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## Psychology within Montessori pedagogy – theory and practice

**Keywords:** Montessori, upbringing, education, psychology, self actualization.

### Introduction

Many thinkers and scientist have influenced contemporary early childhood education and care such as Froebel, Steiner but also Maria Montessori.

Maria Montessori was great scientist and in her work she used observation to determine the needs of the children. Soon, she determined that the problems existed not in the children, but in the adults, in their approaches and in the environments they provided. She realized that, to be comfortable and successful in learning and growing up, young children needed schools which are completely adjusted to them<sup>1</sup>. It is often said that Maria Montessori discovered the child as a true, complete human being with his/her individual potentials and capabilities.

In Private preschool institution “Planet Montessori” Mostar this approach is welcomed and what is most important, most relevant institution as Montessori Centre International, London recognized the true spirit and included this school into accreditation process.

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<sup>1</sup> C.G. Mooney, *Theories of Childhood*, St. Paul 2000, p. 23.

## **Maria Montessori – synonymus for pedocentrism**

Ideas which Maria Montessori provided sound so basic to the ways we think about early childhood today that we take do not think about them as something revolutionary. But in that time, during 20<sup>th</sup> century, these ideas were more than revolutionary. More than 100 years ago her ideas about child-sized furniture and tools were considered radical. Her research into young children and the way they are learning gave fundamental ways early educators think about children. That is why today many people who work in preschool institutions and organizations can be traced to Montessori. Montessori's theories have influenced the way all early childhood programs are structured today, not just programs that refer to themselves as Montessori programs<sup>2</sup>.

Maria Montessori talks about importance of environment and usually this is the main characteristic by which people identified her method. But she included not only the space which children use but also the adults and the children who share their time together.

We often make mistakes under the pretext of child's own safety and, for example, give children to cut the fruits and vegetables with butter knives. We do not understand that these dull tools make simple tasks actually very difficult which affects child's self-confidence.

Montessori believed that children want and need to take care for themselves and their environment. The role of adult as "servant" was questionable because if we do not allow to children to try something they will not learn the way of doing it. The modern, quick times are not giving us enough space to be patient with children and it is much easier to do something for and instead of children. The consequences are visible later in their life when they are in years when we expect them to make some responsible decisions and moves but they are still waiting someone to help them.

## **Montessori theory and practice**

First of all, the question arises: Can ideas of Maria Montessori, first formulated more than hundred years ago, still be effective in working with children today. Every Montessori teacher would say: Yes, without any doubt! This must be the correct answer because child today is the same child as one in the past and the one in the future.

This is also supported by current brain research which is offering an analytical explanation of Montessori's insights and theories. Those researches gave many conclusions but one of them is significant to our topic: early experiences have a decisive impact on the architecture of the brain, and on the nature and extent of

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<sup>2</sup> Ibid, p. 24.

adult capacities<sup>3</sup>. This would be later considered in context of problems which children have later in life.

Psychologists and other experts confirmed that children learn in the context of important relationships, especially during preschool period. The best way to help children in preschool period grow into curious, confident, learners is to give them warm, consistent care so they can form secure attachments to those who care for them. And those children who receive consistent, responsive care in early years of life are more likely to develop strong social skills. Montessori also said that first and foremost, primary relationships are crucial to the child's early survival, and later, strongly influences the child's confidence in exploring the world. She believed if child felt secure in the presence of his/her mother or primary caregiver, than the child is more likely to take greater risks exploring the environment. Erik Erikson went so far as to declare that a child's experience in bonding with mother in the first years of life would forever impact a child's capacity trust and mutuality<sup>4</sup>.

Children's attachment is formed as a result of close affective relationship between the child and the care-giver and is not simply a biological dependency. It has a stabile organizing role for social and emotional behaviors<sup>5</sup>.

As children grow, a number of factors affect their attachment behaviors. Children's attachment behaviors are influenced by their developmental abilities and a number of other behavior systems such as exploratory behavior, stranger awareness, social or affinitive behavior, fear/anxiety and temperament.

