The High 5! disability awareness program and its impact on its participants

Introduction
With the spread of the approach of inclusion, the majority of children with special educational needs (SEN) are educated in majority institutions, with their typically developing classmates. Inclusion provides an opportunity for equal access, both in the general curriculum and in social interactions, thereby creating a higher expectation for children with SEN. Interactions and learning processes between children help not only the development of theoretical knowledge, but also the development of social skills that can play a role in shaping the strengths and needs of individuals (Maich & Belcher, 2012). An inclusive educational environment has the ability to influence attitudes towards children with SEN in a positive direction (Rillotta & Nettelbeck, 2007). However, most of the typically developing students lack proper knowledge and most of the time are not adequately prepared to receive their disabled peers, and therefore they are less accepting, understanding and empathetic than they could possibly be. This may later have consequences such as the development of negative attitudes—or the predisposition of them, the saturation negative emotions, hostility and even bullying in the classroom environment (Williamson, 2014).

Disability awareness programs affect the entire school environment and are also important at the level of individuals, as this allows students to become better citizens in our society (Lindsay & McPherson, 2011). Incorporating the understanding of disability into education has long-term benefits for students, as it provides them with tools that will enable them to understand and embrace elements of diversity in the world. Shaping attitudes with such programs is an effective way of supporting the elimination of judgement and favoring the tolerance of differences and the development of positive attitudes towards students with SEN (Gasser, Malti & Buholzer, 2013).

Attitudes always apply to a socially constructed object (an idea, object, person, process, event, etc.) created by a society, but stand out as an individual state of mind. Attitudes are socially defined even when a person recognizes them as part of his or her personal world (Csepeli, 2001). Therefor this also implies that most attitudes are formed through learning. When people get to know an attitude object, they build the cognitive representation of the object. This representation includes cognitive, affective, and behavioral information about the subject (Smith, 1993).

- The cognitive component is the individual's assessment of an attitude, how he/she judges and what knowledge he or she has about it (these can be facts and misconceptions).
- The affective component contains the emotional reaction to the attitude object or the emotions, and the emotions triggered by the object itself. Most of the researchers focus on this component when analyzing attitudes.
- The behavioral component involves verbal or non-verbal interaction of attitudinal spell that is manifested in action or observable response (Jain, 2014).

Our attitudes reflect our judgment about our knowledge, feelings and experiences. An attitude object consists of prior information about the given object, but it can be said that not all information weighs in equally in developing or forming a certain attitude. For example, important information that is relevant to our personal needs, goals, and motivations is usually overriding the unimportant ones. At
the same time, negative information is more important than positive, since its consequences can potentially pose a greater threat to us. Apart from this, our decisions regarding attitudes are dominated by accessible (easily recallable) and outlining (awareness-raising) information. Claypool, Mackie and Smith (2016) say that when forming our attitudes, we gather all the accessible information we have and put them together. If the majority of the important, overwhelming and accessible information is positive, we will create a favorable attitude, however if the information is mostly negative, our attitude will be negative as well. When an attitude is created that summarizes the essential information about an attitude object, this becomes part of our mental representation. The relationship between an object and its attitude becomes stronger and stronger if we think about it repeatedly. By doing so, we will be sure about our attitudes, they will be easily accessible to us and hereinafter it will be relatively difficult to change them (Smith, 1993).

