

I SAY WHAT I THINK

the method of TOC (Theory of Constraints) used during therapy of stuttering

Introduction

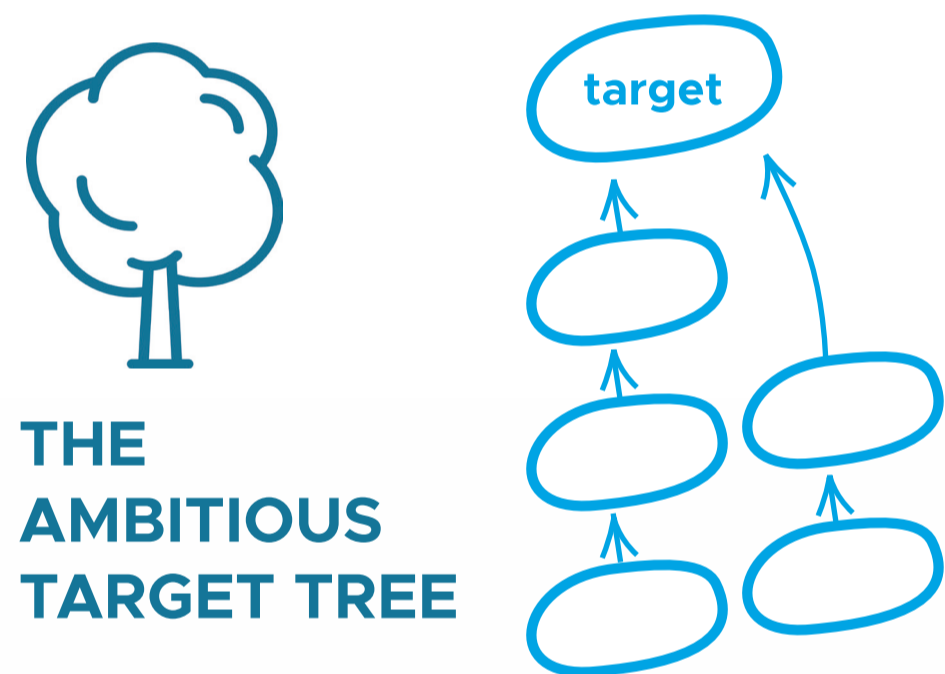
Stuttering is a specific barrier that prevents the ability to effectively communicate (Tarkowski, 2007). Challenges that come with having a stutter in everyday situations include difficulty verbalizing thoughts as well as expressing needs and emotions. These factors can have many social consequences, including difficulty establishing and maintaining satisfactory personal relationships as well as problems functioning in a group, school, or workplace environment. As a result, this can lead to a reduction of one's quality of life and one's ability to achieve life goals. (O'Connor, 2008; Leary, Smith, 2001).

The goal of this poster is to show the practical aspect of the Theory of Constraints, a theory created by Dr. E. Goldratt. TOC is one of the methods that can be implemented in therapy for people with stuttering. "I Say What I Think" is an innovative method that implements the tools used in the Theory of Constraints and adapts them for kids and teenagers with stuttering. The effectiveness of the therapy relies on the use of the three visual TOC tools: the ambitious target tree, the cloud, and the logical branch. These tools are very helpful in identifying the limitations associated with stuttering, designing a treatment plan that identifies the individual's needs and accommodates for their level of ability, improving interpersonal skills, helping to overcome a fear of speaking, increasing motivation to continue therapy, as well as improving self-esteem, self-acceptance, and self-sufficiency.

