



**#80 PAPER 113 -
COOPERATIVE LEARNING, SOCIAL COMPETENCE AND SELF
CONCEPT IN PRIMARY SCHOOL STUDENTS` - PILOT STUDY**

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Abstract

Constructivists suggest that social interaction is important for learning because higher mental functions such as reasoning, comprehension, and critical thinking originate in social interactions and are then internalized by individuals. Cooperative learning in which students work against each other to achieve a good grade and only some of them succeed and individualistic learning, in which students work independently to achieve learning goals unrelated to those of other students. This pilot study examined the effects of cooperative learning on the social competence and self-concept in primary school students.

Keywords: *cooperative learning, competitive learning, social competence, self concept, primary school.*

1. INTRODUCTION

Constructivist approach on human learning deepens Cognitivism and considers that human knowledge and its development is done through individual engagement, through the mobilization of his internal resources. (Piaget, 1967 in Sălăvăstru, 2009, Negovan, 2010). The predetermined action exercised from the exterior is not important in the learning act but the internal drive generated by one's own initiative which brings into play mental operations acting upon the object of knowledge. The learner is the initiator of his own learning experiences, the one who tries to optimize changes with the environment, who self-constructs himself by integrating the products of his thinking and who permanently seeks useful information with a view to reorganize the knowledge system and to solve the problems he encounters. According to the constructivist model the individual who learns must construct learning actively, being the initiator of his own learning experiences, continuously seeking useful information to solve his problems and permanently reorganizing his knowledge (Milne & Taylor, 1995).

However, learning is a social process: children involve actively in the progress of their knowledge, through their continuous attempt to find a meaning in the world. This thing is done more efficiently through collaborative work (Vîgotsky, 1971): without social interaction with those around you (parents, educators, peers) it is practically impossible to acquire the social meaning of important systems of symbols and to learn how to use them. (Woolfolk, 1998). The interaction allows the learner to exist in the zone of proximal development and results in the learner progressing to succeeding advanced stages as learning increases (Vîgotsky, 1971). The socio-cognitive approach of learning is focused upon the social framework of learning, through the modeling and observing models upon the interaction of the individual and the environment, upon the significances he attaches to reality. Thereby one can explain children's acquisition of certain behaviors which will allow social adaption and the delineation of social and emotional competences.

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2. CONCEPTUAL DELIMITATIONS

2.1. Social learning

The issue of forming interpersonal and intrapersonal behavior as well as the capacity of self-knowledge, of an adequate reflection of self-concept since early childhood represents a challenge with multiple methodological and operating valences in the educational practice.

Learning group behavior, to set and to maintain interpersonal relations; learning roles and status, behaviours, attitudes, norms and scales of values as well as an adequate forming of self-concept, the development of the self-knowledge and inter-knowledge capacity, self-appreciation and inter-appreciation represents contents of the social type learning. This type of learning is completed as inter-learning, being present in the interpersonal influence and assimilation through the acquisition of behavioral models in the field of interpersonal action. The process develops as a continuous inter-personalization based on reciprocal transfer and assimilation of value orientations, behavioral models, operating strategies, etc. (Mureşan, 1980).

Bandura theorizes that social learning results from the dynamic and continuous reciprocal interaction between cognitive, behavioral, and environmental influences, the behavior being influenced by the person's attitudes, convictions, by the history of his previous encounters and also by the environmental stimuli. The adopted behavior can determine changes in environment similarly as an aspect of personality can be affected by environmental action. Researches in the field of the Psychology of Learning reveal numerous positive aspects the social learning determines upon the individual emotional development. Moreover, researches in neuropsychology confirm strong relations between emotion and learning (Toga & Thompson, 2003). Social competence requires both experiential learning and emotional maturity (Crawford, 1996).

Social competence at early years refers to children's ability to cope with social interactions both with adults and with their peers. Social competence refers to the personal and interpersonal adequacy and communication skills. These influence the positive interactions which correspond to cultural ones, in such a way that own goals are attained and others' needs are respected. Emotional competences represent the capacity to recognize and interpret one's own and others' emotions, as well as the ability to manage the different social situations adequately.

In our study, the social and emotional competences refer to children's ability to perceive, understand, process, manage and express social and emotional aspects of their life, which reflect in social skills and interpersonal abilities.

