PEER RELATIONS IN INCLUSIVE CLASSES

Summary: Peer relations represent an important area of research in the field of school pedagogy, reflecting the students' social, intellectual, moral and emotional development. The research issue in this paper focuses on peer relations in inclusive classes, but considering the complexity of these relationships, the aim of the research is to look at these relationships through two dimensions: the quality of friendship and the sense of loneliness. Research questions are focused on establishing a relationship between the quality of friendship and sense of loneliness in boys and girls and identifying significant predictors of sense of loneliness in inclusive classes (gender, parents’ education, material opportunities, number of close friends and friendship quality). The study included 152 students from eight inclusive classes. Adapted questionnaires for measuring quality of friendship and loneliness were used as measuring instruments. Pearson coefficient of correlation found that there was a statistically significant association between quality of friendship and loneliness in girls, while in boys no such association existed. T-test showed a significant difference in the quality of friendship, with girls having a higher quality of friendship. Gender and friendship quality have shown as significant predictors of the explained feelings of loneliness. In the implications for implementation and conclusions, it was emphasized that it is possible to improve students' acceptance by peers and that the training of social relationships can influence the quality of friendship which represents a protective factor for the emergence of loneliness and abuse by peers.

Key words: Peer relations, inclusive classes, friendship.

INTRODUCTORY DISCUSSION

The world of peers is a very important social environment in which the child lives and develops. Membership in peer groups for elementary-school pupils is of utmost importance. The influence of peers on students' behavior, i.e. their social, intellectual, moral and emotional development, begins to be stronger in the school environment (Kolak, 2010). Therefore, the peer relations are of exceptional importance. Through the process of socialization, the child learns how to behave in a peer group, learns to follow the rules, cope with defeat and victory. The peer group meets their need for intimacy, a child creates a picture of themselves, acquires social skills, learns to help, share and cooperate. Class departments make formal peer groups

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in schools. Class departments are of great importance in developmental changes in peer relations because the importance of the group is particularly increased at school age. Each class department is unique, unrepeatable and specific. According to the cognitive development approach peers are an important driver of change in the cognitive process. Piaget and Kohlberg point out that the ability to take on another's opinion develops out of cognitive conflict with peers (Vizek-Vidovic et al., 2003), while Vygotsky's theory emphasizes the teaching role of more competent peers. According to cognitive development-oriented theorists, the way pupils think about their peers determines their behavior toward them. According to the theory of social learning, peers serve as a model of behavior, reward or punish certain procedures and are one of the sources of self-efficacy estimation (Vasta et al., 2005). The turning point of peer relations research makes the theoretical model of peer relations by Bukowski and Hoze (according to Klarin, 2006). Difficulties that may arise in this sphere of social experience (popularity and friendship) can cause anxiety and social isolation. The research confirms the hypothesis of a direct relationship between the quality of peer relations and the development of the child's personality, social behavior and cognitive development (Ladd, 1989; according to Klarin 2006). Socially accepted pupils who express pro-social, cooperative and responsible behaviors in school usually achieve high school achievement, while pupils ignored by peers often achieve poorer school success and represent a risky group predisposed to delinquency, school aptitude, and abandonment of schooling (Krnjajic, 2002). Of all the above, the need for researches in the field of pedagogy to study peer relations, with special emphasis on two levels of social interaction: popularity and friendship, is understandable. One of the fundamental components of building relationships and friendships is to be close to people and have the ability to communicate with them. Studies have shown that if children or older want to create the connections needed for friendship, they must have constant access to each other. It follows that pupils who go to school or school together with their neighbors will most likely create a strong bond that will end with friendship. (Pearpoint et al., 1997: 67). Unfortunately, secure opportunities and closeness are not always enough for children and adolescents to feel interconnected to build friendship. Middle and late childhood is a period of significant changes in the child's social life and encompasses the period of elementary schooling. The child is spending most of his free time with his peers. The peer group meets the child’s need for intimacy, where they form a picture about oneself, acquire social skills, learn to assist, share and cooperate (Klarin, 2006). Hartup (1984; Klarin, 2000) emphasizes the importance of peers in mid childhood, stating that this is the time of qualitative and quantitative changes in interaction between a child and a child, as well as the time when peers occupy a key place in their childhood. As a child is spending more and more time with peers, it is of great importance to be accepted by the group (Asher & Parker, 1989). A friend is a person who is connected to another person, where there is mutual respect and liking, a favorite company (Merriam - Webster, 2002, according to Saenz, 2003). One of the sources of support are the peers who, in the toughest times, are the most important and become more important as children grow (Berndt, 1989; according to Vasta, et al., 2005). With parents and teachers, relationships with peers in childhood play a major role in the development of social competence and satisfaction with life. Peer relations are important for the development of the child and his well-being. Friendship and experience in the peer group provide opportunities for learning and gaining experience that differs from the child’s experience in interaction with parents (Sullivan, 1953, by Klarin, 2000). Bukowski and Hoza (1989; Klarin, 2006) state that acceptance and friendship are the basic dimension of peer relationships. Peer acceptance is defined as the relational status of a child within a group of peers, determined by the extent to which the child is liked or disliked by the members of the group (Ladd 1999; Zic Ralic, 2009). Friendship involves a relationship between two close
friends, which is different from relationships with other peers and relationships with their parents. A friendly relationship and a relationship with a close person of a same age is of utmost importance for the realization of primary social experience and is the basis by which a child learns to deal with conflict situations (Berndt, 1983, according to Klarin, 2000). While they are with a friend, the child shows happiness, avoids other obligations and wants to spend more time in the company of the person who supports them. The benefits of friendship are emotional safety, positive self-image, satisfaction, social competence, satisfying needs for intimacy and the adoption of pro-social norms of behavior. Studies claim that social interaction between friends is richer. Rich interaction is manifested in the use of multiple conversations and cooperative behaviors. Studying friendships in regular classes where children with disabilities are integrated, become of the utmost importance since friendship stands out as an important potential protective factor for a low level of empathy, poor social status within the class, poor social network and inappropriate social interaction. Available research suggest that inclusion is useful for typical children, as they can obtain a number of important gains from relationships with disadvantaged students (Staub, Peck, 1994-1995, Staub 2005): Reducing fear of human differences accompanied by increasing the level of security and awareness; the growth of social knowledge, increased tolerance; increase in self-esteem; increasing personal moral and ethical principles, less prejudice towards people who behave, act, or look different from them (Peck 1992, to Staub & Peck, 1994-1995); creating honest friendships between students with and without disability(Staub & Peck, 1994-1995).

