# 41 - PHYSICAL ACTIVITY ADAPTED IN AQUATIC ENVIRONMENT FOR VISUAL DEFICENTES

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## INTRODUCTION

It's known that the history of the person with a deficiency varies of culture according the culture and reflects beliefs, values and ideologies that, materialized in practical social, establish differentiated ways of relationships between this and other people, with or without deficiencies. In accordance with Bruns (1997), the deficiency is presented as a phenomenon constructed socially and, thus, to be or to be "deficient" is almost always relative to other people who are considered without "deficiencies".

The occurrence of the blindness and its different meanings are inserted in the proper history of the humanity. The society changes of attitudes to the blind person occur, as Amaral (1994), the same way, due to the social organization to which is subjected. The blind person or with even though low vision, has been, in the majority of the times, excluded of the society and, in a general way, they are present in minority groups.

Vision is the most important relationship canal of the individual with the exterior world. Such as the hearing, it catches next or distant records and allows to organize, in the cerebral level, the information brought by the other sense organs. Recent studies disclose that to see is not an innate ability, or either, at birth we still do not know to see: it is necessary to learn to see, second (GILL 2000).

The visual deficient, as well as any person, needs educational interventions next to his real necessities. The limitations caused in the visual field do not have to disable the deficient to express his potentialities in other tasks, for example, the sporting activities, in which the other senses can be favored.

The physical education adapted to the child and blind adults, works enclosing her/his development, not only in the psychomotor area, as also cognitive, social, affective and sensorial the aspects. It uses the body as instrument, as main tool. Starting from the knowledge and domain of this body, it uses the controlled movement as a way, the absolute respect of the individuality of the pupil as basic strategy. Taking into consideration this conjecture, we try to understand the perceptions of the coordinators, involved professors and participants in the project of Extension "Physical Activities and Inclusive Sport" in relation to the activities that are being developed in aquatic environment.

"All loss or abnormality of a structure or psychological, physiological or anatomical function that in general generate incapacity for the performance of activities in the daily one ", as describes the decree nº 3298 de 20/12/1999 that regulates the Law that dispose the National Politics for the Integration of the Deficient (Política Nacional para a Integração do Portador de Deficiência - Corde).

"The one whose perception of light, even so can assist in its movements and orientation, is insufficient for acquisition of knowledge by visual means, needing to use the Braille system in its process of teach-learning." (Barraga,1985,p.18).

"The one that posses difficulty in playing visual tasks, even with lapsing of corrective lenses, but that can improve its capacity to carry out such tasks with the use of compensatory visual strategies, low vision and other resources, and ambient modifications." (Corn e Koenig, 1996,p.4)

### Adapted physical activity

The expression of the term Adapted Physical Education, appeared in the decade of 1950 and was defined by the American Association for Health, Physical Education, Recreation and Dance (AAHPERD), as a diversified program of developers activities, adequate games and rhythms to the interests, capacities and limitations of students with deficiencies, that cannot have their participation in vigorous activities of a program of physical Education, according to contribution of Pedrinelli (1994).

It is through the physical activities that the deficient person can establish a new concept of body, starting to detect and to develop the remaining potentials, directing the thought, the reasons and the behavior ahead of her/his condition. The more stressed that the limitation is, a partial or complete adaptation to her/his limitation and the requests of the environment can be obtained by the adapted physical education, in several situations, as it was added (MENEZES and SAINTS, 2006).

The Physical Education, according to Costa and Souza (2004), starts to worry about physical activity for people with deficiency, approximately, in the end of the 50ies, and the initial approach for the practice of these activities was the doctor. The same authors still record that the history of the adapted sport for people who present some special necessity, started in the city of Aylesbury, England.

### Visual Deficiency

The first concern, in Brazil, with the education of the visual deficient appeared in 09/12/1854, according to the report of the author Masini (1994). The Emperor Pedro II lowered the Imperial decree nº 1428, creating the Imperial Institute of Blind Boys. After the advent of the Republic this Institute started to call Benjamin Constant, only in charge Institution of the education of visual deficient in Brazil, until 1926.

