



**UNIVERSITATEA BABEŞ-BOLYAI  
CLUJ-NAPOCA**

**DOCTORAL THESIS**

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**DECEMBER**

**2015**

**UNIVERSITATEA BABEȘ-BOLYAI**  
**CLUJ-NAPOCA**  
**Faculty of Psychology and Science of Education**  
**Doctoral School**  
**”Education, Reflection, Development”**

**Development of Learning and Social Skills**  
**in Children with Learning Disabilities**

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## **Acknowledgements**

Special thanks to my supportive supervisor and mentor, Prof. Dr. Muşata Bocoş, with whose useful advice and help I could finally reach this stage.

Upon reaching the end of this journey, I would like to extend my gratitude to the Head of the Department, Professor Dr. Chis, for his personal approach and kindness to the students.

To Dr. Yehudit Od-Cohen for endless patience and readiness to support and encourage, and for always lending an ear.

I would like to extend my gratitude to the management of the "A" school for allowing me to conduct this research and contributing to its success, and to the pupils for their participation and caring throughout the intervention program.

To Danny and Avishay for planning, organizing and providing all necessary details so as to alleviate this journey in any way possible.

To the translator, Sonia for her patience and devotion.

And last, but certainly not least to my family, my parents, in particular my father who has accompanied me with warmth and never ending, unconditional love from the start.

Thank you all for making this possible.

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## **ABSTRACT**

This research depicts a social group intervention program with adolescents having learning disabilities in a school for children with behavior disorders (special education school), and the way in which the program influenced their academic achievements in mathematics and Arabic, their self-image and social status both in their peer group and their homeroom class . The conceptual framework that underpinned the research included theories in mediated learning (Feuerstein, 1991), and cooperative learning (Vygotsky, 1975).

It was a mixed-methods research which was based on quantitative questionnaires, observations and personal interviews before and after the intervention. Participants were five learning disabled junior high school pupils, aged 14-16, who were also diagnosed with behavioral, social and emotional difficulties and some also had medical problems as well.

The findings that emerged from the observations, interviews and questionnaires reaffirmed the hypothesis that a social intervention program would lead to improvements in the participating students' academic achievements in mathematics and Arabic, and improve their social status and self-image. The intervention program was based on cooperative learning and led to significant improvements in the pupils' social skills, so that levels of collaboration and partnership among them increased as well as their levels of assertiveness and self-control. Furthermore, the intervention program led to significant improvement in their level of self-image.

In light of these findings, and despite social pressures and stigma suffered by participating pupils, especially from their peers, due to their enrollment in a special education school, the participants were able to overcome society's external forces and strengthen their internal forces by acquiring social and emotional skills. Hence it can be concluded that if a school system provides a supportive framework for pupils, is aware of their difficulties and makes an effort to find creative solutions for their problems, these pupils will succeed in their studies.

**Key words:** SEN, cooperative learning, mediated learning, social skills, social status, academic achievements, self-image, educational intervention program, ADHD

## **INTRODUCTION**

This research addresses a social group intervention program for adolescents with learning disabilities in an Arab Junior-High school for children with behavior disorders (special education school), and the way in which the program influenced their academic achievements in mathematics and Arabic, their self-image and social status both in their peer group and their homeroom class.

### **Research Problem and Gap in Knowledge**

As a special education teacher, I believe that every child with learning disabilities has the right to be an active member of regular society, and to have normal interaction with his/her surroundings. There is a gap in knowledge regarding the ways in which learning disabled pupils advance academically as a result of social intervention programs. Not much research has been found regarding this topic. This motivated me to create an intervention that strengthens these pupils' social skills in spite of peer pressures.

### **A Brief Background of the Research**

In the course of my work as a Learning Disabilities teacher, I was exposed to the social difficulties that pupils experience, and how these difficulties influence their learning ability. The source of the problem is connected to their having moved from regular schools to a Learning Disabilities school, and although they receive emotional and intellectual support for all aspects of learning, they frequently encounter peer-group stigmatization because they learn in a special education school.

Such stigmatization has a negative social influence on the pupils and may lead to a downward turn in learning. As a special education teacher, I believe that every pupil with special needs has the right to be an active member of regular society, and to have normal interaction with his/her surroundings, to establish relationships, and to experience friendships within his/her peer group.

### **Research Aims, Questions and Hypotheses**

**Aim 1:** To examine the influence of the social intervention program on academic achievement in two basic subjects - Arabic and Mathematics.

- A. **Research Question 1:** How does social intervention program with children with learning disabilities influence their academic achievement?
- ❖ **Hypothesis 1:** Participation in the program will bring about a rise in academic achievement in two basic subjects - Arabic and Mathematics.
- B. **Aim 2:** To examine social status among the pupils: in the homeroom classroom, before and after participation in the social intervention program.
- ❖ **Research Question 2:** What is the influence of the Social Skill Approach on the participants' social status?
  - ❖ **Hypothesis 2:** The social status of the participants will improve following their participation in the social intervention program.
  - ❖ **Research Question 3:** How does participation in the social intervention program influence self-image?
  - ❖ **Hypothesis 3:** the participants' self-image will improve following participation in the social intervention program.

**Key words:** SEN, cooperative learning, mediated learning, social skills, social status, academic achievements, self-image, educational intervention program, ADHD.

## LITERATURE REVIEW

Research literature dealing with Arab education in Israel indicates that school and the subject of education have a **central and important role in Arab society**. However, despite the important role that schools fulfill, they still reflect the prevailing spirit of Arabic society, and as such they are fundamentally authoritative (Elian, 2012, **Abu Asba, 2007**).

Special Education Law, enacted in 1988, sought to be a turning point in the special education services to pupils with special needs in Israel (Gumpel, 1999). The purpose of special education, as formulated in the 1988 Special Education Law, is *“to advance and develop the abilities and the of disabled children, to correct and improve their physical, mental, psychological & behavioral performance, to convey knowledge, skills, habits & social behavior for the purpose of becoming part of society.”*

Special education in the Arab sector was "born" about 20 years after its "birth" in the Jewish sector, around 1975. Arab children constitute 25% of the children in Israel but there are considerable differences between special education in the Arab sector and special education in the Jewish sector, even though the proportion of children with special needs in

the Arab sector is higher than among Jews. For example, the percentage of children with severe disabilities is much higher in the Arab sector than in the Jewish sector: 5.4% and 3.3%, respectively (Abu Asba, 2007). The hours allocated to the Arab sector are far from satisfactory: roughly 90% of the standard hours for special education, but only 10% of the resources are directed at the Arab sector. And the level of services is also different.

The State Comptroller's Report found that the number of Jewish children who receive special educational services is double that of Arab children. (Neon, Morgenstern, et al., 2000). The report further shows that the special education system in the Arab sector has seen progress in recent years, but it is still a small system that does not provide for the full needs of the population (State Comptroller's Report, 1992, p. 391-12).

The accepted diagnoses for groups of children in special education include children with mental retardation, children with emotional disorders, children with learning disabilities, aggressive pupils with behavior disorders, and children with sensory impairments. Today, due to the diagnoses and awareness in the Arab society, there are more types of disabilities and frameworks. According to the Statistical Yearbook (2010), disabilities are now labeled as developmental impairment, lingual impairment, learning disabilities, behavioral disorders, borderline intelligence, mild mental retardation, medium mental retardation, complex retardation, Cerebral Palsy, severe physical disabilities, autism, mental diseases, and rare diseases. As a result, new schools with specific specialties were opened for special education.

The Israeli education system was first established by the Hebrew Society as one of its major tools, and has, since then, continued to take part in the construction of Israeli society, by either purpose or chance (Reichel, 2008). The power of the education system and its ability to function rely on its legal standing, meaning the legislation that established the country's educational system. One of the central laws of the Israeli education system is the Special Education Law, 2002).

Since 1970 there has been considerable growth in the number of special education schools in Israel, followed by a gradual lessening thereof, while in parallel, the number of pupils in advancement<sup>1</sup> classes in regular schools rose. Although the majority of learning disabled children in Israel study in special inclusion classes within regular schools, there are those who study in learning disability schools, particularly those with multiple disabilities (Ministry of Education, 2002).

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<sup>1</sup> Advancement classes are classes for students with learning problems, or low achieving students

Treatment of Children with Learning Disabilities based on Individualized Learning Plans (ILP) (according to the Ministry of Education, Circular 7, 1998 (Dalia et al, 2007) is presented in three areas: Academic Treatment, Cognitive Treatment and Social Treatment:

#### **A. Academic Treatment:**

Those studies that are looking for a personal response to a pupil's unique needs, and can thus provide them with effective tools to deal with their learning difficulties and to improve their educational level (Kaniel, 2006; Manor, 2005).

Remedial is suitable for pupils with learning disabilities, assisted by different types of technology (Heimann, 2005). The main goal of remedial teaching is imparting learning strategies so that pupils can use them to overcome academic, emotional and social difficulties. (Kidron, 1985).

On the personal level, the aim is to help the pupil gain a realistic view of himself, self-acceptance, and a positive self-image, in spite of his disabilities, and furthermore, to motivate the pupil to make a maximum effort to advance his abilities, by strengthening his behavior. All this is done to enable successful integration into learning mode.

Through remedial teaching, the pupil develops learning strategies and skills that are a condition for learning ability. He emerges armed with tools that will enable him to circumvent irrevocable disabilities, develop ways of thinking and provide appropriate concepts and vocabulary (Kidron, 1985).

Since remedial teaching is based on instilling learning strategies in pupils, it is important to define the types and meanings of learning strategies with an emphasis on the characteristics of effective learning strategies.

#### **B. Cognitive Treatment**

**Cognitive-Behavioral theory** enables learning disabled people to deal with anger and various emotional problems. It attempts to develop coping strategies, applied in a supportive approach, using a three-stage process of cognitive preparation, acquisition of skills and employing drilling techniques, developed first by Milenbaum to deal with anxiety, and expanded by Novaco for the treatment of chronic anger. (Blake, et al, 2005).

This technique acknowledges that there may be behaviors that cannot be controlled through rational thought, but rather emerge based on prior conditioning from the environment and other external and/or internal stimuli. CBT is "problem focused" (undertaken for specific problems) and "action oriented" (therapist tries to assist the client in selecting specific

strategies to help address those problems), (Schacter et al, 2010) or directive in its therapeutic approach or directive in its therapeutic approach. Behaviorists believed that disorders, such as depression, had to do with the relationship between a feared stimulus and an avoidance response, resulting in a conditioned fear. Cognitive therapists believed that conscious thoughts could influence a person's behavior all on its own. Ultimately, the two theories were combined to create what we now know as cognitive behavioral therapy (Brewin, 1996).