Quality of friendship

The quality of friendship began to be explored during the 70s and 80s of the last century. It is apparent in the closeness and safety within the dyad, especially in the period of early adolescence (Sullivan, 1953; Klarin, 2000). We distinguish between two friendship quality assessment strategies (Hartup, 1995). One is based on examining types or categories of friendly relationships, and the other on questioning the dimensions of friendship. The questioning of the quality dimension of friendship is based on the features of a friendly relationship (Berndt, 1996, cited in Klarin 2006). An example of a questionnaire that examines the quality of friendship based on the dimension of friendship is the Friendship quality questionnaire constructed by Parker and Asher (1993). As basic dimensions, they point to appreciation and care, problem-solving, conflict and betrayal, helping and guiding, the frequency of socializing and recreation, and level of intimacy and self-detection. Some authors emphasize accessibility, common activities, care, honesty, confidentiality, loyalty, understanding, compassion, sharing information, laughter, humor and entertainment (Kolak, Markic, 2018). Parker and Asher (1993) described the developmental course of a friendly relationship over three periods: early childhood (3 to 7 years), middle childhood (8 to 14 years) and adolescence (14 to 18 years). The qualities being sought in friends depend on the child's age. Younger children in early childhood emphasize the importance of play as an essential feature of friends, while preadolescents and early adolescents emphasize the importance of intimacy, loyalty, trust and closeness as essential features of a relationship with a friend (Turnball, et al., 2000). In the middle and late childhood, as the best friend is called the person in whom the child is most confident, who is ready to co-operate, providing the protection, support and consolation (Berndt, 1996, according to Klarin, 2006). As far as gender differences are concerned, boys prefer sexual independence to girls and are more willing to interrupt their friendship in the case of a feeling of loss of independence. Girls have more stable and tighter friendships (more often they choose each other for their best friends) (Cillessen and Rose, 2005) and have a smaller number of friends than boys. They are more
oriented toward intimacy, emphasizing sensitivity, exclusivity, joint activity, and honesty as an essential part of friendship, while young men are more oriented towards common activities (Berndt, 1982). Girls show higher levels of appreciation and support, helping, problem solving and intimacy, compared to boys, which is explained by differences in the organization of friendly relationships. In their friendships they are more focused on the relationship. Children with disabilities can show their values in relations and therefore girlfriend friendships are more frequent (Zic Ralic, 2009). The boys' groups are larger and hierarchically organized. Boys are competitive in their friendships, competing with each other in their skills and status within the group. Thus, children with disabilities can not compete in competitive boys' groups (Parker & Asher, 1993). Lackovic - Grgin (2005) state that research in different cultures show that the differences between boys and girls in preferential characteristics in friendly relationships occur in childhood. Social requirements are similar in the course of later development, which results in different orientations in relationships with others. The quality and quantity of friendships influence self-image, self-perception, social status and social success. In addition, the parental perception of child friendships affects their perception of their friendship, as well as perception of themselves (Saenz, 2003).

**Friendships of students with disabilities**

Establishing friendships is a complex process for every child, and even more difficult for a child with disabilities. Children with disabilities find it difficult to establish interaction with other children (Brown, et al., 2001), they are faced with problems in making friends and have a limited number of peers with whom they can develop friendship (Saenz, 2003). Most children with disabilities manage to have at least one friend (Wendelborg & Kvello, 2010) when attending regular schools that actively engage in inclusion, receive more social support and have more long-lasting friendships (Wendelborg & Kvello, 2010). Longitudinal researches confirm that children do not overcome their difficulties in peer relations. As a child with disabilities grows, their picture of themselves becomes more negative. A child with disabilities becomes withdrawn, more shy (Jerome, Fujiki, Brinton and James, 2002, according to Zic Ralic, 2010) looking for friends in their relatives (Turnball, Blue-Banning iPereira, 2000, according to Saenz, 2003). Studies (Odom et al., 2006) indicate that problems of integration occur in the process of integration: disrespect of disadvantaged students, fewer friends among typical peers, poorer quality of friendships compared to typical students. Typical students have more intimate friendships than students with disabilities (Helmana, 2000; according to Saenz, 2003). Students with disabilities often show a lack of social skills in regular classes, so it is important to provide a safe environment for them, where they can successfully develop social skills and socially acceptable behaviors through peer relationships. Studies show that children with greater disabilities are better accepted than children with light and less visible disabilities. Severity of disabilities has an indirect impact on the observed social acceptance and peer intimacy, because it affects the educational organization. Social participation during teaching has a direct impact on the perceived social acceptance and intimacy in peer relations (Wendelborg & Kvello, 2010). Most children with disabilities have difficulty in participating in a collective game and 65% spend time playing by themselves (Zic Ralic, 2009). The interaction of children with disabilities with their peers drops significantly during summer holidays (Guralnick and Weinhouse, 1984; Guralnick, 1990; according to Zic Ralic, 2009). Children with disabilities find it difficult to form a mutual friendship (Guralnick and Groom, 1988; Guralnick, 1990; according to Zic Ralic, 2009). Research have shown that 90% of students with disabilities associate with friends outside the school at least occasionally,
while about 10% of students never visit friends outside the school nor have been invited to other social activities of their peers (Wagner et al., 2002). Students with disabilities may have friends, 95% have at least one friend (Vaughn et al., 2001), but many children but many children from the above-mentioned reasons do not know what to do to keep them (Vaughn et al., 2001). If they have at least one friend, it increases their confidence and positive perception by peers (Igric et al., 2010). On the negative side, it seems that contact itself does not prevent the poor social acceptance of students with disabilities in the regular classroom. Moreover, because of the students’ efforts to socialize with students more similar to themselves students with disabilities that are not well-accepted (e.g. because of behavioral problems) can associate with students who do not represent the best models for them. Under such circumstances, social affiliation can, instead of diminish, maintain poor student behavior, leading them to negative social and academic consequences rather than social isolation. Typical students have relatively low expectations of friendship with their disadvantaged peers. There was no significant difference in the expectation of friendship by gender, but there was a difference between students of different age groups. Younger students have lower expectations from older students (Han & Chadsey, 2004). Information and preparedness of classes on disability, impairment, chronic illness of a child positively affects their position in the classroom (Zic Ralic, 2009).