The importance of forming secure attachment has been indicated by many studies that have looked at connections between attachment type and development<sup>6</sup>. Securely attached children are superior on a range of different measures including: persistence when solving problems, making friends at school, social and cognitive competence and engaging in successful problem solving.

A developing sense of self as an individual is important because the way individuals view themselves appears to influence the overall feelings of well-being and competence. Parents contribute to the children self-image by giving criticism or praise and positive or negative descriptions of their behavior and by reminding them of their successes or failures. These influence children's perceptions of themselves, which, in turn, plays a role in how they respond to their successes and failures.

## Montessori curriculum in classroom

The curriculum in Montessori classrooms all around world are based on her observations which she transposed into method. It aims to support all aspects of the child personal and social development<sup>7</sup>.

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<sup>3</sup> S.M. Helfrich, *Montessori Learning in the 21st Century*, Oregon 2011, p. 19.

<sup>4</sup> Ibid, p. 21.

<sup>5</sup> M.D. Sheridan, *From birth to five years*, New York 2008, p. 87–90.

<sup>6</sup> I. Macleod-Brudenell, J. Kay, *Advanced Early Years*, Essex 2008, p. 100.

<sup>7</sup> L. Pound, *How children learn*, London 2006, p. 30.

Those who work in Montessori classrooms claim that this method leads to children who are developed in a balanced way, who are good decision-makers, who are confident and independent. Children are striving to independence. In the classroom, it is not unusual for a child to spend hours pouring different materials from jug to jug. Explanation of this behavior is simple – he/she wants to pour himself/herself a milk or tea for breakfast. In other words, they are showing desire for independence which is child's most fundamental need. His/her whole future development, and therefore his/her ability to contribute to the world, to the society as an adult, depends upon fulfillment<sup>8</sup>. Independence is directly connected with self-esteem which is central and critical aspect of psychological well-being but the influence of parents or care-givers is also seen here.

### **Cognitive-behavioural therapy for low self-esteem – a case report**

Low self-esteem is common and distressing problem repeatedly shown to be involved in etiology and maintenance of a range of mental health problems and disorders. Hence, it is important to develop and evaluate treatment of low self-esteem. This case study presents conceptualization and treatment of a patient with extremely low self-esteem with severe anxiety and depression symptoms. Approach is cognitive-behavioral therapy.

Cognitive conceptualization of low self-esteem is proposed (see figure 1) and cognitive-behavioral treatment described. Fennell's model of low self-esteem incorporates longitudinal elements (early (mostly aversive) experiences, "basic beliefs" and "rules for living") and current maintenance cycles of symptoms associated with self-esteem<sup>9</sup>. Model suggest that on the basis of early (childhood) experiences person forms a fundamental, deepest – "basic beliefs" about self. When those basic beliefs are negative ("I am worthless" or "I'm helpless") person develops "rules for living" ("You must be excellent (or you are worthless)")<sup>10</sup>. To survive with such basic beliefs, a person must develop rules and/or strategies for living to compensate. "Rules for living" usually relate to domains of acceptance, control and achievement – what needs to be done in order to be happy. Those rules tend to be excessive – to be liked by everyone, to be in control, to be the best all the time. Logically, these rules are unachievable in the long-term. Psychological distress is the most probable result. When there is perceived threat that rules might be broken ("I might fail at test") that results in anxiety. When rules are broken, the basic belief is triggered ("I am worthless and can't do anything

<sup>8</sup> P. Polk Lillard, *Montessori in the Classroom*, New York, 1997, p. 4.

<sup>9</sup> M. Fennell, *Low self-esteem: a cognitive perspective*, „Behavioral and cognitive psychotherapy“ 1997, p. 1–25.

<sup>10</sup> M. Fennell, *Overcoming low self-esteem: a self-help guide using cognitive behavioral techniques*, London 1999, p. 39.



good”) resulting in depressive symptoms and seemingly „prove“ negative self-image/low self-esteem.

