it wouldn't matter. Explanatory style includes the way people interpret different events* “(Seligman, 2001; p. 43).

Explaining positive and negative effects in life could differ according to their Pervasiveness (specific, universal) Permanence (permanent, temporary), Personalization (internal, external). Optimists tend to give universal and/or permanent and/or internal reasons for the positive events in their life and specific and/or temporary and/or external for the bad events. Pessimists tend to show the opposite.

Different characteristics of explanatory style suggest that pessimistic and optimistic explanations of past events would lead to different future (Gillham et al., 2001).

According to Charles carver and Michael (1985, 1987,1992,1994) future expectations are often generalized characteristic of the personality. This leads to their consistent display throughout different situations and life periods. Their optimism theory is based on their expectancy and self-regulation theories. Carver and Scheier are not only interested in optimism's effects but also its process, which could lead to the development of programs and courses aimed at improving wellbeing trough optimism. The authors suggest that one of the main reasons for individual differences between optimists and pessimist could be in the way the cope with stressful situations and support the idea with a rich empirical base. Carver and Scheier prove that optimists are more capable of adaptive coping, based on problem solving, while pessimists show more dysfunctional coping strategies. Optimists are more prone to accepting the situation as it is and seeking the positive outcomes. Pessimists on the other side are more vulnerable to denial and giving up when met with life challenges and goal barriers.

Both theories share the same core, but each one has a different measurement and experimental base. They both depend on individual expectations for future events and share the belief that those expectations can be crucial to human behavior and experience.

### **1.1.2. Factors, concerning optimism**

For better understanding of the construct, the current section outlines optimism's relationship to different forming factors. These factors are separated in three larger groups – Genetics (1.1.3.1), Environment (1.1.3.2) and Cultural factors (1.1.3.3.). This process is impossible without identifying reliable measures of optimism (1.1.3.4-5)

Most studies support the claim that very little of our optimism is genetically derived. This means that building optimism training programs can be crucial for developing the so needed skill and trait. This leads to the idea that optimistic view can be learned which would lead to better life quality and higher physical and psychological wellbeing. Optimism can affect the individual's approach to new and uncertain situations and her quality of coping skills and strategies.

As for the environment, the data is inconclusive. Some scientists propose that parents can affect optimistic attitudes in their kids in two key ways: their personal experience and direct instructions. Another key factor is the person's own experience.

In some cultures, optimism makes more sense than others. In some cases, optimism can cloud the clear view on reality, while in others it can be useful by providing helpful resources for dealing with helplessness and the feeling of incompetence after a failure.

As for the measuring of optimism (1.1.4), the most popular method is The Attributional Style Questionnaire (ASQ; Peterson et al., 1982). It offers a view of individual differences in participants' explanatory styles. The assessment takes place for all three dimensions in the optimism theory. Generalized optimism is measured with Carver and Scheier's Life Orientation Test (LOT, LOT-R) and is the preferred method in the current thesis.

#### **1.1.5. Defensive pessimism and its connection to optimism.**

„Defensive pessimism“ is a cognitive coping strategy, theorized by Norem and Cantor (1986). According to them, some people use pessimism as a defense strategy – by lowering their own expectations for the result people tend to lower the distress or disappointment levels when a potential failure occurs. This also leads to lower level of performance anxiety. This mechanism isn't related to the frequency of successes and failures in the past. Although its lowering anxiety function, defensive pessimism does not show better results than optimism. Research shows that defensive pessimism is connected to lower levels of life satisfaction and higher level of physiological distress symptoms throughout time (Carver & Scheier, 1993).

#### **1.1.6. Optimism and wellbeing**

Positive psychology research results indicate that optimists show diminished distress levels and a better ability to recover fast from failure and getting back to normal functioning.

#### **1.1.7. Optimism and physical health**

Research on the topic turns out to be inconclusive. Some studies show such relationship, while others don't.

Optimism has a positive effect on the individual as far as taking action concerning health issues goes. Optimism is capable of enabling biological, psychological and social processes facilitating better physical health.

#### **1.1.8. Optimism and coping skills**

Some researches show that optimists are more prone to accepting the situation as it is and if the problem turns out to be unsolvable, they are more capable of reaching to a point of growth and building character. Pessimists on the other side are more likely to deny the problem. Such data suggests that optimism as a characteristic (as Carver and Scheier conceptualize it) is closer to realistic view on the situation than pessimism. Moreover, this type of optimism is closer to Seligman's idea of “healthy optimism” that provides a more accurate assessment of the situation which then aids focusing on the best outcome possible. When a problem arises, the optimistic person is more likely to assess it as solvable or unsolvable. Some research on life adversity and tragic events even go further by suggesting that coping strategy differences put optimists and pessimists in different conditions and that makes optimists much less prone to distress.

#### **1.1.9. Optimism and achievement**

Optimistic people show more positive future expectations. This leads to the idea that optimists would be more likely to expect success, which would then lead to them putting more effort in obtaining their goals. Pessimists on the other side would have a greater expectancy of failure and this could have an enormous effect on their efforts, providing them with less capability of obtaining their goals.

However, scientists warn that those positive beliefs about the self should be somewhat balanced as their overuse could lead to negative effect. Too strong positive opinion about one's abilities can lead to problems in the personality as well as their relationship with others – it could lead to unrealistic expectations of the Self, aggressive behavior and rudeness. Optimism as well as every other skill should be developed with caution and applied in a balanced and harmonical way.

#### **1.1.10.Optimism and social relationships**

Carver and his colleagues address the idea that depressed people are more often exposed to social rejection (Carver, Kus & Scheier, 1994). They quote different studies that prove this point and decide to see if there is such connection between rejection and optimism-pessimism dimension. Optimists tend to show stronger friendship satisfaction than pessimists (Carver & Scheier, 1992). The same idea could be transferred to romantic relationships. It is interesting if romantic relation satisfaction changes with the couple's profile – for example would both optimists show better results than couple consisting of an optimist and a pessimist. The current research is focused on discovering if there is any connection between optimism and relationship satisfaction at all, so it does not go in depth in this topic, but the question provides interesting direction for future research.

#### **1.1.11.How can optimism be developed?**

The most popular optimism training program is Seligman's ABC model (Селигман, 2001). The title itself derives from the ideas *Adversity, Belief and Consequence* for life events that encompass the main idea of the model. Usually when the person struggles with adversity, they contemplate on the situation which results on conclusions that can grow into beliefs. When there is some repetition, those beliefs can grow into temporary ideas and habits. Those habits can affect behaviors, thoughts and moods. Identifying automatic thoughts and beliefs that turned into a habit require a special level of mindful effort. Comprehending those models could give the opportunity of questioning them that can lead to changing them if necessary.