**Sense of loneliness**

Based on the analysis of the main characteristics of the definition of loneliness, Pinquart and Sorensen (2001) cite two types of definitions. The first are the ones that, as the main feature of loneliness, cite having a sense of suffering due to the lack of contacts, and other social-cognitive ones which view loneliness as the lack of interpersonal relationships that a person has with those the person would like to have. Until recently it was considered unnecessary to study loneliness in children. However, Asher et al. (1984), searching for descriptions of the feelings of loneliness among younger children, have come to the conclusion that there is no difference in descriptions between adults and children from the third to the eighth grade. Furthermore, this may mean that defining this unpleasant feeling should not be different in adults and children (Rubin, 1982, according to Asher et al., 1990). In his interpersonal theory, Sullivan (1953) emphasizes the importance of the need for intimacy as social need in the context of interpersonal relationships. Deficit in social relations and the subjective reaction to that deficit result in an emotional experience that we call loneliness. In accordance with this assumption that the child feels the need for socializing very early, In accordance with this assumption that the child feels the need for socializing very early, the sensation of loneliness and its roots will be found very early in the time of the formation of the first social relations. These first social relations are based on the need for belonging and involvement in the peer community. Lonely people have lower self-esteem than those who are not lonely, they are prone to depressive and anxiety conditions (Buunk & Prins, 1998) which in interaction results in hostile mood toward others and does not gain approval. In such situations, the society rejects this person. Such social experience results in withdrawal and supporting of loneliness. Students feel lonely when they estimate that they are not in the company of those they would like to be with, and the unpleasant feelings of loneliness motivate them to look for a peer society that is important to them (Milivojevic, 2007).
The relationship between quality of friendship and feelings of loneliness

Peer relations in childhood play a major role in the child's later life. They contribute to the socialization of the child, serve as behavioral models, the child is taught in communication skills, understanding of social situations and moral judgment, and relationships are also one of the sources of self-assessment of their own efficiency. The lack of interaction between peers can lead to depression, loneliness, feeling of isolation, anxiety, nonconformity etc. At a time of pre-adolescence, loneliness is associated with the dimension of relationships with peers, which is friendship. In this period of development, there is a need for intimacy that the child meets in contact with the best, close friend. The safety, love, and pleasure that a child fulfills by socializing with close friend prevent loneliness. Students with disabilities spend most of the school days in regular classes, but just physically accommodating students with disabilities in a regular classroom is not enough to improve their social skills. The importance is most often placed on structuring and adapting the environment to their needs, as well as adapting their social environment. Research shows that students with learning difficulties also show social difficulties, including feelings of isolation and loneliness. Students with emotional problems and behavioral disorders are more prone to difficulties in creating and maintaining relationships and exhibiting pro-social behavior. Many students with disabilities need clear instructions on decoding social signs and making decisions in order to increase their social competence and improve social skills. Students with intellectual disabilities, and especially with severe impairments, are generally not in regular contact with peers of typical development and the frequency of their participation in school activities is reduced so they can feel excluded and lonely. Without friends, a child can feel lonely and isolated (Geisthardt, et al., 2002; according to Saenz, 2003), which can undermine the concept of a child with disabilities, whereas acceptance and friendship can make it possible for them to contribute to their community (Whitaker et al., 1998). The results of numerous studies confirm that "involved" students with disabilities are often dismissed from the students in the regular classroom and fail to establish positive relationships with their peers (Stainback et al., 1989, Kamps et al., 1997, by Campbell Miller et al, 2003). Children with disabilities have fewer friends and associate with their peers less. They feel more disapproved by their peers and are lonelier (Margalit & Efrati, 1996; according to Saenz, 2003). Nonetheless, children with disabilities are not without friends (Vaughn, 2001; according to Saenz, 2003). Studies show that typical peers are willing to be friends with students with disabilities (Hendrickson et al., 1996, Peck, Donaldson and Pezzoli, 1990, according to Han & Chadsey, 2004) and that there are friendships between them (Evans, Salisbury, Palombo, Berryman and Hollowood, 1992; according to Han & Chadsey, 2004).

