

THE RELATIONSHIP BETWEEN SOCIAL SKILLS AND BEHAVIORAL PROBLEMS IN CHILDREN WITH VISUAL IMPAIRMENT

TINA RUNJIĆ, ANTE BILIĆ PRČIĆ, SONJA ALIMOVIĆ

Edukacijsko-rehabilitacijski fakultet Sveučilišta u Zagrebu, tina.runjic@erf.hr

Received: 22.9.2015.
Accepted: 22.11.2015.

Original scientific paper
UDK: 376.1-056.263

Abstract: Previous research has indicated that there is a significant correlation between social skills and problem behaviors. Children with poor social skills usually show some kind of problem behavior. Both poor social skills and problem behaviors negatively influence psychosocial functioning as well as academic achievement. Children with visual impairment often have problems in social functioning throughout their whole life as a consequence of impaired vision, but also as a consequence of insufficient and adverse social experiences. The most common problem behaviors these children experience are social withdrawal and aggression. The goal of this study was to define the relationship between social skills performance and behavioral problems in students with visual impairment.

The study was comprised of 39 parents of teenage children with visual impairment (13–17 years old). The children attended regular state schools and a school for the blind in the Republic of Croatia.

The data were collected using the Social Skills Rating System (SSRS) developed by Gresham and Elliott (1990) and were analyzed by quasi-canonical correlation analysis using ROBKAN software.

The obtained results confirmed the correlation between social skills and problem behaviors in children with visual impairment. Children with poorer social skills had more problems with behavior. The correlation was particularly evident in the domain of cooperation, as more responsible and more cooperative children had significantly less problems with behavior.

Key words: social skills, problem behaviors, children with visual impairment, cooperation, responsibility

INTRODUCTION

Every child is expected to possess certain skills and experiences that will enable him or her to obtain desirable academic and social achievement when entering the school system. In order to successfully accomplish educational goals, a child should develop expressive and receptive language abilities, the ability to follow instructions, problem-solving skills, and a range of social skills. Gresham et al. (2010) state that social skills encompass specific behaviors which will enable successful accomplishment of social tasks. This implies characteristics, skills or strategies that enable people to communicate and connect successfully with others in their surroundings (Botsford, 2013). Social skills are those specific skills the child uses to interact and communicate with others: resolving conflicts, communicating clearly, following directions, etc.

Students who lack these skills may be excluded from positive interaction with peers and may have problems in relationships with their teachers, which can lead to the risk of poor academic achievement. (Bloom, 2007).

Students with poorly developed social skills often have not only problems in achieving academic goals, but also long-lasting problems in psychosocial development (Bulman, no date). Children with deficient social skills mostly lack cooperation and communication skills, as well as the ability to respond positively to peers and the ability to develop friendships (Bilić Prcić, 2007). In recent literature, authors often relate the concept of social competence with the concept of social skills (Shahrumb, 2012). Social competence, together with social behaviors and skills, entails understanding, planning, and perfor-

mance in order to achieve better social interaction. Shahrum (2012) states that social competence has a constructive role in shaping adjustment abilities both in childhood and adulthood. Children with greater social competence are generally better accepted by their peers and emotionally healthier. They show a greater degree of school readiness and develop better interpersonal relationships and better social adjustment. On the other hand, children with a deficit of social competence have issues with positive social interactions as well as peer and teacher acceptance, and demonstrate less prosocial behavior.

Vision influences all aspects of a persons' functioning; therefore, it influences the development of both social skills and social competence. Hill and Blasch (1980) stated that almost 85% of what is learned socially is mediated through the visual sense. Complete or partial vision loss complicates the process of receiving accurate and precise information about the social environment, understanding the context in which social activities take place, and correctly interpreting social concepts. According to a series of studies, children with visual impairment have poorly developed social skills (Sacks et al., 1992; Verdugo and Caballo, 1996; Huurre and Aro, 1998; Jindal-Snape, 2004 as cited in Caballo and Verdugo, 2007). These children are less likely to initiate social contacts and often have problems with maintaining established social interactions (Kekelis and Sacks, 1988; Preusler, 1993, as cited in McGaha and Fraan, 2001). Also, according to Kekelis (1992) and Preisler (1993), they show rejecting and self-centered behavior in social interactions. Children with vision problems are less interested in friendships and have a tendency toward social isolation because they do not receive many positive responses from peers and because of their weaker engagement in social interactions (Celeste, 2006). Difficulties with daily living skills, not having many social contacts, a high number of negative social experiences, and inability to perceive peer feedback leads to social functioning problems in children with visual impairment. These children are dependent on others to create constructs and integrate the external environment into a realistic, concrete world (Waren, 1994). Children with visual impairment, especially those who are

congenitally blind, are extremely dependent on others in getting adequate social information that enables them to achieve positive social interactions with family, friends, and their social environment. Fraiberg (1977) noted that it is difficult for parents of blind children to create an environment that fosters positive physical stimulation and social interactions without intervention. Therefore, these children may never develop autonomy and more complex stages of personal development (Sacks, 1992). The same author stated that social expectations for children with visual impairment can be lowered because they are recognized as dependent on others.

