



The Correlation Between Watching Television and Bodily-Kinesthetic Intelligence of 6 Years Old Children

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Abstract

The aim of this research is to find out the correlation between duration of watching television and bodily-kinesthetic intelligence of 6 years old. Six development scopes according to Regulation of National Education Minister of Indonesia Number 137 in 2014, what must be stimulated in accordance with the achievement level of six years old children's development cover language, art, physical, social emotional, cognitive, moral, and religion. Bodily-kinesthetic or physical ability, according to Gardner, becomes one of competences that must be developed at early age. The research method used was quantitative research. The analysis was done by using correlation product moment with two variables; independent variable which is the duration of watching television (variable X) and dependent variable which is bodily-kinesthetic intelligence (variable Y). The decision criteria if "r" score (r count) along with significance (sig.) $< 0,05$, then independent variable has strongly convincing correlation with dependent variable. If "r" score (r count) along with significance (sig.) $> 0,05$, then the independent variable has strongly convincing correlation with the dependent variable. The results of the research showed correlation coefficient (r) = 0,842 along with significance 0,000. Based on the decision criteria above, it can be concluded that correlation from both variables is significant because its significance is smaller than 0,05 ($0,000 < 0,05$). Then in can be concluded that there is strong correlation, in which the longer the children watch television then the higher their bodily kinesthetic intelligence was

INTRODUCTION

The Standard of Achievement Level of Children Development (STPPA) is the reference to develop content standard, process, evaluation, teachers and education officers, facilities, management, and defrayal in running and managing early age education, STPPA is the reference used in Early Childhood Education curriculum development (The Regulation of Education and Culture Minister of Indonesia/Permendikbud, 2014).

In STPPA, there are six development scopes that must be stimulated in accordance with the achievement level of children development which covers religion and moral value, physical-motoric, cognitive, language, art, and social-emotional, all those development scopes support the growth and development of children until there is no scopes of development not stimulated in its implementation.

Bodily-kinesthetic intelligence is one of the aspects that must developed in STPPA. According to Gardner, bodily-kinesthetic intelligence has strong correlation with children skill to manage their body, maximize their motoric sensors, either soft or rough, and how children can equally use their body to do activities (Gardner, 2011). This intelligence covers physical skills in coordinating, balance, endurance, power, flexibility, and speed. This intelligence encompasses talent in controlling body movement and skill in handling things. Athletes, craftsmen, mechanic, and surgeons have high kinesthetic intelligence.

Television screen can be a very sweet honey, presenting interesting program non-stop for 24 hours. Nevertheless, television can be deadly poisonous if not wisely used. Children who watch television program got entertained continuously, children can be entertained and stimulated however television can be disturbance in their growth and development. Parents' active roles become pivotal here. They have to give clear limitations started from how long their children can watch television and what programs their children can enjoy.

From the explanations above, then the main problem in this research is; finding the truth on whether or not there is correlation between the duration of watching television and bodily-kinesthetic intelligence.

Childhood is one of certain phase in our life. We were children too and now there are many kinds around us or we are educating them now. The task to educate children is our task as a human because we are social creature who needs

one another and education is one of the results of social behavior in the society. Education is an activity which leads to forming self-discipline, independent, and self-control. Children perception about the world is the basic of knowledge (Montessori, 1915).

Sometimes when teaching, the indicator that we use is the word "intelligent", even most of us judge someone from how high is their IQ. Gardner tells about a western views in which an intelligence is how intelligent your parents or your ancestors. Gardner calls it single intelligence "g", when this "g" becomes the standard of intelligence, there are many things we cannot do because how smart we are reflected on who our ancestors are. Different from some countries in Asia, Gardner states that intelligence according to Chinese, Korean, and Japanese; intelligent people are the ones who just sleep 4-5 hours a day (Ghamrawi, 2014). Intelligence according to Gardner defined as a skill with is completeness process, which can handle specific problems in the world (Fadhli, 2016).

