Children with attention deficits are usually integrated in regular primary school classes in Croatia, without any special educational treatment nor interventions. Teachers, whose primary education does not include educational methods for working with children with developmental disabilities or procedures of inclusion of such children in regular classes, must do their best to be successful in education and integration of this specific group of children.

The main objective of this research was to determine the differences in use of educational strategies (upbringing and teaching) and misbehavior management (positive and negative) among primary school teachers working with children with attention deficits in respect of their gender, level of education, years of work experience and whether they teach in lower or upper grades of primary school.

The research covered 31 primary schools from 3 counties of the eastern part of the Republic of Croatia. Participants were teachers (N=103) teaching in lower grades (from 1st to 4th) (51%), and in higher grades (from 5th to 8th) (49%) of primary schools. 12.8% of them were male and 87.2% female teachers. Teachers gave estimations for their students who had attention deficits (N=305), 85.6% (N=261) were male and 14.4% (N=44) were female students. The age span of estimated students was 7 to 15 years, and the average age was 10.69 years (SD=2.26). Teachers filled out the Educational desirable behavior-oriented strategy scale (upbringing and teaching subscales) and the Scale of misbehavior management strategy (positive and negative discipline subscales).

The results implicate that teachers in the lower grades of primary school use more positive disciplinary strategy than teachers in the higher grades of primary school. The results of the research have shown that teachers working with children having attention deficits more often use the educational strategy of upbringing than teaching. Teachers from lower grades of primary school and also female teachers more often used the educational strategy of upbringing. As in Croatia formal education for primary school teachers teaching in lower grades of primary school differ from the education for teachers teaching in higher grades of primary school, it can be concluded that teachers in lower grades of primary schools are more sensitive and better educated for working with children with attention deficits.

Keywords: Attention deficit, educational methods, discipline, teachers.

1. Introduction

In school, children with attention deficits have difficulties with fulfilling their obligations, organizing themselves, looking after their things and losing them, they are distracted by the stimuli from the environment and they do not respect the given instructions (Bouillet, 2010). Students with ADD, if not having other difficulties, do not need to adaptation of teaching content, but in the work with them it is important to individualize the methods of teaching with an emphasis on their strengths (Zrilić, 2013). Ivančić (2010) further emphasizes the importance of applying appropriate educational strategies.

Previous studies suggested that teachers in lower grades of primary school (or class teachers) were more likely to use appropriate educational strategies in dealing with students with deficits such as: prolonging exam time, providing assistance and motivating other students to provide support and assistance (Martan, Škočić Mikić, & Puljar, 2016). In addition, younger teachers have a higher level of emotional intelligence which would mean they are more effective in leading the classroom and also female teachers have a more developed interpersonal dimension of emotional intelligence (Di Fabio...

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1The risk level for behavioral problems of early developmental age children and professional intervention (“This work has been fully supported by the University of Rijeka under the project number 13.10.2.2.03.”)
& Palazzeschi, 2008). Teachers who teach in lower grades of primary school use different educational strategies, most of which are writing, drawing, talking, and creative activities while teachers in upper grades of primary school (subject teachers) reduce variety of their educational strategies (Buljubašić Kuzmanović & Petrović, 2014). Game proved to be an important educational method (Nikčević Milković, Rukavina, & Galić, 2011), and it was more often used by class school teachers (i.e. several times a week).

When there is a student with disabilities or disorders in the classroom, maintaining the class discipline could be problematic. Rijavec and Miljković (2015) described that in the model of positive discipline everything is a matter of agreement, there is no place for rewards and penalties. If a student does something that violates the discipline in the class, the natural consequences will follow. The Model of assertive (negative) discipline is directed to the teacher and it is based on setting rules and corrective actions. Rijavec and Miljković (2015) concluded that the model of negative discipline is more efficient in the short run, while on the other hand for long-term impact it is a more appropriate model of positive discipline.

Recent research has shown that teachers (81.6%) are willing for further education for working with students with disabilities, but also a large number of teachers (83%) stated that they are not offered such education (Goldin, 2017).

