

# The Importance of Sports in Integration of Visually Handicapped People in to the Society and the Physical Effects of Visually Handicap

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## ABSTRACT

With the gymnastics movement initiated by Jahn and Friesen in the 19th century, the foundations of the sports for the visually impaired were laid unwittingly. With the outdoor sports initiated after the 2nd World War, the visually impaired individuals were provided certain areas of activity other than their training fields, under the same circumstances as the normal individuals, and an important step towards the removal of the integration and orientation problems of these visually handicapped people was taken. Similar to those of the free time sports activities, the aim, mission and objectives of the sports for visually impaired individuals comprise many fields such as strength, speed, endurance, skills and movement. In the sports for the visually impaired individuals, improvement of the movement sensitivity, touching, mastery and vibration sensitivity were shown as special objectives and missions for the compensation of the visual effects and observation. Learning targets and duties for the visually impaired people differ. Also, the time of commencement of the disability is a very important factor and the necessity for the visually impaired individuals to use their residual capacities<sup>1</sup> as frequently and assertively as possible during the sports courses is underlined. For the visually impaired people to be able to compete in certain sports activities, utilization of senses such as hearing and tasting plays a great role. In this study which was analysed within the scope of the international literature, information regarding the subject is provided via the monographs from certain international magazines and newspapers. Among the learning objectives of all the areas of visual impairment are; strengthening the body scheme, compensation of the missing development features, balancing the stance, organ and coordination weakness and limiting the conspicuousness of the psychomotor deficiencies.

**Keywords:** *visual impaired, visual impaired individuals and sports, blindness and sports*

## INTRODUCTION

Until the beginning of the 16<sup>th</sup> century, most of the blind people were excluded from the society. Since 1528, it was introduced which targets should be determined for the blind people's participation into the social life. The targets that were introduced here were mostly pedagogical approaches. Erasmus von Rotterdam taught writing to the blinds in 1528 and Louis Vives took the blinds' logically attendance as the main theme in his writing in Strasbourg. "This pedagogical study about the integration the blinds into the society could not be a provable research subject in the following 250 years" (21, p.59).

The first institution for the blinds was established in Paris, in 1784 and after this institution, it was laid the foundations of the pedagogical care to the blinds. While there were 16 institutions in Europe in 1808, they were doubled in 1937 (8). In 18<sup>th</sup> century, the publishing about activities for people who are blind was started again by Edmonde Reinier (21). But there were nothing about sports in that publishing.

Development of the sport for the blinds is very closely related to the emergence of the idea of gymnastics. Neither schools for the visually handicapped nor the other members who are not visually handicapped in the society do not think about the importance of physical education, so this kind of beginnings were developed the people who experienced that disability.

## APPROACH

In a study that researches the targets and the development of sports in visually handicapped, it will be true to benefit from the little resources. As a result of monographies that are collected from magazines and newspaper articles, it can be interpreted better. Therefore, as a data collection technique, document-scanning was used in this study and by the collection of monographies from the articles from international books, magazines and newspapers, the aims of visually handicapped sports and specific learning targets for disability have been analyzed in the context of the literature and concluded.

## FINDINGS

### The Development of Sports for Visually Handicapped and Social Integration

In 19<sup>th</sup> century, the sport for the visually handicapped was started with the action of gymnastics by Jahn and Friesen unconsciously. It is observed that the visually handicap sport has been done for the first time in the year of 1847 officially (21). Klein, who is a pedagogue, opened a school that gives education in German language for visually handicapped in Vienna for the first time and published a book named "Gymnastics for Blinds". The first standard schedule was carried out in 1888 in visually handicap school (21).