Theoretical foundation

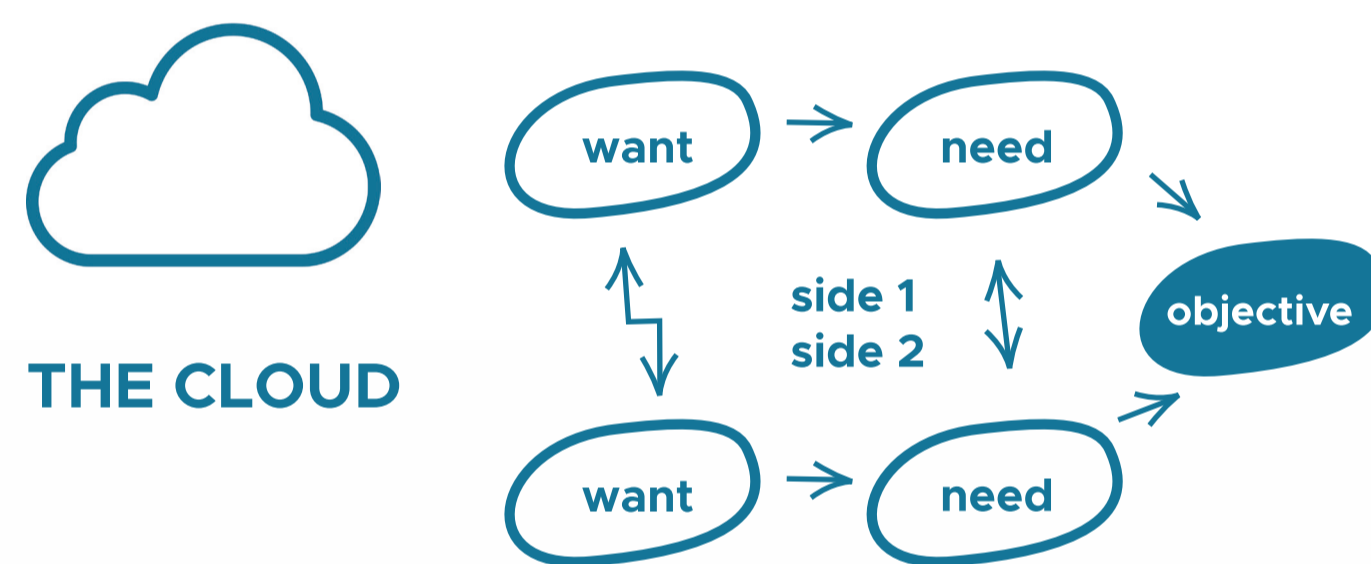
The genesis of the Theory of Constraints by Dr. E. M. Goldratt dates back to the 1970s. The theory is based on an individual's focus on the process of ongoing improvement and on developing their potential by identifying and controlling the constraints that exist in the world around them. The term "constraints", usually associated with its negative connotation, is seen from a different perspective within the Theory of Constraints. Awareness and analysis of the limitations in our lives, whether intrapersonal or interpersonal, that block or slow down our personal development are the key to developing a constructive action plan that allows us to achieve our goals (Goldratt, Cox, 2007). The Theory of Constraints was initially used in the process of solving enterprises' economic problems (including General Motors, Philips, Procter & Gamble, Boeing, Ford Motor Company).

Based on the Theory of Constraints, the TOC method utilizes three different cognitive tools: The Cloud, the Logical Branch, and the Ambitious Target Tree. Their dissemination into the world of education is carried out by the pro-social and international organization TOCFE (TOC for Education), founded in 1995 by E. M. Goldratt, which conducts its activities in over 20 countries, including Poland. The TOCFE program supports children and youth in, among others, acquiring skills for effective communication, determining and expressing one's own needs, setting and achieving goals, and predicting the consequences of events related to decisions made. The visual tools used in the TOC method help answer questions that arise in every aspect of life, including within stuttering therapy, such as "What to change?", "What to change to?" and "How to change?" (Suerken, 2007).