1.1. Objectives

The main objective of this research was to determine the differences in use of educational strategies and misbehavior management among primary school teachers working with children with attention deficits. As teachers by themselves estimated which children have attention deficits, it is important to know if they behave differently regarding their own personal characteristics.

First, use of educational strategies (upbringing vs teaching) in working with children with attention deficits was checked, i.e. it was assumed that in working with attention deficit children teachers have to use upbringing educational strategies more often than teaching ones.

Second, use of misbehavior management (positive vs negative) in working with children with attention deficits was checked, i.e. it was assumed that in working with attention deficit children teachers have to use positive disciplinary strategies if they want help include children in regular class.

Third, differences in use of educational strategies (upbringing and teaching) and misbehavior management (positive and negative) in respect of their gender and whether they teach in lower or upper grades of primary school (class vs subject teachers), were examined. It was assumed that female teachers (because of more sensitive and caregiving nature of woman) and class teachers (because they spent more time with a specific child and have a better education about inclusion of students with developmental disabilities in regular schools) use more often upbringing educational and positive disciplinary strategies.

2. Method

2.1. Participants

The research covered 31 primary schools from 3 counties of the eastern part Republic of Croatia. Participants were teachers (N=103) teaching in lower grades (from 1st to 4th) (51%), and in upper grades (from 5th to 8th) (49%) of primary schools. 12.8% of them were male and 87.2% female teachers. In average, teachers estimate that they know student for 2.5 years (SD=8.43), with giving him on average 11.25 classes weekly (SD=8.43). The average teachers’ age was 41.3 years (SD=9.76), and average working experience in schools 16.53 years (SD=10.01).

Teachers gave estimations for their students who had attention deficits (N=305), 85.6% (N=261) were male and 14.4% (N=44) were female students. The age span of estimated students was 7 to 15 years, and the average age was 10.69 years (SD=2.26). There were 51.2% of students in lower grades and 48.8% in higher grades of primary school.

2.2. Instruments

At the beginning, the teachers fill out the questionnaire about some general data: their sociodemographic data (age, gender, years of professional experience, subject that they teach and grade in which they teach) and data about students for whom they filled out the questionnaire (age, gender, grade, academic success).

Educational desirable behavior-oriented strategy scale (Kovačić & Vlah, 2018) was constructed for the purpose of a larger project. It consists of 24 items which operationalize only those aspects of teacher competence regarding practical teaching methods. For the purpose of the obtained study two educational subscales were used: the upbringing subscale (k=12, Cronbach α=0.77) examines the teacher’s frequency of application of educational methods such as communication, collaboration, listening and encouraging (e.g. I reward students for doing tasks on time), and the teaching subscale (k=12, Cronbach α=0.76) examines the teacher’s frequency of application of educational methods such as text reception, learn how to learn, evaluation of their educational methodology (e.g. In a suitable way,
I emphasize words, images and concepts to focus attention to them). At 7-point Likert scale, teachers should assess how often a particular educational method they applied in working with students, whereas 0 means - almost never, 1 - very rare, 2 – rarely, 3 - often, 4 - very often, 5 - almost always, 6 - always. The overall result is the arithmetic mean of the particular items.

The scale of misbehavior management strategy (Martin, Linfoot & Stephenson, 1999) was translated and validated as a part of the project aims. It consists of 24 items, and for the purpose of the obtained study it has been split into two subscales: positive discipline (k=14, Cronbach α=0.79) measures frequency of teachers’ use of positive disciplinary strategies when student misbehave (e.g. I speak with the student), and negative discipline (k=10, Cronbach α=0.67) measures the frequency of teachers’ use of negative disciplinary strategies when students misbehave (e.g. Sending students to the corner / back of the room). At 6-point Likert scale teachers should rate how often they are using described procedures in working with the student, whereas value 0 represents never, 1 - rarely (no more than once a month), 2 - occasionally (two to three times a month), 3 - frequently (at least once a week), 4 – regularly (at least once a day) and 5 - always. The overall result is the arithmetic mean of the particular items.