This theory is suitable for my research because a person's thoughts, and hence, if a person's thoughts are changed, his or her feelings may also change, and hence, his or her behavior.

### **C. Social Treatment:**

The literature suggests that we must teach the social skills required for creating relationships with peers, and therefore early intervention is critical in order to prevent the formation of social problems (Denham & Weissberg, 2004; Freedman, 2003).

I presented two learning methods in this area:

1. **Mediated Learning** (Feuerstein, 1991): Mediated learning is defined as **quality interaction between an organism and its environment**. Mediation has to do with the quality of relationships rather than contents. The latter change from one culture to another, from age to age and from person to person. This quality is created as a result of the changes caused by a human mediator, who is placed between a stimulus and a learner: the mediator chooses, organizes, allocates time, and determines the intensity and importance of a stimulus (Feuerstein et. al. 1991).

The interaction between man and the environment through a mediator generates significant and more general change, which can also be applied to new situations and stimuli. This is a structural change, which reflects a developmental change that affects a person's overall reactivity. **In other words, there are two channels of development and learning: learning through direct experience with objects, and learning through a mediator.** (Feuerstein et. Al., 1991).

2. **Cooperative Learning (Vygotsky, 1978)** is an inclusive name for a large number of teaching and learning methods emphasizing rudiments of cooperation between pupils in the course of educational activities.

In cooperative learning pupils strive to achieve their goals through supporting and involving others in a group or class (Martin & Dowson, 2009).

**The approach relies on Vygotsky's theory (Vygotsky, 1978)**, according to which interaction among pupils in small groups allows children to acquire skills and reach deeper understandings than they could not reach on their own. Social interaction created in small groups leads to cognitive growth in pupils and improvements in learning achievement (Rich, 1996; Denham & Weissberg, 2004; Freedman, 2003).

It appears that Vygotsky's theory supports cooperative learning because learning in a small group indeed allows participants to acquire skills and motivates them to make efforts, learn and reach a state of deep understanding, which cannot always be reached through individual work.

## **Social Skills and Learning Achievements**

**Social skills:** The individual's ability to listen and focus on tasks, to express positive and negative emotions, to accept himself/herself positively, to cooperate with others, to accept authority and obey requests and demands made by a peer or an adult (Lior, 2010).

The research demonstrated that social competence and academic competence are interrelated. Research has shown that levels of learning achievement can influence levels of social acceptance. At certain ages, and in certain grades, success in learning can be the most important issue and determine how important the pupil is. Wiener and Harris (1997), noted that learning disabled pupils who have high learning achievements, sports skills, good looks and good humor, are more accepted than learning disabled pupils lacking these attributes.

**On the other hand, the research shows that advancing social and emotional skills significantly improves their readiness for school and learning success.** (Durkan & Weissberg et. al., 2005).

Social and emotional learning have a positive influence on academic achievements, including improved skills and grades in mathematics, the arts, language, and the social sciences, in problem solving and in planning skills and control of the subject (Durkan & Weissberg et. al., 2005).

In summary, a range of studies conducted in Israel and abroad that reinforce and point to the contribution of social skills and their positive influence on academic capability and academic achievements among students with learning disabilities, who are characterized by poor social skills.

## **Presentation of My Social Intervention Program for Children with Learning Disabilities**

The studies discussed above have shown the fact that successful interventions that build social, emotional and behavioral skills at an early age can have positive influence on the way children can solve problems and create interaction with their peers later in life (The National Institute for Education, 2007). The studies indicated that along with cognitive ability (such as significant reading, writing and thinking skills), Social and emotional competence, such as cooperation, motivation for learning skills (which is an important predictor of academic achievements (DiPerna & Elliot, 2002).

Moreover, in recent years, the strengthened its educational philosophy which holds that in order to fulfill the educational goals of the education system, school staffs need to address the pupils' emotional and social needs, especially when an inappropriate school approach to the pupils' needs may damage their academic functioning (Hadar-Pecker, 2013).

**The following section presents an intervention program seeking to develop social and emotional skills with reference to academic achievements.**

The Israeli Ministry of Education took upon itself the responsibility to provide for children with special needs as part of the democratic rights in Israeli society. As a teacher of special education, I believe that every special needs child has the right to take his place in normal society as an active member, and to enjoy normal interactive processes, to develop relationships over time, to create friendships with peers. As part of my role as a special education teacher, I am aware of the many difficulties pupils have in the realm of social skills, and how this influences their learning ability.

A study by Noiberger and Margalit (1998) suggests that academic help without aid in developing social skills and the establishment of an atmosphere promoting friendship, will make no change in learning disabled pupils' social status (Schechter, 2013).

Apart from that, previous studies (Levin, 1997; Margalit, 1995) confirm that children with learning disabilities responded better to social skills training.

I was thus led to develop and build an intervention program that reinforces social skills in *children with Learning Disabilities* based upon the emotional-social intervention plan for adolescent learning-disabled pupils (Life Skills Plan), and is a derivative from a comprehensive program aimed at adolescents of junior high school age.



## Values of the Social Intervention Program

The Social Intervention program provides pupils with a number of values such as: listening, being patient, accepting others, respecting others, cooperating with others, being aware of members' emotions feeling for others, empathizing with others.

The goal of this of Social Intervention **program** is to aid children with Learning Disabilities to deal with social problems in the following ways:

- ❖ Development of the individual's ability to cooperate with others, including one-on-one cooperation with a peer or an adult.
- ❖ Development of the ability to accept authority and obey requests and demands made by a peer or an adult.
- ❖ Development of the ability to express positive and negative emotions, and to accept himself.
- ❖ Development of the ability to listen and focus on tasks, to be able to carry out tasks to the best of one's ability.
- ❖ Development of the ability to deal with stress, anxiety and embarrassment.
- ❖ Development of the ability to make decisions and set goals.

In other words, the intervention program sought to address the educational needs of children with learning disabilities, in the spirit of the overall demand of the education system which is committed to seeking and providing relevant solutions to promote the normal development of these children

**Social Skills that were Examined:** (1) Listening; (2) Cooperation; (3) Working in a team; (4) Empathy; (5) Self-image; (6) Self-control; (7) Critical thinking; (8) Dealing with failure; (9) Decision making.

## Unique Characteristics of the Intervention Program

- ❖ This program allows the participant to understand and absorb his disability – a foundation block for progress in all fields.
- ❖ The program is tailored to the research population, according to pupils' ages, and to the specific disability each has.
- ❖ Activities progress gradually from simple social skills to more complex ones (gradual learning).

- ❖ The activities are brief, and most are based upon movement, to prevent participants from getting bored, and thus assuring they will participate until the end of the tasks.
- ❖ This program is based on a cooperative learning approach.

## Key Concepts

**Learning disability:** is defined as a permanent and objective *cognitive* neurological disturbance that seriously affects a person's ability to learn (Gress and Boss, 1996; Spector, 2005).

**The most common learning disabilities are:**

**Dyslexia, Dysgraphia, Dyscalculia (Karnit, 2007).**

**ADHD** is a combination of two disorders:

1. ADD, which stands for Attention Deficit Disorder, and expressed through shorter spans of attention and concentration than the norm, a tendency to react to external stimuli, and difficulty focusing on the self without disrupting the environment. ADHD is a hyperactivity and impulsivity disorder that manifests as added energy, restlessness and hyperactivity (Tagansky, 2006)

ADHD disorder is characterized by high levels of:

2. Inattention: Impulsiveness and Hyperactivity.

**Academic achievements** - The concept **academic achievements** includes several related concepts, such as: personal knowledge, learning ability, learning skills, etc.

(Manor, 1981), it is the outcome of education - the extent to which a pupil, teacher or institution has reached educational goals.

(Ward et al, 1996)

**Social skills:** The ability of the individual to listen and focus on tasks, to express positive and negative emotions, to accept himself positively, to cooperate with others, to accept authority and obey requests and demands made by a peer or an adult. (Lior, 2010)

**Social status:** the degree of honor or prestige attached to one's position in society (Kerbo, 1983)..

**Self-Image:** Self-image is a system of beliefs and opinions that a person has about himself in a variety of domains: physical, academic, social, familial, etc.), and based on the individual's personal experiences, and in comparison between himself and his peer group (Roseman, Zalzman and Hason and Frankel, 1993; Halamish, 1996).

**Cooperative Learning:** an inclusive name for a large number of teaching and learning methods emphasizing rudiments of cooperation between pupils in the course of educational activities (Martin & Dowson, 2009). The cooperation between pupils can be built in a number of ways, and in fact, various methods explore unique ways of creating cooperation among pupils. Cooperative Learning includes a number of methods, based first and foremost upon cooperation between pupils (Hertz-Lazarovich, 1987).

## **METHODOLOGY**

The study was carried out using qualitative research methods (**case study**) with some quantitative parameters

### **Research Aims**

**Aim 1: to examine the influence of the social intervention program on academic achievement in two basic subjects- Arabic and Mathematics.**

**Aim 2: to examine social status among the pupils: in the homeroom classroom, before and after participation in the social intervention program.**

### **Research Questions**

- ❖ **Research Question 1:** How does social intervention program with children with learning disabilities influence on their academic achievement?
- ❖ **Research Question 2:** What is the influence of the Social intervention program on participants' social status?
- ❖ **Research Question 3:** How does participation in the social intervention program influence on self-image?

### **Research Hypotheses**

- ❖ **Hypothesis 1:** Participation in the program will bring about a rise in academic achievement in two basic subjects - Arabic and Mathematics among children with learning difficulties.
- ❖ **Hypothesis 2:** The social status of the participants will improve following their participation in the social intervention program.

- ❖ **Hypothesis 3:** Self-image of the participants will improve following participation in the social intervention program.

## **Research Variables**

**Independent Variable:** The application of the social intervention program based on Cooperative Learning of children with learning disabilities.

**Dependent Variables:**

- ❖ Academic achievement in Arabic and Mathematics
- ❖ The Social status: The level of social skills
- ❖ The level (structural and functional) of self-image's quality.

## **Research Paradigm and Approach: Qualitative Research Method**

The study was carried out using qualitative research methods (**case study**) with some quantitative parameters

**Qualitative research** is a situational action suggesting a point of view to the observer...meaning that qualitative researchers study participants in their natural surroundings, and attempt to find significance in the phenomena or to explain them according to terms used by laypeople. Strauss and Corbin suggested a definition with a wider common denominator: within the definition of qualitative research we mean all types of research that presents findings not through statistical processes or other quantitative methods (Shkedy, 2011). These definitions, and undoubtedly numerous others, identify qualitative research, first of all, as based upon verbal theories posed by members of the research group, and the proximity of participants in the research group to the natural world of experiences, and their lack of use of statistical-mathematical tools (Shkedy, 2011). It can be understood that these definitions emphasize the methodological aspect as the defining feature of qualitative research.

