

## Functioning of Social Skills from Middle Childhood to Early Adolescence in Hungary

Anikó Zsolnai<sup>1</sup> and László Kasik

*University of Szeged, Hungary*

The aim of this cross-sectional study was to describe the social skills that crucially affect children's social behaviour in the school. Our objective was to gather information about the functioning of social skills from middle childhood to early adolescence. The sample consisted of 7-, 9- and 11-year-old Hungarian students (N=1398). Based on Stephens's (1992) list of social skills, a 54-item Likert-type questionnaire (teacher-, parent- and self-report versions) was developed especially for this purpose. The child and the adult versions share the same structure and scale items. The results show no spontaneous development at the level of social skills between the ages of 7 and 11. There was a moderate correlation between the three evaluators' judgements concerning the level of children's social skills. All three respondent groups indicated that girls' social skills were slightly more developed than boys'. Teachers, however, perceived this difference to be twice as large as the other two raters. To sum up our results indicate that for a large percentage of participants, the acquisition of social skills has not been completed at 11 years old. This finding indicates that more attention should be paid to fostering social skills early at school.

**Keywords:** social skills; social competence; school-age children

First submission 29<sup>th</sup> October 2013; Accepted for publication 14<sup>th</sup> May 2014.

### Introduction

Social competence has traditionally been defined as the complex system of social abilities, habits, skills and knowledge (e.g. Brown, Odom, & McConnel, 2008; Semrud-Clikeman, 2007). In Argyle's definition (1983), social competence is an ability, the mastery of social skills which makes it possible to generate the desired effect in social relationships. Schneider's approach (1993) is very similar, viewing social

1

Corresponding author. Email address: [zsolnai@edpsy.u-szeged.hu](mailto:zsolnai@edpsy.u-szeged.hu)

competence as enabling one to engage in appropriate social behaviour, thus enhancing one's interpersonal relationships in a way not harmful to others. Rose-Krasnor (1997) defined the construct of social competence as effectiveness in interaction, the result of organised behaviours that meet short- and long-term developmental needs. Rose-Krasnor's (1997) model of social competence includes specific social, emotional and cognitive abilities, behaviours and motivations that are primarily individual. The developing child's increasing cognitive, motor and emotional skills facilitate the growth of a variety of social abilities (Rubin & Rose-Krasnor, 1992). In this approach social competence has been operationalized using the four general areas of social skills, peer status, relationship success, and functional goal-outcome assessments (Rose-Krasnor, 1997).

It is also a widely accepted claim that social competence is the possession of different social skills and abilities (Argyle, 1999; Greene, Hariton, Robins, & Flye, 2011; Gresham & Elliot, 1993). The literature discusses over a hundred social skills, of which communication skills are regarded as the most important (Spence, 1983). The appropriate application and interpretation of verbal and non-verbal communication signals, such as eye contact, posture, social distance, facial expressions and speech tone are essential for a person to be effective in interpersonal relationships (Argyle, 1999). Among social skills, Spence (1983) distinguished the sets of microsocial and macrosocial skills. The former includes verbal and non-verbal communication and social perception; the latter comprises empathy, helping behaviour, co-operation, altruism, and conflict-resolution skills.

One of the basic characteristics of social skills is that they are acquired through learning (Argyle, 1983; Dowling, 2001; Gresham & Elliott 1993; Webster-Stratton, 2002). Furthermore, social learning theory (Bandura, 1977) has shown that children's social learning is influenced most by imitation, reinforcement and modelling. It is an inherent characteristic of social skills that they reflect the specific requirements of the surrounding culture (Fiske, Kitayama, & Markus, 1998; Saarni, 1999). Of the wide range of cultural differences that can be observed between different societies (Markus & Kitayama 1991; Triandis, 1989) only a few will be discussed here. One basic question is whether a given society is on the whole individualistic (Western cultures) or collectivistic (many Eastern cultures). The former emphasises individual interests and goals while the latter always gives priority to the interests and goals of the group (Fiske et al., 1998). Societies also differ in how tolerant they are towards otherness and behaviours deviating from the norm. In countries where deviation from social norms is less tolerated, there is considerably more pressure on parents and children to avoid deviation from norms of accepted social behaviour (Hofstede, 1983). The majority of non-verbal communication signals are also culture bound (e.g. Forgas, 2004). In some cultures downcast eyes are a sign of respect rather than an indication of social anxiety or shyness. Girls or women in some cultures may be considered immodest if they look too directly at others, particularly adult males. Moreover, culture can even modify the meaning of those signals that are present in most cultures. Significant differences can be observed in the prosocial behaviour of children from different cultures, too (e.g. Cole & Tan, 2007). The examples above demonstrate that social behaviour and its constituent social skills are, to a large extent, culture specific.

