

**Conclusions:**

The patients with vascular brain diseases were divided in four subgroups according to their diagnosis: first stroke, repeated stroke with neurologic sequelae, cerebral lacunarism and Binswanger's disease. They were diagnosed by CT-scan done in the first days from admission with diffuse brain atrophy.

There is dissociation between brain atrophy diagnosed by CT-scan and clinical examination of vascular patients. Presence of brain atrophy in the first days from acute stroke and the good status of patient some days ago is an example in this way.

In first two groups the principal risk factor was hypertension, age more than 61 years in 80% cases, brain atrophy was of cortical type in more than half of them.

In third group dyslipidemia was present in all cases, associated with diabetes mellitus in 8 cases and old myocardial infarction in 5 cases, most of the patients with age more than 61 years old.

Patients with brain atrophy associated with Binswanger's disease were presenting pseudobulbar syndrome associated or not with gait disturbances, with or without dementia, and leukoaraiosis on CT-scan. Arterial hypertension and dyslipidemia were most frequent risk factors founded in patients with age more than 61 years old.

Presence of brain atrophy in other diseases (rather than vascular brain diseases) was so reduced

because our neurology department is settled in an emergency hospital.

Presence of diffuse brain atrophy associated with other diseases (neoplasms with different localization, chronic alcoholism, epilepsy and brain trauma) rather than cerebral vascular diseases was in correlation with oldness of underlying disease.

The age is an important factor of risk.

Correct treatment of arterial hypertension, dyslipidemia, diabetes mellitus and other cerebral vascular risk factors delays development of brain atrophy.

Localized brain atrophy was only in correlation with brain trauma in all cases.

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## **THE EFFECT OF THE PARTICIPATION OF EDUCABLE MENTALLY RETARDED CHILDREN IN THE SPECIAL PHYSICAL EDUCATION CLASSES UPON THE ANXIETY LEVELS OF THE PARENTS OF THE CHILDREN**

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**Abstract**

Mentally retarded children live by depending on their parents in accordance with their level of disabilities. The parents may develop certain psychological disorders due to having a mentally retarded child. The situation may affect their way of life and cause high levels of anxiety. Whereas the special physical education classes give the mentally retarded children an opportunity to learn how to do several activities on their own while enjoying themselves; they also help alleviate the dependency of children upon other people.

The research is built around a hypothesis which suggests that the parents of the children who participate in the special physical education classes are going to have a decrease in their anxiety levels.

The purpose of this study is to determine the anxiety levels for the parents of the children who participate and do not participate in the special physical education classes.

The research group consists of 16 couples whose children are receiving physical education classes, which makes a total of 32 parent subjects.

The children are within an age range of 6 to 11. A total of 16 (8 practice, 8 control) children have been divided into two groups. The research was figured by an experimental type with preliminary test-final test control group. As the contents, a special physical education program consisting of warm-up exercises, functional exercises (individual, paired, group staffed, station-racecourses) and sports games (paired, types of helping each other, group competitions and games with rules) was applied to the practice group, 2 days a week and 1 hour each day. Program was implemented 20 weeks. Parent are invited as spectators. Mothers were watching all the sessions. Fathers came at the weekend.

Spielberger Trait and State Anxiety Inventory was used as a data collecting instrument. Pretest was administered before the application. Posttest was administered after the final session.

The data collected at the beginning and final of the practice program as group based with the evaluations of the mothers and fathers of the children were compared. "Wilcoxon Test" was used for the dependent comparisons.

A decrease in the anxiety levels has been observed at the anxiety levels for the parents of the children at the practice group, compared to those of the parents whose children are at the control group. This decrease, however, is not found to be statistically meaningful. There has been no change at the constant anxiety levels of the control group.

Observing their children move independently has had an effect on the parents of disabled children that greatly helped them reduce their levels of anxiety. The continuity of this kind of special physical education programs and parent cooperation can help achieve more effective results.

**Keywords:** educable mentally retarded children, special physical education, anxiety, parents

### Introduction and Research Objective

Families with handicapped children may have many problems. The requirements of the children with mental retardation may lead to intensive intrafamily anxiety by influencing the life styles of the family members. (F. Abasiubong et al, 2006, W.P. Witt et al, 2003).

