

## Development of Balance in Diffable Children Ages 7 to 12 Years

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### Abstract

This study discusses the development of the balance of children with disabilities aged seven to twelve years in the city of Surabaya. This research is basic, which will be made a roadmap to be able to find out the advantages and disadvantages in terms of children with disabilities in the city of Surabaya, so that it can be a report for the government and teachers of Physical Education in Surabaya. The data that has become the results of our research are then made as a benchmark to be able to parse from motoric interests in the city of Surabaya, because on the one hand the city of Surabaya lacks the space for children with special needs. Why do we take from the initial balance, because balance is the motor skills needed to be used in terms of movement activities in sports or in sports. Because motor development is one of the most important factors in the development of the individual as a whole. This study uses development / survey research with a cross-sectional model, which is to make the object of research can be represented by others at the next age stage. The substitute object seems to be in accordance with the object of previous research, not waiting for the object of research to have its true age. This means that we took it by using a cluster random sampling technique from 60 SDLB in the city of Surabaya, we took samples of each region each with one SDLB from five regions, so that there were five SDLB representatives in Surabaya as the sample. Long story short we met each school randomly, then we asked for primary data names of children with special needs, especially children who were deaf and light-minded, after the primary data on children's names was collected, we told them to do a balance test that has been prepared. The results of the study were that the equilibrium development of children with disabilities aged seven to 12 years experienced fluctuations, such as sea waves, which can be easily described, which are up and down in static balance and in dynamic equilibrium.

**Keywords:** balance, diffable, motor

### Introduction

Physical education has a very noble goal and must be achieved, physical education has an important meaning to represent the development of its students achieved in motion, because the essence of physical education is education using sports as a tool so that the performance of motion in physical education must receive serious attention. With serious attention, it will produce good and correct movement performance, support good motion performance and need to see gross and fine motor skills.

The age of children who want to do physical activity is growing rapidly, this gives the possibility to improve the quality of physical abilities and movements become larger and children begin to participate in various sports activities that are usually carried out by adults. One of the physical abilities is balance, balance has a variety of very important factors, so the balance factor here plays a very big role in children. The development of balance is an important problem in the world of sports, if the balance is not good then it will have an effect on doing sports activities, doing daily activities will also be disrupted which will then affect themselves to stay away from their environment. Balance will be different for each human, can be seen from gender and age.

The development of sports in Surabaya for normal people is very rapid, as evidenced by the existence of various championships. Seeing that there are experts who focus on normal children, even though there are still children outside who need to be considered again and have the right to get from their physical movements, namely children with special needs. Children with special needs in Surabaya have not been so well-placed because they have not been so touched by the experimentalists of physical education. Apart from that in Surabaya, there is also no adaptive physical education experimentalist, only in general it is not too explicit to be able to pour the adaptive penjas curriculum. With this research, we will help from children with special needs to be able to develop from their motor, after the data that we have obtained and made as a reference to be able to evaluate the adaptive physical education at the SDLB. Because elementary school children are children who have very rapid development for motoric problems, in the memory of elementary school children it is said that there is a desire for knowledge of what they see by imagining for themselves so that satisfaction occurs between each of them.

Based on the background above, the researcher intends to conduct a study of differences in balance in children so that the authors are interested in knowing the development of dynamic balance and dynamic balance of children aged 7-12 years in boys and girls in Surabaya.

## Method

This research is a developmental research (developmental research) using a cross-sectional study method. describes the development of the balance of large children aged 7-12 years. According to Suharsimi Arikunto (2009: 241). cross-sectional development research is part of descriptive research, where descriptive research is not intended to test certain hypotheses, but describes what it is about a variable, a phenomenon or a condition. Suharsimi Arikunto, (2009: 234). By using this method a new subject in the following years will appear replaced with another subject with a multilevel age. Thus at one time had several groups of children of different ages.