In the context of social integration of people with disabilities, an opinion has been intensified over the years that considers inclusion to the mainstream education system as a solution for children with SEN. Article 24 of the United Nations Convention on the Rights of Persons with Disabilities states that State parties recognize the right to education for people with disabilities. This will ensure inclusive education at all levels of the system and the possibility of lifelong learning. Its main purpose is to promote the development of children with disabilities to unfold their capabilities, self-esteem, talents, and creativity. It is therefore necessary for members of the community to have as much information, personal experience, and understanding as possible about people with disabilities. Nowadays inclusive education is the focus of social inclusion for people with disabilities. The most important question is: how can we manage that (Kőpatakiné, Mayer & Singer, 2006)? Inclusive education plays an important role in tackling disability stereotypes and can help to create a long-term, positive attitude of students in order to contribute to a more inclusive society. (Beckett, 2009 id. Moore & Nettelbeck, 2013). Numerous studies have reported that placing a student with disabilities in an inclusive environment is by itself not sufficient to promote a positive attitude among his/her peers (McDougall, DeWit, King, Miller, & Killip, 2004 id. Moore & Nettelbeck, 2013). In addition to several factors, parents and teachers play an important role in shaping and modeling attitudes (Aiden & McCarthy, 2014). In order to shape the attitudes of children, they need to be aware of, and find out about the issues of disability itself. It is important that disability-related knowledge transfer leads the children towards positive attitude. Disability awareness programs play a key role in drawing attention to disability and long-term acceptance of people with disabilities. Versatile, well-structured and well-run programs can positively influence children’s attitudes (Ison, McIntyre, Rothery, Smithers-Sheedy, Goldsmith, Parsonage & Foy, 2010).

In 2017, with the financial support of the National Lottery Company of Hungary and with the professional help of the Council of Disabled People’s Organizations (FESZT) and the ELTE Bárczi Gusztáv Faculty of Special Education, the Salva Vita Foundation announced a national tender named ‘High 5!’ for primary and high school students. The idea originally comes from Spain.

The common mission of the European Disability Forum (EDF – an umbrella organization for the EU member disability organizations) and European Lotteries Association (EL) is to promote the social integration of people with disabilities in Europe. This intention was announced in a cooperation agreement in Madrid 2011 at the headquarters of the National Organization of Spanish Blind People (ONCE, member of both organizations), and was confirmed in 2014. They intend to contribute the integration of people with disabilities in the following four areas: employment, sponsorship, sharing of best practices and awareness-raising. As a part of awareness-raising a proposal named ‘Concurso ONCE’1 for school-aged children has been announced since 1984 by ONCE. The purpose of the proposal is to allow children to meet with disability in their early age, and to form their attitude to become open-minded, accepting, responsibly thinking and prepared members of a diverse society. Additionally, the program contributes to forming adults’ attitudes (parents’ and teachers’) who also take part in this awareness-raising indirectly.

1 https://www.concursoescolaronce.es/?lang=en
The Spanish announce the application in five categories each year, for 8-10 year old students; 10-12 year old students; 12-16 year old students; students over 16 years and for children with special educational needs. Since the beginning, more than 5.5 million students, 41,000 schools and 120,000 teachers participated in the program.

High 5! – disability awareness program for children

According to the applied practice of ONCE, 10-18 year old students in school groups can participate in this program managed by a mentoring teacher. There are no different age categories, both primary and high school students can apply but management of a mentoring teacher is required.

The application requires a preliminary program plan which includes the unique idea of the applicant group for a low-budget, short-term program together with disabled people. One of the main points of the tender is to share the personal experience of the applicant groups through the interaction with others as a good example and good practice. The ideal program plan is an ingenious, low-budget program which is feasible (short-term) and is a pleasant activity for both parties.

There are mentors and experts who can join the programs and give assistance if it is needed by the applicant group. During the implementation, applicants have to provide documentation with photos/videos/written materials about the awareness program, which can help the professional jury to evaluate and decide who will be among the winners. During 2017 there were 50 disability awareness programs realized and the best ten school groups won 1300 Euros each. A wide range of programs were implemented last year, such as: one-week camping with disabled children, presentation of different professions (decorator, carpenter, mason) in practice, dance performance, preparation of a home page for blind people, wheelchair basketball championship etc.

The applications were evaluated by the following criteria: how creative the idea of the awareness program is; how fun and interactive it is for both parties; is provided information accessible; the way of documentation – does it reflect the mood of the program; what was the message of the program.

(www.adjegyotost.hu)

The prizes were handed over to the winning classes at an award ceremony, where the children could also take part in awareness-rising programs. A surprise prize was also given to a lucky group: a visit to Spain where they had the chance to meet the ONCE organization.