The description of the visual deficiency can be found divided in three periods, as mentioned by Vigotsky, in the contribution of the authors Batista and Enumo, apud Novo and Menandro (2000, p. 160-161):

·first period (Antiquity, Average Age and part of Modern History): in this period existed two contradictions, when the blind one was seen as an incapable person and also as a mystic and privileged person for a more refined philosophical thought for not having one of the senses (the vision);

·second period (Enlightenment - century XVIII): period in which the visual deficiency was seen as a phenomenon that put into motion new concepts of life and not as a deficiency. The author attributed to this new understanding of the D.V. to the theory of substitution of the sense organs (where the lack of one of the sense organs is compensated by a more advanced development of other sense organs), not for being follower of it, therefore was conscientious of no evidence of this theory as general rule for studies realized

·in the beginning of the century, but yes, considering it inside of the revolutionary character that he generated;

·third period (Modern Time): time which the idea appears ahead of the complex reorganization of all activity of the psychic system of a deficiency and not the substitution of a sense organ for the absence of another one as cited at last periods.

Due to this historical evolution, we see that the visual deficient acquires credits in science, but to the society her/his life still continues presenting deficits, therefore the difficulties found for these individuals still are great, for example: work, leisure and education.

The blind child and the adult one have absolute necessity to discover, to know, to dominate and to relate their bodies to the

environment and to the people. Only then she/he will be identified as novel, forming her/his "I", interacting in the environment and in her/his social group, it is a phase of her/his development that cannot be burnt. Depending on this all development of her/his maturation, as Fertile valley (1983).

**Aquatic activities in the context of the Visual Deficiency**

Each day, a larger number of people with some type of physical disability, organic or sensorial is involved in physical activities and sports due to the benefits that they bring for the rehabilitation

and well-being. The exclusion of these individuals of the physical activity practicing or the sport can lead to the reduction of the physical aptitude, the efficiency of the movements or even of the development of motor abilities, according to AST (2000).

Swimming is one of the most appropriate sports for individuals with some type of physical deficiency, due to the benefits and the proportionate easiness's for the execution of movements with the immersed body in the water. Swimming develops coordination, aerobic conditioning, it reduces the espasticity, and it results in less fatigue that other activities. Moreover, it brings great contributions for the process of rehabilitation and can reduce the degree of weakness and complications. For people with deficiency, swimming has therapeutic, recreative and also social value.

The sportive modalities, as well as, swimming for people with visual deficiency, must be structured in a pedagogical proposal that considers beyond the relative technical aspects to the involved modality, the importance to intervene together the learner about the relative aspects of the values and ways of behavior, according to Gorgatti and Costa (2005). This way, the practice of the sport must exceed the question of the methodology, also considering its educational function.

The Visual Classification in the swimming sportive modality, according to the IBSA - International Federacy of Sports for Blind people in accordance with the CBDC - Brazilian Confederation of Sport for Blind people, are the following ones:

**(B1)**: No luminous perception in both eyes until the perception of light, but with incapacity to recognize the format of a hand from any distance or direction.

**(B2)**: Capacity in recognizing the form of a hand until the visual sharpness 2/60 of and/or inferior visual field at 5 degrees.

**(B3)**: Visual sharpness of 2/60 6/60 and/or visual field of more than 5 degrees and less than 20 degrees.

This classification only will be made by ophthalmologist's doctors in clinics or specialized doctor's offices.

**METHODOLOGY**

The Physical Education course of Centro Universitário Feevale, aiming to serve the community of Região do Vale dos Sinos/RS, offers to the extension project Special Aquatic Activities, Sports and Fights for People with Necessities: "Physical Activities and Inclusive Sport", with the objective to develop sportive activities and of leisure for people who present some type of special necessity.

For the accomplishment of this study, we count on the deposition of 6 integrant of the

ADEVIS - Associação de Deficientes Visuais do Vale dos Sinos, with ages between 40 and 65 years, that do aquatic activities once a week. We also count on the contribution of 1 coordinator and 2 professors.

We opted for an interpretative qualitative approach, case study, intending to understand the perceptions of the involved people with the practicing of aquatic activities, developed together to the Project of Extension in the Centro Universitário Feevale/RS.

This way, we used for the data collection the interview, making possible to the interviewed ones to express with freedom and spontaneity their thoughts and experiences regarding to the focus of the research, what has allowed us to extract the necessary depositions for the analysis and interpretation of the data.