PROBLEM, AIM AND HYPOTHESES OF THE RESEARCH

The problem of research is focused on the peer relations of primary school children in inclusive classes that are examined through two dimensions: the quality of friendship and the feeling of loneliness.

The aim is to establish the connection and differences between the two dimensions considering gender and contribution of the quality of friendship to explaining the sense of loneliness in inclusive classrooms.
Hypotheses
1: There is a negative correlation between the quality of friendship and the sense of loneliness in boys and girls
2a: There is a difference in the quality of friendship between boys and girls, where girls have higher quality in friendly relations than boys
2b: There is a difference in the sense of loneliness between boys and girls, where boys have a greater sense of loneliness than girls
3: Gender, parents' education, material opportunities, number of close friends, and quality of friendship are significant predictors of the explanation of the sense of loneliness

Participants in the study
The students from the third to the sixth grade of the Primary school of Ljudevit Gaj, Osijek participated in the study. There were 8 classes altogether. The study was conducted on a sample of 152 participants, 77 of which were boys and 75 girls. The participants' age is between 9 and 13, with an average of 10.96 (SD = 1.27). The mean age for girls is 10.74 (SD = 1.19) and for boys 11.17 (SD = 1.31). Out of a total of 152 participants, 4 (2.6%) reported that the material circumstances of their families were very poor, considerably weaker than most, 6 (3.9%) reported that they were bad, weaker than most, 48 (31.6%) 57 (37.5%) say they are good, better than most, and 37 (24.3%) that they are excellent, much better than most others.

Measuring instruments
Friendship quality questionnaire (Parker and Asher 1993, Croatian adaptation Klarin, 2000) - Friendship quality questionnaire was constructed by Parker and Asher in 1993. The questionnaire examines the perception of different qualitative aspects of relationship with the best friend. The questionnaire is intended for children of elementary school age. It contains 40 statements, e.g. We are always together during breaks, We confide to each other with our problems, We help each other with our homework, We tell each other secrets. The task of the child is to name the best friend and on a five degree scale to answer to what extent each statement describes their relationship, where claim one is "never valid for your friend or your relationship", and the claim five "always applies to your friend or your relationship". By factor analysis of the questionnaire authors came to six factors: 1. Valuation and concern, 2. Conflict and betrayal, 3. Problem solving, 4. Helping and guiding, 5. Socializing and recreation, and 6. Intimacy and self-exposure. Previous researches have shown good metric characteristics of the questionnaire. Bohnert, Aikins and Edidin (2007) applied the original scale on adolescents (16 to 21 years of age) and received internal reliability, Cronbach α = 0.88. The factor structure also lists six factors from the original version. Klarin (2000) constructed a friendship questionnaire according to the Parker and Asher template. She maintained 30 claims from the original questionnaire, which by factor structure provide two factors. Given the content, Klarin (2000) describes the first as Evaluation, emotional support and conflict resolution, the other as Helping and sharing. Klarin (2000) applied a shortened and translated scale on primary school students (4th, 6th and 8th grade) and received internal reliability α = 0.94. The questionnaire measures the positive aspects of a friendly relationship, and the result is taken as a sum of estimates on all claims. A higher score means a more positive assessment of the quality of relationship with the best friend. The questionnaire used in this research consists of 30 parts of the translated questionnaire by Klarin (2000). By factor analysis of the questionnaire in this study, with Varimax rotation, four factors were obtained that could be described by content as Care and valuation, Intimacy and self-exposure, Courage and help. Internal reliability is 0.94.
Loneliness questionnaire (Asher et al., 1984; Croatian adaptation Klarin, 2000)-
An adapted version of the scale of loneliness was used to measure loneliness (Asher et al., 1984). The Adapted Scale contains 11 particles to which the participants respond to a 5-degree Likert type scale (1 to 5). A higher score indicates greater loneliness. The scale is of satisfactory reliability (Cronbach alpha = 0.84) and is one-factor structure. The percentage of explained variance with this extracted factor is 36% (Klarin, 2000). Scale content indicates that it measures emotional loneliness (eg "I feel lonely in school," "I do not have any friends in school"). The obtained value of the Cronbach alpha in this study is 0.90. The statistical processing of the collected data was carried out using the statistical program SPSS 15.0 for Windows.

RESULTS ANALYSIS

Prior to data processing in accordance with the set problems, we checked the psychometric characteristics of the measuring instruments and the normality of the distribution. Pearson's correlation coefficients, testing the significance of arithmetic meanings and graded regression analysis were used for statistical analysis.

Reliability and validity of the construct

In order to be able to interpret the results obtained and to make conclusions, it is useful to examine the reliability of measuring instruments.

Friendship quality questionnaire

Reliability coefficient, Cronbach alpha for Friendship quality questionnaire across the sample (N = 152) is 0.94. All particles have a coefficient of discriminatory validity greater than 0.3. The most discriminated particles are: He/she helps me to finish sooner with my tasks, We confide in each other and We confide to one another with our problems. In order to determine the constructive validity of the Friendship quality questionnaire, the extracted number of factors is rotated in the Varimax position. Factor analysis has extracted four interpretable factors around which particles are grouped and explain 53.93% of the variance of the results in total.