The real development in visually handicap sport was started with the desire of people who has done sports before, effected badly and became visually handicapped after The First World War. Even though the visually handicap sport could not proceed until The Second World War, after the Second World War, because of the people who lost their ability to see, it reached high levels (21). After that date, it has taken an important step to the integration these visually handicapped people into the society by providing facility to act, with the races that were done outside, under the same circumstances but outside their own training ground. According to the report of Salamaco that was published by UNESCO in 1994, it is supported all disabled or non-disabled individuals' participation in the community under the same circumstances (20,2). The relationships with the other people, meetings and races within the group are more important for the visually handicapped people (7). The integration of disabled person into the society is accelerated and the integration process gets easier with a sporting activity (6). The increasing numbers of participators by these kinds of races and races done at an outer field have clearly shown the need for activeness of the visually handicapped people.

### The Physical Effects of Sport at Visually Handicapped People

The targets of visually handicapped contains a lot of motoric areas such as strength, speed, solidity, skills, activeness etc. as in the targets of disabled or free-time sport activities (1). Lorenzen has emphasized the importance of the boosting the sensitiveness for movement in the sports of visually handicapped. Touching, addressing, and vibration should be included in the private goals for compensation of the lack of visual effect. Additionally, in the sports classes must be drawn more attention to the goals related to the orientation, to co-operation and to education of people helping the blind (16). In his studies, Kosel distinguishes the goals of learning for the blind people and visually handicapped. Nevertheless, he touches on the date the handicap happened to be as he considers it very important and he also tries to emphasize the necessity of using and training other senses in sports classes with as much repetition as possible for the blind and visually handicapped people (12). Especially the use of auditory and gustatory skills by the visually handicapped people means a lot and the skill of sight also plays a central role at outer sense (4). Visually handicapped people have a series of difficulties on the perception and interpretation of items at the right time. Among these difficulties is the perception of outer movements done by his own, team mates and game equipments gets harder. Consequently, very late and wrong reactions leading to the failure are observed.

The lack of performance causes the inferiority complex and reluctance for movement interrelated, and shows that one's own sportive activeness is stopped by the advancing age (1). The visual performance of a visually handicapped person is always related to the demands of emotional and social surrounding and also to the varying conditions within the group (19).

That the groups in which the blind and visually handicapped people do sports together are not homogenous causes difficulties at implementation of the sports activities. According to Kosel, children whose skills are not prompted suitably show a very delicate failure (11,13,14). These individuals frequently stay away from the group and endanger not only themselves but also other blind students. On the other side, youngsters and adults with visual impairment are very valuable helpers for their friends in the groups.

### **The Physical Impact of Sports at Blinds**

The perceivable and livable world of the blind is very different from the one of a sighted person. The completely deficient eye perception and the restricting of optical effects cause a characteristic behaviour which shows itself especially in psychomotorics. In this way, the blind are firstly in the mood of timid and waiting behaviour in the unknown and unusual surroundings. This behaviour can only be overcome when the sports teacher or the trainer gives the feeling of confidence and that he can reach the success. The social life within the sports groups eliminates the negative outcomes of blindness such as living alone and not being open to the outer world. Apart from anything, the action-in reactions in the blind children are so impressive as in the sighted children. However, the facility of free movement development is lack for the blind children. Here psychomotoric features which are lost during the proceeding ages such as the movement impulses (shaking, turning), abnormal forms of gestural expression (games without words and moving gestures) and movements related to eye (eye rubbing) emerge in the end (24).

The negative experiences often repeated in the daily life may tire the blind while moving, and may also cause a complete passivity. By the way, the rhythmic vibration of the movement is left missing. Profoundly blinds do not have an optical design. So their perceptive and motoric education should be started during the early childhood. Within this term tactual and acoustic knowledge is taught. During the first years of the blind who are in the early childhood period, they may have perception in their other senses but as the time goes by they start to lose these abilities. The perception of basic movement such as handling, walking, running etc. means a lot for the future development of a child together with the time, when the blindness happened. Generally, optical impulses which are regarded as the natural decoder of movement in the blind children are deficient.

