

THE PERCEPTION OF SPECIAL EDUCATION TEACHERS TOWARDS PUPILS WITH DOWN SYNDROME

(Physical, cognitive, health, social, learning and improve special education for Down Syndrome children in school)

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Abstract— This study aimed to investigate the perception of special education teachers on the characteristics and problems of children with Down Syndrome. This study is a survey using a questionnaire which has 45 items administered to 50 teachers of special education. The study is adopting quantitative research concept. Data were analyzed using the Statistical Package for Social Sciences version 22.0 for descriptive window, which are to generate descriptive and inferential statistic. The finding have shown that learning a critical problem among children with Down Syndrome is a high level, exceeding the third quarter or 75 percent giving positive feedback. Overall, the finding clearly show that the positive feedback on the characteristics and problems of children with Down Syndrome. Also concluded that in order to teach children with Down Syndrome, a teacher needs to understand the characteristic and learning problems of students with Down syndrome before being able to improve the quality of special education services.

Keywords— Perceptions; Teachers; Down Syndrom

1. Introduction

Education is a necessity for all human beings and is learned from one's birth (Slavin, 2003). Every individual from birth until the end of his life will undergo an educational process whether it is realized directly or indirectly. It is therefore an obligation of parents, communities and teachers to provide educational exposure to these special needs students to ensure that they are not left out of the flow of life and society. With that knowledge and skill it can give valuable meaning to the children to be independent and take care of their own lives in the future.

In order to educate and improve the ability of students categorized as special students, the syllabus enacted does not have to be different from the normal student, emphasis on physical, emotional, spiritual and intellectual development in line with the philosophy of national education (Yusuf, 2007). Children with Down syndrome are also excluded from following a special education stream to gain knowledge that can help them when they finish schooling. Among the agencies involved in the development of special citizens in Malaysia are the Ministry of Health, the Ministry of Women, Family and Community Development, the Ministry of Higher Education and the Ministry of Human Resources (Jamila, 2005). Efforts to help disabled people are never neglected in our country because we assume that these groups are special in our society.

Some people are confused with the term of Down syndrome. Down syndrome was detected by a doctor named Langdon Down in 1860. He published the first description in the medical world about Down syndrome. The next study was conducted by Jerome Lejeune a physicist from France in 1959. He has discovered the addition of chromosomes to the 21st chromosome. For normal people the chromosome number 21 is

2 copies but for the Down syndrome, they have 3 copies of chromosomes. Down syndrome is also referred to as the Trisomy 21, in other words, those with 1 chromosome, which causes them to be categorized as a Down syndrome.

Down syndrome is also said to occur in the absence of abnormalities in chromosomes where chromosomes are structures that contain genetic living cells containing information inherited from parents. It contains genetic code that controls and directs distribution, growth and development cell function. A normal individual has 46 chromosomes. Each person gets one of each father's chromosome pair and one from his mother with the other meaning each person gets 23 chromosomes from the father brought by the sperm and 23 chromosomes from his mother carried by the egg.

Children with Down syndrome is a child with many problems. These disadvantages can be seen in terms of their physical characteristics, the health problems they face, subtle and sensory motor development, conversation problems, social problems, cognitive problems and vision and hearing problems. Based on these statements then the children with Down syndrome should be given due attention to help them survive the allegations and challenges of life. To realize that requirement, the researcher relates the relevance of Piaget learning theories. Piaget's learning theory has always been linked to the concept of teaching and learning of children with Down syndrome because Piaget cognitive development theory emphasizes four important stages in the cognitive development process namely sensorimotor, preoperational, concrete and formal operations (Suparno, 2003). This is appropriate for children with Down syndrome and the group is said to have the advantage in visual learning (Fidler, 2005).

2. Problem Statement and Objectives

Special students or special children are a group of disabled students and have learning problems. They need specialized education and services to develop their own potential and progress. Special education refers to a specially designed lesson to complement the needs of an extraordinary child and certain facilities (M.Sofi, Rohana.H, Amirmudin, 2015).