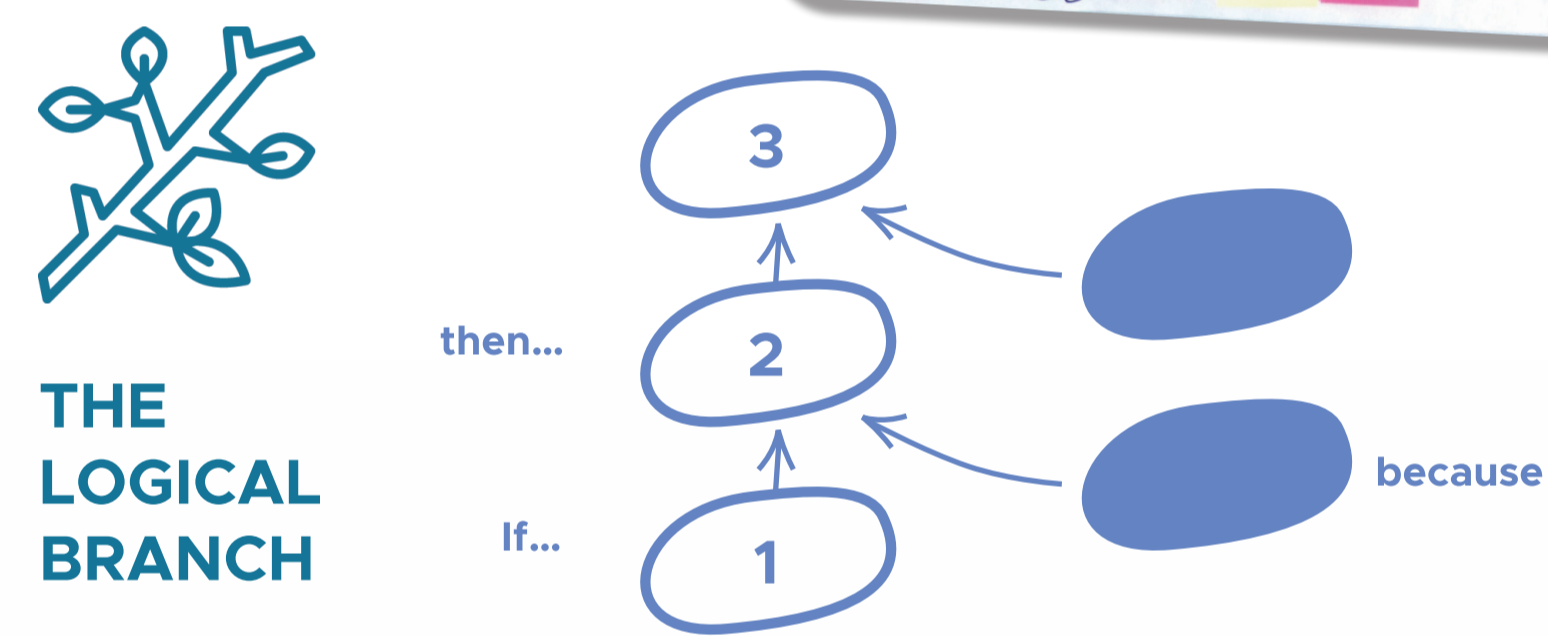
THE AMBITIOUS TARGET TREE

The Ambitious Target Tree helps to analyze and improve the ability to define goals and teaches the responsibility for their achievement (Suerken, 2006). It is an effective tool that is helpful in planning the stuttering therapy process, particularly when determining goals of the therapy that come from the needs and capabilities of the participants, and in developing a therapeutic action plan. This detailed plan allows for the monitoring of the implemented activities, the verification of their effectiveness and the modification of their execution based on the patient's current needs (Kaminska, 2017).



THE CLOUD

The Cloud is a tool that is used to resolve intrapersonal or interpersonal conflicts through thorough analysis and understanding of their causes. By answering questions such as: "What is the conflict about?", "What does each party demand?", and "What are the reasons for these requests?", we are able to understand the motives behind need-oriented actions, to clarify the common goals of both sides of the conflict, and, as a result, to resolve the conflict constructively (Suerken, 2006; Kaminska, 2012, 2017). Throughout the process of stuttering therapy, the Cloud is helpful in improving one's ability to identify and express needs and emotions associated with stuttering as well as one's assertive behavior and participation in therapy (Kaminska, 2017).