## Styles/ Types of Qualitative Research

Interpretive research, Theoretical research, Action research, Speculative research, Content research, Narrative, Phenomenological research, Ethnographic research, **Case study**

### ❖ Case Study

R.K. Yin defines the case study research method as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used (Yin, 1984, 2009).

Thomas offers the following definition of case study: "Case studies are analyses of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more methods. The case that is the subject of the inquiry will be an instance of a class of phenomena that provides an analytical frame – an object - within which the study is conducted and which the case illuminates and explicates." (Thomas, 2011).

**Case study research** excels at bringing us to an understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research. Case studies emphasize detailed contextual analysis of a limited number of events or conditions and their relationships. Researchers have used the case study research method for many years across a variety of disciplines. Social scientists, in particular, have made wide use of this qualitative research method to examine contemporary real-life situations and provide the basis for the application of ideas and extension of methods (Thomas, 2011).

According to Creswell, data collection in a case study occurs over a "**sustained period of time.**" (Creswell, 2009)

One approach sees the *case study* defined as a *research strategy*, an empirical inquiry that investigates a phenomenon within its real-life context. Case-study research can mean single and multiple case studies, can include quantitative evidence, relies on multiple sources of evidence, and benefits from the prior development of theoretical propositions. Case studies should not be confused with **qualitative research** and they can be based on any mix of quantitative and qualitative evidence. **Single-subject research** provides the statistical framework for making inferences from quantitative case-study data. (Yin, 2009). This is also supported and well-formulated in. "The case study is a research approach, situated between concrete data taking techniques and methodologic paradigms."

## Research Design and Tools

### ❖ Stage 1 - Pre-Plan

1. Quantitative data collection.

Sociometry questionnaire (Glantz, 1989) completed by the participating pupils' classmates

The research study subjects were selected based on the sociometry questionnaire (Glantz, 1989) completed by the participating pupils' classmates.

2. Quantitative data analysis and selection of 5 children to participate in the intervention.

### ❖ Stage 2 - Preparation for the Program

1. Social skills questionnaire (Elliot, Gresham Ashe, 1989) to be completed by participants' teachers.
2. Self-evaluation questionnaires (Rosenberg, in Schechter, 1993) to be completed by participating pupils themselves.
3. Interviews to be conducted with each participating pupil before commencing the social intervention program,
4. Participating pupils to be tested in chosen basic subjects (Arabic, and Mathematics).

### ❖ Stage 3 - After the Intervention Program

1. Quantitative and qualitative data collection, using questionnaires and repeat interviews with teachers and pupils
2. Teachers to complete the Social Skill Questionnaire again, and participating pupil to once again **fill out the self-evaluation questionnaires and be retested in chosen basic subjects (Arabic, and Mathematics).**
3. Interviews to be conducted with each subject pupil after the **social intervention program.**

### ❖ Stage 4: Interpretation

The material from the interviews, quantitative examination of questionnaires completed before and after the social intervention program, will be analyzed. **Finally**, there will be a discussion of the findings and their consequences.

## **Research Population**

The participants were chosen after filling out socio-metric questionnaires in their homeroom classes. The questionnaires yielded information regarding pupils who felt rejected or neglected by their class mates (Appendix 1).

The findings emerging from the sociometric analysis based on the preliminary interview with the pupils indicate that the pupils did not like to play with anyone. They preferred to sit by themselves. Only one pupil mentioned a name of another pupil next to whom he was willing to sit, but the pupils noted they sometimes sat next to two or three pupils. The pupils also noted they did not play with anyone outside, but they rarely played with two or three pupils. In addition, some of the pupils also have learning disabilities according to school documents.

The research population consisted of five learning disabled junior high school pupils, aged 14-16. In addition to learning disabilities, all of the research participants also suffer from behavior, social and emotional problems and some also have medical problems. The children come from lower to middle class socio-economic status.

## **Research Methods and Data Analysis**

As the sample is small, nonparametric tests were used in order to examine the differences before the intervention plan and following it, for each of the variables measured in the study, as reflected in the questionnaires.

### **Quantitative Tools**

- ❖ **Sociometric Questionnaire for Pupils** (adapted from Glantz , 1989 – Appendix 8) Social acceptance is gauged by a Sociometric Questionnaire which is composed of six open questions. The advantage of this tool is that it includes simple questions that are tailored for children with learning disabilities and behavioral problems. The child is only asked to remember the names of other pupils, without having to explain or to justify. The questions are short, specific and simple, so that they do not require an attention-deficient child to apply much effort. Naturally, a child who has difficulty reading or understanding is read the questions aloud and they are explained to him, his consequent answers written for him.

Source of the questionnaire: Austin, A. M. B. (1984). Young children's attention to dyadic conversation as modified by sociometric status. *Genetic, Social, and General Psychology Monographs, 111*, 151-165.

❖ **Social Skills Questionnaire (Elliot & Gresham, 1989)**

Questionnaire to Examine Social and Learning Skills of Elementary School Pupils

Questionnaire for the Homeroom Teacher: “Questionnaire to Examine Social and Learning Skills of Elementary School Pupils” (Hebrew version of Gresham & Elliot [1990])

In the questionnaire the following areas will be examined: Social Skills: 30 items about the extent of lack of status frequency:

(0) Never (1) Sometimes (2) Frequently

In previous studies,  $a=94$ . In this current study  $A=95$

Advantage of the tool: The answers included items from three sub-fields:

- A. Cooperation – 10 items describing cooperation between pupils in the class. For example: “Carries out orders”
- B. Assertiveness and initiative – 10 items describing the pupil’s initiating behavior. For example: “Initiates conversations with peers”
- C. Self-Control – 10 items describing behavior during confrontations. For example: “Controls his anger in confrontational situations with peers”.

In other words, this tool allows the educator or researcher to obtain a general, specific, and accurate picture of the pupil's social standing as it is reflected in three specific areas: Cooperation; Assertiveness and initiative; Self-Control.

❖ **Self-Concept Questionnaire (Rosenberg, in Schechter, 1993 - Appendix 10)**

This questionnaire includes 2 scales (22 items,  $\alpha = .87$ )

- A. Multidimensional Self Concept Scale, MSCS (Bracken, 1992). This questionnaire includes 12 items out of “The Multidimensional Self Concept Scale” that is specified for pupils up to age 18. ( $\alpha = .78$ )
- B. Rosenberg Self-Esteem Scale (Rosenberg, 1979). This questionnaire includes 10 sentences that describe human emotions towards oneself;  $\alpha = .78$

The questionnaire was deemed valid in studies conducted in the USA as well as studies conducted in Israel (Rosenberg, 1979), (Oren, 1993; Tal, 1999).

❖ **Mapping of Learning of Basic Subjects (Arabic and Mathematics), based on the curriculum - Appendix 11 / 12)( school staff contribution )**



### ❖ **The Mapping of Mathematics:**

Mapping is based upon the National Committee of Mathematics and it is adjusted to the needs of the pupils with regards to the length of the exercises and the level of difficulty.

The mapping includes 24 Question in the following areas: numbers and mathematical and algebraic operations, verbal questions and geometry were eliminated and the questionnaire was adjusted to the research population

### **The Mapping of Arabic (school staff contribution Appendix 11)**

Mapping is prepared by the Arabic team at the school. It is adjusted to the intellectual level of the pupils and includes the following components: listening, reading, writing and language skills.

The pupils received breaks during the time they filled in the questionnaires as it was complicated and lengthy.

### **Qualitative Tools and Data Analysis**

❖ **Semi-Structured Interviews** (Adapted from Avraham, 2011) with pupils were carried out by the researcher before and after the intervention program. The interview consisted of six open questions and was based upon group work for the improvement of social skills in children not accepted socially by their peers that was developed by Yael Avraham (2011).

❖ **Individual Questionnaire for Each Participant** (Appendix13).

This tool includes three open-ended questions, i.e. the original interview is comprised of 6 questions but I added secondary questions to allow the pupil to express himself more accurately and specifically and obtain the whole picture regarding the pupil's social situation in the class.

This tool demonstrates and contributes greatly to identifying the pupil's social placement in the classroom through the image (circle) attached to the questions.

The questions are open-ended, allowing the pupil to speak freely.

When the child was unable to answer questions because of his limited vocabulary I would give him a lot of possible answers to help him choose the most appropriate answer.

Based on: “Opening the Glass Gate: Group Work to Improve Social Skills in Socially Rejected Children by Their Peers”, as developed by Yael Avraham. 2011 (Based on: “Opening the Glass Gate: Group Work to Improve Social Skills in Socially Rejected Children by Their Peers”, as developed by Yael Avraham. 2011).

- ❖ **Structured Observation** by a research assistant guided by the researcher as per how to conduct an observation in each encounter of the intervention program.

**Number of observations:** 12 according to the intervention program. **Monitoring Pupil Behavior (Appendix 15)** - This instrument would be useful in the classroom during instruction. A pupil’s behavior would be observed to determine the degree that he or she demonstrates particular behavior skills that are deemed important for pupils to be successful in the classroom and in life in general.

**Rationale:** The rationale for using an instrument such as the behavior observation checklist is two-fold: (1) It helps the teacher identify deficits (or strengths) in pupil’s behavior. This information could then be used to develop a behavior plan for the pupil to follow in the classroom; (2) The observation tool would provide valuable documentation that could be needed during a parent-teacher conference or when discussing a particular pupil with another teacher experiencing similar problems. An administrator may also find the information useful if disciplinary issues are involved.

**Instrument:** The instrument is designed to work with one particular pupil that has been pre-identified as a needed case study. To do observations on multiple pupils with this instrument, pupil names could be color-coded and the checkmarks would then have to match the color of the name. This may work well with two or three pupils but with many more it may be confusing. Ideally, one observation instrument per pupil would be implemented.

In my research I will use this tool with five pupils, because my experience with pupils showed that it is effective and its contribution to the attention given to the pupil's behavior before and after the intervention program.

It is important to note that changes were made to this tool, meaning that I erased sub-headers and added statements that describe, in a focused and specific manner, the pupil's behavior during an activity such as collaboration, team work, discussion of emotions, compliance with stressful situations, positive thinking, and self-advocacy.