Table 1. Rotation matrix of factor structure of Friendship quality questionnaire

<table>
<thead>
<tr>
<th>Item</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. We are always together in a free time.</td>
<td></td>
<td></td>
<td>.667</td>
<td></td>
</tr>
<tr>
<td>2. He/she praises me.</td>
<td></td>
<td>.602</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. He/she protects me if someone is talking behind my back.</td>
<td></td>
<td>.528</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. We choose one another as an associate in school or out-of-school activities</td>
<td></td>
<td>.698</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. He/she apologises if he/she hurts me.</td>
<td></td>
<td>.490</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. He/she is full of good ideas in socializing and having fun.</td>
<td>.648</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. When we quarrel, we try to make up.</td>
<td></td>
<td>.792</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. He/she loves and supports me.</td>
<td></td>
<td>.419</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. He/she tells me I am clever.</td>
<td></td>
<td>.496</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. We confide our problems to one another.</td>
<td>.511</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. He/she supports me in my ideas.</td>
<td></td>
<td></td>
<td>.509</td>
<td></td>
</tr>
<tr>
<td>12. I talk to him/her when I'm angry about something that happened to</td>
<td></td>
<td></td>
<td></td>
<td>.496</td>
</tr>
</tbody>
</table>
me.
13. We help each other with housework (cleaning the room, going shopping...).
14. We do each other special favours (lending games...).
15. He/she keeps promises; I can rely on him/her.
16. We visit each other.
17. We spend school holidays together.
18. He/she gives me advice when I ask about some of my problems.
19. We make up very soon after an argument..
20. We share things together.
21. WE discuss how to overcome each other’s anger.
22. He/she has many good friends.
23. We lend each other things.
24. He/she helps me to finish my tasks sooner.
25. He/she quickly overcomes our arguments.
26. We both have good ideas on how to finish some tasks.
27. We confide in each other.
28. We help each other with our homework.
29. We tell each other secrets
30. He/she is concerned about my feelings.

The first factor is Caring and valuation, the second factor is Intimacy and self-exposure, the third factor Companionship and the fourth factor is Helping.

Table 2. Coefficients of correlation between total scores on individual factors

<table>
<thead>
<tr>
<th></th>
<th>Care and appreciation</th>
<th>Intimacy and self-exposure</th>
<th>Companionship</th>
<th>Helping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care and appreciation</td>
<td>1</td>
<td>.83**</td>
<td>.66**</td>
<td>.78**</td>
</tr>
<tr>
<td>Intimacy and self-exposure</td>
<td>1</td>
<td>.65**</td>
<td>.75**</td>
<td></td>
</tr>
<tr>
<td>Companionship</td>
<td>1</td>
<td></td>
<td>.70**</td>
<td></td>
</tr>
<tr>
<td>Helping</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

** Level of significance \(p < 0.01\)

Table 2 shows correlations between some of the subscales of the Friendship quality questionnaire. It is evident that all correlations are significant at \(p < 0.01\). The data obtained show that the results collected by this questionnaire can be presented by factors, but also as a unique quality measure of friendship.

Table 3. Basic statistical parameters for research variables

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>BR. PARTICLES</th>
<th>(\alpha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARE AN EVALUATION</td>
<td>36.23</td>
<td>6.77</td>
<td>9</td>
<td>0.85</td>
</tr>
<tr>
<td>INTIMACY AND SELF-EXPOSURE</td>
<td>38.27</td>
<td>6.39</td>
<td>9</td>
<td>0.85</td>
</tr>
<tr>
<td>COMPANIONSHIP</td>
<td>20.25</td>
<td>3.78</td>
<td>5</td>
<td>0.71</td>
</tr>
<tr>
<td>HELPING</td>
<td>27.89</td>
<td>5.45</td>
<td>7</td>
<td>0.79</td>
</tr>
<tr>
<td>QUALITY OF FRIENDSHIP</td>
<td>122.66</td>
<td>20.27</td>
<td>30</td>
<td>0.94</td>
</tr>
<tr>
<td>LONELINESS</td>
<td>16.91</td>
<td>8.09</td>
<td>11</td>
<td>0.90</td>
</tr>
</tbody>
</table>
Loneliness questionnaire

The reliability coefficient, Cronbach alpha for Loneliness questionnaire on the whole sample (N = 152) is α = 0.90. In order to check the normality of the distribution of results, Kolmogorov - Smirnov test was used, which showed that the results were normally distributed in the Friendship quality questionnaire, while on the Loneliness questionnaire the results were not distributed normally (K - S z = 2.86, p <0.01). However, results in the Loneliness questionnaire are asymetrically negative, ie. tend to group at lower values. Since the distribution is not bimodal nor in the U - shape and the sample is large enough, and the subset of girls and boys are very similar, Petz (2002) states that in these cases it is possible to use parametric statistical procedures and they were used in the analysis of the results.

The relationship between quality of friendship and feelings of loneliness

In order to ascertain whether there is a correlation between the quality of friendship and the sense of loneliness of boys and girls, we computed the Pearson coefficients of correlation between these variables and obtained the results shown in Tables 4 and 5.

Table 4. Coefficients of correlation between subscales and loneliness for boys

<table>
<thead>
<tr>
<th></th>
<th>Care and appreciation</th>
<th>Intimacy and self-exposure</th>
<th>Companionship</th>
<th>Helping</th>
<th>Quality of friendship</th>
<th>Loneliness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care and appreciation</td>
<td>1</td>
<td>.81**</td>
<td>.62**</td>
<td>.80**</td>
<td>.93**</td>
<td>-.03</td>
</tr>
<tr>
<td>Intimacy and self-exposure</td>
<td>1</td>
<td>.58**</td>
<td>.76**</td>
<td>.91**</td>
<td>-.09</td>
<td></td>
</tr>
<tr>
<td>Companionship</td>
<td>1</td>
<td>.69**</td>
<td>.77**</td>
<td>-.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helping</td>
<td>1</td>
<td>.92**</td>
<td>-.10</td>
<td>.92**</td>
<td>-.06</td>
<td></td>
</tr>
<tr>
<td>Quality of friendship</td>
<td>1</td>
<td>.84**</td>
<td>.69**</td>
<td>.93**</td>
<td>-.47**</td>
<td></td>
</tr>
<tr>
<td>Loneliness</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As can be seen from Table 4, the hypothesis of correlation between the quality of friendship and loneliness is not confirmed on the sample of boys.