2.3. Procedure

The data collection process took place during the summer semester of 2018. At the beginning of the data collection process, school principals were contacted via e-mail or during personal visits to the schools. After they gave consent for the school to participate in the research, the official letter from the Faculty of Education in Osijek was sent to the schools. After the schools received the letter, co-operation was agreed through the research coordinator, i.e. pedagogues or psychologists working in the particular school. The questionnaires that the teachers were supposed to fill out were sent to the schools and the research coordinators distributed them to the teachers. The completion of the given questionnaires was voluntary and their anonymity was emphasized. After the coordinator was informed that all submitted questionnaires were completed, the main researchers personally picked them up.

3. Results

The preconditions for conducting parametric statistics were met so the data was analyzed by paired-samples t-test and ANOVA. In processing the results, descriptive statistics for the variables included in the study (Table 1) were calculated first. Indexes of asymmetry did not exceed values greater than ± 4.00.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
<th>Paired-samples t-test</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upbringing educational method</td>
<td>305</td>
<td>2.08</td>
<td>6.00</td>
<td>4.23</td>
<td>0.68</td>
<td>19.90</td>
<td>0.00</td>
</tr>
<tr>
<td>Teaching educational method</td>
<td>305</td>
<td>1.50</td>
<td>6.00</td>
<td>3.54</td>
<td>0.88</td>
<td>32.96</td>
<td>0.00</td>
</tr>
<tr>
<td>Positive discipline</td>
<td>305</td>
<td>0.30</td>
<td>4.57</td>
<td>2.87</td>
<td>0.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative discipline</td>
<td>305</td>
<td>0.00</td>
<td>3.75</td>
<td>1.26</td>
<td>0.57</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In table 1 the results of paired-samples t-tests have shown that teachers more often use upbringing educational methods compared to teaching ones, and also more positive discipline compared to negative ones, in working with children with attention deficits.

ANOVA results for gender differences have shown only one significant difference ($F_{(1,304)}=7.11$, $p<0.01$), i.e. female teachers used more often upbringing educational method (M=4.27, SD=0.66) in comparison to male teachers (M=3.96, SD=0.76) in working with children with attention deficits.

Finally, statistically significant differences were found between class teachers and s subject teachers. Class teachers more often use upbringing educational methods ($M_{(class)}=4.40$, SD=0.59 vs $M_{(subject)}=4.03$, SD=0.73; $F_{(1,304)}=22.35$, $p<0.01$) and more positive disciplinary strategies ($M_{(class)}=3.06$, SD=0.63 vs $M_{(subject)}=2.65$, SD=0.74; $F_{(1,304)}=27.13$, $p<0.01$).

4. Discussion

According to statistical data, the frequency of diagnosis of attention deficit disorder is 5% in most cultures (APA, 2014), which means that students with these disorders can be found in each class. In addition, there are a large number of children who may show symptoms of attention and concentration problems but have not yet been diagnosed. In the Osijek-Baranja County it is about 25% of these students in primary schools (Velki & Dudaš, 2016).
In accordance with the first research objective, it has been confirmed that primary school teachers working with students with attention deficits are more likely to apply upbringing educational strategies in relation to teaching ones. By applying upbringing educational strategies, teachers encourage the students’ development of positive relationship to tasks and self-improvement, and the students’ participation in the activities. According to the results of previous research, when working with children with learning disabilities teachers often try to apply the upbringing educational methods of co-operation, encouragement, communication that is manifested in encouraging other students to help, providing support and creating positive emotional school climate (Martan et al., 2016). Teachers often use upbringing educational methods such as creating opportunities which help students with disabilities emphasize their strengths.

Furthermore, it has been confirmed that teachers in lower grades of primary school use more positive disciplinary strategies in working with students with attention deficits. Positive disciplinary strategies include talking to a student about his behavior, praising and highlighting good student behavior, emphasize examples of his own good behavior, encouraging peer support, and other ways of creating a two-way relationship between student and teacher based on trust. The positive relationship between the teacher and the student with disabilities reduces the symptoms of difficulties and problems of student behavior (Masoumparast, 2016). The greater usage of positive disciplinary strategies than the negative ones shows the greater competence of teachers in working with students with attention deficits.