## **Data Analysis**

In order to examine the research questions and hypotheses a variety of tools were used to measure pupils' academic achievements in Arabic and Mathematics, structured questionnaires to examine pupils' social skills and self-image as well as observations and interviews. The qualitative data generated by the tests and questionnaires were analyzed statistically and the interviews were analyzed using content analysis. Findings that emerged from the quantitative and qualitative analysis were combined and triangulated.

## **Triangulation, Validity, Reliability**

It is important to note that the research tools went through an additional process of validation (in addition to the reliability and validity of the original tools), so that the tools presented to a team of experts which was comprised of people specializing in the cooperative teaching approach and teaching pupils with learning disabilities, psychological characteristics of the learner (Self-image) and sociological characteristics (social position). These experts expressed their agreement that the tools indeed examine the world of content which the research seeks to examine, and that there is a high level of correspondence between the components of the tools and the aspects of the variables under study. It is important to note that the tools were translated from English into Hebrew and Arabic, and were then re-translated into English. The translation was found to be accurate. Thus, the tools were presented to the participants in Arabic.

## **Judging Reliability**

The correlation between judges is examined. The higher the correlation is, the fewer random errors there are whose origins are in the differences among the judges (i.e. the tendency to be severe or to be lenient, the giving of different emphases, prior knowledge of the pupil, etc.). Following the translation of the questionnaire and its writing and wording – the questionnaire is displayed to 10 judges (8 teachers from the school and 2 university lecturers).

## Validity

I made certain of the validity of the questionnaire when I presented it to a pilot group of 10 pupils at Afak Um Al Fahm School, who had been randomly chosen (6 boys and 4 girls). Each pupil was assigned a number from 1 to 10. Two weeks later the questionnaire was shown to the pupils once again. I analyzed factors and extracted common details from among their grades using the Pearson coefficient equal (87.5), and the analysis of factors was found equal.

**Regarding the generalization** of the results of the study: it is true that the number of participants was small, which undermines the generalization and the credibility of the study's results, but, in my opinion, the carrying out of the study in a controlled, planned, in-depth, intensive way will contribute greatly to the justification and reinforcement of the findings and their inclusion upon others.

## Researcher's Role

My role as the researcher made me an active collaborator, involved in all stages of the study, from start to finish.

I interviewed pupils, gave out exams and questionnaires on an individual basis (because they have difficulty reading and understanding, I thus was expected to explain everything to them). Additionally, I carried out the intervention plan with the pupils. This means that I had direct contact with the participants and all of the material and information came to me.

Moreover, I took on the role of assessor in the course of the study (prior to and following the intervention plan).

## Confidentiality and Ethics

In order to maintain confidentiality and ethics throughout the study, the participants were **informed** of the goals of the study and that their participation in the study was their free choice and that no pressure would be brought to bear on them, and that they could end their participation at any time. It was emphasized to the participants that the questionnaire is anonymous and that no one would see their answers, other than the researcher carrying out the study. To this end, participants' names were expunged and the name of the school in which the study was carried out was not mentioned. Furthermore, I received the parents' consent in writing from the parents, for their children to participate in the research, after I had explained

(through the homeroom teacher) the contribution and positive influence of the research on their children's academic and social progress.

Additionally, I promised to show the Headmistress the results of the study, and that the use of the questionnaires and interviews would be for research purposes only.

## **Findings Pertaining to the First Research Hypothesis and Question**

### **Hypothesis 1: Participation in the program will bring about a rise in academic achievement in two basic subjects - Arabic and Mathematics**

This hypothesis seeks to answer the question: How does social intervention program with children with learning disabilities influence on their academic achievement?

There was a significant improvement in all dimensions of achievements in Arabic Language. All pupils, except for F' and R', improved in the listening and speaking element, and R' in linguistic knowledge element. The intervention program has led to improvement and better achievements for all participating pupils in all aspects and elements of Arabic language, as well as in their total Arabic marks.

**In addition there was a significant improvement** in most measures of achievement in mathematics among all pupils; in some measures, there were improvements made by some students.

## **Findings Pertaining to the Second Hypothesis and Research Question**

### **The second research question was: What is the influence of the Social Skill Approach on the participants' social status?**

The intervention program led to significant improvement in all the participants' social skills. Hence, the degree of sharing and collaboration among these pupils has also increased, as well as their level of assertiveness and self-control. Improvements can be seen in such skills as containing anger, appropriate responses to stressful situations, inviting others to join an activity, effective time use, ability to communicate with others, to listen and accept criticism, volunteering, following instructions and more. These skills improved as a result of the intervention program. The participants' self-image was examined via a structured questionnaire comprised of two separate questionnaires.

## **Findings Pertaining to the Third Research Question and Hypothesis**

### **Hypothesis 3: Self-image of the participants will improve following participation in the social intervention program.**

This hypothesis seeks to answer the question: How does participation in the social intervention program influence on self-image?

The participants' self-image was examined via a structured questionnaire which is comprised of two questionnaires

It was found that there has been an improvement in the level of self-image among all participating students.

## **Findings Emerging from the Observations and Interviews**

Structured observations were also conducted based on predetermined criteria regarding the behavior of the students who participated in the research throughout the program, in order to examine the level of improvement in their learning, organization and educational behavior throughout the program that lasted 14 weeks (encounters).

The findings indicate continuous improvements in learning, organization and educational behaviors. The improvements were constant and monotonous, and the students' behaviors changed for the better.

The intervention program also led to an improvement and change in participating students' discipline and order in class, so that students began to follow instructions and take responsibility for their actions.

Emotionally and in terms of interpersonal relationships, the students became more open, expressed their emotions to others, were more capable of functioning in a group and cooperate and express solidarity with others, respect their opinions and property.

**In summary**, their participation in the program led to significant improvement in their social status in class. They shifted from a state of isolation to being in the center; they made friends and increased their sense of confidence and belonging. Additionally, they sought respect and gained it, as well as love and involvement.

## **General Findings Drawn from the Research**

There were considerable improvements in all dimensions of achievements in Arabic and mathematics with all the pupils who participated in the intervention program. The program was based on cooperative learning and led to improvements in the achievements of all pupils in Arabic and all of its aspects, as well as in the general Arabic score. In addition, there were significant improvements in most dimensions of Mathematics for all the pupils. The intervention program brought about improvements in the achievements in Mathematics and all of its aspects, as well as in the general Mathematics score.

The cooperative learning based intervention program led to significant improvements in the pupils' social skills, so that the level of collaboration and partnership among the pupils increased as well as the level of their assertiveness and self-control. The following skills have improved: anger management, introducing oneself to others, the ability to learn the rules, compromise, proper reaction to stressful situations, inviting others to join activities, effective time management, the ability to communicate with others, listen and receive criticism, initiative, complimenting others, volunteering, maintaining order and cleanliness, and obeying rules and regulations. These skills improved as a result of the pupils' participation in the intervention program, which also led to improvements in the pupils' self-image.

Furthermore, the pupils who participated in the intervention program were rejected, isolated, in the margins of the class and lacked confidence and a sense of belonging. However, their participation in the program led to considerable improvements in their social status within the class. They improved their social status to the center. They made friends and increased their sense of confidence and belonging. They also wanted and received respect, love and involvement. The pupils expressed great satisfaction with the program by stating that they would like to participate in a similar program as such participation may provide solutions for their needs for calmness, restraint, patience and tolerance, collaboration, attention and more.

## **CONCLUSIONS AND RECOMMENDATIONS**

This research describes, through case study, the process undergone by adolescents who participated in the Intervention program to improve their academic achievements in the two major subjects (Arabic and mathematics), their social skills, and their sense of self-esteem. The study also examined the implications of the intervention program, based mainly on the

principles of Vygotsky's Cooperative Learning Theory (1978), on the social status of the participants in their peer group in the class, with emphasis on measuring the impact that the program had on the participants and their position on the social fabric and among their peers, while also taking into account the type of learning disability and the child's behavior and sociometric placement before the treatment – participation in the intervention program.

It is important to note that the intervention treatment is largely based on the principles of cooperative learning, and was built to realize the goals set for this study, out of the awareness that children with learning disabilities express cognitive and functional educational difficulties, as well as emotional, social and behavioral difficulties. These further increase their learning difficulties. Therefore, the intervention program was designed to improve learning skills in two important areas, language and mathematics.

The research hypotheses were:

- ❖ **Hypothesis 1:** Participation in the program will bring about a rise in academic achievement in two basic subjects - Arabic and Mathematics.
- ❖ **Hypothesis 2:** The social status of the participants will improve following their participation in the social intervention program.
- ❖ **Hypothesis 3: self-image of the participants will improve following participation in the social intervention program.**

The main research findings indicated that there was significant improvement in all dimensions of the achievements in Arabic among all pupils.. The intervention program also led to improvement and increase in the pupils' achievements in Mathematics in most aspects and dimensions, as well as their overall grade in Mathematics.

The intervention program, based on cooperative learning, resulted in a considerable improvement in the social skills of all of the participating pupils. The level of cooperation and collaboration among the pupils increased, and their level of assertiveness and self-control has also increased. These skills have improved as a result of the pupils' participation in the intervention program, which significantly improved the self-image of all of the participants.

In addition, the pupils who participated in the intervention program based on cooperative learning were ostracized, isolated, rejected, and felt dislocated and insecure, but their participation in the program resulted in a considerable improvement in their social position within their class, they improved their social status, and became the center of the classroom. They connected with friends and increased their sense of confidence and



belonging. They also wanted and received respect, love, and sharing. Pupils have expressed great satisfaction with the program and said that they want to participate in a similar program, because their participation in this type of program can meet their needs in acquiring the following qualities: calm and restraint, patience and tolerance, cooperation, listening, and more.

**It is important to note that the findings of the qualitative analysis support the quantitative analysis findings to a very large extent.**

## **Factual Conclusions**

**Research Question 1:** How does social intervention program with children with learning disabilities influence on their academic achievement

**Hypothesis 1:** Participation in the program will bring about a rise in academic achievement in two basic subjects - Arabic and Mathematics

The development of learning and social skills among pupils with learning disabilities in a special education school in the Arab sector is done by implementing a unique intervention program based on cooperative and personal work while giving attention and meeting each pupil's needs, and adjusting the tools and strategies according to age, level of difficulty, or the pupils' academic, social, or behavioral characteristics, and thus improving the pupils' achievements in all areas. In addition, the findings show that the intervention program, aimed at developing learning and social skills for pupils with learning disabilities in the Arab society was discovered to be a powerful catalyst which can improve these pupils' interpersonal relationships (interpersonal communication) and thereby take advantage of collaborative learning to improve academic achievements. Hence, hypothesis No. 1 was confirmed.

**Research Question 2:** What is the influence of the Social Skill Approach on the participants' social status.

**Hypothesis 2:** The social status of the participants will improve following their participation in the social intervention program.