Materials and methods

More than 75 schools from different areas of Hungary applied to the tender submitted by the Salva Vita Foundation, from which the professional jury found 50 draft plans adequate to be implemented. In order to collect information, the tenderers decided to use the questionnaire method. It was important to choose a method that allowed gaining information simultaneously from more people, and was not time-consuming. The sample was based on the students and teachers out of 26 schools – elementary and high schools – who participated in the tender. The data collection was structured along a predetermined questionnaire, on a paper basis, which consisted mostly of open-end questions in both IN and OUT surveys. There was a total of four types of questionnaires, two for the students and two for the teachers. In each group one (IN) was to be filled out before the awareness program was implemented and one (OUT) after. The questions are shown in 1. table.

The questionnaires were built around three main factors, so they focused primarily on the mapping of prior knowledge, emotions and experiences about disability, while questions of personal experience and personal opinion were also built into the surveys. In determining attitudes towards people with
disabilities, the most important questions were the ones about emotion and motivation. Social attitudes are built up in a hierarchical system which are structured by emotions.

Results
We have to highlight the limitations of the validity of the results, as there are no matching sample numbers for IN and OUT surveys, so the conclusions can only be interpreted within certain limits. Nevertheless, due to the relatively large number ($n = 535$) of the samples, we attempted to get an overall picture of the effect of disability awareness programs. The IN survey for teachers was filled out 36 times while OUT 40 times. The IN survey for students was filled out 244 times while OUT was filled out 215 times.

The first question of the survey was to identify which disability groups were known to the participants. According to today's conceptualization in Hungary, these may be: intellectual disability, learning disability, hearing impairment, visual impairment, physical disability, autism spectrum disorder, speech disability. A new conceptual category has emerged in recent years as psychosocial disability, which is currently most commonly used by professionals. On this basis, the maximum number of disability groups is 8, so the diagrams were depicted accordingly.

1. diagram Average of correctly named categories

The first diagram shows the average number of disability groups correctly named by teachers and students based on the results of IN and OUT. As stated in the IN survey, teachers named 3.91, rounding up to 4 categories, while the students named 2.39, so rounding down they could name two categories correctly. The difference can be substantive according to the knowledge and experience of the adults in relation to students. The first diagram also shows the outcomes of the OUT survey, which displays worse average values for both teachers and students than in the IN. Here the teachers named 3.33 rounded to 3 categories, while the students likewise named 2.22 rounded to 2 categories again. If we don’t round the results, lower values are shown in the OUT than in the IN surveys, as indicated in the first diagram. Two-sample t-tests were used to compare the two groups (teacher IN with student IN and teacher OUT with student OUT). And based on statistical calculations, it can be concluded that there is a significant difference between the two results in both of the groups compared.

Comparison of IN and OUT questionnaires for using the correct term of disability groups before and after the awareness program is only possible within certain limits. Since the ‘$n$’ of the two questionnaires are not the same, they can not be compared to each other. In spite of this we attempted the statistical analysis as shown in 2. Table, as the sample is relatively large ($n = 535$).
As shown on the 2. diagram in the case of IN, the average of the disability groups named jointly by teachers and students is 2.59, while in the OUT the same value is lower, 2.35. Compared to the maximum value of 8, both results are significantly low. From the students’ answers it stands out that there was a difference in the most often mentioned categories between primary school and high school students. In the input questionnaires, primary school students most often identified physical disability (46 cases) and visual impairment (44), while for high school students it was ‘mental retardation’ (81). As these children become older, they typically mock each other with abusive phrases which can be linked to intellectual disability. This may be the reason why high school students named that category more than their younger companions. In the output questionnaires, the term ‘mental retardation’ often named by high school students decreased, but not sufficiently (70).

All in all, studying the answers in the surveys it can be said that both the students and the teachers often use medicalized concepts when defining disability categories. This was present earlier in the medical model of disability, which is an outdated approach due to the paradigm shift in the 1980s. The following names were common among the answers: ‘Alzheimer’s disease, schizophrenia, epilepsy, Parkinson’s disease, allergy’.