#### **1.1.12.Relationship between optimism and hope**

Peterson and Seligman's theory on character strengths and virtues places optimism and hope together as one whole strength. Such approach is used also by Niemec and McGrath. However, there are some main differences between the two constructs – while optimism is usually based on facts and past experiences, hope is not necessarily based in past experience. One of the main differences between the two is that while hope rests on the idea of one's own capability of coping with the current situation, optimism incorporates elements that are not under one's control (like luck, environment, other people's actions). Moreover, while optimism is mostly viewed as a “general expectation (Carver & Scheier, 1985), hope is considered a set of cognitive abilities, deriving from one's feeling of



capability in generating pathways and agency thinking (Snyder, 1989, 2000a, 2000b, 2002). Although they are closely connected, hope and optimism are different constructs that are measured separately (Snyder et al., 2001; Alarcon et al, 2013; Bryant, & Harrison, 2015).

## 1.2. Hope

Hope's roots can be sought since the dawn of human existence as it encompasses many scientific and non-scientific areas. Apart from art and common beliefs, the science field shares a great interest in examining hope, its processes and connection to other concepts. Positive psychologists actively research methods of increasing the ability of using hope, training hope and developing it as a means of improving life quality.

### 1.2.1. Historical perspectives of hope

Greek philosophy (1.2.1.1.) demonstrates a complex and contradictory attitude towards hope. Hope is often considered as a source of relief but it could also have a deceiving nature. One of the earliest ideas of the contradictory nature of hope can be met in the myth of Pandora. The word for hope in Greek could vary in its interpretation also. Its literal translation is closer to future expectations, but those expectations do not have positive or negative connotation in themselves (in Gravlee, G.S., 2020). This duality of hope is a common topic in Ancient Greece. It is viewed as foolish as well as a source of relief. This duality can be seen in the texts of great thinkers as Sophocles, Platon and Aristotle.

Most of ancient philosophers base their ideas on Aristotle's texts when addressing hope. What is interesting is the fact that most of them view hope as a virtue, although Aristotle's main idea is that hope itself isn't one, but it is more like a way of forming a virtue.

Hope as a virtue is considered a main topic in medieval times also (1.2.1.2.). During this period hope is more often considered as a theological virtue, related to happiness bound to Heaven. Hope is viewed as a strive, innate to all human beings. One of the most consistent theories of hope in this period is that of Thomas Aquinas as it brings together theoretical views of many early medieval scientists and also encompasses a non-scientific Christian approach. In theological point of view, Aquinas views hope as based in the human strive for living a useful, fulfilling life and even though the difficulty of achieving his higher purpose, the individual could reach his eternal happiness in the Kingdom of Heaven.

As far as **the Enlightenment** (1.2.1.3) goes, hope is mostly viewed as a passion. According to **Descartes**, passions are closely connected to the spirit, opposing the body, and are considered a main resource of power in our inner world. Passions can be consisted of different perceptions, emotions and feelings. Viewing hope as a passion leads us to the idea of her directive and motivating role for behavior. The idea of the free will suggest that it is possible for hope to be controlled through directing our attention towards concrete ideas, objects and examples.

Another theory during the Enlightenment is **Baruch de Spinoza** who views hope as a specific kind of short-term joy related to an episode of the past and future which result isn't completely clear (Spinoza, 1996). Uncertainty about the future is a basic part of hope

but could also be related to feeling scared and anxious. Just like Descartes, Spinoza theorizes that hope is impossible without fear as well as the opposite. Similar ideas are shared by **Hume**, according to whom joy and sorrow are emotional responses of certainty in a potential future result, whereas hope and fear are reactions, more common for uncertainty

Kant's ideas strongly differ from those of his peers. He doesn't use passions and affect to set his ideas of hope, but nonetheless hope takes a central place in his work. Kant leaves a special place for hope in his Critique of Pure Reason (2013 in Bulgarian). In his work, section 2, Kant talks about three fundamental questions related to reason. The last one is „ *What am I hoping for?* “ (Kant, E. p. 628). According to Kant, “hope is directed at bliss”. Moreover, in his ideas a connection between the construct of hope and the idea of bliss and happiness can be found.

### **1.2.2. Contemporary philosophy of hope**

Contemporary philosophy of hope can be split in two fields according to the main interest of the thinkers – the nature of the construct and its value. Similar to philosophical traditions during The Enlightenment, contemporary philosophers view hope together with constructs like fear, desperation and joy, distinguishing hope from desperation and relating it to joy and partially fear. Philosophers support the idea that hope consists of desires and strives for events that we consider probable, but not certain (see Milona, M. 2020). It somehow looks like hope has less to none benefit to the individual. Many philosophical ideas support the thesis that hope is not only a source for the fools, but is also connected to illusions and false conclusions, that are not in an intellectual's nature. Another point of view accepts hope as a *virtue*. Unarguably hope turns out to be a central virtue throughout religious context. However, hope can be viewed as a practical as well as political virtue.

### **1.2.3. The positive psychology of hope – Charles R. Snyder**

One of the most complex and famous theories of hope is that of Charles Richard Snyder. Snyder (1994) views hope mostly as a cognitive ability which pushes person to action. With the help of his colleagues, he defines hope as *a positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-directed energy) and (b) pathways (planning to meet goals)* “(Snyder, Irving, & Anderson, 1991, p. 287). This definition outlines the main components of hope – goals, agency and pathways. Each of these elements has substantial meaning for the process of hope and building Snyder's theory. Goals (1.2.3.1.) could differ in their duration, definition and desired outcome. According to the theory of hope, the clear, meaningful goals are most likely to be met. That does not necessarily mean that smaller goals would be excluded as they could be the pathway to successful large goal completion. Agency (1.2.3.2), earlier viewed as “willpower” (Snyder, C.R., 1994, стр. 6) is the motivational aspect in the hope theory. It is viewed as the psychological energy necessary for moving toward the desired goal. Pathways (1.2.3.3.) is connected with the planning and can be used with a large diversity of goals. The clearer the goal, the easier the use of the pathway's component. According to Snyder, (1994) not all components develop simultaneously and synched but their cooperative work is what build the successful process of hope and its development. Snyder

(Snyder et al. 1991) developed The Adult Hope Scale (1.2.4), which has 12 items and two subscales later discussed.

### **1.2.5. Development of hope**

According to Snyder (1994), between the first two years children start to develop the pathways mechanism. He theorizes that pathways derive first and the agency abilities come later in life (Snyder, C. R., 1994).

Main components of hope continue to develop throughout the lifespan. The more often a person meets life difficulties and barriers to fulfilling his goals, the better hope develops. While growing up and aging, the individual continuously updates her hope models and develops the ability.