### **Targets of the Sports in Visually Handicapped and in the Blind**

That the use of some remaining abilities such as auditory and gustatory skills by the visually handicapped individuals is especially important. Meanwhile, Lorenzen includes the followings within the learning goals for the visually handicapped and the blind;

- empowering of the body
- compensation for developmental features that are lack and fallen behind
- stabilizing of posture, organ and coordinational weakness
- lessening of clearness at psychomotoric faults
- improvement of economical and rhythmic movement style
- experience of movement and equipment
- education of basic movements
- improvement of socio-integrational behaviours (15,16)

Important goals can be determined based on the psychomotoric behaviour profiles of the visually handicappeds and of the blind people. This situation goes on chronologically till the blindness in the periods of pre-school, while-school, youth and adulthood. The goals of visually handicappeds and blinds bear resemblance to each other in some respects.

Among these goals;

- empowering of the awareness of performance,
- to initiate relationships via musical and sportive activities that to be done with the groups who are not handicapped,
- conveyance of the information about some of the reasonable kinds of sports that the blind and highly

- visually handicappeds are not able to do directly (9,10),
- by tempting for free time activities and active participation out of school sports, adjusting the child's psychomotorical performance skill with versatile movement impulses to his age group,
- *"the correction of postural disorder by determined gymnastics, removing the organ weaknesses with a systematic heart-circulatory training, enabling the visually handicappeds to use other existing capacities systematically"* (9, p.258)
- The activation of the child's feeling of moving alone without fear and difficulty
- Supporting the motivational process via the experience of first success
- Compensating the developmental deficiency; to balance the lack of posture-, organ and coordination
- To make use of auditory and gustatory skills of the blind
- To help improve the child's motoric functions
- *"To create the suitable conditions for the psychomotor skills' natural developments and in the child's pre-school years with regard to facilities"* (9, p.258).
- To prompt the development with suitable toys and moving spaces,
- Giving the service of consultancy with educated personal to the handicappeds
- Via systematic education, to provide help proper to the conditions of being blind (9,10)
- To improve general movement and stuff experience by various gym equipments
- To make entrance to the technics by making use of the experiences of sports branches and games included in the blinds' sports.
- The training of basic movements for learning sport motorical skills
- By taking the interests and intentions of the youth into account, the training of general moving quality within special sports branches and games proper to handicappeds in a planned way,
- The protection of psycho-physical performance skills of belatedly blinds is included in the sports primarily.

Within the flow of motoric learning process, how and what time the sensoric informations above will be initiated is based on some points such as; *"the degree of handicap, the understanding of speech, learning goals, the complexity of movement, the phases of learning process, truly interpretation and implementation of acoustic signals"* (9, p.246).

Teacher of physical education or the training specialist must analyze the movements well and must take care of motoric traction points of the learner.

## DISCUSSION AND RESULT

Among the learning goals of all the visually handicappeds and the blind are; strengthening the body scheme, the compensation of lack and neglected developmental features, the balancing of posture, organ and coordination weaknesses, the limiting the obvious psychomotor faults. Since the psychomotoric behaviour profiles of visually handicapped and blind people, these individuals may have some motorical traction levels. Methodical learnings of the visually handicapped affect varying information getting, the process of information and their learning process. The beginning of motorical learning in childhood is generally composed of copying. Optical impulse is in the form of solving for the initiation of movements. Movements perceived via the eye are arising from copying in the same way. In the individuals with visually handicappeds and the blind some motorical traction levels happen to arise.

According to Meinel, the level of motorical traction includes;

- coordination skills
- coordinative skills
- intellectual conditions (17,18)

Conditional skills of the visually handicapped child show developmental backwardness obviously and this developmental backwardness initially causes the declining or loss of performance skills such as speed, strength and solidity. Conditional skills of visually handicapped people are better developed when compared to blind individuals. The level of coordinative skills is fairly decreased with limiting the visual ability and with sense organs' being deactivated. In this way, very important information for motoric learning in blinds gets lost and certainty and accuracy for visually handicappeds completely vanish.