Bishop (1996) found that parents, teachers, and students with vision impairment rated social skills as third in importance for creating positive interaction in school integration. Bullis et al. (2001, as cited in Anderson et al. [n.d.]) stated that children with poorly developed social competence can develop emotional and behavioral problems. In addition, Langeveld et al. (2012) claimed that poor social competence can be a reason for problems in behavior, and Shahrum (2012) stated that students with better social skills show fewer behavioral problems. Most common behavioral problems in students with poor social competence are classified as externalizing and internalizing behavioral problems. The externalizing behavioral problems that these students can develop include aggression, physical conflicts, destructiveness, peer rejection, peer refusal, maladjustment, and compulsive behavior, whereas the internalizing problems include social withdrawal, depression, and anxiety.

Although attention in schools is mostly focused on students with externalizing behavioral problems because they disrupt class, students with internalizing behavioral problems also represent an important concern of families, schools, and communities. (Kaufman, 1997, as cited in Sugai et al., 2000).

OBJECTIVE AND HYPOTHESES

Starting with the assumption that behavioral problems exist concurrently with social skill problems in students with visual impairment in the domains of cooperation and responsibility, we

defined the objective of this study as determining the relationship between social skill performance and behavioral problems in these students.

Based on this objective, we defined the starting hypotheses of this study:

H1 – There is a correlation between social skill performance and behavioral problems in students with visual impairment.

As two domains of social skills were tested (cooperation and responsibility), the main hypothesis was divided into two sub-hypotheses in order to determine the influence of behavioral problems on social skills, and vice versa:

H1-1 – There is a correlation between cooperation and problem behaviors in students with visual impairment;

H1-2 – There is a correlation between responsibility and problem behaviors in students with visual impairment.

METHODS

Participants

The questionnaires in this study were filled out by 39 parents of students with visual impairment. Out of these students, 53.8% (n=21) were boys, and 46.2% (n=18) were girls. On the basis of visual impairment, students formed two groups: low vision students (76.9%; n=30) and blind students (23%; n=9). Most of the children attended regular public schools (61.5%; n=24), while 38.5% (n=15) were attending the Vinko Bek School for the Blind. None of the students included in this study had any additional problems. All students attended the final two grades of primary school (Primary 7 & 8) or secondary school (Secondary 1, 2, and 3): Primary 7 (15.4%; n=6); Primary 8 (33.3%; n=13); Secondary 1 (35.9%; n=14), Secondary 2 (7.7%; n=3), and Secondary 3 (7.7%; n=3).

Instrument

The data were collected using the Social Skills Rating System (SSRS), a comprehensive rating scale for assessing social skills, problem behaviors, and academic competence, with different scales for parents and teachers to complete, and

a self-report version for older students (Gresham and Elliott, 1990). There are three grade levels: Preschool, Elementary and Secondary. The SSRS consists of four subscales: Cooperation, Assertion, Responsibility, Empathy, and Self-Control. Each of these subscales contains ten items, and the Problem Behaviors domain of the scale contains twelve items.

The Problem Behaviors domain includes subdomains measuring externalizing and internalizing problems and hyperactivity behaviors (Gresham and Elliott, 1990). For the purpose of this study, we used the Parent Form – Secondary Level, subscales Cooperation and Responsibility and the Problem Behavior Subscale, to collect data from parents of children with visual impairment.

Data analysis

The data were analyzed by quasi-canonical correlation analysis (Nikolić, 1997) using ROBKAN software. All variables were normalized and standardized before the analysis (Abramowitz et al., 1964).

Correlation between Social Skills and Problem Behaviors was determined by quasi-canonical correlation analysis (Hotteling, 1936; Momirović et al., 1977; Momirović et al., 1978; Momirović et al., 1986; Momirović et al., 1987). Considering the small number of surveyed parents (39), and the Likert-type scales with non-normal frequency distribution, we used the canonical analysis of covariance, also called quasi-canonical analysis. This method is less sensitive to sample size and data presented on ordinal scales with non-normal distribution (Momirović et al., 1983; Momirović et al., 1984; Dobrić et al., 1985; Momirović et al., 1985; Gredelj et al., 1986).

RESULTS

Correlation between cooperation and problem behaviors in children with visual impairment

In order to determine the correlation between social skill performance in the cooperation domain and problem behaviors, we did a spectral decomposition of the covariance matrix between the set of those variables, the results of which are presented in Table 1.

Table 1. Eigenvectors of a covariance matrix

Component	Eigenvector	Cumulative variance	Common variance %
1	2.18531	2.18531	21.85307
2	0.67303	2.85834	28.58341
3	0.48036	3.33870	33.38705
4	0.31829	3.65699	36.56994
5	0.20729	3.86428	38.64280
6	0.13325	3.99753	39.97533
7	0.06782	4.06536	40.65357
8	0.03132	4.09667	40.96673
9	0.01926	4.11593	41.15933
10	0.00134	4.11727	41.17274

One significant quasi-canonical component (factor) with a covariance of 2.19 and a quasi-canonical coefficient of 0.57 was extracted. Results for the significance of quasi-canonical covariance are presented in Table 2. showing that quasi-canonical covariance is statistically significant, with a standard error of proportion (p) < 0.01%. Therefore, we concluded that cooperation and problem behaviors in children with visual impairments are significantly correlated according to the evaluations of their parents.