The effectiveness of social behaviour depends to a large extent on the quality and quantity of the individual's array of social skills. The richer the set, the greater an individual's chances that he or she can activate the most appropriate skill to handle a given situation (Nagy, 2007; Stephens, 1992). Children with good social skills are more successful than their less competent peers in developing positive attitudes towards school and in adjusting to school (Hamre & Pianta, 2001; Odom, Zercher, Li, Marquart, Sandall, & Brown, 2006; Semrud-Clikeman, 2007).

Many investigations have shown that social skills are associated with academic achievement (Alexander, Doris, Entwisle, & Dauber, 2003; Ladd, Birch, & Buhs, 1999). Children with good social skills get better grades and perform better (Birch & Ladd, 1997; Diener, Isabella, & Behunin, 2008; Webster-Stratton & Reid, 2004; Zsolnai, 2002). Our previous research results show that this pattern is more typical for 7-10 year-olds than for adolescents (over 12 years of age). Among 7-10 year-olds we observed moderate correlations of about 0.4 between social skills and non-science subjects such as Hungarian language and sports (Kasik & Zsolnai, 2010).

Studies abroad and in Hungary agree that there is a considerable gap between parents' and teachers' evaluation of children's social behaviour. Compared to children's self-ratings, parents (in most studies) tend to overestimate their children's social skills, while teachers typically judge them less advanced than the children (Józsa & Zsolnai, 2005; Zsolnai & Kasik, 2011). There are several reasons for the discrepancy: the assessments are made with reference to different social contexts (school *versus* family environment), teachers' ratings are greatly influenced by children's gender and family background, and parents may be biased because of their emotional involvement. In order to overcome these difficulties, more observers' assessments of social skills are needed for analysis (Webster-Stratton & Lindsay, 1999). Several studies have suggested, however, that teachers' ratings have greater predictive validity than parents' (e.g. Coie, 1990).

Some assessment bias is also evident in parents' and teachers' assessments of children of different genders. In some studies (Nourani, 1998; Persson, 2005) the data shows that teachers' and parents' ratings of social skills are higher for girls than for boys. In another study Abdi (2010) also found that girls receive higher marks in social skills. Our own two-year longitudinal study conducted with school-age children (10-13 year olds) between 2003 and 2004 yielded similar results. At the first data collection, teachers and parents rated girls' social skills higher than boys'. At the second data collection the same gender differences were found as two years before. Gender differences did not grow, but neither did they diminish considerably in the observed period (Józsa & Zsolnai, 2005).

It appears that teachers and parents as fully-socialized adults, view children through the spectacles of their own gender stereotypes, and perceive differences where there are none. Keith and Campbell (2000) reported that family is the most important factor influencing the social development of the child. The functioning of the psychic components of social behaviour is dependent on several factors of the family background (e.g. the social skills and abilities of parents, their education, the type of the family) (Kohn, 1995). Hungarian studies found significant correlations between social behaviour and parents' education in kindergarten children and junior grades (in Hungary, elementary school grades are divided into junior -1<sup>st</sup> to 4<sup>th</sup>- and senior -5<sup>th</sup> to 8<sup>th</sup>- grades), and the relationship was found to be the strongest with mothers' education

(e.g. Zsolnai, Lesznyák, & Kasik, 2007). These results suggest that parents' education is a crucial factor in parenting style. Our previous studies (e.g. Zsolnai & Kasik, 2012) show that the children of parents with higher educational attainment have better social skills, although this effect disappeared after adolescence (the age of 12). For younger students (7-10 year-olds), the children of mothers with tertiary education had better social skills involving rule following behaviour and adherence to norms than the children of mothers having no tertiary education. We may assume that parents' insistence on rule conformance has a substantial effect on social skills. The above correlation was not observed, however, among adolescents. There was no strong correlation between their social skills and either the mothers' or fathers' education.

### *Objectives and hypotheses of our study*

The objectives of our cross-sectional study are (1) to find out whether there are differences between the studied cohorts and genders within them in the level of social skills; (2) to discover relationships between raters' responses (children's, parents' and teachers'); (3) to find out if social skills are related to the parents' education; and (4) to find out whether the level of social skills is related to the children's gender and their school performance (measured in grade average).

Based on our previous studies, we hypothesized that (1) significant differences would be found, at least between the youngest and the oldest cohorts; (2) the strength of correlation would be inversely proportional to the children's age, as a sign of increasing external social influence; and (3) the level of social skills is strongly associated with the children's academic performance and their gender.