Issues that often arise in the teaching of special education in schools include aspects of academic qualification and professionalism, knowledge of the characteristics of students' special needs and the ability of teachers to deliver special education content (Aini, 2013). According to Tahir (2009), special needs educators need to adapt their learning methods with various types of disabilities experienced by students under their guidance. The approaches and methods employed also tend to the ability of special students in the long term not only to nurture independent traits among themselves but also to enhance their role as part of the community contributing to the overall development of the nation.

Children with Down Syndrome are one of the disabled and special needs groups who are often concerned about and become an issue in the study. A variety of perceptions are often heard and the impetus for researchers to study the physical, cognitive, social and health features of the child's down syndrome. In addition, researchers are keen to look at the learning problems faced by children with Down syndrome and how to improve the services of special education teachers to help the children in school.

3. The Purpose of Study

This study was conducted to identify the perceptions of special education teachers on the features in children with Down syndrome, the learning problems in children with Down syndrome and improve services for teachers in special education schools and department.

4. Research Objectives

In particular, this study looks at the perception of special education teachers on several things like:

- Examine the perception of special education teachers on the physical, cognitive, social and health features in children with Down syndrome.
- Look at the perceptions of special education teachers on the problem of children's learning Down syndrome.
- Review the perception of education teachers to improve special education services

5. Research Questions

Based on the statement of the problem, the researcher wanted to study:

- What are the perceptions of special education teachers about the child's physical, cognitive, social and health features of the Down syndrome?

- What are the perceptions of special education teachers about the problem of children Down syndrome in their learning process?
- How can special education teachers improve special education services to help Down syndrome children?

6. Literacy Review

Special children like Down syndrome is one of the target groups of social development programs, which the government is committed to helping. They also want to get the same economic and social opportunities as well as to enjoy the country's developmental flow (Fong, 2001) which insists they are able to do some things like others if given the opportunity.

Mohd Sharani (2004), said that society should not assume that the children of the down syndrome did not contribute to the development of the country but gave the country a burden to provide their needs. However, society should understand the children that they also have dreams and aspirations to actively participate in social, economic and political life after they leave school.

While Puteri Roslina (2008), the children of the Down syndrome are visual learners rather than auditory students. Hence the use of concrete in the children's environment of Down syndrome is indispensable for promoting cognitive development and stimulating and enhancing their level of learning. Bennetts & Mark (2002), also says that down syndrome children have hearing skills and this affects their communication skills, language and academic developments.

Based on the research, the researcher concluded that the Down syndrome had a problem in listening and needed aids that focused more on visual materials. It also shows that children with syndrome down should be given early exposure in learning using visual materials so they can learn well like normal children.

There are some insights and perceptions from various parties about the Down syndrome. At school, schools also have their own perceptions about the Down syndrome. The lack of understanding and skills about these groups led teachers to less confidence to face and to teach the children of the Down syndrome. Based on the observations made by the researcher found that there are not many schools that have pupils Down syndrome in special education classes. Hence, researchers want to look into the understanding and perception of the special education teachers themselves about the Down syndrome children.

Inadequate teacher training is also a major issue that hinders the provision of adequate and trained teachers in special education (Scheuermann et al., 2003). In order to provide effective education for children with special needs then special education teachers need to be provided with the basic skills of primary school and special education (Simpson 2004).

7. Research Methodology

This study is a survey study using questionnaire as a research instrument. There are 45 items distributed to 50 special education teachers. The data were analyzed using SPSS Version 22.0 to produce descriptive and inferential statistics to

answer the objectives and questions of the study. In summary this study can be explained through the framework of the study theory as shown in Figure 1. The independent variables consist of the characteristics of the students of the Down syndrome and their learning problems while the dependent variable is enhancing the services of special education teachers to help the children with Down syndrome in school.