**DATA ANALYSIS AND INTERPRETATION**

With the intention to make better base interpretation of the depositions, we established the detailed categories below.

**Extension Project**

To participate of an inclusive process, as underlined Gorgatti and Costa (2005), is to be open to consider and to respect the individual differences, creating the possibility to learn on ourselves and about each one of the others in a situation of diversity of ideas, feelings and action. The sport is recognized world-wide as one of the more effective practice to raise self-esteem and to develop the autonomy and independence of the people who present different and peculiar conditions for sport practical.

"Today we have clear the fact that each person has her/his singularity and our differences many times is the one that makes us special, I think that we must also take care with this proposal, therefore about some cases is necessary to have clarity of each individual limitation and how we will deal with them, is not enough to open the possibility of the school and the university education for all, is necessary to have the understanding that for some the objective conditions still determine the limits that they can reach, that these limits can be always in change".

The adapted Physical Education, according to Gorgatti and Costa (2005), will base and favor the corporal evolution of the blind person, also focusing aspects such as the self-confidence, the feeling of more value, the sense of cooperation, the pleasure of being able to make and the interfaces of these affective valences with her/his quotidian in the family, in the school and in the society, the physical education will fulfill her/his function as important facilitator element in walking of the child and the blind adult tack to the social emancipation, making possible basic conditions enabling he/she to overcome the future barriers and difficulties that certainly they will be imposed to.

**The physical education teacher's role**

*"I believe that the professional of physical education fulfills some roles, it can be the educator, the trainer, the health agent, depending on the place and the objective that he is trying to develop. This is valid for "normal" people, or without special necessities such as for those who work with People with necessities special, what changes are the characteristics and the specificity of the citizens with whom he will work!!!".*

Due to the information, it is perceived a concern in providing the physical, sportive activity and of leisure, respecting the individuality of the people, the recognition of the alterity, as well as, the responsibility of the planning and organization of the activities proposals. According to Negrine (1998), the Physical Education is an educative practice that uses itself as a mosaic of corporal practice. A pedagogical proposal of Physical Education must has the opening and the plasticity to consider the differences of contexts and the wealth that can be promoted and/or be rescued of a local culture.

**Aquatic activity Program**

The physical activity adapted is nothing else than the adequacy of methodology, adaptation of materials and techniques that come to take care of the individual differences of each person. However, such adequacies, must be based on the types and characteristics of the deficiencies so that the participation in the largest number of possible activities can provide to all, aiming, thus, its improvement to the motor, affective, cognitive level, as well as the interaction and integration with other people, as Nogueira (2000) describes it.

*"the activities program is organized from the individual necessities of the people, the planning and teach-learning*

*strategies are developed from the evaluation of the current performance of the pupil, respecting her/his limitations and at the same time stimulating her/his potentialities, by a gradual way, with the purpose to provide to the visual deficient ones the chance to live deeply activities that contribute for their social, cognitive and psychomotor development ".*

The activities schedule, planning, strategy of teach-learning are developed from a current evaluation of the pupil, in the proposed activities, this, demonstrate the concern of the professor in provide to the pupil, among of the possibilities and limitations, a fan of chances and experiences in the aquatic environment. Considering the reflection: What to make? Why to make? How to make? And how to evaluate?

**Perceptions of the participants of the project**

The accomplishment of the activities is perceived as the ones that are being developed, contributes for the improvement of the quality of life of people with visual deficiencies, reflected in the daily tasks. According to Paes (2002), the wealth of the sport is in its diversity of meanings and re-meanings, being able, among others functions, to act as facilitator in the search of the best quality of life of the human being, in all the segments of the society.