### **1.2.6. Developing hope ability in adults**

Snyder gives a model of developing hope in adults. He emphasizes on higher ability for mindfulness and voluntarily attention to the present moment as well as identifying one's own thoughts. The model isn't directed at removing or changing the existing non-productive thoughts but is rather focused on the direct development of the ability for using hope. Snyder idea is based on components like setting clear and valuable goals (1.2.6.1) as well as identifying personal strives that are not formed by social desirability (1.2.6.2.), attention control and focus on goal attaining (1.2.6.3.) and divisive strategies connected to agency (1.2.6.4.). The last point consists of bettering the ability of starting and maintaining goal-related activities as well as redefining the current situation.

### **1.2.7. The role of hope in social relationships**

Hope could turn out to be a key component in social interactions. On one hand, people set goals that are directed towards relationships themselves and on the other – in order for successful communication to occur, the individual needs to pay attention to other's strives and goals. Moreover, it is possible that similar goals could lead to closer connectedness between two people. As far as romantic relationships are concerned (1.2.7.1) these common interests could grow in time to become goals for the foreseeable future together as a couple. Building and maintaining a relationship could be a goal to the partners itself as well. Mutual pathway ideas for reaching goals are a key concept of romantic relationships as accomplishment can be reaching through different paths. This process activates pathways system in both partners but nonetheless could lead to different results. Mutual planning could lower the risk of taking different pathways to the same goal and could positively lead to a synch in the relationship dynamic and a positive result. This results itself could lead to stronger dedication to the relationship and the goal, which itself can increase the meaning and value if the desired outcome

### **1.2.8. Hope and optimism**

Optimism and hope are two relatively close constructs, but they differ from each other at their core. While optimism is somehow related to the belief that good things will happen, with hope a person has a clear plan that would lead him to attaining his goals.]

## **1.3. Mindfulness**

The meaning of mindfulness could broadly vary in different contexts. Before positive psychology gaining popularity, it was most commonly used to describe a characteristic related to the act consciousness of the individual. However, in modern context mindfulness is basically used as a slightly different term, which leads to keeping the English word “mindfulness” to help differentiate between consciousness and awareness which use the same word in Bulgarian.

### **1.3.1. Historical and cultural ideas of mindfulness**

Mindfulness is rooted into ancient eastern philosophy (1.3.1.1.) – Buddhist, Hinduist and has meditative roots.

The word “mindfulness” is translated by Rys Davids for the first time in English and derives from the Buddhist “*sati*”. The term could also be translated as memory or clarity. In the current context the term is more related to a specific state of directing one’s attention – as a kind of interpretation of current events. This idea is close to the definition in the Oxford online dictionary (2021), describing mindfulness as a type of psychological state, related to being in the present moment. A main condition for mindfulness is for the person to be non-judgmental and accepting towards his own thoughts, feelings and emotions.

In western psychology (1.3.1.2) mindfulness as a theory and practice starts gaining popularity relatively late, but gradually becomes a popular topic. Nowadays mindfulness is often related to characteristics affecting wellbeing, relationships and increasing one’s own potential.

### **1.3.2. Contemporary mindfulness theories**

Modern mindfulness theories are most often divided into two larger groups – western and eastern. Eastern approaches encompass those, based on the Buddhist ideas of the concept, while western ideas are based entirely on scientific outcomes in one or another directory.

Ellen Langer’s (1.3.2.2.) ideas of mindlessness give a stable foundation for building western views and theories on the construct of mindfulness. Her ideas are based on social psychology theories and examine the value of mindfulness in different areas. Langer’s work on mindfulness is novel in the field of social psychology. Her main definition of mindfulness is as follows: *„flexible state of mind in which we are actively engaged in the present, noticing new things and sensitive to context. Being mindful leads us to greater sensitivity to context and perspective, and ultimately to greater control over our lives“* (Langer, E., 2014, стр.11).

The other leading scientist in mindfulness conceptualization is John Kabat-Zinn (1.3.2.1.). His ideas are mainly based on the eastern philosophy and mindfulness in clinical practice. Kabat-Zinn talks mainly about deliberate, focused attention to the present moment, non-judgmental and accepting (Kabat-Zinn, 2020a). He assures that mindfulness is an innate ability to every human being. However, a person not necessarily has access to that ability and might not be able to use it. In this line of thinking mindfulness practice is based on returning to the true self of the fulfilled, authentic person, instead of building new set of complicated skills.

The main similarity of both approaches is the desired outcome. Both ideas share similar advantages for the individual and the main characteristic is the lack of disposition to accepting the reality as it is. In one case this tendency is based on the inability to address failure, negative emotions and other stimulus and in the other – on the incapability of making decisions and taking responsibility as a result of one's own actions. In conclusion, both perspectives on mindfulness meet the opportunity for collaboration, aimed at supporting and strengthening the positive impact on the person himself.

### **1.3.3. Conceptualizing mindfulness**

Scientific understandings of mindfulness may vary but some of them focus on similar points of interest, while others differ considerably. Bishop et al. (2004) broaden Kabat-Zinn's perspective by proposing two additional components - *one that involves self-regulation of attention and one that involves an orientation toward the present moment*. Although definitions of mindfulness may differ, there are some common characteristics like beginner's mind, acceptance, non-judgment. Mindfulness can be measured differently according to the way it's viewed as – a state, disposition or practice.

### **1.3.4. Elements of mindfulness**

Mindfulness meditation is usually oriented towards developing awareness and attention focusing skills. Such view of mindfulness incorporates four major elements (see Kang, Gruber & Gray, 2014): Awareness (for inner and outer experiences); attention (full concentration) focus on the present (directing at concrete stimulus) and acceptance (of experiences – own, others' and the surroundings).

### **1.3.5. Stages of mindfulness**

Mindfulness has five stages where each one is more complex than the previous one (see Olendzki, 2014). First level is almost rudimentary. It doesn't involve conscious or metacognitions. Second level is more complicated because it involves making a conscious choice and attention focus for a period of time. The third stage includes moral judgement. It usually includes analyzing negative emotional states, but at this point emotion control is still unavailable as it is dedicated to the fifth level of mindfulness. Here a person can not only observe his state and reactions but also control them. The fifth stage is the highest form of mindfulness and is often related to wisdom and wise behavior.

### **1.3.6. Benefits of mindfulness practice**

James Carmody (2015) shares three key principles stressing the benefits of mindfulness practice: ability of recognizing the components of the experience, attention and emotion regulation and ability to take a non-centered perspective. The latter facilitates the individual in letting go of emotions and feeling and seeing clearly new pathways and perspectives which could lead to low levels of distress and negative affect by breaking the cycle.

The most common method of **measuring mindfulness** (1.3.7.) – as a state and disposition are self-reported measures such as the Five Facet Mindfulness questionnaire (FFMQ, Baer, Smith, & Lykins et al. 2008), Mindfulness Attention Awareness Scale (MAAS, Brown & Ryan, 2003) и Toronto Mindfulness Scale (TMS, Lau, Bishop & Segal et al., 2006).

