
Development of learning and social skills in children with learning disabilities: an educational intervention program

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Abstract

This article presented the research topic: "Development of Learning and Social Skills in Children with Learning Disabilities" and its aims was to examine the influence of the social intervention program on academic achievement in two basic subjects - Arabic and Mathematics and to examine social status among the students: in the homeroom classroom, before and after participation in the social intervention program. It was found there were considerable improvements in all dimensions of achievements in Arabic and mathematics with all the students who participated in the intervention program.

Keywords SEN; cooperative learning; mediated learning; social skills; social status; academic achievements; self-image; educational intervention program; ADHD.

1. Learning Disability

Learning disability is defined as a permanent, objective cognitive-neurological disorder that significantly affects an individual’s learning ability. It is a term that includes specific disabilities in the processing of information, affecting

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learning processes, which in turn influence the individual’s adjustment to daily life. (Gress & Boss, 1996; Spector, 2005; Weitzman, 2009).

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). People from different cultures and with different interests may attribute different significance to any given circumstances. Cultural differences in any society may result in hatred, hostility and a social phenomenon that can be explained by social theories.

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

2. Rationale

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 students have in the realm of social skills, and how this influences their learning ability.

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 students (Life Skills Plan), and is a derivative from a comprehensive program aimed at adolescents of junior high school age.

This intervention program combines additional methods, such as Goldstein’s Social Skills Approach (Goldstein et al, 1986), Plotnik’s Systemic Approach to Corrective Social Learning (2008), and Novaco’s Behavior-Cognitive Method (1975), all of which are outlined above.

2.1 Aims of the Social Intervention Program

The goal of this 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.

2.1 Unique Characteristics of the Intervention program:

- This program allows the participant to understand and absorb his or her disability – a foundation block for progress in all fields.
- The program is tailored to the research population, according to students' 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 which will be discussed below.
2.2 What is a Cooperative Learning?

Cooperative Learning 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 (Hertz-Lazarovich, 1987). It includes the collective work of students in a small group without direct and immediate teacher intervention, so each student could participate in the group's task and contribute to it (Cohen, 1994).

Definition of Cooperative Learning: Cooperative Learning includes a number of methods, based first and foremost upon cooperation between pupils (Hertz-Lazarovich, 1987). The approach relies on Vygotsky's theory (Vigotsky, 1978), according to which the interaction among students in small groups allows children to acquire skills and to reach deep understanding that they could not reach by themselves, the social interaction that is created in small groups causes cognitive growth in students and leads to improvement in learning achievement (Rich, 1996; Denham & Weissberg, 2004; Freedman, 2003).

3. 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 students: in the homeroom classroom, before and after participation in the social intervention program.

a. Research Questions

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

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?

b. Research Hypotheses

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.

c. Styles/Types of Qualitative Research

Interpretive research, Theoretical research, Action research, Speculative research, Content research, Narrative, Phenomenological research, Ethnographic research, Case study (Veltziker, 2000)

Case Study: 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).

d. Research Population

The participants were chosen after filling out socio-metric questionnaires in their homeroom classes. The questionnaires yielded information regarding students who felt rejected or neglected by their classmates. In addition, some of the students also have learning disabilities according to school documents. The research population of the study consisted of five learning disabled junior high school students, 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.

e. Research Design

- **Stage 1 - Pre-Plan:** (1) Quantitative data collection: Sociometry questionnaire (Glantz, 1989); (2) Quantitative data analysis and the selection of 5 children.
- **Stage 2 - Preparation for the Program** (1) Social skills questionnaire (Elliot, 1989 & Gresham Ashe) will be filled out by their teachers. (2) Self-evaluation questionnaires (Rosenberg, in Schechter, 1993) will be filled out by the students themselves; (3) Interviews will be conducted with each subject student before the treatment: social intervention program; (4) In addition, the students will be tested in the basic subjects (Arabic, and Mathematics).
- **Stage 3: Performance:** (1) Running the intervention program in the pupils' homeroom; (2) The subjects will participate in the social intervention program based on The Social Skills Approach (Goldstein et al, 1986); (3) Structured observation by a research assistant guided by the researcher as per how to conduct an observation in each encounter of the intervention program.
- **Stage 4 - After the Intervention Program:** (1) Quantitative and qualitative data collection, by questionnaires and repeat interviews with the teachers and pupils; (2) The teachers will fill out the Social Skill Questionnaire again, and the student subjects will once again fill out the self-evaluation questionnaires; they will be tested again in the basic subjects (Arabic, and Mathematics); (3) Interviews will be conducted with each subject student after the treatment: the social intervention program.
- **Stage 5: Interpretation** - The material from the interviews, the quantitative examination of the questionnaires filled out before and after the social intervention program will be analyzed. Finally, there will be a discussion of the findings and their consequences.