THE LOGICAL BRANCH

The Logical Branch makes it possible to understand the cause-and-effect relationships between actions and their consequences ("if...", "then...") and to create a narrative about these events. Having a graphical visualization of your tools helps you acquire the ability to predict changes and logical sequences of events. This visualization enables you to make informed choices and teaches you to make your own decisions as well as to take responsibility for your actions (Suerken, 2006; Kaminska, 2012, 2017). Implementing the Logical Branch into the process of stuttering therapy aids in analyzing the needs and emotions associated with various difficulties as well as in understanding the attitudes and sensations associated with stuttering. The Logical Branch also provides an opportunity for practical training in using the methods and techniques that shape the fluidity of speech (Kaminska, 2017).

Implementation of the project

"I Say What I Think", the implementation of the Theory of Constraints (TOC) method, was deployed into group therapy for stuttering children and adolescents at the Psychological and Pedagogical Clinic in Ciechanów. The project equips a stuttering person with tools to manage their stuttering. Using these tools increases their willingness to communicate, improves their interpersonal contacts, and decreases their anxiety surrounding communication. As a result, the individual's quality of life improves significantly. The activities realized within the implementation of the project took place in four age groups once a week for 1 hour over a period of 2 years. **A total of 37 people aged 5 to 23 years participated.** Activities were adapted to the age, needs, and psychophysical abilities of each participant and parents and caregivers were involved.

The TOC method used during classes was a method that supported the process of group stuttering therapy. The intended goals of the therapy included, among others, learning about alternative methods of stuttering management, talking openly about stuttering, designing the therapy's process and including its goals, decreasing the prominence of logophobia, increasing readiness to communicate, improving fluidity of speech through the use of the appropriate methods and techniques, as well as increasing self-esteem, self-confidence, and a sense of competence. The graphical and visual diagrams of TOC tools that were used in the method are easy to understand and are versatile enough to be applied to both education at all levels and therapy for children, adolescents, and adults of various abilities.

Conclusions

Programming of the therapy process should take into account a variety of therapy-related impacts, as in accordance with the principles of evidence-based-practice (EBP), including available and proven practices and forms of speech therapy in combination with other forms of therapy, such as psychotherapy and sociotherapy. Regardless of the chosen strategy and therapeutic methods, it is necessary to monitor and adapt the treatment plan on an ongoing basis based on the patient's needs, capabilities, and expectations. It is a so-called "tailor-made" plan. The author's innovative method "I Say What I Think", the use of the Theory of Constraints (TOC) in stuttering therapy, may support the process of speech therapy. Based on the therapeutic value confirmed by the results of various studies, "I Say What I Think" is an innovative and effective, methodological proposal that can be used in therapy for people with stuttering.

The results obtained

The efficiency and effectiveness of the application of the TOC method to group stuttering therapy are confirmed by quantitative and qualitative analysis of the comparison between the initial diagnosis and the results following speech therapy. The results demonstrate the positive impacts of the implementation of the TOC method on the development of communication and social competences of the participants in therapy, in particular:

- increased readiness to communicate, including reduced avoidance of communication-focused situations;
- improved interpersonal relationships;
- increased ability to identify and name one's own needs and emotions;
- constructive resolution of both intrapersonal and interpersonal problems and conflicts;
- increased motivation and involvement in the therapy process: among others, the acquired ability to analyze one's own needs related to participation in therapy, to identify and eliminate restrictions disrupting the therapy process, and to predict consequences of one's behavior;
- increased assertiveness;
- increased self-evaluation and self-acceptance;
- increased self-esteem;
- improved fluidity of speech;
- increased attention span through the use of visual TOC tools.