## **Method**

### *Participants*

1398 children (aged 7, 9 and 11 years) participated in the study. Participants were recruited from seven elementary schools in Szeged, one of the largest cities in Hungary. All children were fluent in Hungarian, and all of them had parental permission to participate in the study. The sizes of the subsamples were comparable (7 years=476; 9 years=455; 11 years=467). ). The genders were approximately equally represented in each age-group, with boys being slightly over-represented (girls among 7 year-olds=230; 9 year-olds=222; 11 year-olds=241). Mothers with all levels of education were involved (elementary school=21%; vocational school=26%; high school=27%; college degree=15% and university degree=11%) – whole sample:  $\chi^2=52.12$ ,  $p=.02$ ).

The students filled in the questionnaire at school in their classrooms. The 9 year-olds and the 11 year-olds completed the questionnaires themselves under the supervision of their teachers. The 7 year-olds read the items themselves (towards the end of the first grade they were already able to read) but had assistants to help them. If they could not understand an item, they could turn to the assistant, who explained what it meant without suggesting an answer to them in any direct or indirect way. The children were told that nobody in their school would see their responses. Teachers (N=62) and parents (N=1398) also participated in the research. They filled in the questionnaire without being aware of their students' or their children's answers. In primary schools in Hungary, each class has a designated class teacher. These teachers usually teach major

subjects (e.g. mathematics), and they are responsible for all student affairs in their designated class. All class teachers completed the Social Skills Questionnaire about each student in their class. Letters briefly explaining the research study and the Social Skills Questionnaire were sent home to the family of each child. Mothers completed the SSQ at home and the questionnaires were sent back to the class teachers in sealed envelopes. The same explanation was given to the parents, the teachers and the students about confidentiality and anonymity.

### *Instruments*

Three research instruments were used in our study: a social skills self-report questionnaire, a teacher-report questionnaire and a parent-report questionnaire. The social skills were assessed using our own 54-item Likert-type *Social Skills Questionnaire* (Zsolnai & Józsa, 2003), which was based on Stephens's (1992) list of social skills and behaviours. Stephens used four categories: interpersonal skills and behaviours, self-related skills and behaviours, task-related skills and behaviours and environment-related skills and behaviours. Stephens' system mainly focuses on social skills closely tied to the school environment. Several of the skills listed by the author correspond to the skills in the categories of school-related social skills derived by Caldarella and Merrel (1997) in their metaanalysis, and also discussed by Missal and Hojnoski (2008). Items in the *Social Skills Questionnaire* are grouped into four categories, each one corresponding to one of the following four sub-categories of social skills: interpersonal social skills (IP, 22 items), self-related social skills (SR, 12 items), task-related social skills (TR, 13 items) and environmental social skills (ER, 7 items). Table 1 shows the list of social skills and behaviours, and sample items.

The self-report version of the *Social Skills Questionnaire* (SSQ) and both parents' and teachers' ratings were used. The child and the adult versions share the same structure and response scales. For each child, the sums of the rank-values of the Likert-scale (1=never, 2=generally not; 3=sometimes, 4=generally yes, 5=always) were computed and then they were converted to percentage points. This method of scoring was used to allow the developmental indices of the four skill groups consisting of different numbers of items to be compared to each other.

The reliability of the SSQ total scale is above .84 in all sub-samples. Teachers' ratings have the highest reliability (Cronbach-alpha) indices (.91; .92; .93), students' self-ratings are somewhat less reliable (reliability indices=.86; .87; .89), and the lowest reliability is shown by parents' ratings (reliability indices=.85; .86; .88) for 7, 9 and 11 year-olds respectively. We also checked the reliability of the four social skills sub-categories and we found that their reliability is high (reliability indices: IP=.89; SR=.84; TR=.85; ER=.78). Only the environment-related skills have a lower reliability index, but this scale contains only seven items, which is fewer than the number of items on the other scales. It is possible that the lower reliability is the results of the low item number. The Kaiser-Meyer-Olkin indexes were .85 (self-assessment), .91 (teachers' version) and .90 (parents' version).