In addition to the ones mentioned above, the following questions were used to map students’ knowledge about disability ‘2. Describe how many people belong to the disability groups you know in Hungary!’ and ‘6. What do you think, what kind of support is required by a person with disability? Please name them!’ There were very way-out responses to disability groups regarding numeric occurrences in Hungary. There were mostly blank questionnaires, but otherwise the completed answers rarely approached reality. This may be because for many students a person with disability appears in their minds as a fictitious individual (until they meet one, or hear any information about one). Therefore it is difficult for the students to associate real, numerical data with it. For the 6th question, the students generally described generalities such as ‘help; care; provision,’ but there were also frequent answers about financial support like ‘work; money.’ ‘They need donations.’ The other most commonly mentioned form of support was ‘psychological support’ like ‘spiritual help, like love and acceptance.’ In the output questionnaire the students were asked again: ‘11. Describe how you can help a person with disability.’ In the answers to that question there appeared a new point of view from the students: ‘I will ask them, how can I help?’ ‘I learned how to accompany blind people, if it’s needed I can help properly.’ ‘In what do they need my help.’ At the same time, the ‘spiritual aspect’ (psychological) continued to play a prominent role in responses: ‘I’ll pay attention and listen to them.’ ‘Acceptance is very important, it’s a great help for them.’ In addition, responses to the practical things needed for everyday life appeared such as: ‘I will help in crossing the pedestrian way, if necessary.’ ‘I can help with running errands.’ ‘Accompany them to a physician.’
Question Nr.5. of the IN questionnaires for students regarding whether a child with a disability is present in their institution. They were also required to write down the type of disability of their schoolmate. Hong, Kwon and Jeon (2014) found that the development of children’s attitudes towards disability is positively influenced by the experience of personal encounter with people with disabilities, regardless of their structure.

The following Table summarizes the average of the correct description of disability categories, depending on the answers to the 5th question.

3. diagram The presence of a child with disability in the institution according to the students

| Schoolmate with Disability in the Institution | No response; 20; 8% | I don't know; 7; 3% | Yes; 82; 34% | No; 135; 55% |

Statistically there is a significant difference between the two answers, which means that if a child with disability is present in a given institution, the respondents could name more disability categories correctly.

The 9th question of IN survey for students was ‘9. Why did you decide to take part in the awareness program?’, tries to reveal the motivation of children for the application to the program.

4. diagram Types of motivation of students to participate in the program

The answers to the question were analyzed and divided into three categories based on the content, according to intrinsic, extrinsic and mixed motivations. There were no answers to this question in 17 cases, but the 4th diagram also shows that more than half of the students (126) had extrinsic motivational factors to participate in the program. They mainly named material (“I want to win money.”; ‘It would be good to win because of the prize.’) or social rewards (“The others said it would be good.”; ‘At the request of my classmate.’; ‘). In 72 cases the motivation was clearly intrinsic (“I want
to get acquainted with people with disabilities.’; ‘I wonder who the disabled are.’; ‘I wonder how they live their everyday lives.’). In addition, there were 29 answers in which both types of motivation could be found. For comparison to these results, question 14. of the OUT questionnaire for students was ‘What was the best experience for you in the program?’. By analyzing the answers, we gained information about how the children felt, what their opinion was and what attitudes they had after completing the program.

5. diagram Experience of participation in the program

When analyzing the answers to the 14th question, four categories have been created (positive, negative, neutral or mixed + and -). Based on these, students’ answers were categorized. Student’s responses in 110 cases – so more than 50% – were fully positive about spending time together with people with disabilities. Besides that, there were 50 mixed responses, which, also lags far behind the ratio of neutral responses, i.e. 53 cases. It is clear that the positive experience is predominant compared to merely neutral experiences. It is important to mention that there was no answer which contained only negative experience, this is why it’s not mentioned on the pie chart.

