PERCEPTION OF LOW VISION STUDENTS IN SAUDI ARABIA REGARDING THEIR INTEGRATION INTO REGULAR SCHOOLS

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SUMMARY

Background: Low Vision, also referred to as "partial sight", has been defined as "reduced central acuity or visual field loss which even with best optical correction still results in visual impairment from a performance standpoint. Low vision affects many aspects of life, the main goal in the field of low care therefore, is to assist the low vision patient in making the best use of remaining vision for a reasonable quality of life. Education of students with low vision has become a central focus of concern in special education in different countries such as Saudi Arabia. Student with visual impairments have received educational services in a variety of settings including schools for blind or in segregated classrooms in a public school building.

Objective: The aim of this study was to investigate the subjective response of Saudi Arabia low vision students towards their integration into regular schools.

Methods: Twenty-nine (29) low vision students who study in three regular schools participated in this study. The average age was 13.2 years. They have not used any Low Vision Aids either when they study in blind schools or after they have been integrated into regular schools. A questionnaire was used to measure the subjective response of the student towards the integration in comparison with segregation (School for the Blind).

Results: The result of the questionnaire shows that 75.86% of normally sighted students deal friendly with low vision students. Also, it has been found that 79.31% of the visually impaired students were happy to be in regular schools; however, 3.45% was unhappy. Moreover, it has been found that 86.2% of them support the concept of integration in comparison with segregation. In other words, they are not supporting isolation in terms of education.

Conclusion: It can be concluded from the study that the integration of low vision students in the regular schools can be very effective and play an important role in improving the quality of education provided to them.

INTRODUCTION

Vision is an essential part of everyday life, depended on constantly by people at all ages. Vision affects development, learning, communication, working, health, and quality of life. Low Vision, also referred to as "partial sight", has been defined by Meher and Freid (1975) as " reduced central acuity or visual field loss which even with best optical correction still result in visual impairment from a performance standpoint. The main goal in the field of low vision is to maximize the patient's present level of low vision or partial sight, for a reasonable quality of life. Globally and according to the World Health Organization (WHO, 2002), more than 161 million people were visually impaired, of whom 124 million people had low vision and 37 million were blind (WHO, 2004).

However, refractive error as a cause of visual impairment was not included, which implies that the actual global magnitude of visual impairment is greater. Visual impairment is not distributed uniformly throughout the world. More than 90% of the world's visually impaired live in developing countries, and WHO estimated the visual impairment in Saudi Arabia to be 227,611 in 2002 (World Health Organization report, 2004).

Education of students with low vision has become a central focus of concern in special education in different countries. Education of persons with special needs began in the United States in the early 1900s. Students with visual impairments (blind or with low vision) have received educational services in a variety of settings. They were taught either in separated schools or in segregated classrooms in a public school building (Barraga and Erin ,1992; Bishop, 1986; Dote-Kwan and Chen,1995; Mason *et al*,1997; Hallahan and Kauffman JM,1997). Due to the major importance of integrating the visually impaired children in the schools inducted by the educational organizations in the

western countries, and due to the educational, psychiatric, social and technical concepts that the integration includes, many definitions of that integration have been proposed. The definition by Kaufman et al, (1975) is considered to be the most panoptic and most common definitions. They considered "Integration" to mean "to integrate the non-normal children whom are qualified, with their consorts. This

ntegration shall be educative, social according to a programmed method and for a specific period of time in a continuous manner as per the needs of each child. Moreover, the responsibilities of each person either in the administration, education and technical members shall be clear and specific whether in the general or special education courses". In addition, Birch (1974) defined "integration" as a union tying the special and general education to present different services to all the children as per their respective needs of education. Although it is generally possible to claim that there are no differences between the visually disabled children and normal children at the basic education needs, but there is a difference in the method used to satisfy those needs, as well as in the necessities that are integrating the education methods, whereas in one hand the normal children depend on normal fonts, in other hand, the disability level is confining the education method for the disabled one (Scholl,1986).

The blind children depending on Braille method as a basic method to study whilst the low vision children count on normal fonts and in case of difficulties, some additions will be applied such as magnifying the font size in printing process; moreover, they can use some vision aid such as optical lenses of all sorts, or video conference circuits and so on (Corn,1986). Bishop (1986) reported that, there are 70 elements that could contribute to the success of integration process to integrate the disabled children in the regular schools. These elements were subdivided into four main categories which are: student's elements (i.e. elements based on themes related to the disabled children themselves), scholar elements, family elements, and social elements.