Self-concept is a mental representation of own person which includes information about the self (abilities, behaviors, emotions, knowledge, values, etc) and which represents a regulating mechanism of the behavior in society.

Retarded or inadequate development of socio-emotional competences and of self-concept leads to negative consequences for pupils both on the level of school performance (poor school performances), and also on the level of interpersonal relations (disharmonious relations within the family and adverse relations with peers).

2.2. Cooperative learning versus individualized learning

Specialty literature offers numerous confirmations of the fact that cooperative learning develops high cognitive processing abilities in pupils, deep levels of understanding and an increased capacity of retaining information a long period of time. Cooperative learning process improves problem-solving skills due to the personal interpretation each individual brings to the group; working within an encouraging learning environment gives the individual the opportunity to utilize cognitive processes that create higher-level thinking skills (Bruner, 1985). From a pedagogical perspective, cooperative learning benefits student comprehension of subject matter (Cooper & Mueck, 1989; Johnson, Johnson & Smith, 1991; Millis & Cottell, 1998; Cooper, Robinson & Ball, 2003). Besides its contribution to the development of cognitive abilities, cooperative learning contributes to a great extent to the pupil's social development: "what the child is able to do in collaboration today he will be able to do independently tomorrow" (Vigotsky, 1978, p. 211).

Cooperative learning means to learn together in order to attain a common goal. Within the activities developed through cooperation, one can find modalities of resolving tasks which determine favourable results for them as individuals and also as group members. Basically, by using specific techniques, cooperative learning represent an interactive approach through which learners become responsible towards their own learning activity, developing at the same time a positive feeling of group appurtenance.

Johnson et al. (1993) settle the essential components of cooperative learning. Systematically applying those basic elements, in group learning situations, helps ensure cooperative efforts and enables the disciplined implementation of cooperative learning for long-term success: *positive interdependence* (the effort of each participant to the group is absolutely necessary for the success of the whole group, each person has a specific contribution with his own competences, role or responsibilities); *encouraging face-to face interactions* (is achieved through effective support each member offers to others); *personal responsibility* (responsibility is not only personal, towards one's own learning task but targets also the responsibility towards the entire group and towards each member); *interpersonal and small group skills* (pupils engage both in learning and group tasks which determine inter-knowledge, communication, acceptance, mutual support capacities, etc.) and *group processing* (refers to the evaluations pupils incur upon their contribution, upon each member's contribution and upon the contribution of the whole group in performing its tasks). In individual learning, goal attainment is only an individual task, determining independence. The reference point is represented by the preset criteria and the pupil is mainly motivated by this one. Other pupil's success or failure does not influence his performance.

Researches between individual and cooperative learning underlined the fact that the pupil attains higher school performances through cooperative learning, stable interpersonal relations and mental health, his well-being and self-esteem fall within normal parameters.

3. METHODOLOGY

3.1. Objectives of research

The main objective of the pilot study is the identification of the effect cooperative learning has upon the development of socio-emotional competences and upon academic self-concept at primary school pupils. In the present study, socio-emotional competences and self-concept do not appear as direct objectives of the didactic act but as effects of applying different cooperative learning techniques the teacher uses in the classroom. In the pilot experimental study we could not provide for the presence of the control group and the equivalence between groups.

3.2. Participants

The research has been performed on a fixed, non-aleatory sample, the group of subjects being formed of 50 children, having the average age of $m=9,46$, $SD=0,95$, 31 boys and 19 girls, which come from school units in the Argeş district.

3.3. Instruments

3.3.1. *SDQ Scale* (Marsh, Parker & Smith, 1982) comprises subscale of *academic self concept* (self-concept in relationship with parents, reading self concept, self concept in mathematics and general school subjects- affective dimension, self concept in mathematics and general school subjects- cognitive dimension), *non academic self concept* (self concept in physical appearance, self concept in physical ability and sports, self concept in relationship with classmates) and *total self concept* of the scale (the sum of the seven scales). Subjects respond to a series of 72 items on a scale from 1 (completely false) to 5 (completely true).

3.3.2. *Screening of emotional and social competences*: is performed by means of two instruments which evaluate the development of emotional (*SCE*) and social competences (*SCS*) which are part of the Platform PEDa (Ştefan, et. al, 2009; Miclea, Porumb& Porumb, 2010). All items are directly scored. The total score of this scale is obtained by adding the scores of each item of the scale.