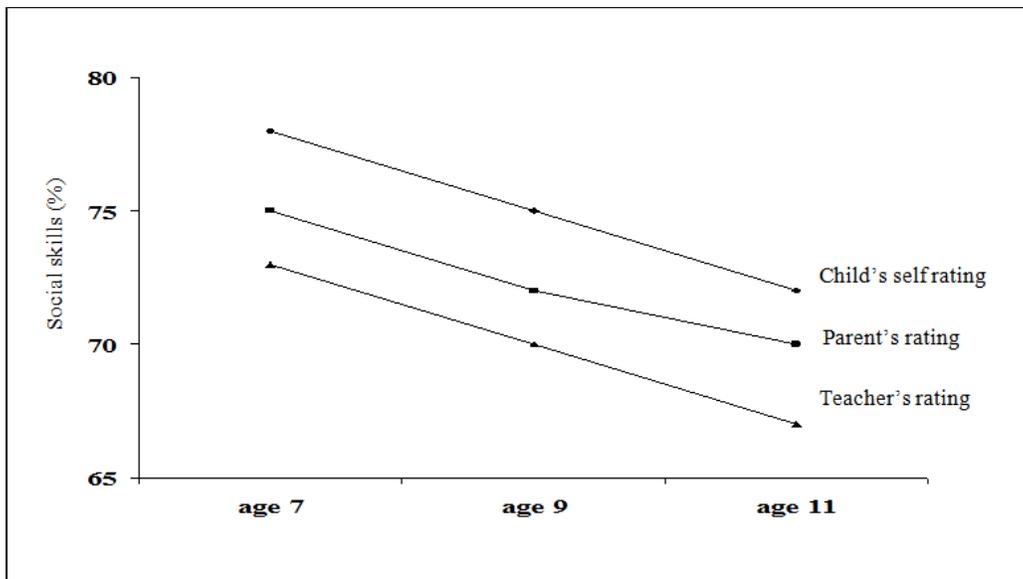
**Table I. List of social skills and behaviours and sample items**

<b>Social skills and behaviours</b>	<b>Sample items</b>
<b><i>Interpersonal behaviours</i></b>	
coping with conflict	Student expresses anger with nonaggressive words rather than physical action or aggressive words.
attracting attention	Student uses “please” and “thank you” when making requests of others.
greeting others	Student looks others in the eye when greeting them.
helping others	Student comes to defense of peer in trouble.
making conversation	Student talks to others in a tone of voice appropriate to the situation.
organised play	Student accepts defeat and congratulates the winner in a competitive game.
positive attitude towards others	Student follows rules when playing a game.
<b><i>Self-related behaviours</i></b>	
accepting consequences	Student apologizes when actions have injured or infringed on another.
ethical behavior	Student identifies consequences of behaviour involving wrong-doing.
expressing feelings	Student recognizes and labels moods of others.
positive attitude towards self	Student makes positive statements when asked about himself/herself.
responsible behavior	Student arrives at school on time.
<b><i>Task-related behaviours</i></b>	
asking and answering questions	Student asks a question appropriate to the information needed.
attentive behavior	Student listens to someone speaking to the class.
classroom discussion	Student makes relevant remarks in a classroom discussion.
group activities	Student shares materials with others in a work situation.
Performing in front of others	Student reads aloud before a large group or the entire class.
<b><i>Environment-related behaviours</i></b>	
taking care of the environment	Student uses playground equipment safety.
table manners	Student disposes of unwanted food properly.
taking part in traffic	Student follows rules for emergencies.

## **Results**

### *Development of social skills*

Our hypothesis was that social skills would show development over this age-range. However, none of the raters could observe any increase in social skills between the ages of 7 and 11 years (ANOVA). In fact,



**Figure 1. Level of social skills (three raters, SSQ total values, %)**

the raters indicated a small but significant decrease in children's social skills (Figure 1). The points of assessment are not at an equal distance from each other; as a result, the curves only approximately represent the hypothesised changes.

As for the average level of social skills, there is a small but significant difference between the three evaluators' ratings. Teachers rate social skills to be the least developed, whereas parents' ratings are somewhat higher than teachers'. The highest mean values can be found in students' ratings. This pattern of mean differences can be observed in all age groups. We also analysed the development of the four social skill categories (IP, SR, TR, ER) separately. Table 2 shows the teachers', children's and parents' ratings, respectively.

It can be seen that the development of the four social skill groups is judged similarly by the three raters. Every rater perceives environment-related and self-related social skills to be more developed than interpersonal and task-related skills. A considerable decrease (about 6 %) can be observed in the case of interpersonal and self-related skills. If we turn to task-related skills, we find a more pronounced decrease (about 8 %) in all three evaluators' ratings. This skill group consists of social skills that are necessary to do schoolwork and carry out school-related tasks.

*Inter-correlations of the social skills and correlations between self-assessment, parent- and teacher-report data*

All three evaluators indicated a strong interrelationship between the four social skill groups ( $r=.65 - .79$ ). Based on the z-tests ( $p < .05$  in all cases), correlations are similarly strong for parents', teachers' and children's ratings. The strong correlations may be partly due to the fact that the four skill groups were evaluated in the same questionnaire. The data, however, clearly indicate that the development of the different

social skills is highly interrelated. A very important question is how similar the judgements of the three independent raters are. We found correlations between the self-report, the parent-report and the teacher-report data (Table 3) but these correlations were moderate ( $r=.35 - .48$ ).