Table 5 Coefficients of correlation between subscales and loneliness for girls

<table>
<thead>
<tr>
<th></th>
<th>Care and appreciation</th>
<th>Intimacy and self-exposure</th>
<th>Companionship</th>
<th>Helping</th>
<th>Quality of friendship</th>
<th>Loneliness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care and appreciation</td>
<td>1</td>
<td>.84**</td>
<td>.69**</td>
<td>.72**</td>
<td>.93**</td>
<td>-.40**</td>
</tr>
<tr>
<td>Intimacy and self-exposure</td>
<td>1</td>
<td>.70**</td>
<td>.68**</td>
<td>.92**</td>
<td>-.48**</td>
<td></td>
</tr>
<tr>
<td>Companionship</td>
<td>1</td>
<td>.68**</td>
<td>.84**</td>
<td>-.48**</td>
<td>.47**</td>
<td></td>
</tr>
<tr>
<td>Helping</td>
<td>1</td>
<td>.86**</td>
<td>-.31**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of friendship</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loneliness</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Level of significance p < 0.01
Contrary to the results of boys, on the girls’ sample there are significant correlations between the quality of friendship and loneliness as well as between the subscales of friendship quality and loneliness.

**Differences in the quality of friendship and feeling of loneliness with regard to gender**

To answer another problem we tested the significance of differences between the results of boys and girls in the quality of friendship and feeling of loneliness by using the T-test.

**Table 6. M and SD results for subscales and quality of friendship and loneliness and the associated t-ratios**

<table>
<thead>
<tr>
<th>Boys</th>
<th></th>
<th></th>
<th>Girls</th>
<th></th>
<th></th>
<th>t – test</th>
<th>Levels of freedom</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care and appreciation</td>
<td>34.53</td>
<td>7.19</td>
<td>38.03</td>
<td>5.83</td>
<td>-3.26</td>
<td>148</td>
<td>.00**</td>
<td></td>
</tr>
<tr>
<td>Intimacy and self-exposure</td>
<td>36.61</td>
<td>6.66</td>
<td>40.01</td>
<td>5.62</td>
<td>-3.37</td>
<td>148</td>
<td>.00**</td>
<td></td>
</tr>
<tr>
<td>Companionship</td>
<td>19.54</td>
<td>3.79</td>
<td>20.97</td>
<td>3.65</td>
<td>-2.37</td>
<td>149</td>
<td>.01*</td>
<td></td>
</tr>
<tr>
<td>Helping</td>
<td>26.42</td>
<td>5.65</td>
<td>29.41</td>
<td>4.83</td>
<td>-3.51</td>
<td>150</td>
<td>.00**</td>
<td></td>
</tr>
<tr>
<td>Quality of friendship</td>
<td>117.09</td>
<td>20.98</td>
<td>128.45</td>
<td>17.86</td>
<td>-3.55</td>
<td>147</td>
<td>.00**</td>
<td></td>
</tr>
<tr>
<td>Loneliness</td>
<td>16.95</td>
<td>6.47</td>
<td>16.86</td>
<td>9.53</td>
<td>.06</td>
<td>149</td>
<td>.95</td>
<td></td>
</tr>
</tbody>
</table>

**Level of significance p < 0.01**

In line with expectations, in all four subscales of quality friendship, girls have significantly higher results than boys. There is also a statistically significant difference in the overall quality of friendship, with girls having higher quality of friendship than boys. Table 6 shows, that there is no significant difference in loneliness between boys and girls, which is not in line with expectations.

**Contribution of gender, parents’ education, financial conditions, number of close friends and quality of friendship to explaining sense of loneliness**

In order to examine the contribution of the variables measured in the research on the feelings of loneliness, a gradual regression analysis was performed.

**Table 7. Results of a step-by-step regression analysis for the criterion of feelings of loneliness (N = 152)**

<table>
<thead>
<tr>
<th>LONELINESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREDICTOR VARIABLES</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td><strong>Step 1.</strong></td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Mother’s education</td>
</tr>
<tr>
<td>Father’s education</td>
</tr>
<tr>
<td>Families’ financial conditions</td>
</tr>
<tr>
<td><strong>Step 2.</strong></td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Mother’s education</td>
</tr>
<tr>
<td>Father’s education</td>
</tr>
</tbody>
</table>

R=.30
R²=.09

R = .31
ΔR² = .07
In the first step, a step-by-step regression analysis different variables were taken: gender, the mother and father's education and financial conditions of the family; in the second step number of close friends was added and in the third the quality of friendship. In all three steps, gender arose as a significant predictor of loneliness. In the third step, the quality of friendship showed as a significant predictor of loneliness.