Once a “basic belief” is triggered, the anxiety and depressive symptoms are maintained by a range of maladaptive behaviors such as avoidance, safety seeking, and negative interpretations. This model helps understand how anxiety and depression interact and possibly have same root in low self-esteem<sup>11</sup>.

The aim of this case report is to describe the assessment, treatment and outcome of a patient treated with cognitive-behavioral therapy (CBT) for low self-esteem based on Fennell’s model.

### **(Early) Experiences**

(negative experiences, loss, neglect, rejection, bereavement, abuse, lack of praise, external validation, interest or affection; being the “odd one out”...)



### **“Bottom line” (schema, basic or core belief)**

(global negative self-judgment – assessment of worth/value as a person)



### **“Rules for living” (dysfunctional assumptions)**

(„escape clauses”, coping strategies, guidelines, policies, standards)



### **Trigger situations (critical incidents)**

(situations in which the rules for living:)

- a) are broken → depression
- b) might be broken → anxiety



### **Activation of the bottom line/core belief**

Predictions, maladaptive behaviors, self-critical thinking and hopelessness keep the vicious anxiety-depression symptoms cycle spinning. Those lead to



### **Confirmation of the “bottom line”**

**Figure 1:** a cognitive formulation of low self-esteem (Fennell’s model)

## **Problems and diagnosis**

Anne was referred to cognitive-behavioral treatment after being hospitalized at Psychiatry Clinic for severe depression and anxiety symptoms. She was experiencing significantly low mood, struggled to cope with frequent panic attacks

<sup>11</sup> M. Fennell, *Depression, low self-esteem and mindfulness*, „Behavior, Research and therapy“ 2004, p. 1053–1067.

and spent majority of her time isolated. Clinician used the structured Clinical interview for DSM-IV-TR<sup>12</sup>. Anne met criteria for major depressive episode. She experienced low mood, loss of interest and pleasure in usual activities that once produced joy, loss of appetite (and weight), sleep disturbances and feelings of worthlessness). Anne affirms suicidal thoughts but on the level of thought; Anne is highly religious person and considers suicide “*a sin she would never do*”. Anne didn’t meet criteria for social anxiety although she did have some elements: she was over concerned how she would appear to others and was avoiding social situations. This has shown to be a result of low self-esteem and depressive state more than a social anxiety as a diagnosis. Anne feared being seen as worthless (depression and low self-esteem) not the humiliation or embarrassment (as in social phobia).

### Psychometric measures

Anne completed the Beck Anxiety Inventory<sup>13</sup>, Beck Depression Inventory<sup>14</sup> and Rosenberg Scale of Self-esteem<sup>15</sup>. The BAI and BDI are widely used 21-item measures of anxiety and depression that have been shown to have good psychometrics (internal consistency, validity and reliability<sup>16</sup>. Total scores range from 0 to 63, with higher scores indicating more severe anxiety or depression. At assessment, Anne scored in the severe category of both BAI and BDI (severe anxiety and depression symptoms). Rosenberg scale is a self-report 10-item scale measuring global self-worth by measuring positive and negative feelings about self. All items are answered using a 4-point Likert type scale ranging from ‘strongly agree’ (0) to ‘strongly disagree’ (4). Anne’s RSE scores indicate low self-esteem.

### Prior and current treatment

Anne never before contacted psychologist. At the time of the assessment she was taking 20 mg/day fluoxetine and was advised to keep the dose stable until next appointment next month.