Another result is that the limiting of sensomotoric development for the important experience of moving and material for the blind. Existing illnesses may increase in the result of physically over loading, moreover very different illnesses can also come along (23). Consequently, deficiencies show up in physical coordination and implementation of movements. Tactual information may be seen as a base for the first movement training. Besides, the eye has an important function at movement organizations and movement controlling. These clues show that the visual organ has a very crucial role at learning and implementation of movement. The gaining of new methodical skills is a very demanding learning process for visually handicapped children which is motivated extrinsic and must be directed in the beginning. Primarily basic principle in sports for the visually handicapped is learning to learn and in this way to see better by understanding the best inner and outer conditions with the raising visual effect (19). Therefore, exercises by which the person is going to use his visual ability at the best level must be prepared. At the same time, advice of eye doctors related to sportive activities of visually handicappeds must be taken into account and during the implementation of the games/sports branches over forcing risk factors should be thought carefully. These risk factors directly cause eye injuries for visually handicappeds and may also result in very painful outcomes for the blind (5,24). That the existence of these kinds of aches reveals field and movement fears. So, the eye doctors are to specify a prescription to prevent over loadings during sports to learn the injury level of the injured eye (9).

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The stated study results showed what kinds of deficiencies may exist if the blind children are neglected at their early motoric educations. Coordinative performance deficiency is frequently seen as posture abnormality and the weakness of strength. In the same way, if the systematic training is neglected during the youth and adulthood, lack of movement caused by handicap may induce the loss of psychophysical performance skills. Posture disorder increased by passivity, lack of skill and movement confidence, shows itself as a negative effect in the characteristics of the blind individual. Blind sportsmen have been viewed as the biggest proofs for long years that the blindness does not have the same meaning as performance and help indigence (9,10).

Visually handicapped children obviously show developmental backwardness especially at body coordination when compared to peers of the same age who don't have handicaps. In another study, done among the children between the ages of seven and fourteen, it was observed that the blind children significantly have posture weaknesses when compared to peers of no handicaps. Among the blind children included in the study, only 24 % showed the ability for normal posture and posture skill (9,10). The results of the test of body coordination, implemented by Schlling, among 103 boys and girls support this situation (22). Kosel and Froböse state that only a part of weaknesses and disorders seen in the field of body coordination is directly related to the visual handicap itself (9,10). The reason of this is that children's lack of psychomotorical education which was neglected during the childhood and their being educated in improper developmental conditions.