*"I try not to be absent, therefore, the lesson once a week, is too few. I feel myself well when I am here, I like very much the people who are with us ", another one speaks: "... I feel myself well, the water assists me in the movement and my expression", another commentary: "today morning I've got a bit of headache, but it is just to come here that pain disappears, still I am a little bit afraid of the water, but I will not give up", the next one pointed out that: "... it is a chance that many people still does not have, it is very good for practicing some physical activity, seems that the body is thankful".*

*" I am more uninhibited, improved my corporal expression; relaxation and communication; it improved my locomotion and balance; my posture and physical condition; it is a leisure and integration moment, therefore here, I knew people new; the physical activity in the water is very good to the health, even being once a week ".*

*"I like of everything, despite that I am still afraid of water, but what I like most is to ride a bicycle with the aid of the spaghetti; I like to swim crawl; I prefer to dive and to slide it's what I enjoy most; I already prefer to swim crawl; everything that is considered good, makes me well, I like to swim and to make elongation ".*

The answers of the participants come to transcribe a moment of satisfaction, pleasure and joy for doing suitable physical activity in the water. It is perceived for the attitudes that the visual deficient that participates of the activities, really do because he/she likes. Even being, only, once a week, it is something expected in the week, a commitment.

In the individual plan, sport practicing is so important for the people with deficiency as for any other people. The security and independence to put into motion each time more and better in the diverse situations, appear in consequence of the domain and the magnifying of the motor repertoire of these people who many times, are presented as limited ones for not having a chance to use their own body.

**FINAL CONSIDERATIONS**

After the reading and the interpretation of the answers, we can affirm that the facts told for the visual deficient disclose clearly, that the physical activity is very significant for these people, and more, is integrant and basic part for the promotion of the health and quality of life.

The perspectives that are always present, when deal with physical activities, in all different moments of the life, either deficient or not, can be contextualized in agreement the aspects: engine, affective, social and sportive. In what corresponds to the motor area, many visual deficient had cited that the physical activity provides the improvement of the locomotion, of the balance, notion of space and amplitude of the movements in general.

Regarding the affectivity some facts had been reported, such as: personal accomplishment, stimulation, improvement of self-esteem, self-confidence and acceptance. In the social area, it was perceived integration and the friendship with not visuals and their colleagues. And in reference to the sportive aspect it was noticed with clarity the satisfaction to be practicing a sportive modality, improving their health.

Being thus, we can consider that the activities are providing great advances to the participants, in the physical social and affective aspects. Finally, we understand that the accomplishment of aquatic activities as the ones that are being developed, contribute for the improvement of people's quality of life with visual deficiency, as well as, if it constitutes as a privileged space of professional formation, willing to consider and to respect the individual differences, creating the possibility to learn about herself/himself and the others in a situation of diversity of ideas, feelings and action.

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**PHYSICAL ACTIVITY ADAPTED IN AQUATIC ENVIRONMENT FOR VISUAL DEFICENTES**

**ABSTRACT**

The Extension Project "Physical Activities and Inclusive Sport" has the objective to develop activities for People with Special Necessities through the adaptation of the most varied practices for reality and the necessities of the involved groups. Among the developed activities, we report here the initial experience of the group of inclusion to the aquatic environment directed the people with visual deficiency, in the sense to understand the perceptions of the coordinators, professors and participants of the project.

This study intends to explicit, even in succinct away, a description on suitable physical activity, as well as approaching aspects of the visual deficiency in the context of the aquatic activity. Analyzing the data of the participants, manifestations of satisfaction, joy had been observed and accomplishment to be exercising some movements in the water, at last, to be able to find a space to do physical activity, contributing to the motor, affective and social development.

Regarding the professors it was contextualized that the proposed activities contribute to an effective process of improvement of the quality of life, leisure and integration of the participants. Due to the given information we can underline that, to look at the people who present different and peculiar conditions for the practice of physical activities, to understand its limitations and to respect the individuality, is the essential when it is about the diversity, either in the professional, educational and sportive sector.