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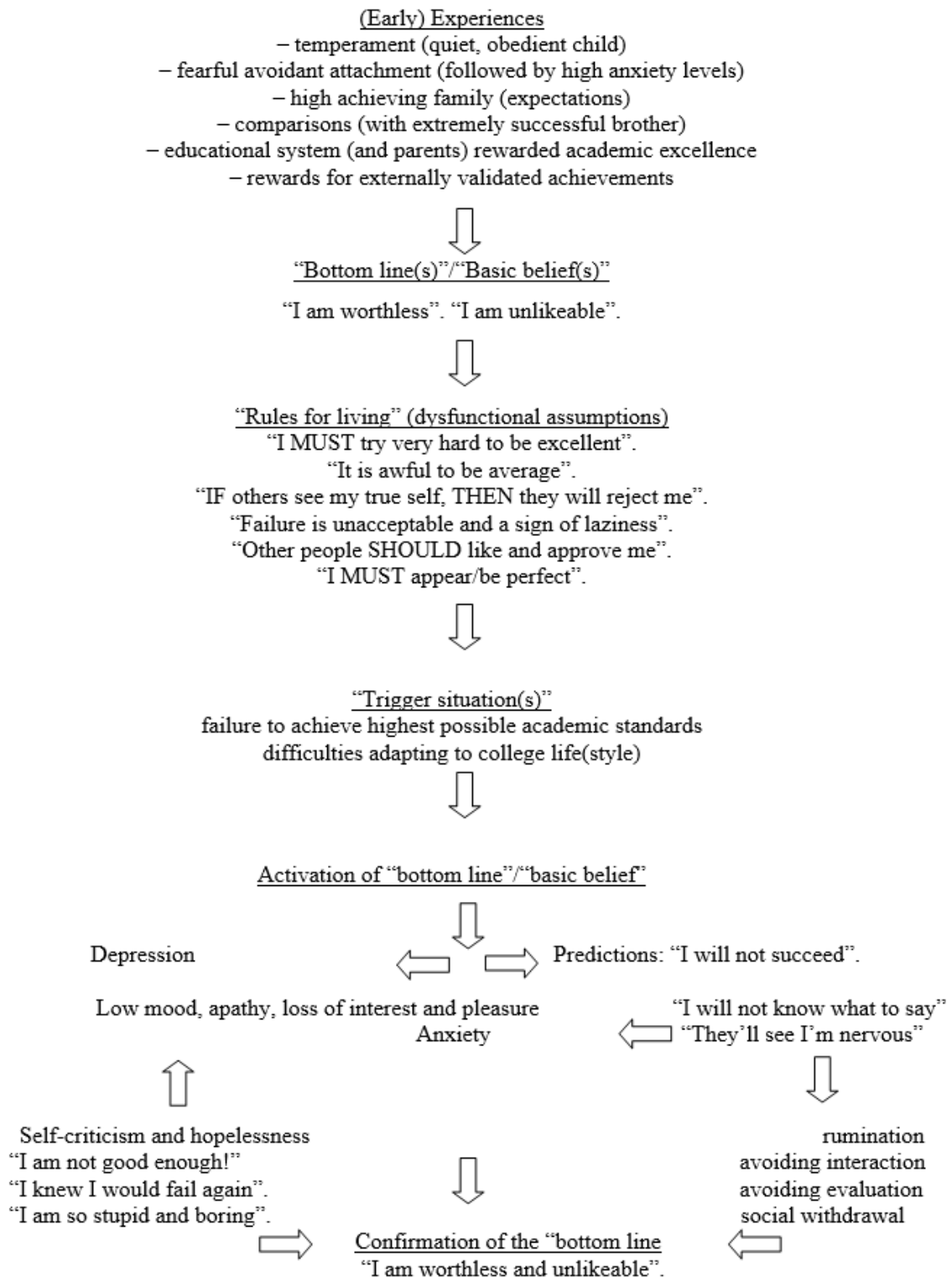
<sup>12</sup> M.B. First, R.L. Spitzer, M. Gibbon, J.B.W. Williams, *Structured clinical interview for DSM-IV-TR Axis I disorders, Research version, patient edition*, New York 2002.

<sup>13</sup> A.T. Beck, R.A. Steer, *Beck Anxiety Inventory-Manual*, San Antonio 1993.

<sup>14</sup> A.T. Beck, R.A. Steer, G.K. Brown, *Beck Depression Inventory-2nd edition, manual*, San Antonio 1996.

<sup>15</sup> M. Rosenberg, *Society and the adolescent self-image*, New York 1965.

<sup>16</sup> A.T. Beck, R.A. Steer, M.G. Garbin, *Psychometric properties of the Beck depression inventory: 25 years of evaluation*, “Clinical Psychology review” 8 (1988), p. 77–100.