Spielberger; defined worry as emotional reactions consisting of the combination of stress feeling, fear, nervousness, bad thoughts and physiological changes (J.S. Raglin, 1992). Spielberg noted that worry is divided into two, as the momentous worry and the continuous worry. The momentous worry defines the actual emotional situation, characterized by fear, anxiety, and stress. At the momentous worry, as the actual situation, which cause stress and anxiety at the individual, is eliminated, also the negative feelings disappear. But continuous worry is a personality attribute. The person tends to percept definite environmental situations as being threatening and to react with an increasing momentous worry on these situations (R.H. Cox, 1994).

In the literature, it is noted that the parents of handicapped children (especially mothers) are more under stress and have a higher level of anxiety, compared to parents without handicapped children (L.M. Glidden et al, 2003, R.P. Hasting, 2003, S.A. Esdaile et al, 2003, K.S. Frey et al, 1989, M.M. Macias et al, 2003, D. Pelchat et al, 1999, B. Ryde-Brandt, 1990).

Existing research studies suggest that parenting a child with mental retardations can be a stressful experience. However, there are few data addressing the question of how parents might experience considerable anxiety, how they might cope with this anxiety, and how this anxiety in parents of children with a mental retardation affect parental attitude.

Parents with a handicapped child are in a different combat and development process (E. Akkök,

1997, M. Margalit, D. Ankonina, 1991). If we set off from the fact that life is a development and changing process, we observe that also our children and their families, having different attributes, run through the development and changing process.

As long as the families concentrate on that what their children are able to, their strong fields and on that what they achieved, rather than on the weaknesses of their children, what they are not capable to and what they could not achieve, these changes take a positive direction.

The more parents observe these developments, these changes, the more relieved they feel themselves (E. Akkök, 1997). This situation may constitute a positive effect on the worrying level of the parents.

The research is built around a hypothesis which suggests that the parents of the children who participate in the special physical education classes are going to have a decrease in their anxiety levels.

The purpose of the study is to determine the anxiety levels for the parents of the children who participate and do not participate in the special physical education classes.

### Method and procedure

The research group consists of 16 couples whose children are receiving physical education classes, which makes a total of 32 parent subjects.

The children are within an age range of 6 to 11. A total of 16 (8 practice, 8 control) children have been divided into two groups. The research was figured by an experimental type with preliminary test-final test control group. As the contents, a special physical education program consisting of warm-up exercises, functional exercises (individual, paired, group staffed, station-racecourses) and sports games (paired, types of helping each other, group competitions and games with rules) was applied to the practice group, 2 days a week and 1 hour each day. Program was implemented 20

weeks. Parent are invited as spectators. Mothers were watching all the sessions. Fathers came at the weekend. This scale, developed by Spielberger et.al., is constituted by two sub-scales, as the continuous and the momentous, each of it consisting 20 questions (C.D. Spielberger, R.L. Gorsuch, R.E. Lushene, 1970). The momentous worry scale determines how the individual feels at a definite time and in definite conditions, and the continuous worry scale determines how the individual feels independent from the situation and conditions he/she is in. The obtained point value from the sub-scales varies between 20-80. The adoption of the scale on Turkey, its validity and reliability works

Spielberger Trait and State Anxiety Inventory was used as a data collecting instrument. are performed by Öner and Le Compte (N. Öner, A. Le Comte, 1985).

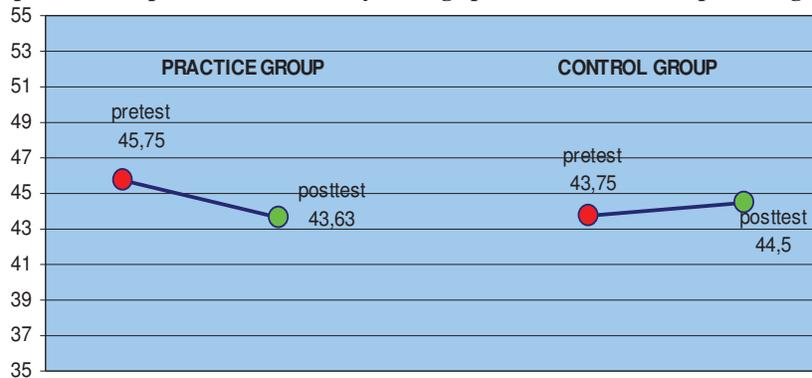
Pretest was administered before the practice. Posttest was administered after the final session.

