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**INTERPERSONAL COGNITIVE PROBLEM-SOLVING AND  
SOCIAL SELF-EFFICACY IN CHILDREN**

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**Abstract**

Research literature showed that the functioning of social abilities have a large impact on personal and professional success and influence the quality of mental and physiological health on the long run. Deficits in social skills and social competence play a significant role in the development and maintenance of many emotional and behavioural disorders of childhood and adolescence. Social-cognitive problem solving has been proposed and often accepted as relating positively to social and emotional adjustment, yet empirical support has been inconsistent. Interpersonal cognitive problem solving skills included: sensitivity to or the recognition of interpersonal problems; the ability to generate alternative solutions to solve these problems; the ability to consider step-by-step means to achieve social goals; the ability to articulate consequences of social acts for oneself and for others, and to generate alternative consequences to acts of social significance before deciding how to behave and the ability to identify and understand the motives and behaviors of others. This study aimed at examining the relationships among interpersonal problem solving skills and social self-efficacy in social competence. The data collected after applying the instruments *Children's Self-Efficacy in Peer Interactions*, *Wally Problem Solving Test* and *The Social Problem Solving Measure*. The findings showed that the interpersonal problem solving skills and social self-efficacy are correlated positively.

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**Keywords:** Interpersonal cognitive problem solving, social competence, emotional adjustment, preschool, childhood.

## 1. Introduction

Children's efficient adaptation to the complex requirements of the environment are ensured by the optimal development of social and emotional competences. Longitudinal studies affirm that the optimal



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development of social competencies at early ages has a significant contribution to obtaining academic success (Ladd, 1999; Carlton & Winsler, 1999; Ladd, Herald, & Kochel, 2006) and in better exercise of interpersonal behaviours at adult age such as cooperation, communication skills, the ability to make friends, the ability to initialize and maintain social interactions, prosocial behaviors (Denham et al., 2003). Social competence helps students interact constructively with parents, peers and teachers and it contributes uniquely to academic success by addressing the inherently social dimensions that are characteristic of learning in a classroom setting (Ladd, Herald et al. 2006). An inadequate development of social and emotional competences is associated during school years until maturity with psycho-social problems such as social anxiety, depression, social phobia, seclusion (Junttila, Voeten, Kaukiainen, & Vauras, 2006).

## **2. Theoretical Considerations**

### **2.1. Social competence**

We consider social competence as being children's ability to form functional social relations with peers and adults through manifesting adequate and socially accepted behaviours, with positive consequences upon those involved and which allow goal attainment and at the same time respect for others' needs.

The structure of social competence at early ages includes on one hand social relations competences which imply the initiation of interactions with peers or other children through play, offering and asking support when necessary, the use of politeness formulae, social-problem solving through adequate strategies and on the other hand intrapersonal competencies such as obeying rules, tolerance in frustrating situations (Ştefan, & Kallay, 2004). As these behaviors are socially desirable, they are built up through encouragement and thus repeated in similar situations. Social behavior is an outcome of social learning.

The development of social competence implies the development of abilities and learning in different development fields (cognitive, emotional and behavioural): cognitive skills such as attention, inhibitory control, and problem solving (Blair, 2002), awareness and expression of affect, situational knowledge, emotion identification, and emotion regulation (Saarni, 1997;Denham, 2006),and behavior such as self-regulation and interaction essential for positive social functioning (Youngstrom, et al., 2000).

Social competence can be conceptualized as a continuous axis, which has the child with high social skills, characterized through adequate and efficient behavioural manifestations and who facilitates the acceptance of the peer group at the positive pole; the child with low social skills which manifests either isolation or withdrawal behaviours (internalizing problems), or disruptive and aggressive behaviours (externalizing problems) which results in the rejection of the peer group stands at the opposite pole. There are numerous longitudinal studies which prove the effects of developing social competences during childhood upon the adult life; thus a poor development of social competence determines serious problems of social inadaptation such as absenteeism or school abandon, difficulties of meeting the requirements of the school environment, behavioural disorders, deficient interpersonal relations, fluctuation at the working place (Parker & Asher, 1987).

The specialty literature mentions the impact of certain variables such as cognitive functioning, social cognitive skills, self-regulation skills and emotion regulation skills, variables which perform a

mediator role for social adaptation. An important indicator is the capacity to manage social situations and interactions with other persons especially with peers.