The development of social skills among pupils with learning disabilities in the special education school in the Arab sector was done using a unique social intervention program based on cooperative and personal learning while meeting the pupils' leaning needs and providing them with tools and strategies for dealing with social situations appropriately instead of using impulsive, aggressive behaviors.

The conclusion is that the intervention program proved to be an effective strategy for improving the social status of the participants. Hence, hypothesis No. 2 was confirmed.

**Research Question 3:** How does participation in the social intervention program influence self-image?

**Hypothesis 3:** the participants' self-image will improve following participation in the social intervention program.

The development of social skill for pupils with learning disabilities in special education schools in the Arab sector was done by implementing a unique social intervention program based on cooperative and personal work with attention to the academic needs of pupils and providing them with tools and strategies for improving and strengthening his self-image and self-confidence.

The study shows that when the pupils underwent new experiences of success through a unique intervention program that addressed their emotional aspect, their self-image improved which led to the improvement and strengthening of their interpersonal communication and interpersonal relationships, further resulting in adequate and acceptable behavior and an improved social status.

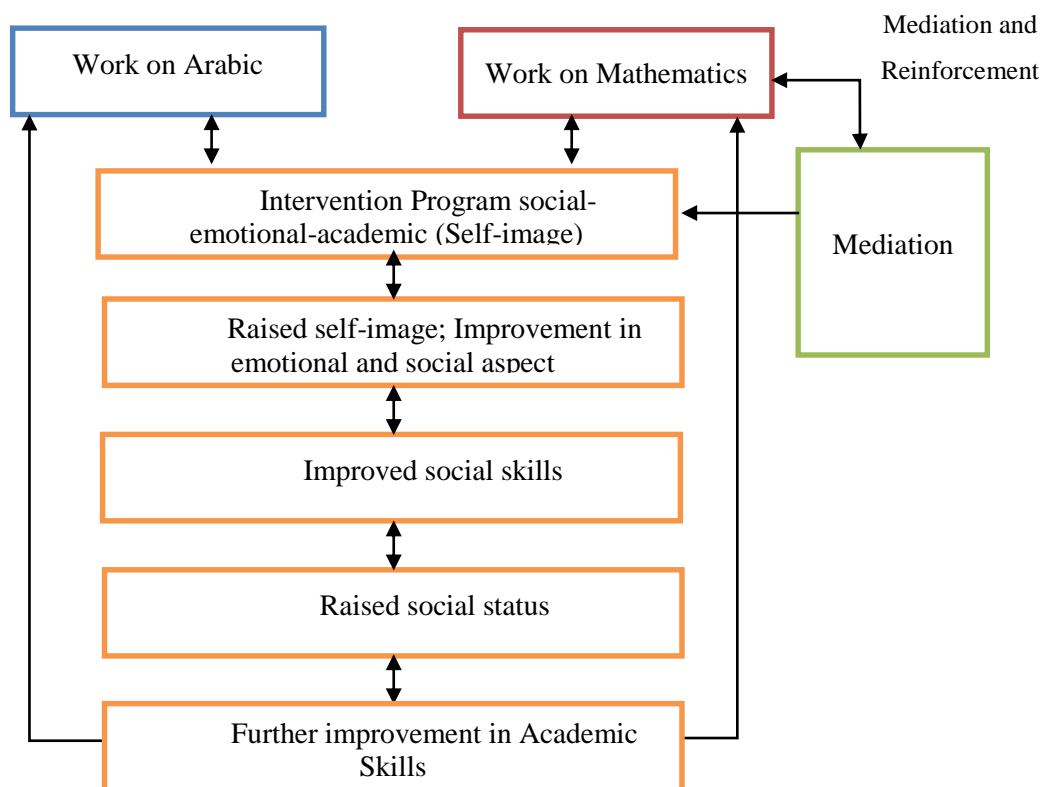
The conclusion is that the intervention program proved to be an effective strategy to leverage and improve the participants' self-image. Hence, hypothesis No. 3 was confirmed.

## **Conceptual Conclusions**

### **Model of Improving Social Skills and Academic Achievements through Intervention Program**

In light of these findings, and despite social pressures and stigma suffered by participating pupils, especially from their peers, due to their enrollment in a special education school, the participants were able to overcome society's external forces and strengthen their internal forces by acquiring social and emotional skills. Therefore, it can be concluded that if a school system provides a supportive framework for pupils, is aware of the difficulties and makes an effort to find creative solutions for their problems, these pupils will succeed in their studies.

Figure 1 presents a theoretical model for improving social and academic skills through an intervention program.



**Figure 1: Model of Improving Social Skills and Academic Achievements through Intervention Program**

**Model Description:** the goal of the intervention program is to improve participants' academic achievements in Mathematics and Arabic.

Improved academic achievements enhanced participants' self-image. This situation led the students' feeling more open and freer, and as a result improved the participants' social skills. In turn, they were better socially accepted, their social status improved both among their peers and in their near surroundings (society). Consequently, this empowered their academic skills.

### **Practical Implications and Recommendations**

Therefore, the main recommendation arising from this study is the inclusion of an intervention program based on cooperative learning work among different populations in special education, especially among pupils with learning disabilities with a behavioral disorder, in special education schools and in integrated classes in regular education in the junior and high school level.

In addition, it is strongly recommended to plan a systematic program to teach an integrated classroom how to accept and assimilate pupils with learning disabilities – which will raise the chances of success of the intervention program and will improve the pupils' ability to integrate into their homeroom, group, society, and prepare them for life in order to make them independent adults who are fully integrated with their peers.

The following measures are also recommended:

- ❖ Reducing the duration and number of activities in every session of the program.
- ❖ cooperative
- ❖ Increasing the activities based on games, and minimizing activities based on discussions as they bore the pupils and reduces their concentration during the activities.
- ❖ Using verbal and material reinforcement which fosters and increases the participants' level of motivation, especially since most of them come from weakened socioeconomic backgrounds, and therefore material reinforcement may contribute to their participation and contribution during the study.

It is also important to examine what influences, how well the social intervention program works for pupils with learning disabilities - is it better to offer individualized treatment or group treatment? Pupils with disabilities first need help in strengthening their 'self' through conversations and personal counseling, and emotional support to improve their resilience and ability to cope with properties that cannot be changed. Afterwards, at a more advanced stage, we move on to a group intervention program. It is also advisable to conduct further qualitative research to examine systemic treatment - which involves the integration of the homeroom teacher.

It is recommended to develop special professional development frameworks for teachers in special education schools, so as to train them toward developing similar intervention programs, or applying the intervention program used in this research.

## **Contribution to Knowledge and Theoretical Implications**

The implications of this research are both theoretical and practical: the current research expanded, supported and reinforced Vygotsky's theory of Cooperative Learning Feuerstein's Mediated Learning Theory (1991), and resulted in improved social, emotional and academic skills among participating students through mediation, mediated learning, cooperative learning and use of varied learning tools and strategies. As such, knowledge has been

contributed to the field of cooperative learning, mediated learning and constructivist learning from the perspective of working with children with special learning needs, learning disabilities and behavior disorders.

Most importantly, the Israeli Ministry of Education must believe in learning disabled pupils' abilities to succeed in developing their own success. If the school system provides a supportive framework for pupils, is aware of their difficulties and makes an effort to find creative solutions for their problems, these pupils will succeed in their studies. An additional aspect of this research pertains to the use of social intervention tools that may contribute to learning disabled pupils' ability to contend with their difficulties in learning. I believe that this research will contribute to the creation of a plan that will strengthen internal resources of children who are overcoming external factors, and will empower them to overcome barriers and make progress in their studies.

This study will contribute to the field of treatment of children with learning disabilities in special education schools and especially at junior high school level. This study can pave a path to an educational policy that benefits special education or inclusive education for learning disabled pupils. By carrying out a social intervention, we can contribute to learning disabled pupils.

### **Research Limitations**

- ❖ The small number of participants is a limitation of this study, in light of the lack of responsiveness on the part of the pupils and their parents, and because of the pupils' disabilities.
- ❖ Behavioral problems that affected the pupils' progress: ADHD affected the course of the meetings and led to shortened and reduced meetings.
- ❖ Excessive absences from school, which affected the group work, which is the basis of cooperative work.
- ❖ Lack of continuity in carrying out the program: many holidays and breaks led to many repetitions of the material and not passing the materials at the scheduled time

Therefore, generalization of the research findings, particularly since the research group was rather small, which is one of the drawbacks of action research, is left for the readers to make.

## **Future Research**

1. Increasing the number of participants, which must lead to better results and will contribute to the research findings, specifically with relation to collaborative work and its impact on social, emotional, and academic progress.
2. To carry out systemic research that includes parents and school staff in order to get a more complete picture of the intervention program's influence.
3. To focus on cultural influences included in educational contexts.