Based on these results we can accept the sub-hypothesis H1-1 and conclude that there is a significant correlation between cooperation and problem

Table 2. Significance of a quasi-canonical covariance

Component	Quasi-canonical		Chi-square	Degrees of freedom	Significance p
	Correlation	Covariance			
1.	0.57	2.19	8.75	99	0.000

Table 3. Structure matrix of the first variables set

Variables	Parallel projections of variables 1st set on factors from the 1st set	Parallel projections of variables 1st set on factors from the 2nd set
Helps you with household tasks without being told	0.71	0.21
Attempts household tasks before asking for your help	0.42	0.07
Uses free time at home in an acceptable way	0.35	0.12
Volunteers to help family members with tasks	0.11	-0.21
Keeps room clean and neat without being reminded	0.75	0.36
Completes household tasks within a reasonable time	0.21	0.09
Attends to your instructions	0.66	0.48
Puts away belongings of other household property	0.72	0.24
Uses time appropriately while waiting for your help with homework or some other task	0.76	0.39
Asks clerks for information or assistance	0.53	0.41

behavior domains of social skills in students with visual impairment, according to the evaluations of their parents. Since there is a statistically significant correlation between those two variables, we also analyzed the correlation structure. Therefore, we analyzed results presented in Table 3. showing parallel projections of variables that are defining the domain of cooperation, on the quasi-canonical component extracted from the same set of variables and on the quasi-canonical component extracted from the other set of variables (problem behaviors). It was necessary to specify and interpret the orthogonal projection (correlation) results of both variable sets on the quasi-canonical component. As one quasi-canonical component was extracted, parallel and orthogonal projections are identical; therefore, there was no need to specify correlations of variables with a quasi-canonical component, as they are integrated in parallel projections.

Based on the results presented in Table 3. we were able to determine the variables that define the domain of cooperation and their influence on the problem behaviors domain. The most significant variable that contributes to the correlation of those two sets is SOC25 (*Attends to your instructions*) with a projection of 0.48. This was followed by the variable SOC39 (*Asks sales clerks for information or assistance*), with a projection of 0.41,

then the variable SOC30 (*Uses time appropriately while waiting for your help with homework or some other task*) with a projection of 0.39, and after that, the variable SOC15 (*Keeps room clean and neat without being reminded*), with a projection of 0.36.

The other variables from the domain of cooperation had no significant contribution in correlation with problem behaviors of children with visual impairments.

Table 4 presents the parallel projection of variables that define the domain of problem behaviors on the quasi-canonical component extracted from the same set of variables and on the quasi-canonical component extracted from the first set of variables (cooperation).

By analyzing the results presented in Table 4, we were able to determine the variables that describe the problem behavior domain in children with visual impairment and their influence on the cooperation domain. The most significant variable that contributes to the correlation between these two sets is BEH52 (*Has low self-esteem*) with a projection of -0.42 on the quasi-canonical component extracted from the first set of variables. This is followed by the variable BEH43 (*Is easily embarrassed*), whose parallel projection on this component is -0.40. The variable BEH46 (*Talks back to adults when corrected*), whose parallel projection on this component is -0.40, is also significant. Other variables with significant contribution were BEH50 (*Shows anxiety about being with a group of children*), whose parallel projection on the quasi-

canonical component extracted from Cooperation is -0.40, and BEH44 (*Argues with others*), with a parallel projection of -0.38 on this component.

Since these projections have a negative sign, the identified problems manifesting through these variables have a significant negative effect on the cooperation domain; in other words, the greater the problems in behavior, the greater the problems in the cooperation domain, which means that the social skills performance in the cooperation domain will be poorer.

Considering the fact that internalized and externalized behavioral problems are evenly represented, we can conclude that these two types have equally negative effects on social skills performance in the cooperation domain in persons with visual impairment.

Correlation between responsibility and problem behaviors in children with visual impairment

In order to determine the correlation between responsibility and problem behaviors, we did a spectral decomposition of the covariance matrix between the set of those variables, and the results are presented in Table 5.

Two quasi-canonical components (factors) were extracted, and their covariances were 2.72 and 1.14. The quasi-canonical correlation was calculated for each quasi-canonical component. The significance results of these quasi-canonical covariances are presented in Table 6. The correlation of the first quasi-canonical component is 0.73, and that of the other one is 0.79. Both quasi-canonical covariances

Table 4. Structure matrix of the second variable set

Variables	Parallel projections of variables 2nd set on factors from the 2nd set	Parallel projections of variables 2nd set on factors from the 1st set
Likes to be alone	-0.26	0.03
Fights with others	-0.25	0.02
Is easily embarrassed	-0.60	-0.40
Argues with others	-0.48	-0.38
Threatens or bullies others	-0.23	0.01
Talks back to adults when corrected	-0.70	-0.40
Has temper tantrums	-0.27	-0.04
Appears lonely	-0.34	-0.05
Gets angry easily	-0.62	-0.15
Shows anxiety about being with a group of children	-0.83	-0.40
Acts sad or depressed	-0.45	-0.10
Has low self-esteem	-0.67	-0.42

Table 5. Eigenvectors of a covariance matrix

Component	Eigenvector	Cumulative variance	Common variance %
1	2.71861	2.71861	27.18612
2	1.14439	3.86301	38.63005
3	0.48220	4.34521	43.45208
4	0.38997	4.73518	47.35180
5	0.23041	4.96559	49.65591
6	0.15356	5.11915	51.19149
7	0.10398	5.22313	52.23128
8	0.04046	5.26359	52.63592
9	0.01954	5.28313	52.83128
10	0.00634	5.28946	52.89464

are statistically significant ($p < 0.01\%$). Therefore, we can conclude that social skills describing responsibility and problem behaviors in children with visual impairments are significantly correlated according to parental evaluation. Based on these findings, we can accept sub-hypothesis H1-2 and conclude that there is a significant correlation between the social skills domain (responsibility factor) and the problem behavior domain in students with visual impairment.