Historically, special education in Saudi Arabia began in 1958 when a blind man called Mr.Alghanem learned the Braille system of reading and writing and introduced it to a few other blind men (Almosa, 1992). Two years later, the first government-training institute for male students (AL-NOOR institute) was opened in Riyadh, the capital city of Saudi Arabia. Most of the researchers consider this step as good beginning of special education in the country in the sense that, the blind people can have their own schools instead of attending the regular

schools. The mid-nineties was the turning point of services provided for students with disabilities. Institutionalisation is no longer considered as the only service then can be provided to low vision or blind students (Lowenfeld, 1975). Special education programs were introduced into regular schools. These programmes include resource rooms, self-contained classrooms, intenerate teachers and consultation. However, institutions will not be eliminated, but their goals or functions will change to provide: 1- in-service training centers, 2- information and support service centers, 3- alternative service delivery models for multiple handicapped students who may not be served in regular schools due to the severity and complexity of their challenging conditions among others.

In Saudi Arabia, integration of visually impaired students in regular schools started in 1991 (The General Secretariat of Special Education Report (GSSE), 2004). It was first introduces in the eastern part of the country (Al-Ahsa Area). The students were integrated into regular schools, but in special classrooms. Ministry of Education classified them according to their visual status into three groups: 1- Those who have a Visual Acuity of 6/24 with correction; 2- Those who have a Visual Acuity of 6/24-6/60 with correction; 3- Those who have a Visual Acuity of less than 6/60 with correction. Vision of each group was checked on regular basis in terms of vision. According to latest report from the Ministry of Education that has been published in 2004, there are 111 integration programs applied in different schools in Saudi Arabia (The General Secretariat of Special Education Report (GSSE), 2004).

This study therefore is aimed to investigate the subjective response of Saudi Arabia low vision students towards their integration into regular schools.

MATERIALS AND METHODS

Twenty-nine low vision primary school male students who study in three regular schools participated in this study. They were previously study in blind schools. The visual acuity of the participant was measured by using Snellen visual acuity chart. Their acuities ranged from 0.25–0.1.Their ages ranged from 11 to 14 years with a mean of 13.2 years. They have not used any Low Vision Aids either when they study in blind schools or after they have been integrated into regular schools.

Students' characteristics including age and diagnosis are given in table 1. A questionnaire was used to measure the subjective response of the student about their integration into regular school in comparison with segregation (school

for the Blind). The three questions that have been asked were printed in large print (N20). The questionnaire was limited to three questions to enable young low vision students cope with the questions, since it is their first time to be targeted in such scientific study and long questionnaire may hinder understanding, which may lead to false results.

RESULTS

The questionnaire was collected and analyzed. The response rate was 100%. The first question was: How do normally-sighted students deal question was: How do normally-sighted students deal with you as low vision students? Three choice answers were given to the students: Do they deal with you: Good, Pity or Bad. The result of the questionnaire shows that 75.86% of normally sighted students deal good with visually impaired subjects (Figure 1).
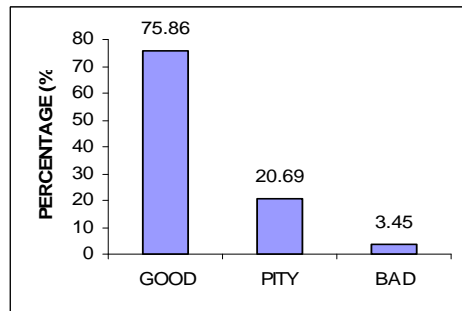

Fig. 1: **Response of the subjects' relating with the Normally-Sighted Students.**

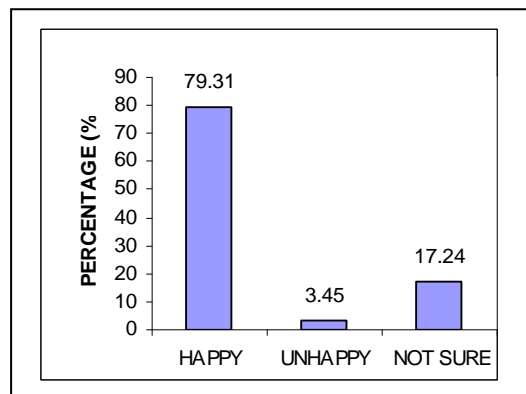**Fig. 2:** **Level of subjects' satisfaction with Regular School.**

The third question was designed to investigate how the subjects view their integration in terms of its effectiveness in education process. It has been found that 86.2% of them support the integration in comparison with segregation (Figure 3). In order words, they are not supporting isolation in terms of education.