What is the variable that facilitates the capacity to manage social situations and how it operates at early ages? The answer can be found in Spivack & Shure in 1974 who lay the foundation of Interpersonal Cognitive Problem Solving Theory - ICPS. They consider that the factor which plays a determinant role in behavior direction is the child's cognitive capacity.

## **2.2. Social and Interpersonal Cognitive Problem Solving**

Social problem-solving is defined as the resolution of problems in ways that maximize positive consequences and minimize negative consequences for oneself and others. Abilities of social problem solving prove to be important mainly in the school environments where the child confronts more often with interactions in the peer group and with teachers. Spivack & Shure (1974) consider social problem solving skills as a moderator variant in the relation between negative stress and depression in childhood. The authors of Interpersonal Cognitive Problem Solving Theory, launched from the assumption that children utilize a set of distinct social information processing operations to determine how to solve interpersonal conflicts (Yeates, & Selman, 1989). In the structure of the ability of social problem solving, Spivack și Shure (1974) include: to understand or recognize interpersonal problems; to produce alternative solutions to solve these problems; to think steps to reach social goals (means-ends thinking); express potential consequences of social actions (consequential thinking) and identify and understand the motives and behaviors of others. The most important aspect of their theory refers to the fact that children develop alternatives in thinking. Alternative solution thinking works as a mediator of healthy interpersonal functioning (Richardson, 2009). We can conclude that cognitive skills assist children to identify personal problems and to develop effective means for resolving such difficulties.

## **2.3. Self- efficacy**

Self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy refers to the belief in one's own ability to execute action required to deal with a situation (Bandura, 1982). Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Such beliefs produce these diverse effects through four major processes. They include cognitive, motivational, affective and selection processes (Bandura, 1994). Self-efficacy correlates with resilience, optimism, goal setting, empowerment, and emotional awareness. If a child lacks self-efficacy, he will not spend time trying to solve a problem because he doesn't believe he will be successful, while if he has strong self-efficacy, he may spend extensive time in attempting to solve the problem because he believes that he will eventually be successful.

Self-efficacy functions as the internal motivator for children to endure challenges and achieve goals. Self-efficacy is determined by one's beliefs about their ability to solve problems or complete a task. Supposing an individual does not believe he can solve a problem, he will not make any effort for that, which will result in his discomfort since the problem will presumably persist. On the other hand, in case a person believes he can solve a problem, he will strive to solve it, he may solve it and this will lead to

satisfaction. Supposing the person with self-efficacy is not successful, he will probably try again to solve the problem, because he has a great resistance to adversity.

Self-efficacy has been found to play an influential role in a range of life outcomes for children such as problem-solving (Bandura, 1994), psychological adjustment among children with disabilities, intrinsic academic motivation (Gottfried, Fleming and Gottfried, 1998) and long-term life satisfaction.

#### **2.4. Interdependences**

The present research does not detect a causal relation between self-efficacy and social competence, mostly in the capacity of solving social problems. However, researches confirm the existence of a relation between the two variables: self-efficacy beliefs tend to lead to a high development of social competence, mainly to social problem solving or high level of social competence lead to a rise in self efficacy beliefs. Interpersonal problem solving skills affect people's self-efficacy expectations. A strong feeling of self-efficacy also influences the quantity of energy individuals are willing to invest in order to overcome some obstacles. Researches demonstrate that children with a high level of self-efficacy manifest social intrepidity, friendly behaviours, participate to social events and obtain or offer their support to the group members (Connolly, 1989). Alternatively, those who do not have interpersonal problem-solving skills, manifest avoidance behaviours and have a low level of self-efficacy (Innes & Thomas, 1989).

### **3. Objectives and hypothesis of the study**

This study aimed at examining the relationships among interpersonal problem solving skills and social self-efficacy, in social competence at the primary school children. The present pilot study proposes to answer the following questions:

- What is the social self-efficacy level of 10 year children?
- What kind of relation can be established between social self-efficacy perceived by 10 year children and the capacity to solve social problems?

### **4. Method**

#### **4.1. Participants**

The research had been performed upon a fixed, non-aleatory sample made up of 45 children, having an average age of  $m = 9.73$ ,  $SD = 0.47$ , 30 boys and 15 girls, who come from school units in the Argeş district, from urban – 35 children and rural environment – 10 children.