Intelligent for most of people is when a kid can quickly count, or able to know many words and can memorize them. Intelligent is also often defined as; when children can read and write. Those are true. However, we cannot judge intelligent children from their skills in reading and writing. Then, what is intelligence? Intelligence according to Gardner is skill to solve problems which occur in our real life; skill to create new problems to be solved; skill to create something or offering service that will emerge awards in someone's culture (Gardner, 2008). Someone maybe has all intelligences at sufficient high level, while others maybe only have those intelligence on regular basis (Chongde & Tsingan, 2003).

According to Gardner, after conducting research for years, all human beings have intelligence. There is no technical term of not intelligence. This paradigm opposes dichotomy theory intelligent and not-intelligent from the previous expert (Sarouphim, 1999). Gardner also opposes suspicion "intelligent" from IQ (Intelligence Quotient), which only refers to three intelligences such as logic-mathematic, linguistic, and spatial (Gardner, 1988). Gardner then emerge technical term multiple intelligences, which then developed to be theory through complicated research, involving anthropology, cognitive psychology, development psychology, psychometry, study of biography, animals physiology, and neuroanatomy (Armstrong, 2000).

Bodily kinesthetic is one of multiple intelligences mentioned by Gardner. According to him,

bodily-kinesthetic intelligent is expertise in using one's whole body to express ideas and feelings (e.g., as an actor, a mime, an athlete, or a dancer) and facility in using one's hands to produce or transform things (e.g., as a craftsperson, sculptor, mechanic, or surgeon) (Gardner, 2011). Expertise in using whole body of someone to express ideas and feelings (for instance, as actor, a mime, athlete, or dancer) and facility in using one's hand to create or change something (for instance, as craftsperson, sculptor, or surgeon) (Chan, 2005). Those expertise if owned by children at early age enable them to grow and develop optimally because these intelligence becomes the activator of other intelligences, i.e. we can be intelligent in art when we can move our hand and body maximally. We are prominent in music when we can use our body to play musical instruments (McKenzie, 2005).

METHOD

The quality of data really depends on the quality of the instruments used in collecting the data or the measuring instrument. If the measuring instrument is valid and reliable, then the data taken will be valid and reliable too. To collect the data needed in supporting the result of the research, the researcher used questionnaire on the correlation between watching television and bodily-kinesthetic.

After the data collected, the data were needed to be processed and analyzed. Data must be validated and the reliability must be checked. Data that had low validity and reliability were eliminated. In this research, it was planned to use statistic analysis by using correlation product moment, analyzed by using SPSS software. The results interpretation, decision accepted or rejected, based on the results of test through statistic test (Punaji Setyosari, 2013).

Data were analyzed by using correlation product moment. Suitable with the type of the research data, then as the follow up of data collected from both variables which were the intensity of watching television (variable X) and students' discipline in study (variable Y), the researcher used the formula of correlation product moment.

The results of the analysis of product moment would obtain coefficient results (r) which then to know strong-weak correlation would be consulted to categories as follows Sugiyono (2009) are as follows:

Table 1. Interpreting Correlation Coefficient of R Value

Coefficient Interval	Level of relation
0,00-0,199	: Very Weak
0,20-0,399	: Weak
0,40- 0,599	: Medium
0,60- 0,799	: Strong
0,80- 1,0	: Very Strong

In correlation model of product moment, there are three kinds of correlation that might occur such as:

- a. Positive Correlation, means the higher independent variable, followed by the higher the dependent variable.
- b. No Correlation, means independent variable will not experience change even though independent variable experience change.
- c. Negative Correlation, means the higher the independent variable, will be followed by the lower the dependent variable.

The hypothesis of this research were stated as follows:

Ho = There is no correlation between the duration of watching television and bidily kinesthetic intelligent.

Ha = There is correlation between the duration of watching television and bodily kinesthetic intelligent.