## REFERENCES

- Abu-Asba, K. (2001). Dilemmas and Issues in Value-Based Education in Arab Schools in Israel. In: Iram, S.Shkolnikov, Y. Cohen, A. (Eds). *Crossroads: Values and Education in Israeli Society*. Jerusalem: Chief Scientist's Office, Ministry of Education pp. 441 – 460 (In Hebrew)
- Abu-Asba, K. (2001). The Arab Education System in Israel. In: Hasson, S and Abu-Asba, K. (Eds). *Jews and Arabs in Israel in a Changing Reality*. Jerusalem: (In Hebrew). Jerusalem: Floresheimer Institute for Policy Studies pp. 81 – 97 (In Hebrew)
- Abu-Asba, K. (2007). *Arab Education in Israel, Dilemmas of a National Minority*. Jerusalem: (In Hebrew). Jerusalem: Floresheimer Institute for Policy Studies (In Hebrew)
- Aiydat, S., (2010). *The connection between the phenomenon of teasing and that of self-image in elementary school students from the Bedouin sector*. M.A. Thesis: Oranim Academic College of Education.
- Al-Hayik, A. (2010). *Empowerment of learning disabled students with low self-image, in girl students from the Haredi sector, through intervention of short term consultancy and by means of group biblio-and art-therapy*. Final Thesis: Oranim Academic College of Education.
- Alian, S. (2012). Good and significant Learning: Learning Experiences of Palestinians-Israeli Graduates. Mofet: *Dapim*, No. 53 pp. 144 – 167 (In Hebrew)
- "Amanda Kirby speaking on the co-occurrence of learning difficulties". dysTalk. Retrieved 2009-04-22.
- American Psychiatric Association - APA, (2013). Diagnostic and Statistical Manual OF Mental Disorders. FIFTH EDITION - DSM 5.
- Asher, S.R. Parker, J.G. & Walker D.L. (1996). *Distinguishing friendship from acceptance: Implications for intervention and assessment*. In W.M. Bukowski, A.F. Newcomb, W.W. Hatup (Eds.), *The Company They Make: Friendships in Childhood and Adolescence*. Cambridge: Cambridge University Press.
- Austin, A. M. B. (1984). Young children's attention to dyadic conversation as modified by sociometric status. *Genetic, Social, and General Psychology Monographs*, 111, 151-165.
- Avidav-Unger, A. (2011). *Teachers' Professionalism and school culture as a learning organization as predictors of assimilating innovative technologies in school*. In: Eshet-Alkalay, Y. Caspi. A., Eden, S. and Gary, N.
- Barkley, R. A. (1997). *ADHD and the Nature of Self-Control*. New York: The Guilford Press.
- Barkley, R. A. (1998). *Attention deficit hyperactivity disorder: A handbook for diagnosis and treatment*. New York: The Guilford Press.
- Bauminger Eilon, N. (1990). *Central Characteristics of Social Skills in Learning Disabled or Lightly Mentally Handicapped Adolescents*. M.A. Thesis: Tel Aviv University.
- Bachara, G.M. (1976). Empathy in learning disabled children. *Perceptual and Motor Skills*, 43, 541-542.
- Beck AT, Rush AJ, Shaw BF, Emery G (1979). *Cognitive Therapy of Depression*. New York: Guilford Press. p. 8. ISBN 0-89862-000-7.
- Berninger, V.W.; B.J. Wolf (2009). *Teaching students with dyslexia and dysgraphia: Lessons from teaching and science*. Baltimore, Maryland: Paul H. Brooks Publishing Co. pp. 1–240. ISBN 978-1-55766-934-6 .
- Blake, L. et. al (2005). "Evaluation of Anger in the Mildly Learning Disabled in a Sheltered Environment", in *Therapy in Cognitive Behavior with the Learning Disabled*. Eds. Biza, K. et. al. Kiryat Bialik, Israel: Ach Publishing Company.

- Brewin, C. (1996). Theoretical foundations of cognitive-behavioral therapy for anxiety and depression. *Annual Review of Psychology*, 47, 33-5.
- Butterworth, B (2010). "Foundational numerical capacities and the origins of dyscalculia". *Trends in Cognitive Sciences* 14 (12): 534–541.
- Butterworth, B; Varma, S; Laurillard, D (2011). "Dyscalculia: From brain to education". *Science* 332 (6033): 1049–1053.
- Campbell, Robert Jean (2009). *Campbell's Psychiatric Dictionary*. Oxford University Press. pp. 310–312. ISBN 978-0-19-534159-1.
- Chiș, V. (2005), *Pedagogia contemporană - Pedagogia pentru competențe*, Editura Casa Cărții de Știință, Cluj-Napoca.
- Circular of the General Manager of the Israeli Ministry of Education (2000). Circular of 2000/9(A). May 2000. Ministry of Education, Culture and Sport. Jerusalem: Department of Publicity.
- Circular of the General Manager of the Israeli Ministry of Education (2003). Circular of 2003 10 (B). June 2003. Ministry of Education, Culture and Sport. Jerusalem: Department of Publicity.
- Clark, M.D. (1997). Teacher response to learning disability: A test of attributional Principles. *Journal of Learning Disabilities*, 30 (1), 69- 79.
- Clinical Practice Guideline: Treatment of the School-Aged Child with Attention-Deficit/Hyperactivity Disorder, *AMERICAN ACADEMY OF PEDIATRICS, PEDIATRICS* Vol. 108 No. 4 October 2001, pp. 1033-1044.
- Creswell, J. (2009). *Research Design; Qualitative and Quantitative and Mixed Methods Approaches*. London: Sage. ISBN 978-1-4522-2609-5.
- Cresswell, J.W. and V. L. Plano Clark (2007). *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA, London: Sage.
- Dalia, D., et al. (2007). Planning of Learning in Frameworks for Special Needs Pupils. Israeli Department of Special Education: 1-20.
- Denham, S. A., Weissberg, R. P. (2004). Social-emotional learning in early childhood: What we know and where to go from here. In E. Chesebrough, P. King, T. P. Gullotta, & M. Bloom (Eds.), *A Blueprint for the Promotion of Prosocial Skills*. New York: Kluwer/Academic Publishers.
- DiPerna, J., & Elliott, S. (2002). Promoting academic enablers to improve student achievement: an introduction to the mini-series. *School Psychology Review*, 31, 293-297.
- Division of Education and Sport, Youth Department, Holon Municipal Government, 1998.
- Dofî, L. Elner, A., Levi, N. (2004). Assessment of Ability, cognitive skills and personality traits of adolescents with learning disabilities. *Issues in Special Education and Rehabilitation*, Vol. 19.
- Dvora, S. (2011). *Non-verbal disorder as a learning disability (NLD) – Guidelines for treatment of social and interpersonal communication difficulties*. The Center for Learning Disabilities in Adolescents and Adults. www.drdebby.co.il.
- Einat, A. Einat, T (2007). *Indictment: Learning Disabilities, Dropout and Delinquency*. Tel Aviv: Hakibbutz Hameuchad. (In Hebrew)
- Elliott, S.N. (1988). *Children's social skill deficits: a review of assessment methods and measurement issues*. Paper presented at the annual convention of the American Educational Research Association, New Orleans, L.A.
- Erikson, E.H. (1968) "Identity: Youth and Crisis", London.
- Engler, B. (2006). *Personality theories* (7th Ed.) p. 424. Boston, MA: Houghton Mifflin Company.



- Evenden, J. L. (1999). Varieties of impulsivity. *Psychopharmacology*, 146(4), 348.
- Eysenck, H. J. & Eysenck, W. M. (1985). *Personality and individual differences*. New York: Plenum Press.
- Feuerstein, R., Klein, P.S. & Tennenbaum, A. (1991), *Mediated Learning Experience (M.L.E)*, Freund Pub. House, London.
- Freedman, J. (2003). Key lessons from 35 years of social-emotional education: How self-science builds self-awareness, positive relationships, and healthy decision-making. *Perspectives in Education*, 21(4), 69–80.
- Gardner, Howard (1993). *Multiple intelligences: The theory in practice*. New York: Basic Books.
- Garvin, D.A. (Sept.-Oct.2003) Making the Case: Professional Education for the World of Practice. *Harvard Magazine*, 106, 1, 56-107.
- Givon, S. Cohen, A. (2008). Cognitive and emotional processes experienced by students with learning disabilities and the Styles of their coping in the effort to gain a matriculation certificate. *Educational Counseling*, 15. University of Haifa. (In Hebrew)
- Goldstein, S. (1999). Attention deficit / hyperactivity disorder. In S. Goldstein & R. R. Cecil (Eds.), *Handbook of Neurodevelopmental and Genetic Disorder in Children* (pp. 154 - 184). New York: The Guilford Press.
- Green, K., Chi, K. (2001). Understanding and treating ADHD. Netanya, Shimoni. (In Hebrew).
- Gresham, F.M. & Elliott, S.T. (1989)."Social skills deficits as a primary learning disability". *Journal of Learning Disabilities*, 22, 2: 120-124.
- Gresham, F. M., & Elliot, S. N. (1987). The relationship between adaptive behavior and social skills: Issues in the definition and assessment. *Journal of Special Education*, 21, 168-181.
- Gress, J. R., and Boss, M.S. (1996). "Substance abuse". *Child psychiatry and Human development*, 26(4):235-245.
- Gruber, Sibylle & Jean, Boreen (2003). Teaching critical thinking: Using experience to promote learning in middle school and college students. *Teacher and Teaching: Theory and Practice*, 9(1), 5-19.
- Guay, F. Boivin, M. Hodges, E. V. E. (1999). Predicting change in academic achievement: A model of peer experiences and self-system processes. *Journal of Educational Psychology*, 91, 105-115.
- Gumpel, T. (1996). Using token Economy and Self-Management for Increasing Attention among Preschoolers in Special Education. *Issues in special Education and Rehabilitation*, pp. 23-32.
- Hadar-Pecker, D. (2013). *The Relationship between School Students Emotional-Social State and Academic Achievements*. Background review for the work of the committee for "Education to all and for everyone", The Initiative for applied research in education.
- Halamish, Y. (1996). *Improvement in self-image: A treatment plan – A teacher's guidebook*. Pedagogic Institute of Kfar Saba. Pages 3-10.
- Haran, C. G. (1990) Limits of School Education and its Possibilities. Introduction to Sociology of Education. Jerusalem: Ben Yishay Publishers (In Hebrew).
- Harari (Pardo), R. (1998). The influence of the kind of integration on learning achievements and self-image in adolescents. M.A. Thesis: Tel-Aviv University. Pages 3-11.
- Healy M.E., C. S. J. (1947). "Le Play's Contribution to Sociology: His Method". *The American Catholic Sociological Review* 8 (2): 97–110. doi:10.2307/3707549.
- Heimann, T. (1998). Social Adjustment of Learning Disabled Students. In: Heimann, T. *Social Coping with Learning Disabilities – New Perspectives*. (pp. 31 – 42). Tel-Aviv: Open University.