The data collected at the beginning and final of the practice program as group based with the evaluations of the mothers and fathers of the children were compared. The data were analyzed by using SPSS 17.0 programme and “Wilcoxon Test” was used for the dependent comparisons.

**Result**

**Figure 1:**

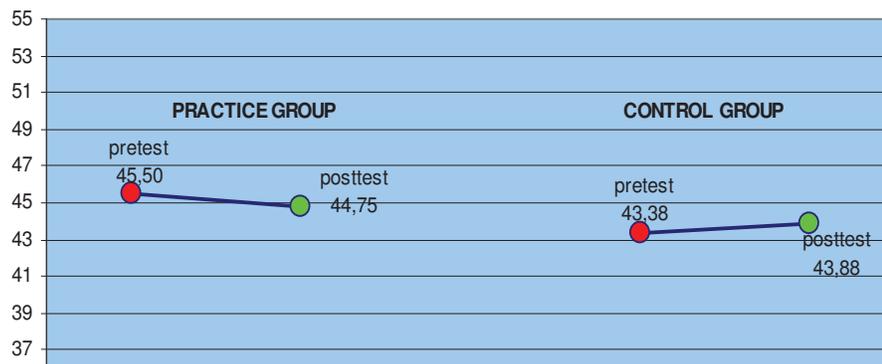
**Comperation of pre-test and post-test trait anxiety average points of control and practice groups of mothers .**



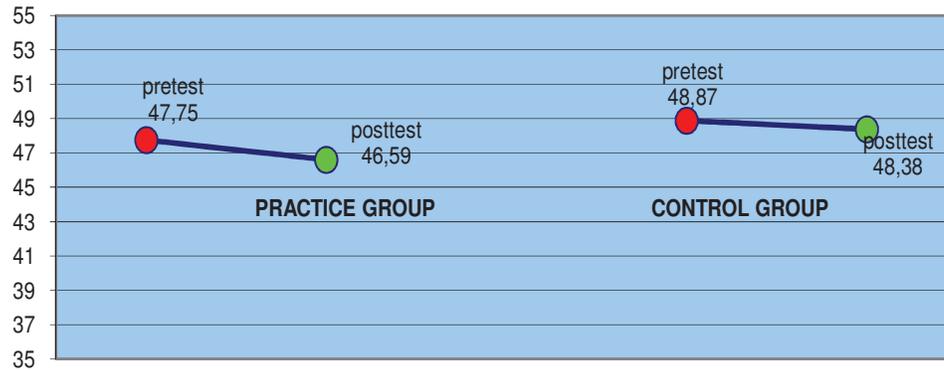
It was seen that the average points that practice group mothers got from Spielberger Trait Anxiety Scale that was applied to mothers before and after programme fell down from  $45,75 \pm 6,71$  to  $43,63 \pm 4,17$ . There was an increase in control group from  $43,75 \pm 6,71$  to  $43,63 \pm 4,17$ . These differences in practice and control group mothers were tested by wilcoxon signed rank test and it was seen that the differences were not significant statistically. (mothers in practice group  $z=1,73$ ,  $p>0,05$ , mothers in control group  $z=1,24$ ,  $p>0,05$ )

**Figure 2:**

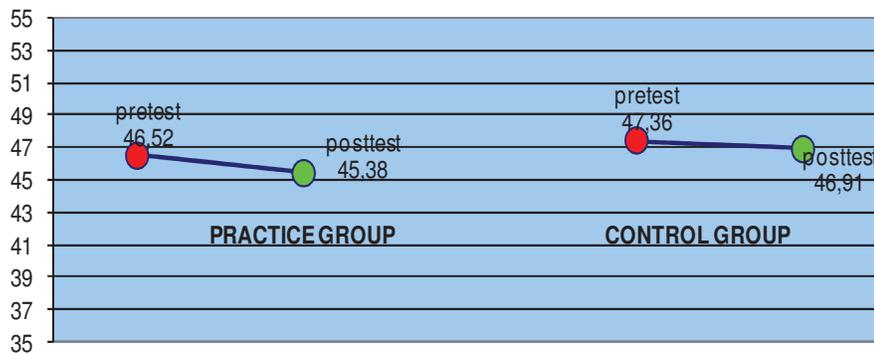
**Comperation of pre-test and post-test trait anxiety average points of control and practice groups of fathers .**