**Figure 2:** Cognitive conceptualization/formulation of Anne’s current difficulties according to Fennell’s (1997) cognitive model of low self-esteem

### **Relevant personal history**

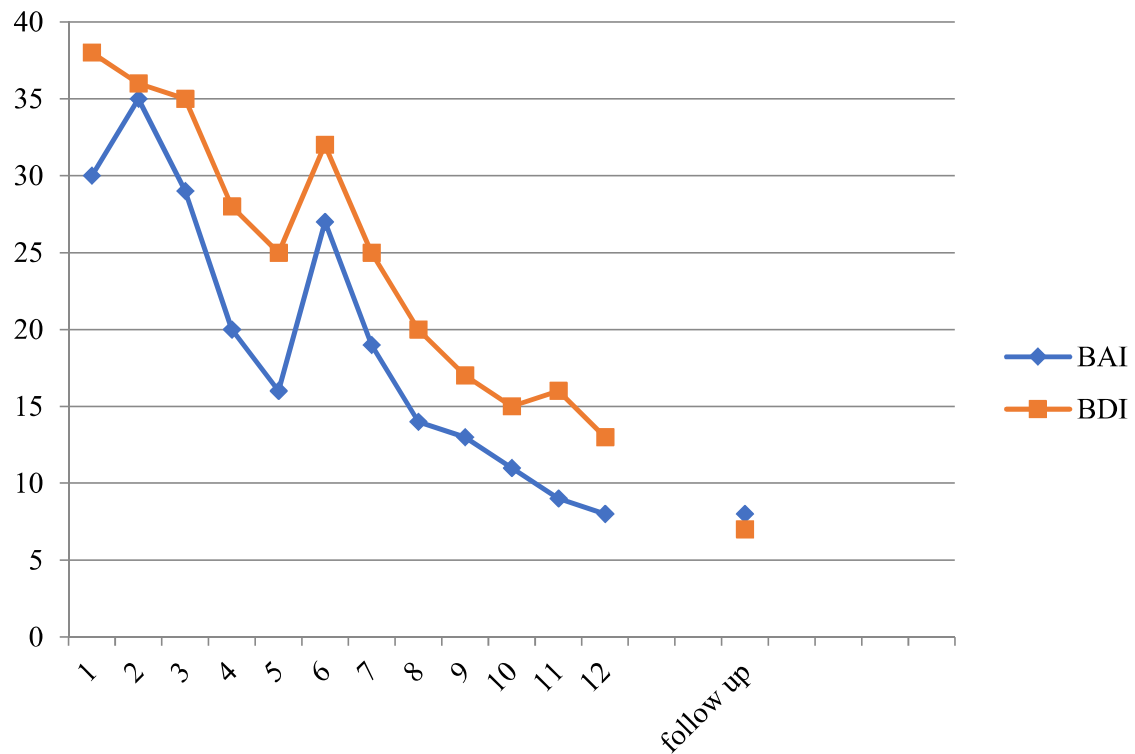
At first, Anne reports a happy childhood. She mentions many instructions from her mother in any activity and persistent feeling that she cannot do things right by herself. Anne recalls many comparisons (by parents and teachers) with her extremely successful brother. She reports early in childhood being aware of high standards expected of her. She called it pressure then and considered it ‘good for motivation.’ It was while at high school that Anne first experienced significant anxiety symptoms and some depression symptoms. Previously, in elementary school Anne was truly the best among her peers; many times rewarded (by educators and parents as well) for her extremely high accomplishments in different areas (physics, essays, poetry, mathematics, drawings...). Nothing wrong in being high achiever until it coincides with Anne’s “Rules for life”, her “musts and shoulds”. As she progressed through academic system, it became much more difficult to keep her (extremely high) standards (that often follow extremely low self-esteem). She had to study many hours and even then she did not excel. There was no guarantee for top 5 positions in class. Her extreme efforts became exhausting and her expectations became even less realistic when she attended university. Symptoms persisted (higher or lower level in response to life stress) for the next four years until culmination before hospitalization at Psychiatry Clinic. At the age of 18 Anne was introduced/referred for cognitive-behavioral therapy for depression and anxiety.