Since there is a statistically significant cor-

Table 6. Significance of a quasi-canonical covariance

Quasi-canonical			Chi-square	Degrees of freedom	Significance p
Component	Correlation	Covariance			
1.	0.73	2.72	38.54	99	0.000
2.	0.79	1.14	21.74	80	0.000

Table 7. Structure matrix of the initial variable set

Variables	Parallel projections of variables 1st set on factors from the 1st set		Parallel projections of variables 1st set on factors from the 2nd set	
	1st quasi-canonical factor	2nd quasi-canonical factor	1st quasi-canonical factor	2nd quasi-canonical factor
Says nice things about himself or herself when appropriate	0.12	0.72	-0.02	0.54
Shows concern for friends and relatives of his or her own age	0.63	-0.31	0.43	-0.37
Appropriately expresses feelings when wronged	-0.09	0.19	-0.12	0.05
Follows rules when playing games with others	-0.16	0.12	-0.21	0.00
Waits turn in games or other activities	0.05	0.56	0.07	0.37
Informs you before going out with friends	0.36	0.33	0.23	0.32
Follows household rules	0.23	0.57	0.01	0.34
Reports accidents to appropriate persons	0.57	0.22	0.41	-0.06
Is liked by others	0.81	-0.13	0.63	-0.03
Answers the phone appropriately	0.35	-0.18	0.14	-0.25

relation between the set of social skills variables (responsibility factor) and the set of variables describing behavior problems, we also analyzed the correlation structure.

Table 7. presents the parallel projections of variables that define the domain of social skills (responsibility factor) on the quasi-canonical components extracted from this set of variables and on the quasi-canonical components extracted from the set of problem behavior variables.

Table 8. which can be seen as supporting our interpretation of the results, presents the correlations between variables that define the social skills domain (responsibility factor) and variables that define the domain of problem behaviors.

Based on the analyzed results, we can conclude that the most significant variables for correlation of responsibility and problem behaviors, across the first quasi-canonical component (factor), are the following: (1) SOC37 (*Is liked by others*), whose parallel projection on this component is 0.63, with a correlation to this component of 0.63 as well; (2) the variable SOC17 (*Shows concern for friends and relatives of his or her own age*), whose parallel

Table 8. Structure matrix of the first variable set or correlation with quasi-canonical factors (components)

Variables	Parallel projections of variables 1st set on factors from the 1st set		Parallel projections of variables 1st set on factors from the 2nd set	
	1st quasi- canonical factor	2nd quasi- canonical factor	1st quasi- canonical factor	2nd quasi- canonical factor
Says nice things about himself or herself when appropriate	0.15	0.73	0.03	0.54
Shows concern for friends and relatives of his or her own age	0.62	-0.29	0.40	-0.33
Appropriately expresses feelings when wronged	-0.08	0.18	-0.12	0.04
Follows rules when playing games with others	-0.15	0.12	-0.21	-0.01
Waits turn in games or other activities	0.08	0.56	0.10	0.37
Informs you before going out with friends	0.38	0.34	0.26	0.34
Follows household rules	0.26	0.58	0.04	0.34
Reports accidents to appropriate persons	0.58	0.24	0.40	-0.02
Is liked by others	0.81	-0.09	0.63	0.02
Answers the phone appropriately	0.34	-0.16	0.12	-0.24

Table 9. Structure matrix of the second variable set

Variables	Parallel projections of variables 2nd set on factors from the 2nd set		Parallel projections of variables 2nd set on factors from the 1st set	
	1st quasi- canonical factor	2nd quasi- canonical factor	1st quasi- canonical factor	2nd quasi- canonical factor
Likes to be alone	-0.45	0.44	-0.45	0.32
Fights with others	-0.21	-0.12	0.03	-0.05
Is easily embarrassed	-0.32	0.58	-0.05	0.38
Argues with others	-0.16	-0.18	0.02	-0.12
Threatens or bullies others	-0.46	-0.01	-0.42	0.08
Talks back to adults when corrected	-0.55	-0.30	-0.35	-0.28
Has temper tantrums	-0.29	-0.63	-0.11	-0.51
Appears lonely	-0.60	-0.10	-0.46	-0.04
Gets angry easily	-0.74	-0.32	-0.54	-0.22
Shows anxiety about being with a group of children	-0.69	0.37	-0.34	0.36
Acts sad or depressed	-0.66	-0.21	-0.39	-0.18
Has low self-esteem	-0.78	0.26	-0.62	0.24

projection on this component is 0.43, with a correlation to this component of 0.40; and (3) the variable SOC36 (*Reports accidents to appropriate persons*), whose parallel projection on this component is 0.41, with a correlation to this component of 0.40.