**Table II. Teachers', children's and parents' ratings (%)**

Age and Raters		IP	SR	TR	ER
Age 7	Teacher	70	78	72	76
	Parent	72	79	76	77
	Child	77	80	80	81
Age 9	Teacher	66	75	68	78
	Parent	68	78	73	77
	Child	73	77	77	78
Age 11	Teacher	65	72	63	73
	Parent	68	74	70	73
	Child	71	75	73	75

*Note.* IP=Interpersonal behaviours; SR=Self-related behaviours; TR=Task-related behaviours; ER=Environment-related behaviours

**Table III. Pearson correlations between raters on the social skills total**

Age	Raters	Parents	Children
7	Teachers	.41	.48
	Children	.35	
9	Teachers	.35	.39
	Children	.41	
11	Teachers	.36	.35
	Children	.43	

*Note.* in all cases  $p < .05$

#### *Gender differences*

All three evaluators indicated considerable differences between the developmental levels of boys and girls (Table 4). The rank order of the three raters' mean values for social skills development differs by gender as well. As for boys, the order of the raters' mean values is the same as in the case of the whole sample (from

lowest to highest: teacher, parent, child respectively). In the case of girls, however, the mean of teachers' ratings is the highest, followed by children's and parents' ratings respectively.

**Table IV. Gender differences in the development of social skills based on the raters' judgement (%)**

	Age 7		Age 9		Age 11	
	Boys	Girls	Boys	Girls	Boys	Girls
<b>Teacher</b>	65	81	69	81	67	82
<b>Child</b>	72	78	74	80	75	80
<b>Parent</b>	70	76	71	77	70	74

*Correlations between children's social skills and school achievement and mothers' educational qualification*

The SSQ primarily assesses social skills that are necessary for successful school work (school performance was represented by grade point average). As expected, we found significant correlations, which were similarly high in the different age groups (Table 5). School success (grade point average) shows the highest correlation with teachers' ratings of social skills (correlations above .5). Parents' and children's ratings of social skills also correlate significantly with grade average.

**Table V. Pearson correlation between social skills and school achievement**

Correlation	Teachers	Parents	Children
<b>Age 9</b>	.61	.38	.37
<b>Age 11</b>	.52	.37	.35

*Note.* in all cases  $p < .05$

Our assumption was that parents' education is a good measure of family background. In our investigation all three ratings correlate significantly with mothers' education, but the correlations are not high (Table 6). These results underline the importance of family background, although the weak correlations suggest that parents' education is not the sole determinant of the development of social skills.

**Table VI. Pearson correlation between social skills and mothers' highest educational qualification**

Correlation	Teachers	Parents	Children
<b>Age 7</b>	.19	.17	.16
<b>Age 9</b>	.25	.19	.18
<b>Age 11</b>	.17	.15	.12

*Note.* in all cases  $p < .05$

## Discussion

The purpose of our cross-sectional investigation with children (7, 9 and 11 year-olds) was to examine the functioning of social skills from middle childhood to early adolescence in a school context. We examined four social skill sub-categories: interpersonal, self-related, task-related and environment related social skills. The functioning of the four social skill groups was rated by three raters: teachers, parents and the students themselves. The social skill groups under analysis here are crucial factors in children's social life both at school and at home and their assessment is thus vital.

*Age differences:* We hypothesized that significant differences would be found, at least between the youngest and the oldest cohorts. The hypothesis was not supported because none of the raters could observe any change in social skills between the ages of 7, 9 and 11. Two evaluators (teachers and students) could not observe any increase in social skills between the ages of 7 and 11. In fact, these raters indicated a small but significant decrease in children's social skills. As for the average level of social skills, there is a small but significant difference between the three evaluators' ratings. Teachers rate social skills to be the least developed, whereas students' ratings are somewhat higher than teachers'. The highest mean values can be found in parents' ratings. This pattern of mean differences can be observed in all age groups. Task-related skills were believed to deteriorate dramatically by all the raters. This skill group consists of social skills that are necessary to do schoolwork and to carry out school-related tasks. The results reveal that these learnt elements of behaviour do not change spontaneously; in fact, in some areas, older children show lower scores than younger children. This phenomenon clearly highlights the necessity of regular planned programmes for fostering social skills.

*Correlations between self-report, parent-report and teacher-report data:* A very important question is how similar the judgements of the three independent raters are. Our results give support to the claim that the evaluator and the context have a strong impact on how the level of children's social skills is perceived. As a result, it is necessary to involve several independent evaluators when assessing children's social skills. The result may indicate that the relationship between the rater and the child influences the rater's perception of how developed the child's social skills are. As a result, one and the same child's social skills can be rated very differently by the teacher, by the parent and by the child him/herself. In particular, the situations in which teachers and parents can observe children's social skills differ from each other. Probably, the bases of comparison for social skills ratings are different too. To sum up, research results suggest that the functioning of social skills and ratings of their development are highly dependent on situational and contextual variables, and on other participants of the interaction.