Discussion
As mentioned before, all the results that have been shown in this study have to be interpreted within certain limitations, they are nor representative nor valid. Further research requires using a standardized questionnaire (for example CATCH attitude scale or MAS attitude scale) to obtain valid and reliable results, since it is very important to monitor the effect of an “intervention’.

Evaluation of the results and the questionnaires conclude that the concepts of disability groups have not been sufficiently clarified neither among students nor among teachers. There can be several reasons for this. During the program, a mentor (who has been previously prepared on disability issues) and an expert (one or more persons with disability) were assigned to each school team. The mentor’s job was the professional mentorship while the expert(s) participated in the program. It is possible that the efficiency of the prepared mentors was not proper or they could not pass the knowledge sufficiently on to their team. It is also questionable what form the knowledge about disability was delivered in (frontal education, interactive tasks), as this might also affect the attachment of the new knowledge. In addition, even the composition of the questionnaire could have caused problems for the participants. The question ‘What sort of disability groups do you know?’ may suggest that the participant should name those disability groups that have been more widely acquainted during the program. Within the framework of the disability awareness program, it would have been necessary to familiarize with the correct terminology. At the same time, the knowledge of the students in the study
as a result of the encounter with people with disabilities - increased thanks to the awareness programs. Regarding the given support, they gained more precise skills and knowledge about disabled people and how to help them.

The personal relationship between different groups (typically developing children and children with disability) can facilitate the overcoming of stereotypes and reduce hostility (Barr & Bracchitta, 2008). In their research, Hunt and Hunt (2000) found that those who are related to people with disabilities have a more favorable attitude towards them. They also found that positive attitudes towards people with disabilities occur during personal contact, because it causes individuals to access information that does not strengthen their prior stereotypes. The study revealed that the children asked were more aware of disability if there was even a minimal personal relationship with a disabled schoolmate or anyone who is living with disability.

As we could see from the diagrams, the existence of a prize has greatly contributed to the high proportion of extrinsic motivation types. Research shows that the effect of rewarding does not clearly increase the expected behavior, so in our case, the money-making itself will not necessarily lead to a more positive attitude towards disability. The rewarding system is well-structured if its information aspect is dominant (Kim, 1998). Most of the children were well-pleased with the awareness programs and the contact with people with disabilities.

Regarding the motivation, it can be concluded that preliminary extrinsic willingness to participate in the awareness-raising program, as seen in the study, did not result in a negative or predominantly neutral attitude towards children with disabilities. The most important of all the results perhaps is that the children had a good time and will mostly have positive experiences with people with disabilities and this can contribute to a more positive attitude towards this topic, so the awareness-raising programs reached their desired goals. Smart (2008) found that attitudes towards people with disabilities are shaped in positive direction, when there is a connection with them, as a result information is obtained which eliminates stereotypes, and also if this connection is personal, intimate and rewarding for both parties (Barr & Brachitta, 2015). Based on research by Pettigrew and Tropp (2008), it can be said that building relationships in a structured environment and with institutional support further increases the likelihood of positive attitude forming. For example, Meyer, Gouvier, Duke and Advokat (2001) reported that students had a more favorable attitude towards people with disability if they had the opportunity to co-operate with them within a project. The “High 5!” program intended explicitly to serve this purpose, providing a connection between people with disabilities, students and their teachers in majority institutions. Not only at the level of education and knowledge transfer but also at an up close level, where they can have a real experience from which each participant can benefit according to their capabilities.

Disclosure statement
No potential conflict of interest was reported by the authors.