- A. Group 1 (0; 1) ..... X.1
- B. Group 2 (1; 1) ..... X.2
- C. Group 3 (2; 1) ..... X.3
- D. Group 4 (3; 1) ..... X.4
- E. Group 5 (4; 1) ..... X.5
- F. Group 6 (5; 1) ..... X.6

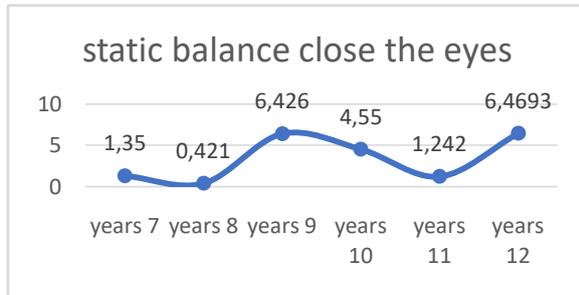
Cross-sectional studies pattern

Source: Suharsimi Arikunto (2009: 242)

This method means the substitute method of the person in the sample, it can be interpreted that when you want to examine people at level one and proceed to level two then you can replace those on level one with other people who are in the community at level two and so on to level which is determined by noting that the person has the same character at the next level. For example, if there is a child at the level of one year of his birth in 1990, then if we want to continue at level two, the substitute child must be born in 1991, there should be no children whose birth years 1990 or 1989, as in the chart above.

## Results and Discussion

The development of balance in disabled children between the ages of 7 to 12 years in Surabaya in terms of dynamic and static balance shows fluctuations in the development of balance. As illustrated in the graph below:



Picture 1. static balance close the eyes



Picture2. Static balance 1 menit



Picture 3. Dynamic balance

## Conclusions

Based on the results of the research and discussion described in the previous chapter so that some conclusions can be taken as follows:

1. Development of the Balance of Disabled Children Aged 7-12
  - a. Development of the Static Balance of Disabled Children Aged 7-12 Years

The development of static balance of boys at the age of seven years has seen a good static balance, from the graph and the results of the field it can be explained that seven-year-olds have a balance that will improve better at a later age, in eight-year-olds there is an increase in balance static from the graph of a seven-year-old child, can be seen in the graph there is an increase in the balance of children aged eight years. Based on the results obtained from the planning of eight-year-old children have static balance that increases or decreases due to daily activities and various other factors. At the age of nine, boys will experience a static balance that tends to be a little slow or a slight increase in static balance. Age of ten years Static balance of boys will also experience a balance that is a little slow, age eleven static balance of boys slightly increased from the previous age that researchers met in the field. At the age of twelve, boys will be better off Static balance than before, so that from the age of seven to twelve years the static balance increases slowly and quickly, then each age level has a different balance but always increases. At this age the balance of the big children is the best.

- b. Development of Dynamic Balance of Disabled Children Aged 7-12 Years

Dynamic balance of seven-year-olds tends to be poor, based on the results of the field of seven-year-olds, there is still little difficulty in Dynamic balance, whereas at the age of eight Dynamic balance will increase better than the age of seven, but there is no good improvement, so at age seven to eight years the balance of Dynamic boys is not too good. Nine years old boys will be just like hamya girls, a little better boys, this is because women are faster in their development. Ages ten and eleven years old boys will also be slightly the same as girls with Dynamic balance. At the age of twelve Dynamic balance will be better than women and more increase in the graph of the percentage of Dynamic balance.

## Acknowledgments

The form of the education unit / institution in accordance with its specificity in Indonesia is known

1. SLB part A for the visually impaired,
2. SLB part B for the deaf,
3. SLB part C for mental retardation,
4. Part D SLB for the disabled,
5. SLB section E for harmonics and
6. G section SLB for multiple defects.