- Heimann, T. (2005). Learning Disabilities. Tel Aviv: Open University: 19-20.
- Heilman, K. M.; Valenstein, E. (2011). Clinical Neuropsychology. Oxford University Press pp. 115–116. ISBN 978-0-19-538487-1.
- Hod-Shemer, I. (2014). Mediation – Experiencing Mediated Learning. Kaye Academic College: *Lexi-Kaye* (2) 26 – 27. (In Hebrew).
- Hoffman, Edward (1998). Peak experiences in childhood: An exploratory study. *Journal of Humanistic Psychology*, 38(1), 109-120.
- Israeli Ministry of Education. (2002). Pupils with Learning Disabilities. Eds. Tamari, D. et. al. Ministry of Education: Publication Division: 21-25.
- Israeli Ministry of Education. (2007). *Handbook for Parents of Pupils with Learning Disabilities*. Eds. A. Binshtock et. al. Ministry of Education: Publication Division: 16; 50-51.
- Johnson, D.W. & Johnson, F. (2003). *Joining together: Group theory and Research*. Allyn & Bacon, Boston.
- Jones, M. C. (1924). "The Elimination of Children's Fears". *Journal of Experimental Psychology* 7 (5): 382–390. doi:10.1037/h0072283.
- Kaniel, S. (2006). Book of Learning Strategies – Learning How to Learn. Tel Aviv: Tel Aviv: CET Publication. (In Hebrew)
- Karniely, M. (2010). Curiosity and Inquisitiveness, Ramot: Tel Aviv University: 57-67.
- Karnit, V. (2007). *The Connection between Drug Use among Students with Learning Disabilities and Their Subjective Images of Their Learning Abilities*. M.A. Thesis. School of Education, University of Haifa: 10-11.
- Kendall, P.C. (2005). *Child and Adolescent Therapy: Cognitive-Behavioral Procedures* (3rd ed.). Guilford Press
- Kerbo, H., *Social Stratification and Inequality: Class Conflict in the United States*, (New York: McGraw-Hill Book Co., 1983), 113.
- Kidron, R. (1985). *Difficulties in Learning Mathematics: Characteristics, Diagnosis, Treatment*. Tel Aviv: The Teacher's Treasure.
- Klingberg, Torkel (2013). *The Learning Brain: Memory and Brain Development in Children*. Oxford University Press, p. 68, ISBN 9780199917105.
- Kutnick, P., Ota, C., & Berdondini, L. (2008). Improving the effects of group working in classrooms with young school-aged children: Facilitating attainment, interaction and classroom activity. *Learning & Instruction*, 18, 83-95.
- Kubobi, D. (1977). Between Teacher and Student: the Good Teacher through the Pupil's eyes. Jerusalem: Hakibbutz Ha'artzi, Hashomer Hatzair (In Hebrew).
- Kyuman, P., Hyun-Oak, J., & Kyung-Sun, N. (2001). Attention deficit hyperactivity disorder in Korean juvenile delinquents. *Adolescence*, 36, 136 – 149.
- La Greca, A. (1997). Children's problems with friends. *Session-Psychotherapy in Practice*, 3, 1–21.
- Ladd, G. W. (2000). The fourth R: Relationships as risks and resources following children's transition to school. *American Educational Research Association Division E Newsletter*, 19(1), 7, 9-11.
- Luria, Y. (2007). Success in Learning as a Contribution to Ideals in Adolescents. Seminar Paper. Jerusalem.
- Levin, G. (1997). *Emotional Style and Emotional Problems of Children with Learning Disability*. MA thesis, Hebrew University (In Hebrew).
- Levin, G. (2001). Aspects of Treating Behavioral, emotional and social Problems of Children with Learning Disabilities. Lecture in the Shefi (Psychological Service) Conference.
- Manor, H. (1981). Social Climate in Israeli Schools as Determining success or Failure. A Phd thesis. Tel Aviv University.

- Manor, I. (2005). *Gifted Children with Learning Disabilities*. Ra'anana: Open University (In Hebrew).
- Margalit, M. (1991). "Understanding loneliness among students with learning disabilities". *Behavior Change*, 8, 167-173.
- Margalit, M. (1995). "Development Trends in Special Education: Fostering Coping with Loneliness, Friendship and Feelings of Coherence". In David Chen (Ed.), *Education Approaching the Twenty-First Century*. Ramot: Tel Aviv University: 489-510.
- Margalit, M. & Efrati, M. (1996). Loneliness, coherence and companionship among children with learning disabilities. *Educational Psychology*, 16, 69-79.
- Martin, A. J. & Dowson, M. (2009). Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and educational practice. *Review of Educational Research*, 79, 327-365.
- Mazuz, Y. (1990) "Attempts at Planning and Teaching a Biology Study Unit by the Jigsaw Method". *Biology Teachers' Newsletter: 3<sup>rd</sup> Workbook*, Nissan: 121.
- McInerney, D. M., Cheng, R., Mok, M., & Lam, A. (2012). Academic Self-Concept and Learning Strategies: Direction of Effect on Student Academic Achievement. *Journal of Advanced Academics*, 23(3), 249-269.
- Melita S., P., Milena, P.L., V.Z., Jana, K., & Cirila, P. (2009). Students' social behavior in relation to their academic achievement in primary and secondary school: Teacher's perspective. *Psychological Topics*, 18, 55-74.
- Meirav, A. (2011). "Shall a Wolf Dwell with a Sheep: On the Integration of Various Methods in Educational Research". *Voices (Kaye College)*, Edition 1.
- Minister of Education's Circular 58/7, 1998.
- Mosak H. H. & Maniaci, M. (2008). *Adlerian psychotherapy*. In R. J. Corsini & D. Wedding. *Current psychotherapies* (8<sup>th</sup> ed.). pp 63-106. Belmont, CA: Thomson Brooks/Cole.
- Munden, A Arcelus, J. (2003). *The ADHD Handbook*. Kiryat Haim: Ach Publications (In Hebrew).
- National Dissemination Center for Children with Disabilities (NICHY), 2004. [1]. Accessed May 11, 2007.
- National Institute of Neurological Disorders and Stroke*. National Institutes of Health. 30 September 2011. Retrieved 29 April 2015.
- Neuberger, S. and M. Margalit (1998). Coherence, loneliness and social skillfulness in learning disabled students. *Megamot* 39, 128-149.
- Nicolson R.I., Fawcett A.J. (2011). "Dyslexia, dysgraphia, procedural learning and the cerebellum". *Cortex* 47 (1): 117– 27. doi:10.1016/j.cortex.2009.08.016.PMID 19818437.
- Nigg, J.T., John, O., Blasker, L., & Willcutt, E. (2002). Big five dimension and adhd symptoms: links between personality traits and clinical symptoms. *Journal of Personality and Social Psychology*, 83 , 251- 469.
- Oatley, K. (2004). *Emotions: A brief history* p. 53. Malden, MA: Blackwell Publishing. Ellis.
- Ofek, A., et al. (2005). *Guidance Booklet for Special Education Frameworks*. Israeli Ministry of Education: Publication Division.
- Palmen, H., Vermande, M.M., Dekovi, M., & van Aken, M.A.G. (2011). Competence, Problem Behavior, and the Effects of Having No Friends, Aggressive Friends, or Nonaggressive Friends a Four-Year Longitudinal Study. *Merrill-Palmer Quarterly*, 57, 186–213

- Parker, J. G., Asher, S. R. (1987). Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin*, 102(3), 357-389.
- Peparna, Y. (1995) "Skills, social standing, friendships and loneliness in learning disabled students in integrated classes". A Thesis for the M.A. Degree. The School of Education: Tel Aviv University, Israel.
- Peterson, RL; Pennington, BF (26 May 2012). "Developmental Dyslexia" *Lancet* **379** (9830): 1997–2007. doi:10.1016/s0140-6736(12)60198-6.PMID 22513218.
- Phillips S. Kelly;K. Symes, L. (2013). Assessment of Learners with Dyslexic-Type Difficulties. SAGE. p. 7. ISBN 978-1-4462-8704-0.
- Plotnik, R. (2008) *Growing up Different: The Emotional and Social World of Children with Learning and Attention Disabilities*. Holon: Yesod Books: 12-13; 131-143.
- Posner, Tamar (2008). Dyscalculic in the Making: Mathematical Sovereignty, Neurological Citizenship, and the Realities of the Dyscalculic. ProQuest. ISBN 978-1-109-09629-3.
- Rasmussen, K., Almvik, R., & Sten, L. (2001). Attention deficit hyperactivity disorder, reading disability, and personality disorders in a prison population. *Journal of the American Academy of Psychiatry and the Law*, 29, 186 – 193.
- Reichel, N. (2008). The Story of the Israeli Education System: between Centralization and Decentralization; between Covert and Overt; between Imitation and Uniqueness. Jerusalem and Tel Aviv: Magnes and Mofet Institute (In Hebrew)
- Rich, Y. (1996). *The Heterogeneous Class*. Jerusalem: Bar-Ilan University, Israel
- Richardson, W. (2000). Criminal behavior fueled by attention deficit hyperactivity disorder and addiction. In D. H. Fishbein, (Ed.), *The science, treatment, and prevention of antisocial behavior: Application to the Criminal Justice System* (pp. 3 – 18). New York
- Ronen, H. (2003). "The Future of the Special Education School", in *Issues in Special Education and Rehabilitation*, Vol. 18, No. 1: 5-81.
- Rourke, B.P. (1988). "Socioemotional disorders of learning disabled children". *Journal of Consulting and Clinical Psychology*, 56, (6), 801-810.
- Rourke, B.P. (1989). *Nonverbal learning disabilities: The Syndrome and the Model*. New York: Guilford Press.
- Rozman, M., Zalzman, N., Hason-Frankel, R. (1993). Personal Identity: Group Work with Adolescents. Ramot Publ. Tel-Aviv University. Pages 224-228.
- Rachman, S (1997). "The evolution of cognitive behavior therapy". In Clark, D, Fairburn, CG & Gelder, MG. *Science and practice of cognitive behavior therapy*. Oxford: Oxford University Press. pp. 1–26. ISBN 0-19-262726-0.
- Robert K. Yin. *Case Study Research: Design and Methods*. 5th Edition. Sage Publications. California, 2014. Pages 5-6. ISBN 978-1-4522-4256-9
- Robertson D., (2010). *The Philosophy of Cognitive-Behavioral Therapy: Stoicism as Rational and Cognitive Psychotherapy*. London: Karnac. p. xix. ISBN 978-1-85575-756-1
- Robinson, D. N. (1995). An intellectual history of psychology (3rd Ed). Madison, WI: University of Wisconsin Press
- Roux F.E., Dufor O, Giussani C. et al. (October 2009). "The graphemic/motor frontal area Exner's area revisited". *Annals of Neurology* 66(4): 537–45. doi:10.1002/ana.21804.PMID 19847902.
- Schacter, D. L., Gilbert, D. T., & Wegner, D. M. (2010). *Psychology*. (2nd ed., p. 600). New York: Worth Pub.
- Schechter, Z. (1993). *Group Therapy in Schools to Improve Social Skills among Students with Adjustment Problems*. Educational Advisor, C (A). The Israeli Association of Educational Advisors
- Schechtman, Z. (2002). *Counseling Groups at School at the Turn of a New Millennium*. University of Haifa (In Hebrew).