The variables that contribute the most to the correlation of responsibility and problem behaviors, across the second quasi-canonical component are (1) SOC08 (*Says nice things about himself or herself when appropriate*), whose parallel projection on this component is 0.54, which is the same value as the correlation with this component; (2) the variable SOC29 (*Waits turn in games or*

other activities), whose parallel projection on this component is 0.37, which is equal to the correlation with this component; (3) the variable SOC17 (*Shows concern for friends and relatives of his or her own age*), whose projection on this component is -0.37, with a correlation to this component of -0.33; (4) the variable SOC33 (*Follows household rules*), whose parallel projection on this component is 0.34, which is the same as the correlation to this component; and finally, (5) the variable SOC32 (*Informs you before going out with friends*), whose parallel projection on the component is 0.32, with a correlation to this component of 0.34.

Table 10. Structure matrix of the second variable set or correlation with quasi-canonical factors (components)

Variables	Parallel projections of variables 2nd set on factors from the 2nd set		Parallel projections of variables 2nd set on factors from the 1st set	
	1st quasi- canonical factor	2nd quasi- canonical factor	1st quasi- canonical factor	2nd quasi- canonical factor
Likes to be alone	-0.42	0.40	-0.43	0.30
Fights with others	-0.22	-0.14	0.03	-0.04
Is easily embarrassed	-0.27	0.55	-0.03	0.37
Argues with others	-0.17	-0.20	0.02	-0.12
Threatens or bullies others	-0.47	-0.05	-0.42	0.07
Talks back to adults when corrected	-0.58	-0.34	-0.36	-0.29
Has temper tantrums	-0.34	-0.65	-0.13	-0.51
Appears lonely	-0.61	-0.15	-0.46	-0.06
Gets angry easily	-0.77	-0.38	-0.55	-0.24
Shows anxiety about being with a group of children	-0.66	0.31	-0.33	0.34
Acts sad or depressed	-0.68	-0.26	-0.40	-0.20
Has low self-esteem	-0.76	0.20	-0.61	0.21

In order to identify the problem behavior variables which are responsible for the correlation with the social skill domain (responsibility factor), we used the analysis shown in Tables 9. and 10.

The variables most responsible for the correlation of variables defining problem behaviors and those defining responsibility, across the first quasi-canonical component are the following: (1) BEH52 (*Has low self-esteem*), whose parallel projection on the first quasi-canonical component (factor) extracted from the first set of variables (responsibility) is -0.62, with a correlation of -0.61; (2) variable BEH49 (*Gets angry easily*), whose parallel projection on this component is -0.54, with a correlation to this component of -0.55; (3) variable BEH48 (*Appears lonely*), whose parallel projection on the first component extracted from social skills (responsibility factor) is -0.46, with a correlation to this component of -0.46 as well; (4) BEH41 (*Likes to be alone*), whose parallel projection on this component is -0.45, with a correlation to this component of -0.43; (5) BEH45 (*Threatens or bullies others*), whose parallel projection on this component is -0.42, with is the same as the correlation with this component; (6) BEH51 (*Acts sad or depressed*), whose parallel projection on this component is -0.39, with a correlation to this component of -0.40; and (7) BEH46 (*Talks back to adults when corrected*), whose projection on the first component extracted from social skills (responsibility) is -0.35, with a correlation to this component of

-0.36. All of the above significantly contribute to the correlation of problem behavior variables and responsibility variables. All of these projections and correlations have a negative effect on social skill performance in the domain of responsibility.

The second quasi-canonical component is defined by following variables: BEH47 (*Has temper tantrums*), whose parallel projection on this component extracted from social skills (responsibility) is -0.51, as is the correlation with this component; BEH43 (*Is easily embarrassed*), whose parallel projection on this component is 0.38, with a correlation to this component of 0.37; and BEH50 (*Shows anxiety about being with a group of children*), whose parallel projection on this component is 0.36, with a correlation to this component of 0.34. Only one of these three variables has a negative value, while the other two variables show positive correlations, which seems quite logical considering that the question requested an evaluation of these types of behavioral problems.

Better social skills – that is, greater responsibility – will have a stronger effect on problem behaviors, while the identified problem behaviors (related to internalized and externalized types of problem behaviors) have an approximately equal negative effect on social skill performance in the domain of responsibility in students with visual impairments. This implies that the more responsible students exhibit fewer problems with behavior.

DISCUSSION

This research has shown that there is a significant correlation between social skill performance and behavioral problems in students with visual impairment. Children with visual impairment who have better social skill performance have significantly fewer problems with behavior. In more cooperative and more responsible children with visual impairment, we have noticed fewer problems in behavior. According to our results, externalizing and internalizing problem behaviors have almost the same negative influence on social skill performance. Children with visual impairment who follow instructions better are more willing to request help from their peers and tend to behave in more appropriate ways while waiting for their turn – i.e., they show less problems in behavior. These children also have higher self-esteem, feel less anxious, and talk back to adults less frequently when corrected. It is obvious that children with low self-esteem, with greater feelings of anxiety, and who talk back to adults when corrected will have more problems in the domain of responsibility, as well.