### **1.3.8. Mindfulness training programs**

Mindfulness programs can be divided into three groups based on the main theory standing behind each of them. The first group includes all eastern and Buddhist based approaches (Such as Kabat-Zinn's MBSR). Second group includes non-meditative programs, based on CBT, acceptance therapy and etc. similar to Heis's ideas. The last group includes all programs, based on ideas, similar to Ellen Langers. They are aimed at direct and open orientation towards the environment, which includes voluntarily attention and de-automatization.

Mindfulness and its components are a fundamental part of the idea of **wellbeing (1.3.9)**. However, there are other factors that should also be considered as related to wellbeing such as hope, purpose, empathy and acceptance. Their connection to mindfulness helps the individual find a stronger feeling of wellbeing.

### **1.4. Social relationships**

In the field of psychology relationships are viewed most often as this type of connections that are stable or also "regular social contacts between two people for a concrete amount of time" (Argyle& Henderson, 1989, p. 30).

#### **1.4.1. Social relationships theories**

Social relationships are a popular research topic in the social psychology field. Theories of relationships' mechanisms and development are based on relatively different ideas. One theory for forming and maintaining close relationships is the Social Exchange Theory (1.4.1.1.) This popular theory is based on some of the principles in economics – a person invests in those relations that are assessed as most beneficial at the current moment. This leads to the idea that the most sustainable relationships are those that have the most benefits for the least cost (Dwyer 2000). Another component of the theory are the power and authority each partner possesses. Another similar approach is Walster and Bernscheid's theory of Equity (1.4.1.2), where the relationship dynamics are defined by the proportion of contribution and received outcome. When this model is not balanced the partners would most probably seek to gain balance and if not possible, this could lead to dissolution of the relationship (Moskovichi, 2006).

As far as the social learning theory goes (1.4.1.3) it is more likely for a person to be attracted to others that he finds more pleasant or has met in more positive conditions. Similar, a person met in negative conditions would be more likely considered unpleasant. The Socio-Biological theory of romantic relationships (1.4.1.4) however puts more emphasis on the initiation and maintenance of intimate and romantic relationships. Its main focus is on heterosexual couples and it's based on the idea of procreation and genetics, making it somewhat out-of-date in our new and modern society.

#### **1.4.2. Types of social relationships**

Relationships can be divided into close and distant (1.4.2.1), where close relationships are more intimate, filled with togetherness and support. They are more long-lasting and permanent. Distant relationship incorporates all types of relations that are

random or short-termed and aren't considered close, intimate or emotionally connected. Close relationships include friendship (1.4.2.2.) and romantic relationships (1.4.2.3).

Love and romantic relationships are a popular topic for researchers but often face some difficulties concerning the way love and similar feelings could be described and conceptualized as it turns out every individual has her own idea of love. However, scientists strive to form a model, concerning the process of love, its types, styles and main characteristics.

### **1.4.3. Love and love theories**

Ellen Berscheid and Elaine Walster (1978) propose defining two opposing types of love – passionate (romantic) and compassionate. The first type is closely connected with passion, sexual desire, tenderness which could often lead to anxiety and over engagement. For passionate love it is more likely to fade away in time, while compassionate love deepens as it is built upon strong attachment to people close to the person whose lives are entangled together.

Robert Sternberg (1986) views love as comprised of three main components – intimacy, passion and commitment. Together they form his triangular theory of love, outlining the eight types of love built by the sum of different components: nonlove (full absence of all three components); Liking (only intimacy); compassionate love (intimacy and commitment); empty love (only commitment); fatuous love (passion and commitment); infatuation (only passion); romantic love (passion and intimacy) and Consummate love which withholds all three components combined.

John Lee has also proposed his own theory for types of love distinguishing between six love styles that could occur together or separate from one another. It's one of the most famous love models and includes the following styles: Eros (passionate, consuming and based on physical characteristics of the partner; Ludus (love as a game – playful, based on mutual pleasure, could be polygamous); Storge (compassionate love); Pragma (practical, focusing on meeting needs and cognitive assessment of the partner); Mania (obsessive love, painful, consuming and possessive); Agape (altruistic love, more typical for the Divine).

### **1.4.4. Attachment and relationships**

Mary Ainsworth theorizes that adult relationships are based on the same principles and relations that are valid between a mother (or a caregiver) and her child in early years concerning types of attachment. Hazen and Shriver (1987) build an adult attachment theory based entirely on attachment styles in childhood. It turned out that adults with a secure attachment style usually engage in happier and satisfying relationships, while those with avoidant attachment usually fear closeness and are rather hesitant about giving themselves into the relationship. Those with disorganized attachment usually show very strong and overpowering emotions.

### **1.4.5. Factors, responsible for forming close relationships**

All types of close relationships are formed under many different circumstances that could fall into the following categories: Proximity; similarity; physical attraction; reciprocal liking; complementarity; competence (Dwyer, 2000).

#### **1.4.6. The process of relationship development**

Each relationship is prone to change and modification throughout time as it goes through separate stages. The current thesis focuses on the Filter theory by Allen Kerckhoff and Kate Davis (1962) and George Levinger's model of relationship development. According to Kerckhoff and Davis through the process of communication people are more likely to filter these relations which are potentially more likely to grow into a romantic relationship. They talk about different criteria such as social demography, similarity of attitudes and complementarity of needs, the last one being central to building long-lasting satisfying relationships.

George Levinger (1980) analyzes the changes that relationships face throughout time. He defines five separate stages that each long-term relationship could eventually go through: acquaintanceship, buildup, continuation, deterioration, and termination.

#### **1.4.7. Relationship components and their effects**

Diana Dwyer (2000) identifies several components in the process of building and maintaining a relationship that are further discussed in the current thesis: Self-disclosure, rules, power, health and happiness. Each one of them would have different effect of every person and has a key role to maintaining lasting relationships.

#### **1.4.8. Relationship conflicts**

Defining the process of dissolving a relationship would be crucial for understanding the factors that distinguish unsuccessful from successful relationships. Most common scientist talk about some main groups of reasons leading to fall in the dynamics of relationships or to total breakdown: Conflicts (highlighting the importance of the way the partner interprets other's behavior); Steve Duck's model (viewing dissolution of a relationship as a reversible process); Rusbult and Zembrodt's (1982) model of responses to dissatisfaction in romantic relationships (exit; voice; Loyalty; neglect).

#### **1.4.9. Relationship satisfaction**

According to Diana Dwyer (2000) happy couples consider their partners' undesired behavior as external, unstable and specific and desired behavior as a characteristic (innate), stable and global. The opposite is valid for the unhappy couples. This explanatory style is similar to Seligman's conceptualization of optimism. Such idea could support the hypothesis that relationship satisfaction would be correlated to higher optimism abilities.

