## "Effectiveness of the SCERTS Model in the therapy and education of children with autism pervasive development disorders (autism spectrum disorder)"

## Summary:

As shown by numerous of scientific studies, the number of children with pervasive development disorders (autism spectrum disorder) increases dramatically every year. Therfeore; there is a high need for the newer therapeutic methods to work with this particular group of children. In the first chapter, various definitions and the main diagnostic criteria of autism and Asperger's syndrome are discussed in great detail. The etiology and epidemiology of this issue are also described. The second chapter describes the basic methods and techniques of autism therapy divided into two main scientific approaches (Applied Behavioral Analysis vs. Treatment and Education of Autistic and Communication related handicapped Children). The next chapter describes the SCERTS Model, which is still unknown in Poland on a larger scale. The theoretical part of this paper describes also in more detail the main components of the SCERTS Model: Social Comunication, Emotional Regulation and Transactional Support. The aim of the research work of this particular paper was to evaluate the effectiveness of the SCERTS Model in Poland. The research on the effectiveness was conducted more over three calendar years (2019-2022) simultaneously at three educational institutions (one primary school and two preschools). The research was carried out with the use of Psychoeducational-Profile (Polish adaptation: PEP-3-PL) according to Eric Schopler. Additionally, the Childchood Autism Rating Scale (CARS) was used. The research was carried out with some diagnostic questionnaires from the SCERTS Assesment Process (SAP) as well. A total number of 177 people participated in all studies especially including: 41 parents of children with autism, 41 therapists of autism, a group of 60 children

with pervasive development disorders (autism spectrum dosorder) and a group of 35 nerotypical children in different ages. In the dissertation, 113 full Psychoeducational Profiles (PEP3) were also carried out.

The main scientific inspiration for the research was an analogous research work conducted previously by Chinese researchers on a group of 122 autistic children using the Chinese version of the PEP-3 (Chinese Psychoeducational Profile-Third Edition; CPEP-3). The analysis showed that in all children, including children with disabilities, there was an increase in both communication skills (except passive speech) and the motor skills (f.ex. gross motor skills, fine motor skills and visual motor imitation) – measured by the polish version of the Psychoeducational-Profile (PEP-3). Moreover, comprehensive therapeutic effects (based on the SCERTS Model) also had a positive impact on the results obtained by children with autism spectrum disorder in terms of emotional expression, social reciprocity, specific motor behaviors and specific linguistic behaviors. At the same time, the analysis did not show any statistically significant differences in the overall increase in individual skills (measured with the PEP3) between the group of children with autism and Asperger's syndrome, and the group of children with combined disability on the autism spectrum. However the progress in the scope of all skills mentioned aboved was also confirmed by parents in the simultaneous questionnaire surveys. All studies were conducted in the Mazowieckie Voivodeship. Surveys for parents and specialists also showed that, according to 65,9% of parents and 68,3% of specialists, there is no comprehensive model of therapy for children with autism in Poland. Moreover, as many as 78% of parents and 70,7% of specialists see the high need to introduce in Poland such a model. At the same time, all parents and specialists had agreed that the SCERTS Model individual parts play a larger role in everyday therapy than the school skills. The scientific work also tried to investigate dependencies between the level of the language development of a particular child and the level of the intensity of autism traits in general – measured by CARS. The analysis showed that children reaching the lowest stage of language development (Social Partner Stage) achieved at the same time a much higher scores on the intensity of autism traits (in total) compare to the higher language development groups in the SCERTS Model. However, the same analysis did not show statistically significant differences (p > 0.05) in the intensity of autism in general (CARS) between the group of children with autism and Asperger's syndrome and the group of children with combined disability associated with the autism spectrum. Finally, Pearson's correlation analyzes and the reliability-tests (alpha Cronbacha) were performed for the research-tools adapted in this dissertation according to the SCERTS Model (SAP) and CARS-Questionnaire.