Furthermore, this research has confirmed that the existence of problem behaviors is significantly correlated with poor social skills performance. These findings were expected, as they are consistent with previous research indicating that, typically, developing children with poor social skills performance often have problems in behavior. Now it may be concluded that the same is true with children who have visual impairment. Wright (2001) states that problems in the domain of social functioning, as well as rejection by peers, can lead to lower academic achievement and emotional and behavioral problems later in life. A correlation between problem behaviors and academic achievement was also found by Sedmak (2009). His research shows that children with visual impairment who had higher academic achievement had fewer problems with behavior. Sahrum et al. (2012) quotes several research studies confirming a correlation between problem behaviors and social competence; Mc Gee et al. (1991) claims that both types of problem behaviors are connected to problems in the domain of social competence. Problems with sadness, anxiety, aggression, and

conduct disorder lasting from childhood into the adolescence are predictors of problems in the social competence domain.

Social skills development is an enduring process during which children with visual impairment improve their social competence. However, these children can experience difficulties during this process, because vision loss disables the accurate and constant perception of the social environment. Children with visual impairment do not have enough social experience upon which they can practice their social behavior; in addition, they are more frequently exposed to negative social experiences. At the same time, sighted persons very rarely provide these children with feedback about their behavior. Therefore, children with visual impairment have a lack of information about their own social behaviors.

The outlined issues lead to deficiency in the social skills domain, especially in children with congenital visual impairments. Senju et al. (2013) noted the social-communication protocol of Clifford, according to which aberration in social skills performance begins already in early childhood. Children with visual impairment lack the range of behavior important for the development of social competence. In the communication domain, these children can have problems in both verbal and non-verbal expression. They show difficulty in initiating and maintaining face-to-face and eye contact, as well as the three points gaze. They also have problems in body language and communication movements towards an object or their own body. Congenital blindness, according to those authors, influences the social skills development and increases the incidence of autistic-like behaviors. Nevertheless, according to other authors, children with visual impairment almost never develop social competence as their typically developed peers do (Eaton et al. 1998).

The correlation of poorly developed social skills with social withdrawal has been confirmed by Rubin, as well, while according to Clikeman (2006), aggression is correlated with poorer social competence. Although children with visual impairment can exhibit a variety of problem behaviors, the most common problems they have are social withdrawal and aggression.

Social withdrawal is a very common problem behavior in children with visual impairment. It can occur as a result of an inability to control the physical and social environment, but also as a result of insufficient and adverse social experiences.

Comparing children with visual impairment to their sighted peers, Huurre and Aro (1998) found that adolescents with visual impairment have less friends and feel significantly more lonely than their sighted peers. They also found that adolescents with visual impairment have poorer social skills performance, lower academic achievement, and lower self-esteem when compared with their sighted peers.

Poljan (2007) stated that the majority of blind children exhibit social withdrawal as a consequence of their increased dependence on the environment and the fear of open manifestation. Withdrawn children spend less time interacting with peers; sometimes even isolating themselves (Rubin et al. 2002). Therefore, they are at increased risk of developing social problems and inadequate behaviors (Fox et al. 1995). Children with visual impairment can be socially withdrawn because they are less accepted by their peers (Oden & Aher, 1997) and because they have trouble maintaining friendships (Robinzon, 2002). They withdraw from group activities and are not prone to get involved in groups (Kiloniatis & Jonson, 1994). All this can lead to passiveness, functioning in smaller groups, and to social isolation (Kef, 2002).

According to Parker and Asher (1987), a social skills deficit that exists during childhood, if untreated, becomes stable over the time, is associated with lower academic achievement, and can also be a prediction of social adjustment problems and serious psychopathology. It can be expected that more socially competent children will have better

academic achievement and will be more socially adjusted. Vahedi et al. (2012) have reached similar results. According to them, more assertive, friendly, and cooperative children are better at social functioning as well as at academic achievement. Although we did not assess academic achievement, the results of this study do support previously presented findings that more cooperative children with visual impairment also have better social functioning and fewer problems with behavior.

The results of this study confirm the need for systematic support for children with visual impairment in the domain of social skills. Special attention should be focused on interpersonal communication skills, dialogue, understanding the reactions of others, demonstrating empathy, and expressing anger, because according to Bilić Prcić (2007), children with visual impairment experience problems in these areas of social interaction. Cooperation and responsibility skills, as shown in this research as well, are proven to be preventive factors with regard to problem behaviors and contribute to better social functioning.

CONCLUSION

According to our research, competence in the social skills domain is very closely related to the emergence of behavioral problems in children with visual impairment. Children with better social skills performance have less problem behaviors, and vice versa. It is confirmed that, in more cooperative and more responsible children with visual impairment, problem behaviors occur much less frequently.

These results confirm the need for a systematic approach to empower children and other persons with visual impairment in the domain of social functioning.