*Gender differences:* In our study gender differences are already present at the age of 7, so we can assume that these differences are formed at an earlier stage in development. In the observed period, that is, from middle childhood to early adolescence, gender differences do not increase but they do not decrease, either. This result is very similar to previous research results (Józsa & Zsolnai, 2005; Nourani, 1998; Persson, 2005). Based on data collected in Iran, Nourani (1998) found that the teachers' and parents' ratings of social skills were higher for girls than for boys. In another study Abdi (2010) found that girls received higher marks in social skills than boys. These research results show the need for further investigation. It is not clear whether

gender differences are real developmental differences or they are just produced by the subjective perception of the raters. Maybe schools and teachers provide educational climates that enhance the social behavioural advantage of girls (DiPrete & Jennings, 2011). Entwisle, Alexander and Olson (2007), for example, see gender bias by teachers and parents in favour of girls. They argue that girls have better social and behavioral ratings not so much because of differences in maturity but rather because “they find the student role more compatible than boys do” (p. 134).

*Social skills and academic achievement:* Many investigations have shown that social skills are associated with academic achievement (Alexander et al., 2003; Ladd et al., 1999). Several studies suggest that social skills have a particularly strong effect on teacher-rated academic achievement, especially at the start of elementary school (DiPrete & Jennings, 2011; Ladd et al., 1999; Lin, Lawrence, & Gorrell, 2003). In our study, students’ academic achievement was expressed by grade point average. School performance showed a medium strength correlation with social skills. It is the teachers’ ratings of social skills that show the highest correlation with school success (grade average), which suggests that teachers find it more difficult to separate their students’ cognitive (academic) characteristics from their social skills. These results are consistent with other studies showing that socially competent children are more successful than their less competent peers in adjusting to school. Moreover, they get better grades and perform better (Birch & Ladd, 1997; Ladd et al., 1999; Zsolnai, 2002; Webster-Stratton & Reid, 2004).

*Social background:* Family characteristics (e.g. parents’ social competence, parenting style, the nature of the attachment between mother and child, sibling effects) play a major role in the development of social skills (Cole & Tan, 2007; Denham, Bassett, & Wyatt, 2007; DiPrete & Jennings, 2011; Kochanska & Aksan, 2006; Schneider, 1993). We have assumed that parents’ education is a good measure of family background. In this study only mothers’ education was examined. Our data show that all three ratings correlate significantly with mothers’ education, but the correlations are weak. We found that the children of mothers with tertiary education have slightly more developed social skills. In the observed period, we did not find any changes in this respect. However, in our research mothers’ education did not prove to be a decisive factor in social skills development.

One factor substantially more likely to affect the development of children’s social skills is the attachment style with their parents and the parents’ social competence. Social interactions between the parents and children and the quality of these interactions have an effect on the social behaviour of the children. A reciprocal, positive interpersonal connection between the parent and the child is a basic component in the development of social competence and “is a critical factor in the development of conscience or autonomous self-regulation.” (Kochanska & Aksan, 2006, p.1596). Underdeveloped social skills can be explained by unsatisfactory family ties, especially by deficiencies in the child's attachment to the mother (Schneider, 1993). A wide range of empirical research has shown that an unstable mother-child attachment has a negative influence on the child's social development (Diener et al., 2008; Howes & Hamilton, 1992).

## Conclusion

Although our study is among the first to demonstrate the relationship between social skills and gender differences and school performance in Hungary, current findings cannot be generalized beyond Hungary and the culture-specific factors (e.g. family background, school environment) related to the variables being studied. Another limitation is the cross-sectional nature of the study. For example, it is not possible to determine whether social skills predict school performance or *vice versa*. Future, longitudinal studies are needed to provide data in this regard. In our future studies, fathers' ratings should also be collected. It is well-known that parents' opinions about their children's social behaviour may differ substantially. Parents evaluate their sons' and daughters' behaviour differently, they do not have the same expectations from boys and girls, which is largely due to traditions of social roles and the roles of the parents in the family (e.g. Webster-Stratton, 1988). Beyond these limitations, we are confident that the findings of our study offer useful information about the level of social skills from middle childhood to early adolescence.

Our results indicate that the acquisition of social skills has not been completed a large percentage of 11 year olds. This finding indicates that more attention should be paid to fostering social skills at elementary school level. Thus helping the development of social skills (e.g. by implementing such programs) should be an important task in education. It would be also very important to determine the influence of environmental factors – such as the parents' social competence, secure attachment between parent and child, teachers' social skills or the social atmosphere of the school and classroom – on the development of social skills in children. More data on social skills development may also be obtained by using tools which allow situation-specific assessment, i.e., where the parents, teachers and students rate social behavior in the same social situation. It is still an open question at what ages social skills can be fostered most effectively. The development of social skills programs for children and adolescents in a school context and the assessment of their effectiveness is another implication from this study.