f. Research Tools

**Quantitative Tools:** Sociometry Questionnaire for Students (Glantz, 1989); Social Skills Questionnaire (Elliot & Gresham, 1989); Mapping of Learning of Basic Subjects (Arabic and Mathematics), based on the curriculum.

**Qualitative Tools:** Semi-Structured Interviews; Individual Questionnaire for Each Participant; Structured Observation by a research assistant guided by the researcher; Monitoring Student Behavior.

4. Findings

The findings are presented in the order of the hypotheses – a hypothesis is presented, followed by a description of the method of analysis, a presentation of statistical measures (means, standard deviations and values of statistical tests for examining the correlations among variables). These are followed by a conclusion and a descriptive figure.

4.1 Findings Pertaining to the First Hypothesis

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 the Arabic Language with all students except for Fadi and Rashad in the dimension of listening and speaking, and Rashad in the dimension of linguistic knowledge.
Differences in Achievements in Mathematics: The differences in achievements in mathematics before and after the program were examined by the Wilcoxon non-parametric test as an alternative to t-test for paired samples.

There was a significant improvement in most dimensions of achievements in mathematics among all students; in some of the dimensions there were improvements with some of the students.

4.2 Findings Pertaining to the First Hypothesis

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

The second research hypothesis maintained that the social status of the participants will improve following their participation in the social intervention program.

The participants' social status was examined via Gresham & Elliot's social skills questionnaire (1989).

It was found that there has been an improvement with all students, in general social skills. The greatest improvement was with the student Rashad with a 46.67% improvement rate, and the lowest improvement rate was with the student Mustafa – 23.33%.

In conclusion, the intervention program led to significant improvement in all the participants' social skills.

General social skills scores among the five students before and after the program and the rate of improvement (difference between before and after)
Before (0 – 20) | After (0 – 20) | Difference (0 – 60) | % Improvement
--- | --- | --- | ---
Fadi | 16.00 | 38.00 | 22.00 | 36.67%
Hana | 24.00 | 46.00 | 22.00 | 36.67%
Muhamad G | 19.00 | 45.00 | 26.00 | 43.33%
Mustafa | 24.00 | 38.00 | 14.00 | 23.33%
Rashed | 11.00 | 39.00 | 28.00 | 46.67%

**Tab. 1: Influence of the Intervention Program on Self-Image**

Following the second research hypothesis and question, "What is the influence of the Social intervention program on participants’ social status?" the question "How does participation in the social intervention program influence on self-image?" was also examined, assuming that the participants' self-image would improve as a result of their participation in the social intervention program.

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 with all the students. The student Mustafa showed a 15.6% improvement rate and the lowest improvement rate was with the student Rashad – 3.6%. The general rate of improvement for all the students was 12.8%.

**Fig. 3: Self-Image**

4.3 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 behaviors of the students were observed and evaluated based on a list of 24 learning, organization and educational behaviors.

The difference was examined between the first measurement in the first week – the beginning of the intervention program, and the last measurement – on the 14th week - the end of the intervention program.
The findings presented in the above table indicate continuous improvements in learning, organization and educational behaviors. The improvements were constant and monotonous, and the students' behaviors changed for the better, so that they started coming to the encounters on time, whereas before the program they were characterized by tardiness and were absent a lot. The students also made sure to be properly equipped after they had constantly lacked equipment. The program developed the students' ability to listen to their peers, which is an important change as before the program they had not adhered to the rules of listening and tended to interrupt their friends or ridicule and mock them.

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

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

The students' responses became proportionate and restrained towards their peers; they avoided abusive language and behaved by positive values such as grace, loyalty, patience and complicity.

In addition to the questionnaires and observations conducted in the current research in order to examine the research questions and hypotheses seeking to examine the influence of the social intervention program on the social status and skills of the students who participated in the research and the social intervention program, the students were interviewed and were asked to answer questions regarding the social circles that describe their position in relation to their class.

References