RESULT AND DISCUSSION

The questionnaires spreaded considere indicators as follows:

Table 2. The Intensity of Watching Television

Indicators	Item No.	The Number of Item(s)
Duration of watching television in the morning	1,2	2
Duration of watching television in the noon	3,4	2
Duration of watching television in the afternoon	5,6,8	3
Duration of watching television in a day	7	1

Table 3. Bodily Kinesthetic Questionnaire

Indicators	Item No.	The Number of Item (s)
Doing body movements coordinatedly to train flexibility, balance, and agility	1,2	2
Doing eyes movement coordination, legs, hands, head in imitating dance/gymnastic in television	3,4	2
Doing physical games suitable with the program watched by the children	6,7	3
Skillful in using right hand and left hand	5	1
Doing self body clean	8	1

From the results of statistic test by using SPSS with the number of samples were 20 children; the results obtained as follows:

Table 3. The Results of Questionnaire

No	The Duration of Watching Television (Hours)	Bodily Kinesthetic (Result of Conversion)
1	8	70
2	10	90
3	8	70
4	7	70
5	6	70
6	8	70
7	9	85
8	12	95
9	8	80
10	8	80
11	8	70
12	8	80
13	8	80
14	9	85
15	9	86
16	10	85
17	5	65
18	7	60
19	8	70
20	7	70

The samples above were analyzed and the results were as follows:

Correlations

	<u>Duration of Watching Television</u>	<u>Bodily Kinesthetic Intelligent</u>
<u>Duration of Watching Television</u>	1	.842**
<u>Pearson Correlation</u>		.000
<u>Sig. (2-tailed)</u>		
<u>N</u>	20	20
<u>Bodily Kinesthetic Intelligent</u>	.842**	1
<u>Pearson Correlation</u>	.000	
<u>Sig. (2-tailed)</u>		
<u>N</u>	20	20

** . Correlation is significant at the 0.01 level (2-tailed).

Fig 1. The Results of Product Moment Correlation

From Figure 1 above, we can interpret as follows; that correlation coefficient between Duration of Watching Television (X) and Bodily Kinesthetic Intelligence (Y) is $(r) = 0,842$ along with significance 0,000.

Based on the decision criteria above then can be concluded that the correlation from those two variables is significant because its significance is smaller than 0,05 ($0,000 < 0,05$). The correlation is positive which means if the independent variable increase, then dependent variable will increase too. The correlation occurs is in very strong category.

CONCLUSION

Bodily kinesthetic intelligent becomes one of aspects of important intelligent to develop because this intelligent covers soft motoric ripeness and rough motoric which supports children physical activities. In a study, physical aspects can be developed based on children age. Fleck in his research describes "Types of physical contact involving preschoolers and kindergarteners may serve different developmental needs that are in accordance with children's ages, skills, and the emphasis placed on physical contact in educational setting" (Fleck & Chavajay, 2009). In his study, Fleck explained about physical activities which in fact different from the ways to develop them. The differences cover children age, children skill, physical condition, and study environment.

Talking about study environment, in this research, it shows that there is scientific evidence showing that physical activities can be stimulated through television program. Picture 1 shows that correlation coefficient between the duration

of watching television (X) and bodily kinesthetic intelligent (Y) was $(r) = 0,842$ along with significance 0,000. It can be explained; if children often watch television with long duration, then their physical activities imitating movements in television program increase. This is probably upside down with point of view that when children watch television they will be lazy to move and tend to be inactive. The results of this research as if oppose that point of view. The results of this research show that the children tend to be active because visually they record activities in those television program and try to practice it in their daily life activities, like pretend to be a pilot, athlete, and other roles.

However, the results of this research must be seen wisely. It does not mean that after reading the result of this research, then we let our children watch television continuously. It is necessary to underline that this research stress on the relationship between watching television and bodily kinesthetic intelligent and not on the effect towards other intelligence. Therefore as parents, we must be wise in utilizing television program and become selective in choosing precise program in accordance with our children age.

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