#### **4.2. Instruments**

- a. *Children's Self-Efficacy in Peer Interactions* (Wheeler, & Ladd, 1982)- adapted. This scale is designed to measure youths' perceptions of their ability to be successful in social interactions. This includes their ability to be persuasive towards peers in positive ways. The questionnaire contains two subscales that measure social self-efficacy in conflict and non-conflict situations. The subscales can be used separately or combined into a total score.
- b. *Wally Problem Solving Test* - adapted (Webster-Stratton, C., 1990). Children are presented 5 potentially conflictual problem situations, each of them being accompanied by a suggestive

image: rejection from a friend, assuming a mistake, unjust treatment from a child, access limitation to play, adult disapproval. 1 point is allotted if the chosen strategy is positive and 0 points if the chosen strategy is negative.

- c. *The Social Problem Solving Measure* – adapted (Dodge et al., 1990). The SPSM is an 8-item instrument designed to measure children’s aggressive and competent interpersonal negotiation strategies in proactive situations. The measure provides two subscales the aggressive strategy and the competent strategy.
- d. *The Social Competence Scale* – adapted (Conduct Problems Prevention Research Group, 1991) is a 19-item questionnaire designed to measure teachers’ perceptions of a child’s social competence. The questionnaire contains two subscales that measure prosocial behavior and emotion regulation.

## 5. Results and discussions

The results obtained after having applied the above-mentioned instruments confirm that there are relations between interpersonal problem solving skills and social self-efficacy in social competence.

As regards the social self-efficacy level perceived by 10 years children from the investigated sample, it has a high value,  $m=77.29$ ,  $sd=7.29$ , with no significant differences between boys and girls ( $t=-0.372$ ,  $df=43$ ,  $sig.=0.712$ ), but with significant differences between children from the rural and those from the urban environment ( $t=4.291$ ,  $df=43$ ,  $sig.=0.000$ ).

Concerning the social competence perceived and evaluated by the teacher, this is measured at  $m=80.71$ ,  $sd= 8.46$ . There are no observed differences as concerns the development of social competence between boys and girls ( $t=-1.41$ ,  $df=43$ ,  $sig=0.165$ ), but there are significant differences between children from the rural and those from the urban environment ( $t=4.29$ ,  $df=43$ ,  $sig=0.000$ ).

We can affirm that the differences observed in the matter of the perceived self-efficacy, as well as the social competence between the children from rural and those from urban environment are determined mainly by the multiple situations and requirements of the environment they live in. The rural environment is characterized by security, interknowledge among the members of the community, with little demands. Instead, the child who lives in a urban environment benefits from interrelational diversity and many unpredictable situations which force him to adapt. Obviously, personal equation intervenes from behind these relations which can facilitate or slow down social adaptation and the development of social competences implicitly.

The analysis of the obtained results by applying the instrument which identifies the strategies used by children in social problem solving confirms the existence of a relation between the positive and the negative strategies used by children and between the aggressive and efficient ones; we determined a correlation of  $r=0.362^*$ ,  $p=0.015$ . between the results obtained at *Wally Problem Solving Test* and those at *Social Problem Solving Measure*.

**Table 1.** The coefficients of Pearson correlation between the social self efficacy and variables of social competence

Instruments	Social self-efficacy
Social Competence Scale	0.693**
Wally Problem Solving Test	0.656**
Social Problem Solving Measure	-0.016

\*  $p < .05$ , \*\*  $p < .01$ ,  $N = 45$

The data presented demonstrated highly significant relations between the perceived social self-efficacy and the positive strategies of social problem-solving ( $r=0.656$ ,  $p=0.000$ ), on one hand and on the other hand with the development of the social competence perceived by the adults, in our case –the teacher ( $r=0.693$ ,  $p=0.000$ ). The results confirm that the development of empathic capacities and interpersonal behaviours influence children's capacity to develop self-confidence, self-esteem and emotional well-being.

## 6. Conclusions

The studies underline that the development level of social competences at early ages leads to social acceptance in the adult life. Students who are not socially competent are more capable of experiencing reciprocal rejection as compared to their socially competent schoolmates. On the other hand, successful social interactions improve students' self-concepts, perceptions of peers and teachers, connectedness to school, and ultimate academic achievement.

The present study represents a pilot study for adapting the instruments used in measuring diverse variables involved in the development strategies of primary school children's social efficacy. The identification of the basic components of social self-efficacy leads to the designing of efficient development programs for them. Easing the development of social self-efficacy beliefs determines a better school adaptation, a rise in self-esteem and the improvement of academic performance.

The results obtained by applying the described instruments cannot be generalized due to the following limits: on one hand the insufficient representativity of the sample and the small number of subjects and secondly the use of instruments unadapted to the level of population in Romania.

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