### **CHAPTER TWO: DESIGN OF THE EMPIRICAL STUDY**

#### **2.1. Subject and object of the empirical study**

**The subject** of the current empirical study is positive cognitive processes optimism, hope and mindfulness as well as the level of romantic relationship satisfaction. **The object** of the current study is examining individuals that fall into the category of young adulthood – single and in relationships as well as people in middle and late adulthood, serving as controls.

#### **2.2. Aim, tasks and hypotheses of the current study**



**The aim** of the current study is to analyze empirically the correlation between levels of relationship satisfaction and positive cognitive processes optimism, hope and mindfulness in young adults. The aim leads to the outline of several main **tasks**:

1. To analyze the available literature, concerning the problem and to choose appropriate instruments for conducting the study.
2. To ask the authors permission to use their scales and adapt them for Bulgarian culture.
3. To translate and adapt the instruments.
4. To gain information on demographics and family status of the participants in order to examine possible tendencies in the positive cognitive processes.
5. To examine the level of romantic relationship satisfaction.
6. To examine the level of participants' positive cognitive processes.
7. To seek potential connection between being in a relationship and optimism, hope and mindfulness.
8. To seek potential connection between age and the constructs of interest.
9. To analyze the relationship between singles/in relationship; early/middle(late) adulthood.
10. To follow the dispositional profile of the participants with satisfying relationships in order to identify possible predicaments for improving relationship quality at each stage of the relationship itself.

The formed hypotheses are listed below:

**Hypothesis 1:** it is assumed that higher relationship satisfaction would positively correlate with higher levels of optimism, hope and mindfulness in adulthood.

**Hypothesis 2:** It is expected that respondents, involved in romantic relationships would score higher on positive cognitive processes than the single ones. This correlation would build foundation for the idea that better ability to use optimism, hope and mindfulness would be crucial for building and maintaining romantic relationships.

**Hypothesis 3:** It is assumed that out of demographics (sex, age, marital status, relationship length, children) most common relationship length would show a meaningful connection to relationship satisfaction. We expect that maintaining a long-term relationship would be connected to better ability to draw pleasure from the relationship and hence a higher feeling of satisfaction.

**Hypothesis 4:** It is assumed that respondents in early adulthood would show lower scores on optimism (4.1), hope (4.2.) and mindfulness (4.3.) as well as (4.4.) relationship satisfaction scales than the respondents in middle and late adulthood.

**Hypothesis 5:** It is expected that the cognitive and affective relationship satisfaction scales would show high correlation coefficients with one another. Moreover, we assume that cognitive scores would be somewhat higher than the affective based scores.

**Hypothesis 6:** It is expected that no gender differences (6.1.) would be found as well as children (6.2.) as factor would be correlated only to the levels of romantic relationship satisfaction.

**Hypothesis 7:** It is assumed that all scales would show high Kronbach's alpha and interitem correlation indexes. We expect the scales to show great possibility for Bulgarian application.

### 2.3. Ethical norms and problems

The current study does not encompass potential ethical problems.

### 2.4. Procedure of the study

The main study held place from 10.04.2022г to 14.06.2023г. respondents are asked to voluntarily fill the forms either via *чрез* Google forms or on paper. Participants were gathered across different online platforms as well as students in Plovdiv university. Points 2.4.1-5 outline the instruments, chosen after a thorough literature overview. All scales are self-report measures and were translated to Bulgarian after asking permission from their owners or their rights' owners and their psychometrical properties were then tested.

For measuring optimism (2.4.1) **The Life Orientation Scale – Revised *житейска* (LOT-R, Scheier et.al., 1994)** was chosen. The scale shows levels of generalized optimism/pessimism and is consisted of 10 items, rated from 0 = Strongly Disagree to 4 = Strongly Agree. The higher the score the higher the levels of optimism. Lower levels indicate higher ability for using pessimism. The scale is single structured, no subscales and has three reverse items and four distractors. Optimism levels are scores by the rest six items.

For measuring the levels of hope (2.4.2) – **Adult Hope Scale (AHS, Snyder et.al 1991)**. The scale has two subscales – Agency and Pathways, consisted of four items each. The other four items are distractors, making the scale a 12-item measure ranging from 1 – Definitely false to 8 – Definitely true.

As well as mindfulness goes (2.4.3) the method used is **Mindfulness Attention Awareness Scale (MAAS, Brown&Ryan, 2003)**. The self-report measure has 15 items ranging from 1 – Almost always to 6 – Almost never. Higher scores on the scale show higher ability for mindfulness attention.

For measuring romantic relationship satisfaction, the current study uses two different scales. One that measures the cognitive appraisal of relationship satisfaction and one that claims to show emotional based satisfaction.

The first one is (2.4.4.) **The Relationship Assessment Scale (RAS, Hendrick, Dicke & Hendrick 1998)**. It has seven items, each one graded on a different scale from one to five, using letters (A,B,C,D,E). RAS is a self-reported, cognitive based instrument and has 2 reverse items.

Emotional satisfaction (2.4.5) is measured with **Family Satisfaction by Adjectives Scale (FSAS, Barraca et al., 2020)**. Its main idea is to measure family satisfaction in functional and dysfunctional couples. According to its creators, relationship satisfaction is comprised of different feelings and emotions in the family environment and the cognitive assessment isn't enough to help us get a full perspective. Thes results in building a 27-item scale with dyadic emotional statements varying from positive to negative emotion. Each pair of emotions is assessed from "Totally," "Quite" and "To some extent", for the positive and "To some extent", "Quite" and "Totally" for the negative.

## **2.5. Statistical methods**

Here are described the statistical methods used in the current study: (2.5.1.) Psychometric properties of the used instruments, (2.5.2.) Descriptive statistics, (2.5.3.) Analysis of variance – for demographics and other factors and (2.5.4.) Correlation analysis.

## **2.6. Research questions**

After conducting the study, results would give answer to the following questions:

1. Could the translated scales be freely used among Bulgarian population?
2. Is there any meaningful correlation between positive cognitive processes and the level of romantic relationship satisfaction in adulthood?
3. Does parenthood affect different positive cognitive processes and the level of intimate relationship satisfaction?
4. Which demographics could have a role in the studied constructs?
5. Does the ability to use positive cognitive processes grow with aging?
6. Are Bulgarians satisfied of the romantic relationship with their partners?

## **CHAPTER THREE: ANALYSIS AND INTERPRETATION OF THE EMPIRICAL STUDY RESULTS**

### **3.1. Descriptive statistics**

A survey card with questions about demographics and marital status was designed for the purposes of the dissertation study. The analysis is based on the results of 825 respondents who successfully completed the test battery. 735 are women, 86 men (3.1.1.), and the rest refuse to share their gender.