REFERENCES

- Abramowitz, M., Stegun, I.A. (1964). Handbook of mathematical functions with formulas, graphs and mathematical tables, Washington, D.C.: U.S. Government Printing Office.
- Anderson, L., Goodson, T., Rodriguez, R. Social Skills: Interventions for Students with Emotional and Behavioral Disorders. <http://www.csus.edu/indiv/b/brocks/Courses/EDS%20245/Hot%20Sheets/Social%20Skills%20Interventions.fall%2007.pdf> [accessed: 30.08.2015].
- Bilić Prcić A. (2007). Socijalne vještine osoba oštećenog vida. Doctoral Thesis. University of Zagreb, Zagreb.
- Bishop W.E. (1996). Preschool Children with Visual Impairments. Texas School for the Blind and Visually Impaired.
- Bloom E.L., Karagiannakis A., Toste J.R., Heath N.L., Konstantinopoulos E. (2007). Severity of Academic Achievement and Social Skills Deficits. Canadian Journal of Education. 30,3 (2007): 911-930
- Botsford, K.D. (2013). Social Skills for Youths with Visual Impairments: A Meta-Analysis., Journal of Visual Impairment & Blindness. Nov-Dec 2013. 497-508.
- Bulman, T.P. (2013). The Relationships among Sharing Behaviors, Social Skills, and Problem Behaviors in Preschool Children. Doctoral Thesis. University of Albany
- Caballo C., Verdugo M-A. (2007). Social Skills Assessment of Children and Adolescents With Visual Impairment: Identifying Relevant Skills to Improve the Quality of Social Relationships. Psychological Reports, 7/2007, 1-14.
- Celeste, M. (2006). Play Behaviors and Social Interactions of a Child who is Blind: In Theory and Practice, Journal of Visual Impairment and Blindness, 100, 2.
- Dobrić, V., Momirović, K., Gredelj, M. (1985): Quasicanonical relationships of variables in universal metric space, Proceedings of 7th International Symposium "Computer at the University", 514.
- Eaton S.B., Wall R.S. (1999) A Survey of Social Skills Instructions in Preservice programs for Visual Disabilities. Re: View, 31,1,40-46.
- Fox, N.A., Calkins, S.D., Porges, S.W., Rubin, K.H. (1995). Frontal Activation Asymmetry and Social Competence at Four Years of Age. Child Development, 66, 1770-1784.
- Fraiberg, S. (1977). Insights from the Blind, Basic Book, New York
- Gredelj, M., Momirović, K., Dobrić, V. (1986). Some relations between canonical covariance analysis and principal component analysis, Proceedings of 8th International Symposium "Computer at the University", 503.
- Gresham, F.M., Elliot, S.N., Cook, C.R., Vance, M.J., Kettler, R.(2010). Cross-Informant Agreement for Ratings for Social Skill and Problem Behavior Ratings: An Investigation of the Social Skills Improvement System-Rating Scales. Psychological Assessment ,22,1,157-166.
- Hill E.V., Blach, B.B. (1980). Concept Development. Foundation of Orientation and Mobility. Welsh, R.I. Blach, B.B. AFB Press, American Foundation for the Blind, New York, 265-290.
- Huurre, T.M., Aro, H.M. (1998). Psychosocial Development among Adolescents with Visual Impairments, European Child and Adolescents Psychiatry, 7, 2.
- Kekelis, L. (1992). Peer Interactions in Childhood. The Impact of Visual Impairment, The Development of Social Skills by Blind and Visually Impaired Students: Exploratory Studies and Strategies. American Foundations for the Blind, New York
- Langeveld, J.H., Gundersen, G.G., Svartdal, F. (2012). Social Competence as a Mediating Factor in Reduction of Behavioral Problems. Scandinavian Journal of Educational Research. 1-19.
- Lane, K.L., Givner, C.C., Pierson M.R. (2004). Teacher Expectations of Student Behavior: Social Skills Necessary for Success in Elementary School Classrooms, Journal of Special Education, 38, 2, 104-110.

- McGaha, C.G, Farran, D.C. (2001). Interactions in an Inclusive Classroom: The Effects of Visual Status and Setting. *Journal of Visual Impairment and Blindness*, 95, 2.
- McGee, R., Williams, S., Feehan M. (1992). Attention Deficit Disorders and Age of Onset of problem Behaviors. *Journal of Abnormal Child Psychology*, 20 (5), 487-502.
- Momirović, K., Gredelj, M., Szivovitz, L. (1977): Multivarijantna analiza, ZPR, Zagreb.
- Momirović, K., Gredelj, M., Herak, M. (1978): COCAIN - Algoritam i program za kanoničku korelacijsku analizu, *Kineziologija*, 10, 1-2:117-123.
- Momirović, K., Dobrić, V., Karaman, Ž. (1983): Canonical covariance analysis, *Proceedings of 5th International Symposium "Computer at the University"*, 463-473.
- Momirović, K., Dobrić, V., Karaman, Ž. (1984): On a robust procedure for the analysis of relationships between two sets of variates, *7th Congress of Balkan Mathematicians*, Athens.
- Momirović, K. (1984): Kvantitativne metode za programiranje i kontrolu treninga, *Fakultet za fizičku kulturu*, Zagreb.
- Momirović K., Štalec, J., Prot, F., Bosnar, K., Pavičić, L., Viskić-Štalec, N., Dobrić, V. (1984): Kompjuterski programi za klasifikaciju, selekciju, programiranje i kontrolu treninga, *Fakultet za fizičku kulturu*, Zagreb.
- Momirović, K., Dobrić, V., Gredelj, M. (1985(1)): Quasicanonical relationships of partial image variates, *Proceedings of 6th International Symposium "Computer at the University"*, 522.
- Momirović, K., Dobrić, V., Gredelj, M. (1985(2)): Some properties of quasicanonical correlation analysis in Guttman and Harris space, *Annual Conference of Bernoullian Society*, Amsterdam.
- Momirović, K., Dugić, D., (1986): A measure of association between two sets of variates, *Proceedings of 8th International Symposium "Computer at the University"*, 505.
- Momirović, K. i suradnici (1987): Metode, algoritmi i programi za kvantitativnu i kvalitativnu analizu promjena, *Institut za kineziologiju Fakulteta za fizičku kulturu Sveučilišta u Zagrebu*, Zagreb, 13-33.
- Nikolić, B. (1997). Povezanost skupa varijabli na temelju kanoničke analize kovarijanci, 5. Znanstveni skup "Rehabilitacija i inkluzija". *Fakultet za defektologiju Sveučilišta u Zagrebu*, Zagreb.
- Oden, S., Asher, S.R. (1997). Coaching Children in Social Skills for Friendship making, *Child Development*, 46, 495-506.
- Parker, J.G., Asher, S.R. (1987). Predicting Long term Outcomes from Peer Rejection: Studies of Dropping Out, Delinquency, and Adult Psychopathology, *Psychological Bulletin*, 102, 357-389.
- Poljan, I. (2007). Osobitosti psihosocijalnog i spoznajnog razvoja djece s oštećenjem vida. U Nenadić, K.: Učenik s oštećenjem vida u redovnoj školi, upute za odgojitelje, učenike, nastavnike i roditelje djece s oštećenjem vida koja su integrirana u redovne škole, *Ministarstvo obitelji, branitelja i međugeneracijske solidarnosti*. Hrvatski savez slijepih, Zagreb.
- Preisler, G. (1993). A Descriptive Study of Blind Children in Nurseries with Sighted Children. *Child: Care, Health and Development*, 19,5, 295-315.
- Robinsons, B. (2002). Effects of Visual Impairment, Gender, and Age on Self-determination of Children who are Blind. Unpublished master's thesis, State University of New York, Brockport.
- Rubin. K.H., Burgess, K.B., Hastings P.D. (2002). Stability and Social Behavioral Consequences of Toddlers' Inhibited Temperament and Parenting Behaviors, *Child Development*, 73, 483 – 495.
- Sachs, S.Z. (1992). The Social Development of Visually Impaired Children. A Theoretical Perspective, The Development of Social Skills by Blind and Visually Impaired Students: Exploratory Studies and Strategies, *American Foundation for the Blind*, New York
- Sahrum, V., Farahman, F., Fathemeh F. (2012). Social Competence and Behavior Problems in Preschool Children, *Iranian Journal of Psychiatry*, 7 (3), 126-134.