- Schechtman, Z. Gilat, A. Flesher, A. (1998). Dynamic Group therapy for Failing Pupils. *Educational Counseling*, 4, 176–178 (In Hebrew)
- Schnitzer, Y. (2001). Narrative of self-image. *Soul*, Vol. 82-86, page 7.
- Schoenbradt, L., Kumin, L., & John, S. (1997). Learning disabilities existing concomitantly with communication disorder. *Journal of Learning Disability*, 30, 264–266.
- Sever, R. (July 2005). “The Place of Research Paradigms in Qualitative and Quantitative Studies as the Basis of Proof for Decision-Makers in the [Israeli] Ministry of Education”. *Paths of Research*, 12: 2-24
- Shern et al. (1990) Cooperative Learning in Small Groups: Review of Methods and Research, in Danilov, Y(Ed). *Planning of Educational Policy in the Pedagogical Center*: Ministry of Education and Culture
- Shkedy, A. (2011). *The meaning behind words: Methodologies in qualitative research – from theory to practice*. Tel-Aviv: Ramot Publishers
- Siegfried L. (2005). *Qualitative Sozialforschung*. Lehrbuch. Auflage. Beltz Verlag. Weinhhein, Basel.
- Silver, C. H., Elder, W. G., & DeBolt, A. J. (1999). Social skills self-appraisal of children with specific arithmetic disabilities. *Developmental Neuropsychology*, 16, 117–126.
- Siperstain, G. (1998). Students with learning disabilities at risk in middle school: Strees, social support and adjustment. *Exceptional Children*, 65, 91–100..
- Slavin, R. E. (1995). *Research on Cooperative Learning and Achievement: What We Know, What We Need to Know*. Center for Research on the Education of Students Placed at Risk: Johns Hopkins University.
- Smilansky, S. (1988). *The Challenge of Adolescence*. Tel Aviv: Ramot Publishers.
- Social Psychology*. Tel-Aviv: Publication of the Open University (In Hebrew) .
- Smilansky, S. Factor, Y. (1989). Exceptional Studetns and Exceptional teachers. Readings in Education, 16, 287–303 (In Hebrew).
- Soy, S. K. (1997). *The case study as a research method*. Unpublished paper, University of Texas at Austin.
- Spector, G. (2005) *Learning from the Learning Disabled about a Different Kind of Vaughn S Hogan A Kouzekanani K Shapiro S (1990) Peer acceptance, self-perception and social skills of learning disabled students prior it identification Jld 82 (1) 101–106 .*
- State Comptroller's Report, 1992, p. 391-12.
- Spivey M., Joanisse, M., McRae, K. (2012). *The Cambridge Handbook of Psycholinguistics*. Cambridge UniMarc versity Press. pp. 219–220. ISBN 978-0-521-67792-9
- Steedly, K.M., Schwartz, A. Levin, & Stephen, D. Luke. (2008). Social Skills and Academic Achievement. *Evidence for Education*. Volume III. Issue II. **pp. 1–8.**
- Steinberg, T. (2006). Our day does not end at noon. On the expressions of Attention disorder outside school framework. Vel-Facial-Cardio syndrome Magazine. Clinic for Behavioral genetics. (In Hebrew)
- Stoll, Louise & Fink, Dean (1996). *Changing our schools, Linking school effectiveness and school improvement*. Bristol, PA: Open University Press
- Spindler, George & Spindler, Louise (1997). Teaching Culture. In D. G. Spindler (Ed.), *Education and cultural process: Anthropological approaches* (pp. 536-557). Prospects Heights, Ill.: Waveland Press.
- Tagansky, S. (2006). Who Is Afraid of ADHD? Israel: Rimomim.
- Tali Snir: Emotional-Social Intervention Plan for Learning Disabled Adolescents [img2.tapuz.co.il/forums/12.09.15](http://img2.tapuz.co.il/forums/12.09.15)

- Thomas, Elwyn (2000). *Culture and schooling. Building bridges between research, praxis and professionalism*. London: University of Chichester: John Wiley and Sons.
- Thomas, G. (2011). A typology for the case study in social science following a review of definition, discourse and structure. *Qualitative Inquiry*, 17, 6, 511-521.
- Thomas G. (2011), *How to do your Case Study*. (Thousand Oak: Sage.
- Thomas, G. (2011). "Sonia is typing..... A typology for the case study in social science following a review of definition, discourse and structure". *Qualitative Inquiry* 17 (6): 511–521. doi:10.1177/1077800411409884
- Timor, Z. (2008). Moral and Personality Profile of learning Disabled Delinquents. *Issues in Special Education and Rehabilitation*, 23 pp. 41–58
- Triger, G. Egozi, S. Doron, N., Ekharar, A. Self-Image among Students with Learning disabilities. *Educational Counseling*, 12, 119–132. (In Hebrew)
- Trull, T. J. (2007). *Clinical Psychology* (7th Ed). Belmont, CA: Thomson/Wadsworth.
- The Future of Children, 1996. [2] Accessed October 22, 2014.
- Voller, K.K.S. (1986). "Right hemisphere deficit syndrome in children". *American Journal of Psychiatry*, 143: 1004-1009.
- Vidlavski. (2008) *Learning and Teaching Opportunities in the Small Class*. Jerusalem: Ministry of Education.
- Vitacco, M., & Rogers, R. (2001). Predictors of adolescent psychopathy: the role of impulsivity, hyperactivity and sensation seeking. *Journal of American Academy of Psychiatry and the Law*, 29, 374–382.
- Ward A., Stoker W. H., Mildred Murray-Ward (1996), *Achievement and Ability Tests - Definition of the Domain*. Educational Measurement 2, University Press of America, pp. 2–5.
- Weitzman, S. (2009). *Teachers' Grasp of a Remedial teaching Workshop at Oranim College: Internal Report*. Number 64. Tivon: Oranim Research and Assessment Authority.
- Welsh, M. Parke, R.D., Widaman, K and O'Neil, R. (2001). Linkages between Children's Social and Academic Competence: A Longitudinal Analysis. *Journal of School Psychology*, Vol. 39, No. 6, pp. 463–481.
- Wentzel, K.R. (1999). Social-motivational processes and interpersonal relationships: Implications for understanding motivation at school. *Journal of Educational Psychology*, 91, 76–9.
- Winstantley, C.A. Eagle, D. E, Robbins, T.W. (2006). Behavioral Models Behavioral models of impulsivity in relation to ADHD: Translation between clinical and preclinical studies. *Clinical Psychology Review* 26, 379–395.
- Whalen, C.K., Kadzin, A.E. (Eds) (2000). Winstantley, C.A. Eagle, D. E, Robbins, T.W. (2006). Behavioral Models Behavioral models of impulsivity in relation to ADHD: Translation between clinical and preclinical studies. *Clinical Psychology Review* 26, 379–395.
- "What are reading disorders?". National Institutes of Health. Retrieved 15 March 2015
- "What are the symptoms of reading disorders?". National Institutes of Health. Retrieved 15 March 2015.
- Wiener, J. & Harris, P.J. (1997). Evaluation of an individualized, context-based social skills training program for children with learning disabilities. *Learning Disabilities Research & Practice*, 12(1), 40–53.
- Wieviorka, M. (1992) Case studies: history or sociology. In C.C. Ragin and H.S. Becker (Eds). *What is a case? Exploring the Foundations of Social Inquiry*. New York: Cambridge University Press.

- Wilson, G.T. (2008). *Behavior therapy*. In R.J. Corsini & D. Wedding. *Current psychotherapies* (8th ed.). pp 63–106. Belmont, CA: Thomson Brooks/Cole.
- Winstantley, C.A. Eagle, D. E, Robbins, T.W. (2006). Behavioral Models Behavioral models of impulsivity in relation to ADHD: Translation between clinical and preclinical studies. *Clinical Psychology Review* 26, 379–395.
- Yalom, I.D. (1995). *The Theory and Practice of Group Psychotherapy* (4<sup>th</sup> ed.) NY: Basic Books.
- Yin, R. K. (1984). *Case study research: Design and methods*. Newbury Park, CA: Sage.
- Yin, R.(1993). *Application of Case Study Research*. Sage publications Beverly Hills Ca. 1993.
- Yin, R. (1994). *Case Study Research: Design and Methods*. (2<sup>nd</sup> Ed.) Sage Publications Beverly Hills Ca. 1994.
- Yin, R.K. (2009). *Case Study Research: Design and Methods*. Fourth Edition. Sage Publications. California.
- Yorgen, Y. Feldamn, I (2000). *The Education system in Israel Education. Work of the Education Committee*. Jerusalem: Knesset Research and Information (In Hebrew).
- Zabar-Ben, Yehoshua, N. (2006). “The History of Qualitative Research, Influences and Movements”, in *Traditions and Trends in Qualitative Research*. Eds. Zabar-Ben, Yehoshua., N. Dvir. Kinneret: Leor Publishers: 3–28.
- Zemerman, I. (1990). *A different Way is Possible. Teachers' Self-Education for Meaningful Value-Based Teaching*. In: M. Bar-Lev (Ed.). *Values and Education for Values. Issues in Teachers' In-Service Training* (Vol. 8 pp. 293 – 308). Jerusalem. Ministry of Education and the Hebrew University (In Hebrew).

<http://www.mkm-haifa.co.il/schools/regavim/pedagogia/tla.htm03>

<http://www.as.wvu.edu/~scidis/dyscalcula.html>

[http://en.wikipedia.org/wiki/Learning\\_disability](http://en.wikipedia.org/wiki/Learning_disability)

[www.edb.gov.hk/en/edu-system/special/.../book-3.html](http://www.edb.gov.hk/en/edu-system/special/.../book-3.html)

American Speech-Language-Hearing Association. (n.d.). *Language-based learning disabilities: Causes and number*. Retrieved June 26, 2012, from <http://www.asha.org/public/speech/disorders/LBLD.htm>.

American Speech-Language-Hearing Association. (2008). *Brain activity in those with dyslexia pre and post treatment: A review*. Retrieved June 17, 2012, from [http://www.asha.org/Events/convention/handouts/2008/1794\\_Kors\\_Alicia](http://www.asha.org/Events/convention/handouts/2008/1794_Kors_Alicia)

Avraham, Y. (2011). *Opening the Glass Gate: Group Work to Improve Social Skills in Socially Rejected Children by Their Peers*. *Psychologia Ivrit*, <http://www.hebpsy.net/articles.asp?id=2666> (In Hebrew)

Chivers, M. (1991). "Definition of Dysgraphia (Handwriting Difficulty). *Dyslexia A2Z*. Retrieved from: [http://www.dyslexiaa2z.com/learning\\_difficulties/dysgraphia/dysgraphia\\_definition.html](http://www.dyslexiaa2z.com/learning_difficulties/dysgraphia/dysgraphia_definition.html)

Dekel, G. (2008). *Social skills among Elementary School children*. <http://www.galiya.co.il>

National Institute of Neurological Disorders and Stroke. (2011). *What is dyslexia?* Retrieved June 26, 2012, from <http://www.ninds.nih.gov/disorders/dyslexia/dyslexia.htm>

NCLD Editorial Staff. (2010). "What is Dysgraphia?" *National Center for Learning Disabilities*. Retrieved from;  
<http://www.nclد.org/ld-basics/ld-aamp-language/writing/dysgraphia>