It was seen that the average points that practice group fathers got from Spielberger Trait Anxiety Scale that was applied to fathers before and after programme fell down from  $45,50 \pm 3,80$  to  $44,75 \pm 4,27$ . There was an increase in control group from  $43,38 \pm 5,92$  to  $43,88 \pm 7,83$ . These differences in practice and control group fathers according to pre-test and post-test were tested by wilcoxon signed rank test and it was seen that the differences were not significant statistically. (fathers in practice group  $z=1,33$ ,  $p>0,05$ , fathers in control group  $z=0,947$ ,  $p>0,05$ ).

**Figure 3:****Comperation of pre-test and post-test state anxiety average points of control and practice groups of mothers .**

It was seen that the average points that practice group mothers got from Spielberger Trait Anxiety Scale that was applied to mothers before and after programme fell down from  $47,75 \pm 4,01$  to  $46,59 \pm 4,12$ . There was a decrease in control group from  $48,87 \pm 5,96$  to  $48,38 \pm 7,12$ . These differences in practice and control group mothers according to pre-test and post-test were tested by wilcoxon signed rank test and it was seen that the differences were not significant statistically. (mothers in practice group  $z=1,82$ ,  $p>0,05$ , mothers in control group  $z=0,89$ ,  $p>0,05$ ).

**Figure 4:****Comperation of pre-test and post-test state anxiety average points of control and practice groups of fathers .**

It was seen that the average points that practice group fathers got from Spielberger Trait Anxiety Scale that was applied to fathers before and after programme fell down from  $46,52 \pm 5,27$  to  $45,38 \pm 4,85$ . There was an decrease in control group from  $47,36 \pm 4,13$  to  $46,91 \pm 5,21$ . These differences in practice and control group

fathers according to pre-test and post-test were tested by wilcoxon signed rank test and it was seen that the differences were not significant statistically. (fathers in practice group  $z=1,41$ ,  $p>0,05$ , fathers in control group  $z=0,66$ ,  $p>0,05$ ).

#### Discussion and conclusion

Families with handicapped children may have many problems. The requirements of the children with mentally retardation may lead to intensive intrafamily anxiety by influencing the life styles of the family members. Mentally retarded children live by depending on their parents in accordance with their level of disabilities. The parents may develop certain psychological disorders due to having a mentally retarded child. The situation may affect their way of life and cause high levels of anxiety. Whereas the special physical education classes give the mentally retarded children an opportunity to learn how to do several activities on their own while enjoying themselves; they also help alleviate the dependency of children upon other people.

Special physical education and sport activities are a mechanism that encloses the dynamics that can obviate many negative characteristics of the individuals and by means of this feature, it can be deemed as a rehabilitation instrument. It serves the community on a macro-scale, by serving all the development aspects of the individuals.

General development processes of the children with mental disabilities may be different in comparison with their coevals who have normal development processes. The scientists in this subject state that well planned physical education and sport activities that may support the developments of these children as one of the measurements can be taken to improve their living standards and may have important role to minimize the disadvantages which may arise from these differences.

That the families accept the responsibilities at the development of their children and assist at the implementation of the education program is an inevitable factor in order to achieve the targeted goals (G. Uyanık, 2003). During the last years, the attached importance regarding the participation of parents of handicapped children at the education programmes increased and the opinion, that this has a positive effect on the success of the education of the child, is widely accepted. That the parents are supported emotionally and educationally, the provision of the participation at the program planning and application may provide the reduction of their worries.

Though it is noted in most of the studies that mothers of handicapped children are more exposed to stress, some studies note that also fathers are affected at a similar ratio as the mothers (S. Goldberg et al,1990). Also the continuous and momentous worry point averages of the mothers and fathers, participated to our study, were rather close to each other.