## References

- Abdi, B. (2010). Gender differences in social skills, problem behaviours and academic competence of Iranian Preschool children based on their parent and teacher ratings. *Procedia-Social and Behavioral Sciences*, 5, 1175-1179.
- Alexander, K. L., Doris, R., Entwisle, D. R. & Dauber, S. L. (2003). *On the Success of Failure: A Reassessment of the Effects of Retention in the Early Grades*. Cambridge University Press, New York.
- Argyle, M. (1983). *The Psychology of Interpersonal Behaviour*. Penguin, Harmondsworth.
- Argyle, M. (1999). Development of social coping skills. In L. Frydenderg (Ed.), *Learning to cope* (pp. 81-106). New York: Oxford University Press.
- Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ, Prentice-Hall.
- Birch, S. H. & Ladd, G. W. (1997). The teacher-child relationship and children's early school adjustment. *Journal of School Psychology*, 35(1), 61-79.

- Brown, W. H., Odom, S. L. & McConnel, S. R. (2008). *Social Competence of Young Children*. Baltimore: P. H. Brookes Publishing Co.
- Caldarella, P. & Merrell, K. W. (1997). Common dimensions of social skills of children and adolescents: A taxonomy of positive behaviors. *School Psychology Review*, 26(2), 264–278.
- Coie, J. D. (1990). Toward a theory of peer rejection. In S. R. Asher & J. D. Coie (Eds.), *Peer Rejection in Childhood* (pp. 365-401). Cambridge: Cambridge University Press.
- Cole, P. M. & Tan, P. Z. (2007). Emotion socialization from a cultural perspective. In J. E. Grusec & P. D. Hastings (Ed.), *Handbook of Socialization* (pp. 516-542). New York: The Guilford Press.
- Denham, S. A., Bassett, H. H. & Wyatt, T. (2007). The socialization of emotional competence. In J. E. Grusec & P. D. Hastings (Ed.), *Handbook of Socialization* (pp. 614-637). The Guilford Press, New York.
- Diener, M. L., Isabella, R. A. & Behunin, M. G. (2008). Attachment to mothers and fathers during middle childhood: Associations with child gender, grade, and competence. *Social Development*, 17(1), 84-101.
- DiPrete, T. A. & Jennings, J. L. (2011). Social and behavioral skills and the gender gap in early educational achievement. *Social Science Research*, 41(1), 1-15.
- Dowling, M. (2001). *Young children's personal, social and emotional development*. London: SAGE Publication Inc.
- Entwisle, D. R., Alexander, K. L. & Olson, L. S. (2007). Early Schooling: The handicap of being poor and male. *Sociology of Education*, 80(2), 114-138.
- Fiske, A. P., Kitayama, S., Markus, H. R., et al. (1998). The cultural matrix of social psychology. In D. T. Gilbert, S. T. Fiske, G. Lindzey (Eds.), *The Handbook of Social Psychology* (Vol 2) (pp. 915-981). Boston : McGraw-Hill.
- Forgas, J. P. (2004). *The Psychology of Social Interaction*. Budapest: Gondolat Kiadó.
- Greene, M. L., Hariton, J. R., Robins, A. L. & Flye, B. L. (2011). *Children's Social Competence. Theory and Intervention*. New York: Nova Science Publishers, Inc.
- Gresham, F. M. & Elliot, S. N. (1993). *Social Skills Intervention Guide: Systematic Approaches to Social Skills Training*. Haworth Press.
- Hamre, B. K. & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72(2), 625–638.
- Hofstede, G. (1983). Dimensions of national cultures in fifty countries and three regions. In J. B. Deregowski, S. Dziurawiec & R. C. Annis (Eds.), *Explications in Cross-cultural Psychology* (pp. 333-355). Netherlands: Swets and Zeitlinger.
- Howes, C. & Hamilton, C. E. (1992). Children's relationships with caregivers: Mothers and child care teachers. *Child Development*, 63(4), 859-866
- Józsa, K. & Zsolnai, A. (2005). A longitudinal study of social skills development in adolescents. In *11th European Conference for Research on Learning and Instruction*, Nicosia, August 23-27. Conference programme.1062.