- Sedmak, Z. (2009). Nepoželjni oblici ponašanja djece oštećenog vida. Magistarski rad. Sveučilište u Zagrebu, Zagreb
- Senju, A., Tucker L., Pasco G., Hudry K., Elsabbagh M., Charman T., Johnson M. H. (2013). The Importance of the eyes: Communicating Skills in Infants of Blind Parents
- Sharum V., Farahman F., Fathemeh F. (2012). Social Competence and Behavior Problems in Preschool Children. Iran J Psychiatry. 7,3, 126-134.
- Shugai, G. (2000). Applying Positive Behavior Support and Functional Behavioral Assessment in Schools. Journal of Positive Behavior Interventions, 2,3, 131-144
- Waren, D.H. (1994). Blindness and Children: An Individual Differences Approach, Cambridge University Press, New York
- Wright D., Torrey G.K. (2001). A Comparison of Two Peer-Referenced Assessment Techniques with Parent and Teacher Ratings of Social Skills and Problem Behaviors. Behavioral Disorders, 26, 2, 173-182.

POVEZANOST SOCIJALNIH VJEŠTINA I PROBLEMA U PONAŠANJU KOD DJECE OŠTEĆENOG VIDA

Sažetak: *Socijalne vještine i problemi u ponašanju povezani su. Djeca koja imaju slabije razvijene socijalne vještine redovito manifestiraju neki od oblika problema u ponašanju. Slabije socijalne vještine kao i problemi u ponašanju negativno utječu na psihosocijalno funkcioniranje i na akademska postignuća. Djeca oštećenog vida, zbog samog oštećenja ali i zbog nedovoljnih i nepovoljnih socijalnih iskustava, često imaju poteškoće u socijalnom funkcioniranju, koje ostaju prisutne tijekom cijelog života. Od problema u ponašanju u ove djece najčešće se javljaju socijalna povučeniost i agresija.*

Cilj ovog rada bio je ispitati povezanost socijalnih vještina i problema u ponašanju djece oštećena vida.

Ispitivanjem su obuhvaćeni roditelji tridesetdevetoro (N=39) djece oštećenog vida kronološke dobi od 13 do 17 godina. Djeca su pohađala redovne osnovne škole u RH i specijaliziranu ustanovu za odgoj, obrazovanje i rehabilitaciju učenika oštećenog vida.

Podatci su prikupljeni primjenom instrumenta SSRS – Social Skills Rating System (Gresham i Elliot, 1990.) a obrađeni su kvazikanoničkom korelacijskom analizom pomoću programa ROBKAN.

Podatci dobiveni istraživanjem potvrđuju povezanost socijalnih vještina i problema u ponašanju kod djece oštećena vida. Djeca oštećenog vida koja imaju slabije socijalne vještine manifestiraju veći broj problema u ponašanju. Osobito je ta povezanost vidljiva u području odgovornosti i kooperativnosti: odgovornija i kooperativnija djeca manifestiraju značajno manji broj problema u ponašanju.

Ključne riječi: *socijalne vještine, poremećaji u ponašanju, djeca oštećena vida, kooperativnost, odgovornost*