### **Treatment**

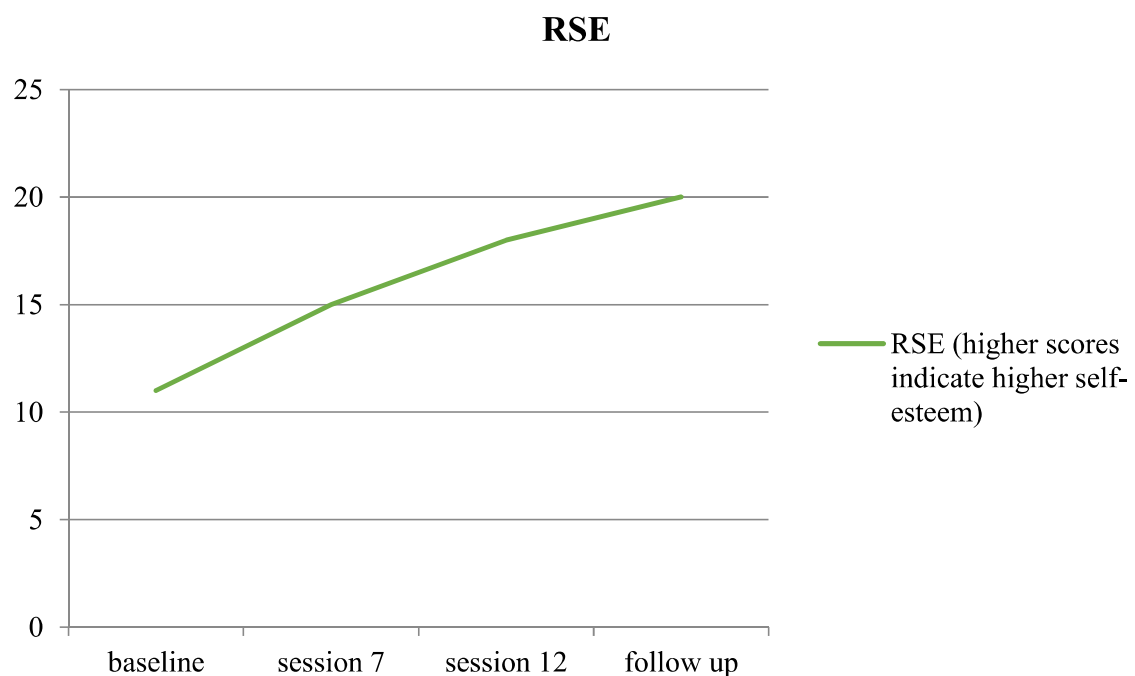
Anne attended 12 sessions of individual CBT over six month period with two follow-up sessions in the year after therapy was finished. Treatment was carried by accredited psychologist and based on Fennell’s CBT for overcoming low self-esteem. Four main phases of treatment were: 1. Goal setting and psycho-education (sessions 1–2–3); 2. Breaking maintenance cycles of anxiety-depression – learning to (r) evaluate thoughts and beliefs through cognitive and behavioral techniques (sessions 4–6–7); 3. (R)evaluating “rules for living”, developing alternative, more adaptive and healthy rules (sessions 8–10); 4. (R)evaluating “bottom line/basic belief”, learning to combat excessive self-criticism; learning self-acceptance self-compassion, planning for the future, relapse prevention (sessions 11–12).

### **Results**

The graph shown in Figure 3. reveals Anne’s progress in treatment. Fluctuations are visible because progress and stress levels in life as well as in therapy process tend to fluctuate. Some negative events prompted Anne’s depressive and anxiety symptoms. Figure 3 shows Anne’s response to treatment on the BAI and BDI during treatment and also one year after the treatment was finished.