8. Research Methodology

Before you begin to format your paper, first write and save the content as a separate text file. Keep your text and graphic files separate until after the text has been formatted and styled. Do not use hard tabs, and limit use of hard returns to only one return at the end of a paragraph. Do not add any kind of pagination anywhere in the paper. Do not number text heads-the template will do that for you.

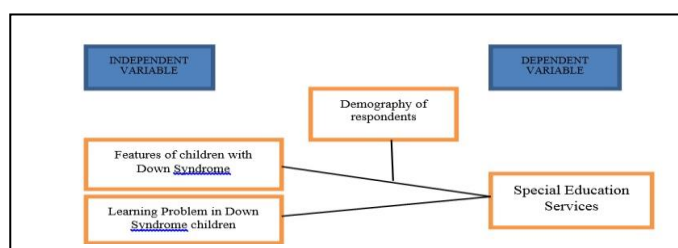


Figure 1

9. Discussion of Study Result

The first test was to test the reliability of the instrument of study, which included independent and dependent variables. It was found that the overall value of Cronbach's maze for this study was within 0.774 ($\alpha = .774$) to 0.950 ($\alpha = 0.950$) for the rest of the statement which was higher than 0.7000, which was the level of acceptance which showed internal consistency among the study variables as stated by Hair et. al, (2007).

10. Respondent Background

The respondents' background shows that 14 respondents are men and 32 respondents are women. About 33 percent of respondents are aged between 31 and 40 years old. The dominant ethnic is Malay 46 percent followed by Chinese 15 percent, Iban 11 percent, Bidayuh 9 percent and the rest are other natives of Sabah 14 percent. The majority or 91 percent of the first-degree educated respondents and the remaining 9 percent are bachelor's degrees. In line with the teaching profession, 57 percent of respondents were teachers who attended postgraduate courses, 26 percent graduate diploma, 11 percent bachelor's education and 11 percent college certificate. In line with the education sector, special education, for 68 percent learning problem courses, 26 percent hearing loss and 6 percent vision problems. Apart from special education options, there are also respondents who specialize in special recovery, Chinese language and visual arts. Another component is teaching time in a week that shows 67 percent of respondents teach at least 26 times a week. Teaching experience is between 5 years up to 21 years and more than half of the respondents are teaching in rural areas.

The main constructs of the study are the features of the children with Down syndrome, the problem of children with syndrome down learning and the enhancement of special education teacher services.

11. Objectives of the Study 1

Objective 1: Examine the perception of special education teachers on the features in children with Down syndrome.

The features of the children with Down syndrome are divided into four main features namely physical, cognitive, health and social features. The highest mean was recorded for the social features in the children with Down syndrome of 4.44, followed by physical features at mean 4.26, health at 3.71 and cognitive characteristics at 3.54 as shown in table 1. Feedback from respondents was high for social characteristics. This can be clearly observed without the use of scientific methods. For example, children with Down syndrome are proactive but rather alone. As we can see the children with Down syndrome have physically different in terms of limbs compared to normal children.

Table 1: Results of the Feature Analysis in Children with Down syndrome

Construct of Study	No.	Alpha Value (α)	Min	SP
Physical Properties	6	.774	4.26	4.26
Cognitive Features	4	.795	3.54	3.54
Health Features	6	.874	3.71	3.71
Social Features	5	.852	4.44	4.44

The findings of this study were supported using hypothesis testing using 95 percent degrees of freedom or at the significance level of 0.05 two-way tests. This hypothesis test used Pearson Correlation testing method to determine significant levels and then recommend whether the hypothesis was accepted or processed.

H01: There is no significant relationship between respondent's background and perceptions of the characteristic in children with DS.

The results of the correlation test showed that perceptions on the social characteristics of Down syndrome children had significant relationships with sex ($p = 0.019$), proving that female respondents had higher perceptions than men. However physical, cognitive and health characteristics have no significant relationship with gender factor among respondents because the significance value exceeds 0.05 on two-way tests. This explains that gender factors do not influence respondents' perceptions of physical, cognitive and health characteristics compared to characteristics the social significance. The next is significant level at <0.05 , indicating that there is a significant relationship between health characteristics with professional approval, specialization, specialization and teaching time of the week. It can be concluded that health factors are the essential characteristics that need emphasized among children with Down syndrome.