**DISCUSSION**

In line with expectations, the research results show a statistically significant negative correlation between the quality of friendship and the sense of loneliness at $p < 0.01$ significance for girls, while such connection did not prove to be significant for boys. We have confirmed the assumption that quality of relationship with the best friend is related to the feeling of loneliness. A child who has a mutual friend and assesses this relationship positively, is significantly less lonely than a child who has no friends. Children who have a mutual friend and who are satisfied with this interaction have a lesser sense of loneliness than children who do not have a mutually chosen friend (Parker & Seal, 1996). Parker and Asher (1993) state, that children without the best friends are lonelier than the children who have the best friend. Authors (Rys & Bear, 1997) conclude that children who have achieved quality social relations with their peers have developed social skills. Such children are sociable, they are more willing to share and help. Such behavior is positively substantiated and accepted. The relationship between the quality of peer interaction, feelings of loneliness and behavior becomes interdependent. The quality of the relationship between the diary systems and the small social groups determines the level of adjustment. These two levels of social relations allow the fulfillment of basic social needs, namely the need for belonging and the need for intimacy. If an individual in interpersonal interaction can not satisfy these needs, there is a sense of loneliness, which as a result of negative social experience has negative consequences on all plans of development - social, emotional and cognitive plan. A sense of loneliness is encouraged by inadequate social interaction whereby an individual is unable to meet the need to share experiences, intimacy, sharing and support. Children who are not accepted by a peer group and who do not have the best friend and/or are not satisfied with the quality of interaction with their best friend are reluctant to stay in school and are reluctant to participate in class activities. For these reasons they do not perform well in cognitive tasks, which results in poorer school success (Klarin, 2000). On the other hand, inclusion and belonging as a result of acceptance result in greater motivation and more intense engagement in school assignments. Klarin (2002) had a significant negative correlation between loneliness and quality of friendship assessment on her whole sample of participants. Such results are consistent with other research results. Sullivan (1953), Ladd (1990), Parker et al. (1995) and Asher et al. (1996) emphasize the connection between different forms of social
relationships, such as the quality of friendship, with a sense of loneliness. The possible explanation of the results that there is no correlation between the quality of friendship and the sense of loneliness in boys is that boys have a wider network of friends (Hartup & Stevens, 1997), so it is not so important for them to have a mutual friend.

In general, children with disabilities are lonelier and have fewer friends (Margalit, 1996; according to Saenz, 2003). As a child with disabilities grows, their self-image becomes worse and the child with disabilities becomes withdrawn (Jerome, Fujiki, Brinton & James, 2002, according to Saenz, 2003). The research by Yu, Zhang i Yan (2005) has given results that point out that children with learning disabilities have a higher level of loneliness and a lower level of acceptance by their peers compared to peers without any difficulty. Researchers have also gotten the results that there is a significant negative link between peer acceptance and loneliness. The authors explain given results by possible behavioral problems and the insufficient levels of social competence, and it is more likely that the mentioned children with disabilities will be rejected by their peers. Because of the insufficiently developed social skills, such students will cope with loneliness more difficultly and can experience it more powerful than children without any difficulty. In order to respond to another problem, it was verified whether there are gender differences in the quality of friendship and sense of loneliness. The results show that there is a statistically significant difference in the quality of friendship (t = -3.55, p < 0.01) between boys and girls with girls having higher quality of friendship (M = 128.45) than boys (M = 117.09). In all four subscales, obtained by factor analysis of Friendship quality questionnaire, a statistically significant difference was found between boys and girls. On all subscales, girls have statistically significantly higher scores than boys. The results obtained were consistent with previous researches (Hussong, 2000; Thomas & Daubman, 2001). The girls experience their friendship as more quality and therefore social support stronger than boys. Namely, girls 'friendships are different from boys' friendships. Girls make intimate, affectionate and close friendships, which are quite limited to a smaller circle of close friends, while boys make more open friendships, less marked by attachment, closeness, and intimacy (Klarin, 2004). In their research, Parker and Asher (1993) have come to results, which show that boys and girls differ in some dimensions of friendship. The girls had more levels in dimensions of support and recognition, help and leadership, conflict resolution, and intimate exchange. The obtained differences in the quality of friendship can be explained by the differences in games that boys and girls give advantage to (for example, boys are more inclined to play in larger groups or prefer hierarchical rankings in the group) that can affect the difference in quality of friendship. Throughout the childhood, the choice of friends can be more precisely predicted based on gender rather than on the basis of age (Epstein, 1986, according to Vasta, 2005). Vaughn and Elbaum (1999; Vaughn et al., 2001) found that the quality of friendship at primary school level was slightly higher for students without disabilities than for students with disabilities and continued to grow during high school. Contrary to that, the observed quality of friendship for students with disabilities remained the same. The difference is observed when it comes to gender. Children with disabilities often choose girls for friends in the game. Hall and McGregor (2002, according to Saenz, 2003) state that this may be so, because girls are more likely to accept children with disabilities. Parker and Asher (1993) have identified gender differences in individual dimensions of friendship quality. The girls showed a higher level of appreciation and support, helping, problem solving and intimacy, compared to boys, which was explained with differences in the organization of friendly relations, where the boys' groups are larger and hierarchically organized, unlike girls' groups. In addition, boys are competitive in their friendships, they compete with each other in skills and status within the group, while girls are more focused on the relationship. Children
with disabilities can not compete in competitive boys' groups, but can show their values in relationships. That is why friendships with girls are more frequent (Zic Ralic, 2009). The results show that there is no significant difference between boys and girls in the sense of loneliness (t = 0.06, p> 0.05). Some studies have shown that the difference in the quality of the interpersonal relationships between girls and boys conditions a difference in feelings of loneliness, which is also indicated by other studies as well (Klarin, 2002; according to Lacković-Grgin, 1999). In her research Klarin (2000) got gender differences, whereby girls are less lonely than boys regardless of age. The author explains the reason for the gender differences in loneliness by assuming that the girl's relationship with her best friend is more valued than the boy's relationship with his best friend. The results of the conducted research are not consistent. Some researchers have found more expressive loneliness in boys (Klarin, 2002, 2004; Lackovic-Grgin et al., 1998; Medved, 2011); others in girls (Medved, 2011), while the third did not find gender differences at all (Medved, 2011). Borys and Perlman (1985; Medved, 2011), as well as Lacković-Grgin et al. (1998), warn of the methodological aspects of the inconsistency of the findings on gender differences point out that because they are less likely to admit that they are lonely, boys, young men and men achieve lower scores on scales that use "loneliness" directly. As in the scale of loneliness we used in our research the word "loneliness" is mentioned directly, obtained results are in accordance with the above. Children with disabilities, especially children with learning disabilities and children with intellectual disabilities, are more susceptible to loneliness than their peers without difficulty (Luftig, 1988; Margalit & Levin-Alyagon, 1994; Pavri & Luftig, 2000; Williams & Asher, 1992; according to Pavri, 2001). Studies have shown that 10% to 16% of students without difficulty express a sense of loneliness (Asher et al., 1984). However, students with intellectual disabilities show a high percentage of loneliness, about 25% (Luftig, 1988; by Pavri, 2001). The assumption is that students with other disabilities will probably show similar levels of loneliness (Pavri, 2001). Disabled students show a greater incidence of experience of loneliness for two main reasons. Many students with disabilities have difficulties with reading and the development of social relationships and have poor social skills, and consequently are less accepted by peer groups (Haager & Vaughn, 1995). Many students have difficulty in showing themselves in the appropriate way in social situations, which rejects their peers. Another reason is that teachers traditionally do not give students with disabilities equal opportunities for full participation in educational and extracurricular activities. Such a separate education system probably affects the extent to which students with disabilities feel belonging and acceptance in school and class community (Pavri, 2001). In order to answer the third problem, the specific contribution of different variables to the explanation of the sense of loneliness was verified and a step-by-step regression analysis was performed. It has been found that gender and friendship variables have shown as significant predictors of feelings of loneliness and together they explain 16% variation of the sense of loneliness. Given the difference in friendships between girls and boys, we can conclude that intense social gatherings, a more intimate relationship that girls develop and nurture, causes a lesser sense of loneliness. Unlike girls, boys’ friendships are more superficial, more active, less devoted to each other, with no intimate moments. Such a relationship among the boys conditions not gratifying the need for intimacy, and thus loneliness. The feeling of loneliness can be explained by the quality of the dyad interaction. The quality relations within the dyad allow satisfying the needs for sharing intimate experiences and for a pleasantly spent time. In a quality interaction there is no room for loneliness. Such interaction enhances trust, meets the need for support and sharing, and hence the individual does not feel lonely, discarded, and socially isolated. In her study, Klarin (2002) has also come to results that point out that loneliness is a significant predictor in explaining the quality of friendship. Most participants evaluate the material condition of their
family as well, better than others (37.5%). But a very small percentage of participants estimate the material condition of their family very poor, significantly lower than most (2.6%). Thus, in the sample, prevail students of a better material status, so it can be interpreted in this way that the material circumstances of the family have not been shown to be a significant predictor of the quality of friendship.