3.3.3. *Social Skills Rating System* (Gresham & Elliott, 1990). The applied form was that used for teachers. The global score is the score of social abilities and is made up of the *subscale cooperation* which includes behaviours such as: help for those around, sharing things and obeying rules and orders; *subscale assertion* includes inception behaviours such as: learning information from those around, personal presentation, answering to others' actions; *subscale responsibility* includes behaviours which demonstrate the ability to communicate with adults and consideration towards property and labour; *subscale self-control* includes behaviours generated in conflict situation such as the answer to teasing and in non-conflict situations which need a compromise. The answers are quoted on a Lickert scale in 3 steps: 0- never, 1- sometimes, 2- often.

3.4. Procedure

At the beginning of the study, children had been evaluated in socio-emotional competences and self-concept level of development. During 10 weeks, the didactic staff who teach the respective classes and who were instructed for the study applied methods and techniques specific for cooperative learning as appropriate, every day (ex. *jigsaw*, *STAD*, *think-pair-share*, *co-op*, *round robin*, *inside-outside circle*, *roundtable*, *three step interview*, *numbered heads together* etc.). At the end of the 10 weeks, the pupils had been evaluated in the level of the academic competence development but also in socio-emotional competences and global self-concept.

4. RESULTS AND DISCUSSIONS

The statistical analysis and the results of the study are presented in Table 1. We have to mention that we considered the global score of self-concept and that the screening of social and emotional competences had been done by the educator involved in the study which might influence the result of the study this being one of its limits.

Table 1. Differences in the levels of socioemotional competence and self concept – pretest-posttest

Scale	Pretest		Posttest		T test	
	M	SD	M	SD	t	p
SCS-P	84.06	9.89	99.60	7.84	16.60	0.000
SCE-P	67.38	7.27	77.36	4.45	16.27	0.000
Social Abilities	55	10.94	64	9.80	10.75	0.000
Self concept total	289	8.88	308	6.57	9.78	0.000

*df= 48

The results of the study confirm that there are significant differences as regards the development level of social and emotional competences and the level of self-concept between the initial test and the posttest intervention in the sense of their expansion. As we have already mentioned, even if the purpose of using this form of learning was the development of cognitive competences, we have observed that its use in the didactic activity has some collateral effects.

a. At the level of socio-emotional competences we have detected a rise in the level of empathy, responsibility and social problem-solving. The effect upon group-working preference had not been identified. It is worthy of note that within this type of learning, pupils participate actively and become responsible not only for their task and for the group task but also for the task of each group member, developing real pro-social capacities. Responsibility manifested not only towards the task to be solved but also towards the allotted time and given resources. Another observation is the fact that the pupil in this learning situation experiences different roles (leader, co-worker, reporter etc) he can exercise adequately in the daily life; he experiences a certain form of competition – the competition in achieving some goals and not the individual competition as an exercise of own power and other's failure. Efficient communication is in fact the main benefit of cooperative learning: communication is clearly focused on the goal to be attained; conflicts are resolved constructively (in case of disturbances in communication the task cannot be achieved within the desired parameters).

b. The positive effects upon the global self-concept can be explained by the fact that the pupil is offered a direct feedback upon his own competences, the situation of psychical tension is absent since the task can be taken over and resolved by another member of the group, and the mechanism of social reference is well represented. An important aspect to be analyzed in the future studies refers to the retention and transfer of the developed social abilities.

5. Conclusions and implications

The present pilot study intended from a scholarly point of view to identify the effects cooperative learning has upon the level of socio-emotional development and the self-concept at primary school pupils and from a methodological point to identify the procedure deficiencies in elaborating a more extended study. Certainly, the described experimental procedure, the absence of a control group, the small number of participants do not lead towards a generalization of the collected data but they offer some attested directions of the following aspects:

- The use of cooperative learning techniques in the primary cycle influences the development of both cognitive and social competences (responsibility, empathy, pro-social behavior, rapid and efficient resolving of social problems) and also of the cognitive, social, emotional and academic self-concept.
- Teacher's role is crucial in leading this type of learning: he has to organize the groups of pupils, to build specific tasks for this type of learning, to prepare the learning organizational environment, to adapt assesment task according to the preset objectives.

The research directions initiated by this study refer mainly to the identification of the effects some factors have upon cooperative learning and we can enumerate here the learning process, the educator, the types of methods and techniques used in this type of learning, the organization of learning.

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