**Figure 3:** Anne's scores on the Beck anxiety Inventory (BAI) and Beck depression Inventory (BDI)



**Figure 4:** Anne's scores on the Rosenberg Scale of Self-esteem (RSE) during and one year after therapy

Figure 4. shows Anne's response to treatment on the Rosenberg Scale of Self-esteem (RSE) during and one year after therapy. Improvement is visible. Anne's

change on RSE, BAI and BDI scores meets criteria for reliable change. At the end of treatment and at 1 year-follow up Anne no longer met diagnostic criteria for any psychiatric disorder. Her anxiety and depression self-reported symptoms were in non-clinical range.

### **Conclusions of CBT**

Cognitive behavioral therapy was effective in helping Anne cope with her low self-esteem; she met formulated therapy goals, reduced anxiety and depression symptoms. At the end of treatment and at one year follow up Anne no longer met criteria for any of previous mental health issues she was struggling with. Although CBT can be considered as successful, self-esteem is more complicated then this (or any) case study may present. Graphs show improvements. Also, on global scale Anne reports better feeling and functioning. Standard CBT techniques were used to break maintenance cycles. More “core-belief” and “rules for life” – focused work to maintain positive change. More research is needed to determine whether intervening directly on self-esteem is more effective than using diagnosis-led formulations. Obvious limitation of current study is using self-report measures. Main features of Anne’s depression symptoms (lack of interest and satisfaction, sense of failure, indecisiveness, sleep disturbance, hopelessness and guilt feelings) were no longer present in previous form and/or intensity. Severe anxiety symptoms were no longer problem for Anne in everyday functioning although anxiety as a trait is Anne’s present (and past). She reports decreased distress. Current results are in arrestment with previous research and indicate the significance of CBT in the treatment of these mental health problems. With regard to clinical implications of current and other findings researching this domain, it has been suggested that low self-esteem is a vulnerability factor for developing psychiatric disorders. As such, low self-esteem should be the focus of treatments. It is of great importance to determine if treating a common thread is more effective than focusing on the primary symptoms and/or diagnosis.

### **Conclusion**

Perfect and conformed can never be free because they are too dependent on opinions, self-image is pathologically connected to accomplishment(s). This (searching for perfection) in the long run produces learned helplessness which is in the base of depression. In clinical practice often is seen that excellence is a two-edged sword. Rewarding excellence can be tricky because we (as parents and as teachers) create standards without expectations. So, instead of building child’s self-image on the values, we build it on accomplishments. On global level, psycho-education is very important for patients but also for parents and educators.

It is our (not child's) responsibility to cut the tragic link between admiration/achievement and love/ (self) worth.

Maria Montessori believed that the children who had real-life experience during the formative period of life would seek similar experiences later in life. She provided the idea that the child needs to environment in which he/she grows and sees himself/herself as productive member of a positive society. That would lead him/her to grow into an adult who would desire a world that allows for similar experiences. And that would be excellent start of global society based upon an inherent respect for all others, recognizing the commonalities of our humanity and the richness of our differences.

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## Summary

In this paper titled *Psychology within Montessori pedagogy – theory and practice* the authors elaborate a current topic of access to upbringing and education, a theme that encompasses both psychology and pedagogy. Based on her experience as an assistant professor on the subject Educational anthropology and her experience as a pedagogue at a private preschool, which follows a Montessori approach, author Topic provides a theoretical approach to upbringing and education in the educational sector in the city of Mostar. Despite it being a review of a single city, the patterns and behaviors observed can be found in any other place or a city.

By nurturing an individual approach to each child and taking into account their needs, children are encouraged to study by themselves, therefore allowing and supporting them to develop self confidence and self actualization. The example given is taken from a kindergarten provides an overview of practices which encourage the child towards healthy growth and development into a confident young people who will be able to form and make good choices in life.

Through practical psychology, author Colak, provides us with an answer to the question why is all that important. Through her experiences in work with young people who suffer from consequences of, among other things, an inadequate approach to upbringing and education in their younger age.