12. Objective of the Study 2

Objective 2: Review the perception of special education teachers on the issue of learning problems in children with Down syndrome.

The learning problems among children with Down syndrome can be divided into two categories namely the critical and moderate problems as shown in Table 2. The subdivision is based on the mean value recorded as the result of the study.

This study has identified seven statements that can be categorized as critical learning problems among children with Down syndrome. The mean score is above 4.30 compared with moderate learning problems (10 statements) which have mean values between 3.50 and 4.20.

It can be seen that critical problems can influence academic achievement of Down syndrome children, because these critical problems will limit the freedom and ability of the children. For example, difficulty communicating clearly limits children in reading aloud. While the problem of moderate learning also influenced academic achievement of children with Down syndrome but at less significant level. This simple problem if able to handle it will contribute to outstanding achievement. Therefore, special education teachers have to adapt the teaching and learning process in line with the students' ability.

Table 1: Analysis Results for Children Learning Problem in Down syndrome

Health Problems	No.	Min	SP Statement
Critical problem	7	4.45	0.743
Simple problem	10	3.90	0.894

H02: There is no significant relationship between the background of the respondent with the problem of the children with Down syndrome.

The results of the correlation test found that the perception of children learning problem in Down syndrome had a significant relationship with professional approval ($p = 0.04$) and specialization (0.016) which recorded a significant level less than 0.05. Other backgrounds do not have significant relationship with children learning problem in down syndrome is proven by the value of $p > 0.05$. Thus it can be concluded that, the perception of learning problem of Down syndrome influenced by profession approval obtained and specialization among teachers of special education.

13. Objectives of the Study 3

Objective 3: Review the perceptions of teachers to improve the special education services in Down syndrome children in school.

Based on the findings of the average mean value recorded for all study constructs are more likely to be positive, meaning they agreed with the statements raised to improve the special education service. The positive feedback recorded for all such statements is over 90 percent.

H03: There is no significant relationship between respondent background and special education services among children with Down syndrome.

Pearson Correlation test shows that four background components of academic qualification ($p = 0.007$), professional

qualification ($p = 0.002$), teaching time ($p = 0.001$) and teaching experience ($p = 0.032$) proved by the value of $p < 0.05$. This explains that these factors have an influence on the perception of special education teachers to serve as special education.

14. Recommendations and Implications

A. Implications of research findings

Overall, this study has responded to the questions and the objectives of the study that have been submitted. From the results of the analysis, it is found that the respondents surveyed respond positively to the characteristics of Down syndrome children, the learning problem in Down syndrome children and special education services. The findings of this study are particularly beneficial to special education pupils especially pupils with Down syndrome, academic and non-academic staffs as well as education policy distributors so as not to ignore the importance of these special people and their needs.

B. Advanced review

Further studies have to be carried out on larger samples and set sample backgrounds to obtain higher validity. Conducted on the same sample group over a long period of time to see whether special education services and learning will change over time or not. Make the differences between respondents who have been exposed to special education services as compared to those who have never received. Study whether teachers are master the special services used in the teaching and learning process. Other studies can be conducted on other schools either in rural or urban areas.

Additionally, further studies are in the form of seeking the relationship between special education services and academic performance factors, socioeconomic status, and other activities for Down syndrome children in school.

15. Conclusion

Each respondent has a different styles in handling and teaching special education. As a trusted teacher to educate these people, they need to understand the style of special education services practiced. With this, they can provide appropriate teaching methods so as to enhance the students' interest in the subjects taught among students Down syndrome. Not every skill that is used is correct, as teachers need to find the most appropriate learning skills in themselves so as to achieve an effective learning process for the privileged ones.

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