It is seen that the participation of the parents to the educations caused changes at their behaviour against their children (B. Sucuoğlu, S. Küçük, N. Kanık, 1992). And the result of our study serves this base. It is thought that parents, who watch the special physical education programmes, at which their children

take part, are impressed by this program. This impression means; that they personally witness the developments at the children who take part at the special physical education program. As the dynamics in sports like competition, entertainment, fun, happiness, contest, friendship affect the children, they also affected the parents watching them. The parents have most times watched their children wondering and applauded at their successful acts. With other words, also the parents took part at the special physical education environment. This situation is crystallized both with the observations of the researcher and the data of the study.

A decrease in the anxiety levels has been observed at the anxiety levels for the parents of the children at the practice group, compared to those of the parents whose children are at the control group. This decrease, however, is not found to be statistically meaningful. There has been no change at the constant anxiety levels of the control group.

Observing their children move independently has had an effect on the parents of disabled children that greatly helped them reduce their levels of anxiety. The continuity of this kind of special physical education programs and parent cooperation can help achieve more effective results.

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## THE ROLE OF PHYSICAL TRAINING REGARDING THE KINETICALLY IMPROVEMENT AND RECOVERY TO CHILDREN HAVING PHYSICAL DEFICIENCY, THE FLAT FOOT

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### Abstract

The present article describes the notion of the flat foot, the architecture of the foot, the influence of a model-programmer for its recuperation. A lot of attention is given to the analysis of the geometrical modification of the foot before and after the application of the model-programmer. By this analysis way we can observe the real progress registered by individual pupils. Only knowing the medical and biological data of every pupil, the physical education teacher can establish the integration possibilities of the pupil in the process of physical education can decide and apply the most adequate measure for preventing and correcting the physical deficiencies. We are suggesting the conduction of a study on improving the physical deficiency through physical exercises, which is the flat foot. In analyzing the flat foot, we have come to the conclusion that through the application of certain individualized programs, the fallowed parameters have evolved favourably bearing in mind the existence of all the articulate alterations which could have delayed or dragged out the success of the recovery treatment.

**Key words:** flat foot, recuperation, physical education, prevention, treatment.

### Introduction

Knowing the harmonious growth and development of the child and of the young generation has been and still is one of the main concerns of specialists in the field of human and social science.

The changes concerning the body dimensions and proportions of certain corporal segments and height, the changes between the corporal segments in themselves, as well as the changes of figure, proportion and different components of the corporal mass, all of these represent the physical growth and development (E. Duma, 1997).. Since one of the main goals of physical education and sport is the stimulation and provision of a normal growth and a harmonious physical development, the physical education teacher must be truly aware of the essential traits of growth and development, of the factors which condition them, of the laws that govern them and, naturally, of the ways in which they can be influenced, for they are mainly working with one of the most important and determinant factors of the growth and development process, that is movement, respectively physical exercise (E. Duma, 1997).

The physical deficiency represents an alteration from the normal state to what the shape and the functions of the locomotive apparatus are concerned, shape and functions which exert negative influences on the organism and decrease its physical efficiency.

These deviation from the normal state can alter the body's shape and functions totally or just to the level of some regions and segments (C. Baciu, 1981).

N.A. Ionescu has given one of the most complete definitions to the notion of deficiency. Thus, the physical deficiency is considered as: "*any deviation from the normal to what the shape and functions of the organism are concerned, shape and functions which disturb the body's normal growth and harmonious development, alter the exterior aspect, reduce skills and adaptive strength to physical effort and the capacity to productive labour, as well.*" These flaws get to remove the deficient from his familial and professional environment only in the most serious cases, creating a series of inferiority complexes towards his healthy and normal-built fellow creatures (N.A. Ionescu, 1964)..

The functional deficiencies are the result of some lack or a hyper function, the result of some imbalance or lack of coordination of the locomotive apparatus. The physical deficiencies of pathological nature are determined by the structural alterations of the elements which compose this apparatus in the first place. The causes for physical deficiencies are numerous and various, reason for which there is no unique criterion of adjustment. The issue of tracking, preventing and correcting the physical deficiencies known to children represents a permanent concern not only for parents but also for the entire faculty in charge with their education and development (N.A. Ionescu, 1971). Along with the medical exams performed in schools in order to establish the health condition and to appreciate the physical growth and development of pupils, it has been found that only a certain part of pupils present a correct body attitude. This is why we