For the purpose of the study, we formed two main age (3.1.2) groups – young adults (20-40 years, n=540) and middle-late adults (above 40, n=284). Section 3.1.3. shows the educational profile of the participants and 3.1.4. – their sexual orientation. 3.1.5 represents the marital status data (311 married, 299 living together, 128 in a relationship and 158 single due to different reasons. Different relationship length is grouped as it follows: under a year (n=46); between 1 and 3 years (n=86); more than 3 up to 5 years (n=67); more than 5 up to 10 years (n=136); more than 10 up to 15 years (n=119) and more than 15 years (n=215). 453 of the participants are parents and 198 don't have children (others refuse to answer).

### **3.2. Optimism empirical study analysis**

This section shows the results from the (3.2.1) exploratory factor analysis for The Life orientation test, showing its psychometric properties (3.2.1) and demographic results concerning the construct in mind (3.2.3). The semantic structure of the original scale is confirmed for the current study. Cronbach's alpha is  $\alpha=0,79$  for the general group, which confirms the possibility for using the scale for Bulgarian population. Each of the items results high in Cronbach's alpha and there is no need for removing or changing any of the items as this would only lower the scale reliability.

No meaningful connection was observed concerning gender, children and relationship length. However, age shows meaningful results (20-40 mean = 15,51; 41-77 mean = 16,44).

### **3.3. Adult hope scale (AHS) empirical study analysis**

This section shows the results from the (3.3.1) exploratory factor analysis for The Adult Hope Scale, showing its psychometric properties (3.3.2) and demographic results concerning the construct in mind (3.3.3). Two factors are responsible for over 60% of the variance confirming the scale's internal structure. The factors could be associated with the two subscales in the original form of the scale. Cronbach's alpha  $\alpha = 0,856$  remains high for all 8 items of both subscales rejecting the need to remove or change an item and showing undoubtedly that the scale could be used freely for Bulgarian population.

There isn't any connection between the examined construct and gender or relationship length. There is though between the two age groups (sig.=0,0015, 0,001, 0,0175) for the whole scale and both subscales. The difference is small, but significant, showing that respondents in middle and late adulthood show higher hope scores. Also, parents score higher in agency than non-parents.

### **3.4. Analyzing the empirical results of the Mindfulness awareness attention scale (MAAS)**

For the mindfulness attention awareness scale are conducted factor analysis (3.4.1.) with cluster analysis and psychometric properties of the scale (3.4.2.) as well as the relationship between demographics and mindfulness (3.4.3) rough scores. The factor analysis and Total Variance Explained derive three factors have their own meaning (Eigenvalue) higher than one and explain 50% of the variance. The scale confirms its validity. Ward's method analysis shows the following: Subscale 1 – items 4 and 5. (internal experiences mindlessness); Subscale 2 – Items 1, 2, 3, 11, 12, 13, 14 и 15 (mindless thoughts, actions and experiences); Subscale 3 – items 6, 7, 8, 9 и 10 (automatic actions). Similar result can be seen in M. Bakracheva's (2020) research on the topic (2020), which gives us ground to accept the multidimensional structure of the Mindfulness Awareness Attention Scale for Bulgarian population. Cronbach's alpha (3.4.2) for the whole group is  $\alpha = 0,847$  remaining high for all separate items.

As for demographics (3.3.3.) there are significant gender differences (sig.=0,015; mean males = 4,10; females = 3,89), age differences (sig.=0,000; mean under 40 = 3,87; mean over 40 = 4,11). There are also significant differences concerning parenthood (sig.=0,032<0,05; mean parents = 3.97; non-parents = 3,84) as well as some of the groups with different relationship length: The singles and those in a relationship for over 15 years (sig.=0,037); those in a relationship between 1 and 3 years and over 15 (sig.=0,006); and those whose relationship has been between 10 and 15 years with those above 15 (sig.=0,003). The longest relationship length is correlated with higher results in mindfulness for the mentioned groups.

### **3.5. Empirical study analysis on the cognitive relationship satisfaction scale**

The Relationship Assessment scale (RAS) has undergone (3.5.1.) factor analysis, (3.5.2.) analysis of the psychometric properties and (3.5.3.) analysis based on demographics. The factor analysis results confirm the original unifactorial structure of the

scale and confirm its validity. Cronbach's alpha for the whole group is  $\alpha = 0,92$  and remains high for all seven items. ANOVA shows significant gender differences (sig.=0,021, mean Males=4,24; Females=3,95) and parentals (sig.=0,007<0,05; mean parents – 3,91; non-parents – 4,11).

### **3.6. Analyzing the empirical results of the Family Satisfaction by Adjectives Scale (emotional satisfaction)**

For **The Family Satisfaction by Adjectives Scale (FSAS)**: (3.6.1) Factor analysis confirms the scale original structure. It shows high reliability (3.6.2) with Cronbach's alpha  $\alpha = 0,980$ , which could lead to the conclusion that the scale can be freely used for Bulgarian population. As far as demographics go (3.6.3): There is a significant difference between parents (mean 126,95) and non-parents (mean 137,80), as the same goes for relationship length (sig.=0,008<0,05). Tukey HSD show significant difference between participants with relationships shorter than a year and those with relationships longer than 10 or 15 years as the first ones score higher.

### **3.7. Correlation analysis results**

Correlation analysis is structured in two main parts. First part (3.7.1-2) displays and analyzes the correlation results between The Life Orientation Test, The Adult Hope Scale and The Mindfulness Attention Awareness scale for the general group of participants. Second part (3.7.3.) displays and analyzes the results on the correlation matrix, concerning all scales and subscales for the participants in a current romantic relationship.

**The results show a meaningful correlation between** (3.7.1.) Life Orientation Test and Adult Hope Scale (0,517), as well as the hope subscales and optimism scale (0,465 и 0,483), showing moderate correlation indexes. This result is expected as the theoretical overview suggests hope and optimism are closely related but different. There is a moderate correlation between (3.6.2) the hope scale and mindfulness scale (0,380), as well as between optimism and mindfulness scores (0,368) where the correlation is positive and meaningful but weak.

Table №53 displays the results of the correlation analysis between all five scales for the respondents that are in a current relationship. **The table shows meaningful correlation between all scales.**

**Table №53. Correlation between all scales**

		Cognitive satisfaction scale	Agency subscale	Pathways subscale	Hope scale	Optimism scale	Mindfulness scale	Emotional satisfaction scale
Cognitive satisfaction scale	Pearson Correlation	1	<u>.239**</u>	<u>.169**</u>	<u>.223**</u>	<u>.243**</u>	<u>.250**</u>	<u>.848**</u>
Agency subscale	Pearson Correlation	<u>.239**</u>	1	<u>.692**</u>	<u>.926**</u>	<u>.468**</u>	<u>.344**</u>	<u>.202**</u>
Pathways subscale	Pearson Correlation	<u>.169**</u>	<u>.692**</u>	1	<u>.913**</u>	<u>.486**</u>	<u>.352**</u>	<u>.168**</u>
Hope scale	Pearson Correlation	<u>.223**</u>	<u>.926**</u>	<u>.913**</u>	1	<u>.518**</u>	<u>.378**</u>	<u>.202**</u>
Optimism scale	Pearson Correlation	<u>.243**</u>	<u>.468**</u>	<u>.486**</u>	<u>.518**</u>	1	<u>.373**</u>	<u>.223**</u>
Mindfulness scale	Pearson Correlation	<u>.250**</u>	<u>.344**</u>	<u>.352**</u>	<u>.378**</u>	<u>.373**</u>	1	<u>.235**</u>
Emotional satisfaction scale	Pearson Correlation	<u>.848**</u>	<u>.202**</u>	<u>.168**</u>	<u>.202**</u>	<u>.223**</u>	<u>.235**</u>	1