DISCUSSION

Education of Saudi Arabia low vision students in isolated school environment started in 1960 when the first blind institute opened in Riyadh city (GSSE, 2004). Before this date, they used to study in ordinary schools along with normally- sighted student. The reasons that led to imminent transfer of the educational programs dedicated to visually-disabled children, in the Kingdom of Saudi Arabia are as following:
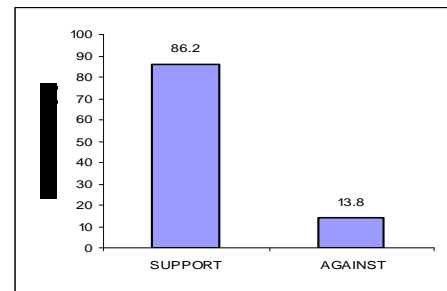

Fig. 3: **Subjects' view about Integration Program.**

Table 1: **Characteristics of Low- Vision Students.**

Student No.	Age (years)	Cause of low vision
1	12	Cataract
2	13	Cataract
3	14	Optic atrophy
4	13	Strabismus amblyopia
5	14	High refractive error
6	14	Corneal opacification
7	13	Albinism with nystagmus
8	13	Cataract
9	13	Congenital optic atrophy
10	13	Retinal detachment
11	14	Cataract
12	13	Nystagmus
13	13	Retinitis pigmentosa
14	13	Cataract
15	14	Congenital optic atrophy
16	14	Cataract
17	14	Cataract
18	14	Congenital optic atrophy
19	12	Cataract
20	14	Nystagmus
21	11	High refractive error
22	13	Congenital optic atrophy
23	13	Corneal opacification
24	14	Strabismus amblyopia
25	13	Nystagmus
26	14	Albinism with nystagmus
27	12	Strabismus amblyopia
28	13	Corneal opacification
29	13	Retinitis pigmentosa

1- The changes that occur in visually disabled children's education environment in the Kingdom of Saudi Arabia can be considered as natural. This change may be due to the influence from European educational systems which has been implemented by most countries.

2- Braille reading and writing system, which is a uniformed system for the visually disabled persons has contributed to the emergence of separate schools, noticing that they used Braille system as a principal mean of work for onsistent visually disabled children education in the regular schools.

3- Lack of supporting programs in the regular schools might leave these schools less equipped to a certain point that they cannot perform their expected role in teaching the visually disabled children.

4-Lack of specialists in the special education leads to independency in understanding, the capabilities and competences of the visually disabled person to assimilate the different knowledge arts (Almosa, 1992).

Among the historical partings is that, teaching of the visually impaired students in the Kingdom of Saudi Arabia began in the normal schools, then switched to separated day-time schools with the emergence of schools such as AL NOOR BLIND SCHOOLS in the year 1960 (Almosa, 1992). Most of those institutes started diverting to segregated schools, whilst the teaching of the visually impaired student in United State of America started in segregated schools in the year 1832, then headed to diverting to normal schools in the year 1900 until the majority of the visually impaired students are being educated in the normal schools (Lowenfeld, 1973).

It is also noted that, the experience of teaching the visually impaired student in the regular schools in the Kingdom of Saudi Arabia enjoyed a great success even though there were some difficulties facing the normal schools at that time, such as lack of potentials, lack of special educators, and non-existence of supporting programmes for special education process. Also, the manner of integrating the visually impaired students in the regular schools in United State of America is in fact a successful style, considering the high percentage of the visually impaired students that are actually studying in regular schools and the achievements made so far.

The result of the present study shows that 86.2% of student support the integration in comparison with segregation (Figure 3). This can be attributed to many reasons that highlighted the advantages of the integration of visually impaired students in regular schools. This could be due to the fact that, the normal schools are the natural environment that regular and visually

impaired student can grow in respectively. Therefore, establishing some modifications in a natural environment to satisfy the special needs of the visually impaired student is simpler and better than modification of an artificial environment to satisfy the basic needs to those children (Lowenfeld, 1975). The integration gives an opportunity to visually impaired student to stay at home with their families for the whole education period, which will enable them to be more efficient working in their social surrounding, and also allowing the families and social environment achieving their commitments toward the children (Pinebrook Review, 1954; Spungin, 1978)

Integration constitutes a flexible educational method allowing increase, improving, diversifying the educational services provided to the disabled students (Kaufman *et al*, 1974).

Teaching the visually impaired children that are qualified to be integrated in the regular classes, will provide them a chance to social interaction with their normal consorts (Christophos and Renz,1969; Fisher and Rizzo,1974) . The integrated environment will work on increasing social acceptance of the disabled children from their normal consorts and that was very clear in the present study (Figure 1).

Integration will increase the chances of communications between the normal and physical challenged children (Newberger,1978; Thompson, 1983). The educational integration will allow finding an educative environment that encourage the academic competition between all the students, as reported by "Elenbogen" (cited by strain *et al* (1981), and that will contribute in raising the academic performances of the disabled children. The educational merging could indicate –either to specialized and non-specialized persons- that the resemblances between the disabled and normal children are greater than the dissensions.

On the other hand, the success of the integration process of the visually impaired students in the regular schools will depend on 1-presence of qualified teachers, trainers and low vision specialist in regular schools; 2-Enviromental modifications that would enable the disabled students to engage in their academic and social activities in a without difficulties and hindrance.

It can be concluded from the finding of this study that the integration of low vision students in the regular schools are very effective and play an important role in improving the quality of education provided for low vision students. The plan to conduct further study of integration in Saudi Arabia is ongoing.

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