## References

- Arikunto, S. 2002. *Prosedur Penelitian*. PT. Rineka Cipta. Jakarta
- Arikunto, S. 2006. *Prosedur Penelitian Suatu Pendekatan Praktik*. Rineka Cipta. Yogyakarta
- Arikunto, S. 2009. *Manajemen Penelitian*. Rineka Cipta. Yogyakarta
- Bachyar B, Ibnu F. 2002. *Ilmu Coaching dan Aspek-aspek Psikologis*. Koni. Jakarta.
- Dwiyoogo, Wasis D. 2006. *Pengembangan Kurikulum Penjasor*. Wineka Media. Malang
- Barrow and McGee. 1979. *Principle of Sport Training*. Sportverlag. Berlin.
- Bloomfield and Mendy. 1994. *The Physiological Basis For Exercises and Sport*. Madison Winconsin Dubuque. Iowa.
- Bompa, Tudor 1999. *Periodization training for sport*. Champaign Human Illinois. Auckland New Zealand.
- Bouchard and Baror. 2004. *Confidence in Just 7 Days*. PT. Diva Press. United Kingdom.
- Chaplinn. 2002. *Life span motor development*. Human Kinetic Publisher Inc. Illinois.
- Cratly and Nartin. 1969. *How To Multiplay Your Childs Intelegents*. PT. Indeks. Britain.
- De Ore. 1980. *Measurment concepts in Physical education*. Cv Mosby Company. London.
- Endang R. S., Panggung S., dan B. Suhartini. 2007. *Pengembangan Motorik*. UNY. Yogyakarta
- F. J. Monk and Mary. 2001. *Biomechanics of Sports and Exercises*. Human kinetics. Canada.
- Gallahue, David L. 1989. *Understanding Motor Development: Infants, Children, Adolosents*. Benchmark Press Inc. Indianapolish, Indiana.
- Ghez. 1991. *The Miracle Of Mind Power For Children*. Human Kinetics. Kanada.
- Hungu. 2007. *Creating Motivated Kids*. Torrent Books. Great Britain.
- Johnson, Barry L., Nelson, Jack K. 1986. *Practical Measurments forevaluation in physical education*. Macmillan publishing company. New York.
- Kreighbauum and Barthels. 1985. *Confidence in Just 7 Days*. PT. Diva Press. United Kingdom.
- Oxendine. 1968. *Sports Physiology*. The Ohio State University. Ohio.
- Rahantoknam. 1988. *Periodization, Theory and Methodology of Training*. Human Kinetics. York University.
- Sasmunuwiyati, Mar'at. 2006. *Psikologi Perkembanga Remaja*. Rosdakarya. Bandung.
- Schembes. 1976. *An Introduction To Physical Education*. Stanford univercity. London.
- Seifert, Hoffnung. 1994. *Measurement and Evolution For Phisical Educators*. Wm. C. Company Publiser. Iowa.
- Simard. 1969. *Play and Game For Children*. Mackinze Publiser. Boka.
- Sri, Mardiman. 2003. *Penilaian Hasil Proses Belajar Mengajar Remaja*. Resdakarya. Bandung.
- Sudjarwo dan Sugiyanto. 1993. *Pengembangan dan Belajar gerak*. Depdikbud. Jakarta.
- Sugiyanto. 1998. *Perkembanga dan Belajar Motorik*. Departemen Pendidikan dan Kebudayaan. Jakarta.
- Sugiyono. 2009. *Metode penelitian kuantitatif kualitatif dan R&D*. Alfabeta. Bandung.
- Suhartono. 2005. *Ilmu Kepelatihan Dasar*. Departemen Pendidikan dan Kebudayaan. Direktorat Jendral Pendidikan Tinggi. Proyek Pendidikan Tenaga Akademik. Jakarta.
- Thothowi. 1993. *Perkembangan Olahraga Terkini, Kajian Para pakar*. PT. Raja Grafindo Persada. Jakarta.

Zaenuri. 1994 . Jenis Kelamin Laki – Laki dan perempuan  
[http://id.wikipedia.org/wiki/Jenis\\_kelamin/2010/06/Jenis-Kelamin-Laki-Laki- dan-perempuan.html](http://id.wikipedia.org/wiki/Jenis_kelamin/2010/06/Jenis-Kelamin-Laki-Laki- dan-perempuan.html), diunduh 15 Februari 2019