References


### Appendices

#### Tables

1. **Table: Question of the input and output surveys**

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Student</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IN</strong></td>
<td><strong>IN</strong></td>
</tr>
<tr>
<td>1. What sort of disability groups do you know?</td>
<td>1. What sort of disability groups do you know? Please name them!</td>
</tr>
<tr>
<td>2. Which disability group is closest to you? Why?</td>
<td>2. Describe how many people belong to the disability groups known by you in Hungary!</td>
</tr>
<tr>
<td>3. Where can you meet people with disabilities most frequently?</td>
<td>3. Where can you meet people with disability most frequently during your weekdays?</td>
</tr>
<tr>
<td>4. Have you ever been in touch with a disabled person?</td>
<td>4. Have you been in touch at least once with a person with disability in the previous month? underline: yes-no</td>
</tr>
<tr>
<td>5. Have you ever had a student with disability?</td>
<td>5. Have you ever had a schoolmate or more schoolmates with disability? If the answer is yes, please write-down, which disability group they fall under!</td>
</tr>
<tr>
<td>6. In your opinion, what kind of knowledge do you have in this topic? (Please rate your knowledge of disabilities on a scale of 1-10)</td>
<td>6. What do you think, what kind of support is required by a person with disability? Please name them!</td>
</tr>
<tr>
<td>7. In which area would you like to enrich your knowledge?</td>
<td>7. What do you expect from the programme to which will be implemented by your team?</td>
</tr>
<tr>
<td>8. Do you have a special qualification in the area? If you have, what sort of?</td>
<td>8. How will you help the implementation of your program?</td>
</tr>
<tr>
<td>9. Do you think that something will change in you during the program? If the answer is yes, what do you expect?</td>
<td>9. Why did you decide to take part in the awareness program?</td>
</tr>
<tr>
<td>10. Do you think that something will change in your students during the program? If the answer is yes, what will change?</td>
<td></td>
</tr>
<tr>
<td>11. If you have any other comments or remarks, please write it down!</td>
<td></td>
</tr>
<tr>
<td><strong>OUT</strong></td>
<td><strong>OUT</strong></td>
</tr>
<tr>
<td>12. What sort of disability groups do you know?</td>
<td>10. What sort of disability groups do you know? Please name them!</td>
</tr>
<tr>
<td>13. Which disability group is closest to you? Why?</td>
<td>11. Describe how you can help to a person with disability!</td>
</tr>
<tr>
<td>14. Where can you meet people with disabilities most frequently?</td>
<td></td>
</tr>
<tr>
<td>15. Have you ever been in touch with a disabled person?</td>
<td></td>
</tr>
</tbody>
</table>
16. Have you ever had a student with disability?
17. In your opinion, what kind of knowledge do you have in this topic? (Please rate your knowledge of disabilities on a scale of 1-10)
18. Did your knowledge extend because of the awareness programme?
19. Did anything change in you because of the awareness programme?
20. Did something change in your students because of the awareness programme?
21. Please write down your comments and remarks about the programme here.
22. In your opinion, what are the strengths of High 5! project?
23. What would you do differently in the future?
24. Have you got enough help during the project?
25. Do you think this project is an adequate tool for forming a disability-related attitude?

12. In your opinion, what has changed in you’re a) knowledge, b) attitude during the High 5! program?
13. How did you contribute to the implementation of your program?
14. What was the best experience for you in the program?
15. What would you change in the future regarding to the program?

2. Table Mean and standard deviation of correctly named categories in all four of the surveys

<table>
<thead>
<tr>
<th>p&lt;0,05</th>
<th>n</th>
<th>mean</th>
<th>+/- SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>teacher - IN</td>
<td>36</td>
<td>3,91</td>
<td>1,05</td>
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<tr>
<td>student - IN</td>
<td>244</td>
<td>2,39</td>
<td>1,52</td>
</tr>
<tr>
<td>teacher - OUT</td>
<td>40</td>
<td>3,33</td>
<td>1,24</td>
</tr>
<tr>
<td>student - OUT</td>
<td>215</td>
<td>2,22</td>
<td>1,35</td>
</tr>
</tbody>
</table>

3. Table Mean and standard deviation of correctly named categories by students if yes=there is a disabled schoolmate, no=there is no disabled schoolmate in the institution

<table>
<thead>
<tr>
<th>p&lt;0,05</th>
<th>n</th>
<th>mean</th>
<th>+/- SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>82</td>
<td>2,92</td>
<td>1,3</td>
</tr>
<tr>
<td>no</td>
<td>135</td>
<td>2,07</td>
<td>1,54</td>
</tr>
</tbody>
</table>