## REFERENCES

1. **Aksay E. (2012):** "The Importance Of Sports In Terms Of The Integration Of The Visually Handicapped People To The Society And The Physical Effects Of Visual Impairity". "2<sup>nd</sup> International Congress of Sport for All and Sport Tourism" 8-11 November 2012 Antalya
2. **Aksay E., Arslan C., Böttger A.V., Güllü M. (2011):** Suda Yapılan Hareket, Egzersiz ve Oyun Uygulamalarının Engelli Bireylerde Yaşama Uyum Sağlamada Etkisi. 13. Ulusal Spor Hekimliği Kongresi 16-18 Aralık 2011 Bursa
3. **Büttgen, Th. (1979):** Koordinative Leistungsfähigkeit von Blinden und hochgradig Sehbehinderten. Dipl.-Arbeit DSHS Köln
4. **Dröge, W. (2003):** Tanzimprovisation als Performance. Sportpraxis, 44 (5), 17-22
5. **Flick, H.&Schnell H.-J. (1983):** Augenärztliche Aspekte beim Sport und Sportunterricht mit sehgeschädigten Kindern und Jugendlichen. In: Scherer, F.: Sport mit blinden und sehbehinderten Kindern und Jugendlichen. Hoffmann Verlag, Schorndorf
6. **Guttman, L (1979):** Sport für Körperbehinderte. München/Wien/Baltimore
7. **Innenmoser, J. (1978):** Wettkämpfe im Langstreckeschwimmen für Körperbehinderte. In: Zeitschr. Rehabilitation 17
8. **Jeschke, G.(1973):** Die Schule für Blinde. In: Zeitschrift für Heilpädagogik, Heft 5.
9. **Kosel, H; Froböse I. (1999):** Rehabilitations- und Behindertensport. 2., völlig neu überarbeitete Auflage, neue Ausgabe. Pflaum. München
10. **Kosel, H.&Froböse, I. (1998):** Rehabilitations- und Behindertensport. Körper und Sinnesbehinderte. Pflaum Verlag, München.
11. **Kosel, H. (1990):** Sachbeschädigung en. In: Bundesminister für Arbeit Sozialordnung (Hrsg.): Bewegung, Spiel und Sport mit Behinderten und von Behinderung Bedrohten. Indikationskatalog und Methodenmanual. Bd. 3, Eigenverlag Bonn 827-860
12. **Kosel, H. (1981):** Behindertensport. Körper- und Sinnesbehinderte. Pflaum Verlag. München.
13. **Kosel H. (1977):** Breiten und Leistungssport für behinderte und Versehrte, in: Der Versehrtensportler Heft 26, 1977
14. **Kosel H. (1969):** 17. Internationale Stoke Mandeville Spiele in Tel Aviv, in: Der Versehrtensportler, Heft 18.
15. **Lorenzen H.& Marten G (1967):** Bewertung sportliche Leistung bei Körperschäden. Düsseldorf
16. **Lorenzen, H.(1961):** „Lehrbuch des Versehrtensport“ Enke Verlag. Stuttgart
17. **Meinel, K.&Schnabel, G. (1987):** Bewegungslehre. Abriss einer Theorie der sportlichen Motorik unter pädagogischem Aspekt. Volks und Wissen. Berlin
18. **Meinel, K. (1987):** Bewegungslehre. Abriss einer Theorie der sportlichen Motorik unter pädagogischem Aspekt. Berlin
19. **Mersi, F. (1975):** Die Erziehung Sehbehinderter. In: Deutsche Bildungsrat. Gutachten und Studien der Bildungskommission 52, Sonderpädagogik 5, Blinde, Sehbehinderte, Mehrfachbehinderte. Stuttgart
20. **Rheker, U. (2010):** Bewegungsraum Wasser – Raum für Inklusion. In: Gemeinsam Leben 18. Jg., H. 3, Juli 2010. Wahnheim

- 21. Papagerio, W. (2005):** Die Geschichte des Behindertensports seit dem Ende des 19. Jahrhunderts.  
Doktorarbeit Köln
- 22. Schilling, F. (1975):** Zusammenfassung der Diskussion zum Rahmenthema: Aspekte der Integration motorischer, sensorischer, kognitiver, psychischer und sozialer Entwicklung. In H.-J. Müller, R. Decker & F. Schilling (Hrsg.), *Motorik im Vorschulalter. Wissenschaftliche Grundlagen und Erfassungsmethoden*. Band 1: Schriftenreihe des Bundesinstituts für Sportwissenschaft. (S. 88-89). Schorndorf: Hofmann.
- 23. Schnell, D.&Bolsinger, A. (2010):** Augenkrankheiten und organischen Einschränkungen beim Sport- und Bewegungsunterricht mit Blinden und Sehbehinderten“ In: Sport und Bewegungsunterricht mit Blinden und Sehbehinderten. Band 1: Praktische Handreichungen für den Unterricht. Martin Giese (Hrsg.) Meyer&Meyer Aachen 83-115
- 24. Schnell, D. (1996):** Sehorgan und Sport. In: Bartmus, U. et al. (Hrsg.): Aspekte der Sinnes und Neurophysiologie im Sport. Sport und Buch Strauß – Köln
- 25. Schlatterer, J. (1989):** Koordinative Leistungsfähigkeit von Blinden Kindern Dipl.- Arbeit DSHS Köln
- 26. Scholz, W. (1981):** Vergleichende Untersuchung zur Beurteilung des Gleichgewichts-vermögens von Sehgeschädigte. Dipl.- Arbeit DSHS Köln
- 27. Varel, F. (1981):** Koordinative Leistungsfähigkeit von sehbehinderter Kinder. Dipl.- Arbeit DSHS Köln