Finally, the last objective results have shown that female teachers more often use upbringing educational strategies in comparison to male teachers. In fact, women are by nature more emotional, more patient and show a greater degree of empathy towards their students. They give students more personal information and practice examples that can teach them different values (Di Fabio & Palazzeschi, 2008). They successfully interact with their students, colleagues and are good at maintaining interpersonal relationships. Interpersonal communication is a significant factor in teaching, which through various educational strategies contributes to the personal development of students (Stevanović, 2002).

Furthermore, class teachers more often use upbringing educational strategies and also more often use positive disciplinary strategies than subject teachers, which is consistent with a previous study (Buljubašić Kuzmanović & Petrović, 2014). Class teachers more often use cooperative learning and the method of individualization which are actually all upbringing educational methods. Another problem is that teachers’ motivation, as an important factor in teaching children with disabilities, as well as using of other educational strategies, is significantly falling in upper grades (Buljubašić Kuzmanović & Petrović, 2014). One of the important teaching methods is the game and usually only class teachers use this educational strategy (Ničević Milković, Rukavina & Galić, 2011). The game has a great educational effect, such as adopting social skills that for children with disabilities pose a big problem, helps expressing emotions and creating a positive self-image. Moreover, class teachers considered themselves more qualified and competent for inclusive education (Kiš-Glavaš, Nikolić, & Igrić, 1998) which is a reflection of formal education. While class teachers in their education go through a series of didactic and methodological courses, subject teachers (as same as high-school teachers) primarily learn the subject matter and only in a small amount listen to methodological and didactic courses. Also, class in the educational program have far more practice. They have more experience and spent more time with students, which results in better knowing students with deficits and their specific strengths and limitations. Subject teachers are on average only a few hours a week with a student with attention deficits, so they do not succeed in getting enough knowledge of the students and therefore use less positive disciplinary strategies in their practice.

4.1. Study limitations

The obtained study has some methodological limitations which is important to stress. First, teachers gave estimations of students’ attention problems. It was their subjective opinion, students were not diagnosed with an attention deficit disorder. To get more objective data future studies should compare students’ and also parents’ estimation of attention deficit problems in students, or maybe compare data with students who actually have diagnosed attention deficit disorder. Second, except of regular educational programs during graduate studies, it was not examined if some teachers had extra education for working with children with disabilities, which could affect their educational and disciplinary strategies. Finally, for practical work and school results it is important to get information from students, for example, his school progress, decreasing of his deficit problems or his misbehavior. Future studies should consider what would be the best way for including students in research in order to directly measure their behavioral and school-related changes.

4.2. Practical implications

When children start school, parents are not the only one that educate them anymore, instead teachers take the main role in their education. Therefore, it is very important for teachers to be ready and willing to face new challenges in working with children with different types of deficits. Lifelong learning is the primary task of every teacher. For the successful completion of that task teachers need extra...
education about educational methods for working with students with deficits, and to be open to co-operation with both school and out-of-school services, and to involve parents in this process. A child with attention deficits often has a number of other difficulties, such as learning disorder or deficits in social skills, which negatively reflects to school life, so the school should, in such cases, provide assistance and support for teachers who have students with disabilities in their classroom. Furthermore, teachers often referred to students for whom they filled out the questionnaire, that they were rejected in the classroom by their peers. For this problem the key role has the teacher, as one of the undisputed role of the teacher is also to be a good behavior model for the students. Working with a student who lose concentration, interrupt other students or not listening for instructions can be very stressful and demanding. But the teachers must show understanding and respect for such students, as a good role model for others.

5. Conclusion

Although in recent years educators had a lot of discussions about students with the diagnosis of ADD, students who do not have ADD diagnosed but show some attention deficits should not be neglected or excluded from these discussions. It is important for such students to provide appropriate educational methods that will help them overcome attention difficulties and mastering the curriculum. As in Croatia formal education for class teachers differs from the education for subject teachers, it can be concluded that class are more sensitive and better educated for working with children with attention deficits. It is neseccersy to assure additional education of inclusive educational methods, especially for subject teachers.

References