CONCLUSION

The aim of the research was to examine the relationship between the quality of friendship and feelings of loneliness and whether there is gender difference. We also wanted to examine the contribution of predictors to the explanation of feelings of loneliness. In order to examine whether there is a correlation between the quality of friendship and the sense of loneliness, Pearson's correlation coefficients are calculated between the data obtained from the Friendship quality questionnaire and Loneliness questionnaire. It has been established that there is a statistically significant association between the quality of friendship and feelings of loneliness in girls, while in boys there is no such association. To answer another problem we used the T-test to test differences in the quality of friendship and feeling loneliness with regard to gender. There was a significant difference between boys and girls in the quality of friendship, with girls having a higher quality of friendship. The hypothesis that there is a difference in the feeling of loneliness between boys and girls was not confirmed. Gender and quality of friendship have shown as significant predictors for explaining feelings of loneliness. Despite the increased emphasis on social development, many students in today's classrooms do not show social competence or skills crucial to successful interaction with peers and adults in their environment (Bishop, 2009). All can benefit from creating a society that supports social competence. Encouraging social competences in today's schools and the diverse school populations of students requires the efforts of teachers, educational rehabilitators and all school staff. Creating friendships between students with disabilities and their typical peers is considered an important outcome of school integration (Haring and Breen, 1992; Campbell Miller et al., 2003). One of the ways in which schools encourage friendships between disadvantaged and typical pupils are the Circles of friends (Haring & Breen, 1992; Hughes et al., 1999; Hunt et al., 1996; Kampset et al., 1997; Stainback & Stainback, 1990, by Campbell Miller et al., 2003). Circles of friends become an increasingly popular form of mediation in providing support to people with disabilities who need help in achieving their aspirations and goals. No one develops social competences or learns social skills isolated and nothing can overcome negative relational schemes better than positive peer interaction (Hartshorne, 2003). Likewise, peers benefit from participating in Circles of friends. Their participation is described as an experience of transformation, greater acceptance of others, greater degree of empathy for students with disabilities, which leads to just procedures. Peers recognize the importance of students with disabilities in their lives and realize that they also play a significant role in the lives of students with disabilities (Calabreseiselur, 2008). Peer effect is useful for students with disabilities, but equally for them as well. Parents believe that Circles of friends improve the quality of their children's lives (Calabrese et al., 2008). Research has shown that it is possible to improve the acceptance of the child by peers, and through the training of social relationships it is possible to encourage friendship (review by Asher & Gazelle, 1999, according to Zic Ralic, 2009) which represents a protective factor for the appearance of loneliness and abuse by peers.
LITERATURE


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**Aleksandra Krampać-Grlijšić** was born in 1964 in Osijek. She graduated from the Faculty of Education and Rehabilitation at the University of Zagreb in 1988 and earned her doctorate in
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