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

By analyzing the correlation scores in the table, we could come to the following conclusions:

- There is a **weak but meaningful correlation** between The Adult Hope Scale and Relationship Assessment Scale's rough score as the same goes for the Family Satisfaction Assessment by Adjectives scale.
- There is a **weak but meaningful correlation** between the Life Orientation Test (dispositional optimism) and both romantic relationship satisfaction scales.
- The relationship between the Mindfulness Attention Awareness Scale (MAAS) and both relationship satisfaction scales is also meaningful but weak.

From the data shown in table №53 we could conclude that all of the studied constructs show meaningful correlation with one another, confirming the leading hypothesis of the dissertation.

### 3.7.5. Conclusions, concerning the dissertation's hypotheses

**Hypothesis 1:** The leading hypothesis of the dissertation study assumes that higher levels of romantic relationship satisfaction (both cognitive and emotional) would correlate positively with rough scores on (1.1.) optimism; (1.2) hope and (1.3) mindfulness. **Hypothesis 1 is fully confirmed.** For **optimism** the correlation coefficient is 0,243 for the

cognitive scale and 0,223 for emotional satisfaction. Correlation coefficients for **hope** and cognitive (0,223) as well as emotion-based (0,202) scales is also weak but significant. As far as the subscales, *Agency* shows higher correlation index for both relationship satisfaction scales. The correlation between **mindfulness** and the cognitive (0,250) and emotion-based (0,235) relationship satisfaction is higher than the one showed with hope and optimism. Such result gives ground for the idea that mindfulness would affect relationship processes stronger and that would lead to higher satisfaction for both partners in the relationship.

The moderate correlation between mindfulness and the other cognitive processes considered is interesting in its nature – 0,378 for hope and 0,373 for optimism. This result is expected as all three constructs have a cognitive – based structure.

*The current correlation results confirm the assumption that not one specific skill, but a set of many abilities is what makes relationship more satisfactory and could affect strongly their length, stability and strength. This idea underlines the importance of training and developing those characteristics.*

**Hypothesis 2:** The second hypothesis was bould on the suggestion that those who are in a current relationship would score higher than singles on the positive cognitive processes' scales. Hypothesis 2 **is rejected**. ANOVA shows no significant differences in optimism, hope nor mindfulness between singes and those in a relationship. However, these findings together with the correlation results for cognitive processes and satisfaction, could lead to the conclusion that positive cognitive processes are a means of supporting and maintaining a more satisfactory relationships when there already is such a relationship. These skills prove to be insufficient as it comes to initiating a new romantic relationship.

**Hypothesis 3:** It is assumed that out of demographics (sex, age, marital status, relationship length, children) most common relationship length would show a meaningful connection to (3.1.) relationship satisfaction. We expect that maintaining a long-term relationship would be connected to better ability to draw pleasure from the relationship and hence a higher feeling of satisfaction. We also expect that relationship length (3.2) wouldn't have anything in common with the examined cognitive processes.

Hypothesis 3 is partially confirmed. The results are as follows: **H3.1.** ANOVA **does not show a meaningful relationship** between cognitive relationship satisfaction with different relationship length, while some groups differ according to emotional satisfaction. The most meaningful scores are those showing the difference between those in a relationship less than a year and those with relationships for over 10 or 15 years which score lower. From theoretical point of view this result could be due to the specific of the early stages of a relationship. Throughout the first-year passion and emotion are most intensive and partners are inclined to close their eyes to each other's undesired traits which makes it possible for emotional satisfaction to be considerably stronger during this period of time. This brings forward the idea of the importance of finding and studying the factors that enrich the relationships and their quality.

**H3.2.** **is partially confirmed** – There is no meaningful connection between participants with different relationship length and hope as well as optimism. However, such

a relationship s found for mindfulness and some of the relationship length groups, ANOVA shows:

- The singles and those with a relationship for over 15 years (sig.=0,037)
- Those with a relationship between 1 and 3 years and over 15 years (sig.=0,006)
- Those with a relationship between 10 and 15 years and over 15 years (sig.=0,003)

The results in the current study prove that the longest relationships are those of people with high scores on mindfulness. It seems like the ability to use mindfulness could turn out to be one of the important skills for maintaining a long relationship. Many studies show that mindfulness skills affect relationship health as well as the process of establishing, maintaining and developing intimacy and closeness between partners. Better ability for being in the present moment as well as the capability of understanding one's emotions and stress management are crucial for maintaining a long relationship.

**Hypothesis 4:** It is assumed that respondents in early adulthood would show lower scores on optimism (4.1), hope (4.2.) and mindfulness (4.3.) as well as (4.4.) relationship satisfaction (both emotional and cognitive-based) scales than the respondents in middle and late adulthood.

Hypothesis 4 is **fully confirmed**. Participants in middle and late adulthood score higher on dispositional optimism. This result could be due to the age period specifics. Early adulthood is a dynamic period full of challenges that could lead to high stress levels and lower expectations of positive events. On the other hand, this period could be filled with a lot of changes and accomplishments which would then lead to an elevation in positive expectations for the future resulting in higher optimism in later adulthood. Results on hope *are similar to those between age and optimism* which could again be due to the specifics of early adulthood and the richer life experience older adults have, leading to the development of stronger and more complex abilities. This correlation could be as well seen in the mindfulness results. This tendency is similar to the international studies, observed in the current dissertation. However, there is no such connection between romantic relationship satisfaction (4.4.) and different stages of adulthood.

**Hypothesis 5:** It is expected that the cognitive and affective relationship satisfaction scales would show high correlation coefficients with one another.

The Hypothesis is **confirmed** with a correlation index of **0,848**. Such results show exclusive closeness between the results of both scales as expected - both instruments are focused on assessing relationship satisfaction in couples. However, the correlation isn't higher than 0,9 or too close to 1, confirming the suggestion that both approaches are structurally different. Assessing both the cognitive and emotional evaluation of a partner's satisfaction of the relationship builds a steady ground for more wholesome approach towards relationship satisfaction. This could lead to the construct's better understanding as well as identifying the sources of dissatisfaction.