- Kasik, L. & Zsolnai, A. (2010). Development of social interest realisation abilities at the age of 4–18. In *2nd European Association for Practitioner Research on Improving Learning in Education and Professional Practice Conference*, Lisbon, November 24-26. Abstract Book. 90.
- Keith, L. & Campbell, J. (2000). Assessment of social and emotional development in preschool children. In B. A. Bracken (Ed.), *The psychoeducational assessment of preschoolers* (3rd ed.) (pp. 364-382). Allyn and Bacon, Needham Heights, MA.
- Kochanska, G. & Aksan, N. (2006). Children's Conscience and Self-Regulation. *Journal of Personality*, 74(6), 1588-1609.
- Kohn, M. L. (1995). Social structure and personality through time and space. In P. Moen, G. H. Elder & K. Lüscher (Eds.), *Examining Lives in Context: Perspectives on the Ecology of Human Development* (pp. 141-168). Washington DC: American Psychological Association Press.
- Ladd, G. W., Birch, S. H. & Buhs, E. S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development*, 70(6), 1373-1400.
- Lin, H. L., Lawrence, F. R. & Gorrell, J. (2003). Kindergarten teachers' views of children's readiness for school. *Early Childhood Research Quarterly*, 18(2), 225–237.
- Markus, H. M., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224-253.
- Missal, K. N. & Hojnosi, R. L. (2008). The critical nature of young children's emerging peer-related social competence for transition to school. In W. H. Brown, S. L. Odom & S. R. McConnell (Eds.), *Social Competence of Young Children* (pp. 117-137). Paul H. Brookes Publishing Co.
- Nagy, J. (2007). *Kompetenciaalapú kritériumorientált pedagógia*. [Criterion referenced pedagogy]. Mozaik Kiadó.
- Nourani, Kh. (1998). *Social skills and adaptive behavior of Iranian preschoolers: Teachers' and parents' ratings*. Unpublished doctoral thesis. Department of Human Development and Applied Psychology, Ontario Institute for Studies in Education of the University of Toronto.
- Odom, S. L., Zercher, C., Li, S., Marquart, J. M., Sandall, S. & Brown, W. H. (2006). Social acceptance and rejection of preschool children with disabilities: A mixed-method analysis. *Journal of Educational Psychology*, 98(4), 807–823.
- Persson, G. E. B. (2005). Developmental perspectives on pro-social and aggressive motives in preschoolers' peer interactions. *International Journal of Behavioural Development*, 29(1), 80–91.
- Rose-Krasnor, L. (1997). The nature of social competence: A Theoretical review. *Social Development*, 6(1), 111-135.
- Rubin, K. H. & Rose- Krasnor, L. (1992). Interpersonal problem solving. In V. B. Van Hassett & M. Hersen (Eds.), *Handbook of Social Development* (pp. 283-323). New York: Plenum.
- Saarni, C. (1999). *The Development of Emotional Competence*. New York: Guilford Press.
- Schneider, B. H. (1993). *Childrens' Social Competence in Context*. Oxford: Pergament Press.
- Semrud-Clikeman, M. (2007). *Social Competence in Children*. New York: Springer.

- Spence, S. (1983). The implication for heterosexual social skills training. In S. Spence & G. Shepherd (Eds.), *Development in Social Skills Training* (pp. 282-286). Academic Press, London.
- Stephens, T. (1992). *Social Skills in the Classroom*. Psychological Assessment Resources, Inc. Odessa.
- Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review*, 96(3), 506–520.
- Webster-Stratton, C. (1988). Mothers' and Fathers' Perceptions of Child Deviance: Roles of Parent and Child Behaviors and Parent Adjustment. *Journal of Consulting and Clinical Psychology*, 56 (6), 909-915.
- Webster-Stratton, C. (2002). *How to promote children's social and emotional competence*. London: SAGE Publication Inc.
- Webster-Stratton, C. & Lindsay, W. D. (1999). Social Competence and Conduct Problems in Young Children: Issues in Assessment. *Journal of Clinical Child Psychology*, 28(1), 25-43.
- Webster-Stratton, C. & Reid, J. (2004). Strengthening social and emotional competence in young children – The foundation for early school readiness and success. *Infants and Young Children*, 17(2), 96-113.
- Zsolnai, A. (2002). Relationship between children's social competence, learning motivation and school achievement. *Educational Psychology*, 33(3), 317-330.
- Zsolnai, A. & Józsa, K. (2003). Possibilities of criterion referenced social skills development. *Journal of Early Childhood Research*, 2, 181-196.
- Zsolnai, A. & Kasik, L. (2011). Development of coping strategies and social problem solving at the age of 8 and 12. In Bente Wold (eds.). *Proceeding of the XV European Conference on Developmental Psychology*. Bergen, Norway, August, 23-27 2011. Medimond , Bologna.
- Zsolnai, A. & Kasik, L. (2012). Megküzdési stratégiák 8, 10 és 12 éves tanulók körében [Coping strategies at the age of 8, 10 and 12]. *Iskolakultúra*, 4, 3–19.
- Zsolnai, A., Lesznyák, M., & Kasik, L. (2007). A szociális és az érzelmi kompetencia néhány készségének fejlettsége óvodás korban [Social and emotional competence in preschool age children]. *Magyar Pedagógia*, 107, 233–270.