**Keywords**: inclusive physical activity; visual deficient; aquatic sport.

**L'ACTIVITÉ PHYSIQUE ADAPTÉE AU MILIEU AQUATIQUE POUR LES HANDICAPÉS VISUELS**

**RÉSUMÉ**

Le Projet d'Extension « *Activités Physiques et Sport Introductif* » a pour but développer des activités pour des Personnes avec des Nécessités Spéciales à travers l'adaptation des pratiques les plus variées, à la réalité et aux nécessités des groupes concernés. Parmi les activités développées, nous relatons ici l'expérience initiale du groupe d'inclusion au milieu aquatique, directionnées à des personnes avec la déficience visuelle. Nous cherchons d'expliciter, dans la premiére partie, même si de façon suscinte, un historique sur l'activité physique adaptée qui a donné l'origine à cette pratique sportive. Ensuite, aborder des aspects de déficience visuelle et le contexte de l'activité aquatique et, à la fin, on fait quelques questionnements quant à la perception des intégrants et des professeurs responsables, participants du projet, référente à l'activité physique développée au complexe aquatique. Ont été observés des manifestations de satisfaction, de gaité, de realisation par le fait d'être en train de exerciter l'activité physique, en contribuant pour le développement moteur, afectif et social. Quant aux professeurs, a été contextualisé que les activités proposées contribuent au procès effectif d'amélioration de qualité de vie, loisir et intégration des participants. Devant les informations prêtées, nous pouvons affirmer que, destiner un regard vers les personnes qui présentent des différentes et spéciales conditions pour la pratique d'activités physiques et comprendre les limitations en respectant l'individualité, c'est l'essentiel quand il s'agît de la diversité, soit au secteur professionnel, éducationnel ou sportif.

**Mots-clés :** activité physique introductive ; déficients visuels ; sport aquatique.

**ACTIVIDAD FÍSICA ADAPTADA EN MEDIO ACUÁTICO PARA DEFICIENTES VISUALES**

**RESUMEN**

El proyecto de Extensión *"Actividades físicas y deporte inclusivo"* tiene por objetivo desarrollar actividades para Personas con Necesidades Especiales a través de la adaptación de las más variadas prácticas para la realidad y las necesidades de los grupos involucrados. Entre las actividades desarrolladas, relatamos aquí la experiencia inicial del grupo de inclusión al medio acuático dirigida a personas con deficiencia visual, en el sentido de comprender las percepciones de los coordinadores, profesores y participantes del proyecto. Este estudio pretende explicitar, aunque de forma sucinta, un histórico sobre actividad física adaptada, así como abordar aspectos de la deficiencia visual en el contexto de la actividad acuática. Analizando los datos de los participantes, se observaron manifestaciones de satisfacción, alegría y realización de estar ejercitando varios movimientos en el agua, o sea, poder encontrar un espacio para realizar actividad física, contribuyendo para el desarrollo motor, afectivo y social. En cuanto a los profesores, quedó contextualizado que las actividades propuestas contribuyen para un efectivo proceso de mejoría de la calidad de vida, ocio e integración de los participantes. Ante las informaciones prestadas podemos resaltar que, destinar una mirada para las personas que presentan diferentes y peculiares condiciones para la práctica de actividades físicas, comprender sus limitaciones y respetar la individualidad, es lo esencial cuando se trata de la diversidad, sea en el sector profesional, educacional y deportivo.

Palabras clave: actividad física inclusiva; deficientes visuales, deporte acuático.

**ATIVIDADE FÍSICA ADAPTADA EM MEIO AQUÁTICO PARA DEFICENTES VISUAIS**

**RESUMO**

O Projeto de Extensão *"Atividades Físicas e Esporte Inclusivo"* tem por objetivo desenvolver atividades para Pessoas com Necessidades Especiais através da adaptação das mais variadas práticas para realidade e as necessidades dos grupos envolvidos. Dentre as atividades desenvolvidas, relatamos aqui a experiência inicial do grupo de inclusão ao meio aquático direcionadas a pessoas com deficiência visual, no sentido de compreender as percepções dos coordenadores, professores e participantes do projeto. Este estudo pretende explicitar, mesmo de forma sucinta, um histórico sobre atividade física adaptada, assim como abordar aspectos da deficiência visual no contexto da atividade aquática. Analisando os dados dos participantes, observaram-se manifestações de satisfação, alegria e realização de estar exercitando vários movimentos na água, enfim, poder encontrar um espaço para realizar atividade física, contribuindo para o desenvolvimento motor, afetivo e social. Quanto aos professores ficou contextualizado que as atividades propostas contribuem para um efetivo processo de melhoria da qualidade de vida, lazer e integração dos participantes. Diante das informações prestadas podemos ressaltar que, destinar um olhar para as pessoas que apresentam diferentes e peculiares condições para a prática de atividades físicas, compreender suas limitações e respeitar à individualidade, é o essencial quando se trata da diversidade, seja no setor profissional, educacional e esportivo.

**Palavras-Chave**: atividade física inclusiva; deficientes visuais; desporto aquático.