**Hypothesis 6:** It is expected that no gender differences (6.1.) would be found. It is also expected that parenthood (6.2.) as factor would be correlated only to the levels of romantic relationship satisfaction. Hypothesis 6 is **partially confirmed**.



The results (6.1) show no gender differences in optimism nor hope (and its two subscales). Although such difference is presented in mindfulness levels. It turns out that male participants score higher on dispositional mindfulness than females. The literature review finds no such tendencies – usually there is no difference at all or women tend to score higher. This lack of correspondence may be due to cultural differences, the characteristics of the studied group or the lack of enough male respondents. Gender differences are also found in the levels of **cognitive-based** relationship satisfaction scale where males again score higher than females. This could be due either to the lack of gender diversity or just the fact that males tend to assess their relationships as more satisfying on cognitive level. No such difference is found as far as the emotion-based relationship satisfaction scale goes. This could lead to the conclusion that *males tend to assess their relationship as more satisfying on cognitive level than emotionally*.

**H6.2.** About the significance of parenthood to relationship satisfaction is **partially confirmed**. There is such a connection indeed but parenthood could be also connected to some of the positive cognitive processes as follows:

**For hope** there is a meaningful connection between hope, parents and non-parents. These findings are meaningful for *agency* as well as the whole hope scale. No such difference is found for the pathways' subscale. Parenthood brings to the individual a new social role to incorporate in his/hers life scheme. Having this in mind it is possible that some parental tasks and the diversity of potential problems and situations that may arise could be responsible for bettering the individual's capability of using hope as a strength.

Parents also show higher scores on the dispositional mindfulness scale than non-parents. The difference is small but meaningful. Accepting the role of a parent could bring new conditions to which the individual needs to accommodate. The relationship between parents and their children often demands a special set of skills, some of which directly connected to the individual's ability of being actively present in the current moment.

**It is fully confirmed** that parenthood would be connected to different levels of romantic relationship satisfaction – for the cognitive-based scale non-parents show higher mean scores (4,11) than those of parents (3,91). The difference is small but meaningful. Same result is valid for the emotion-based relationship satisfaction scale. The new role of a parent and the tasks connected to the transfer to parenthood could lead to changes in relationship satisfaction as well as give ground to problems in the relationship.

**Hypothesis 7:** It is assumed that all scales would show high reliability (Cronbach's alpha) and internal consistency as well as high interitem correlation indexes. We expect the scales to show great possibility for Bulgarian application. Hypothesis 7 is **fully confirmed**. The analysis results are already described in sections 3.2-5.

## **CONTRIBUTIONS AND APPLICABILITY OF THE RESULTS**

**Contribution 1:** All scales for positive cognitive processes and romantic relationship satisfaction have proven to be reliable and valid for the Bulgarian population and can be used freely.

**Contribution 2:** The dissertation study offers new to Bulgarians instruments for studying different cognitive processes as well as such measuring romantic relationship satisfaction of partners.

**Contribution 3:** Theoretically the studied constructs are systemized and interdisciplinary approached. The study expands the theoretical framework as it systemizes the information in a meaningful way as far as modern positive psychology goes in Bulgaria as well as internationally.

**Contribution 4:** The research approach used in the current dissertation study could be applied not only in scientific context but also interdisciplinary. The scales could be used by different specialists in a variety of scientific and non-scientific areas.

**Contribution 5:** The scientific approach described in the current thesis could be used for outlining the partners' resources concerning their current relationship. Such approach could be used in therapy sessions or future pre-marital consultation programs.

**Contribution 6:** The results of the current study underline the importance of positive cognitive processes for relationship making them skills that could possibly be integrated into different training programs for better individual coping and relational competence – on local level as well as national.

**Contribution 7:** The used methods could be applied to social services where specialists could benefit from outlining more specific ways of helping their clients.

**Contribution 8:** The study in the current dissertation gives the possibility of determining the actual tendencies in optimism, hope. Mindfulness and relationship satisfaction in Bulgarians. The collected data give opportunity for comparison between results of this study and international ones which would then make it possible to either confirm or reject their theoretical and practical benefits in the Bulgarian cultural context.

The dissertation has the following theoretical and practical limitations:

### **LIMITATIONS OF THE STUDY AND FUTURE DIRECTIONS**

It is recommended to replicate the study including more male participants and more sexual orientation diversity. Future studies could research additional factors as well as their effect on participants, for example different training programs and follow-up measurements could be used.

The current research shows only the momentary relationship between constructs. If a longitude study is conducted, that would give more information about how does the relationship dynamics evolve and change across time.

Although the studied constructs are rather universal, a broader study of the positive cognitive processes in terms of Bulgarian population and culture is also recommended.

One recommendation is that the current study findings be used for the construction of programs and training (both national and European) for supporting couples that face relationship difficulties.

### **CONCLUSION**

In the scientific basics of the current dissertation research there is so much more than just a follow up of the correlation between positive cognitive processes and romantic relationship satisfaction. Setting the foundations of the dynamics of romantic relationships as well as outlining the positive psychology factors improving their quality is a crucial step towards entering the new psychological health care era that slowly turns into a tradition for modern society worldwide. Adapting worldwide ideas into Bulgarian cultural context could be beneficial for the actualization of approaches, needed by specialists in order to improve the individual and social quality of life. The positive cognitive processes of optimism, hope and mindfulness prove their substantial role in terms of positive psychology worldwide. The abovementioned constructs have many benefits for the individual as well as his relationship to other human beings. The current dissertation proves such notion for the Bulgarian population as well.

The current dissertation research successfully confirmed the hypothesis for a correlation between the studied positive cognitive processes – optimism, hope, mindfulness and the level of romantic relationship satisfaction in early as well as middle-late adulthood. The factor analysis confirmed the semantic structure of all instruments. Each of them showed high Cronbach's alpha and no necessity for removing any items. All scales show results supporting their reliability, validity and internal consistency, confirming the hypothesis that all of them could be freely used for the Bulgarian population.

The results of the current research confirm the theory that developing better optimism, hope and mindfulness abilities would positively influence the quality of relationships which then will be beneficial for the persons overall quality of life.

The current dissertation strives to incorporate different layers of meaning with the aim of giving space for science to address the needs of the contemporary person. The empirical study aims to build a foundation for the idea of a more serious focus on romantic partners' relationships as well as to open pathways to new studies in the contemporary psychological science. Such necessity also derives from high rate in divorces and unregistered relationship dissolution. The modern person needs better relationship quality – a fact that does not need a substantial empirical proof. Building an adaptive romantic relationship model would be beneficial not only for the relationship between two people but also could serve as an example of positive interaction aimed at future generations.

The current dissertation research is just a step forward to unraveling the broad topic of studying constructs, responsible for the initiation, building and maintaining satisfaction relationships, whether romantic or not. The research gives space for contemplation on the theoretical and practical application of modern findings in the positive psychology model in national as well as international context

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