And to answer why this is important, psychology might have some cues. Author Čolak from her work experience with young people at Psychiatry Clinic in Mostar considers consequences that (according to literature, theory and practice) have some causes in upbringing approach at an earlier age and which behaviors were/are reinforced through evaluation systems and early messages from adults. Working with young people, author Čolak presents case study of female student with extremely low self-esteem and extremely high perfectionism in cognitive-behavioral therapy process. We discuss how and why those are so immensely pathologically connected. Some risk factors (following bio-psycho-social model of illness/wellness) are connected with psychological and social context. Thus, by educating parents and educators so we may have chance to improve mental health of children and later adults.

As a conclusion, co-operation and multidisciplinary approach is suggested. Education, psychotherapy and prevention have much in common. Montessori approach is not the only one which deals with it, but in its foundations holds the bases to help us to react in time, both as a profession and as humans too.

## Psychologia w pedagogice Montessori – teoria i praktyka

### Streszczenie

W artykule niniejszym autorki odnoszą się do aktualnego problemu dostępu do wychowania i kształcenia, obejmującego zarówno psychologię, jak i pedagogikę. Opierając się na swoim doświadczeniu w zakresie antropologii edukacyjnej oraz jako pedagoga w prywatnym przedszkolu pracującym w oparciu o podejście M. Montessori, Kristina Topić zapewnia teoretyczne podejście do wychowania i edukacji w sektorze edukacyjnym w Mostarze (Bośnia i Hercegowina). Pomimo tego, że tekst dotyczy jednego miasta, zaobserwowane wzorce i zachowania można znaleźć w każdym innym miejscu.

Pielęgnując indywidualne podejście do każdego dziecka i biorąc pod uwagę jego potrzeby, zachęca się je do samodzielnego uczenia się, umożliwiając i wspierając w rozwijaniu pewności siebie i samorealizacji. Podany przykład, pochodzący z przedszkola, zawiera przegląd praktyk, które zachęcają dziecko do prawidłowego rozwoju, aby stać się ludźmi, którzy będą w stanie tworzyć i dokonywać dobrych wyborów w życiu.



Poprzez psychologię praktyczną, Iva Čolak, formułuje odpowiedź na pytanie, dlaczego wskazane wyżej praktyki są tak ważne. Poprzez swoje doświadczenia w pracy z młodymi ludźmi, którzy cierpią z powodu popełnianych błędów w wychowaniu i kształceniu.

W celu odpowiedzi, dlaczego indywidualizacja podejścia, samodzielność w uczeniu się i wspieranie w rozwoju są ważne, psychologia może dostarczyć pewnych interpretacji. Iva Čolak z perspektywy swojego doświadczenia w pracy z młodzieżą w Klinice Psychiatrii w Mostarze rozważa konsekwencje, które (zgodnie z teorią i praktyką) mają pewne przyczyny w podejściu do wychowania młodych ludzi oraz w zachowaniach, które zostały (bądź są) wzmacniane poprzez systemy oceniania i wczesne informacje zwrotne od dorosłych. Pracując z młodzieżą, przedstawia ona case study studentki o skrajnie niskiej samoocenie i niezwykle wysokim perfekcjonizmie będących przedmiotem terapii poznawczo-behawioralnej. Omówione zostało, jak i dlaczego te zjawiska są powiązane. Niektóre czynniki ryzyka (zgodnie z biopsychospołecznym modelem choroby / dobrego samopoczucia) są powiązane z kontekstem psychologicznym i społecznym. W ten sposób, poprzez edukację rodziców i wychowawców, możemy mieć szansę na poprawę zdrowia psychicznego dzieci i dorosłych.

Podsumowując, Autorki sugerują współpracę i interdyscyplinarne podejście. Edukacja, psychoterapia i profilaktyka mają ze sobą wiele wspólnego. Podejście Montessori nie jest jedynym, które zajmuje się relacjami między tymi pojęciami, ale w jego fundamentach znajdują się podstawy, które pomagają reagować na czas.

**Słowa kluczowe:** Montessori, wychowanie, edukacja, psychologia, samorealizacja