Profile of Physical Fitness, Healthy Life Behavior, Anxiety and Concentration Level of Elementary School

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- Keywords: Learning Model, Basic Movement Pattern, Physical Fitness, Healthy Life Behaviour, Anxiety, Cortisol Saliva, Concentration and Academic Achievement.
- Abstract: This study aims to obtain empirical evidence, develop applying the model and basic movement patterns of students based on physical fitness profile, healthy life behaviour that associated with concentration, anxiety and accompanied by examination of salivary cortisol saliva response and academic achievement of elementary school students in West Java. The results of this study are expected to be known and analysed the benefits of physical fitness and healthy life behaviour associated with the concentration and anxiety levels that vary from every student and academic performance of each level or class and yield products in the form or teaching materials for the development of dominant movement patterns and the suitable learning models for elementary school students. Based on the results of field survey and data analysis, physical fitness of students in Bandung showed that 39.70% of the students were in the category of inadequate, 29.38% were in good category, 26.77% were in enough category, and 3.94% very good.

1 INTRODUCTION

The current teenagers' social life is really worrying and dangerous if they left without guidance of parents, teachers and others. Teenagers can be channeled with positive activities, such as extracurricular of sports activities, art, and others (Djaja, 2003). Extracurricular activities are activities outside the classroom that are very useful for students (Hackney and Viru, 1999). Extracurricular activities that can be followed by the students are a team sport, for example basketball, volleyball, soccer, futsal, and so on, whereas, the individual extracurricular are namely karate, badminton, taekwondo, athletic and others (Blair and Church, 2004). By Brownlee et al. (2005), it is expected to affect the increase the students' concentration, as described by Bailey et al. (2009). In the article entitled Physical education, Physical activity and academic performance. It is mentioned that physical education and physical activity which are done regularly will affect students' physical fitness and learning achievement (Gill, 2007). Another study says that the influence of physical education and physical activity can affect academic achievement in children (Kalman et al., 2004). The study was

conducted to 214 children for 2 semesters, by Strong et al. (2005), at Tarleton State University. The impact of physical activity on the extracurricular as presented in Niel Egelund's research results, which was published by Medical Daily in detik health, states that the sports that are done when leaving for school by walking or cycling are reflected in the concentration level that lasted until 4 hours later.

In this study, the researcher team analyzed the extent to which portrayals of physical fitness, concentration, anxiety and healthy living behavior (Daly et al., 2004). In addition, the specific purpose of this study is to obtain empirical evidence of the large role of learning models application that associated with physical fitness levels, concentration, stress levels (cortisol response) and healthy life behaviors (Kirschbaum et al., 2000).

2 METHODS

The qualitative method research method was used in the present study. The research site based on the research plan was in accordance with the target population of the study, which are all elementary school students in Bandung. Research population are

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shown on Table 1 of name's school, location, and subject.

NO	Name's School	Lokation	Subject
1.	SDN Banjarsari	Kota Bandung	22
2.	SDN Ciparay 07	Kab Bandung	25
3.	SDN Langensari	Kab Bandung	20
	Lembang	Barat	
4.	SDN Ciumbuleuit	Kota Bandung	20
5.	SDN Cimandiri	Kota Cimahi	20
6.	SDN Cikalong Wetan	Kab Bandung	20
		Barat	

Table 1: Research Population.

3 RESULTS AND DISCUSSION

After obtaining the data to the research sites, the following is a description of fitness profile analysis, healthy life behaviour, anxiety, and level of concentration in the elementary schools in Bandung.

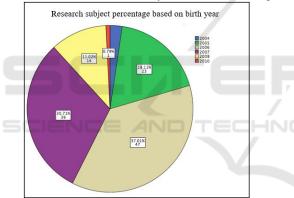


Figure 1: Percentage of Subject Number Based on Year of Birth Graphic.

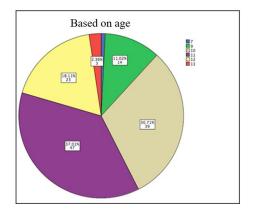


Figure 2: Percentage of Subject Number Based on Age Graphic.

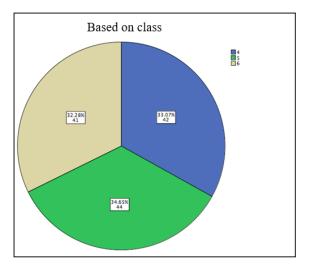


Figure 3: Percentage of Subject Number Based on Classes Graphic.

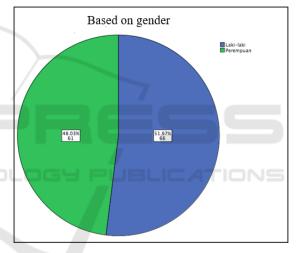


Figure 4: Percentage of Subject Number Based on Gender Graphic.

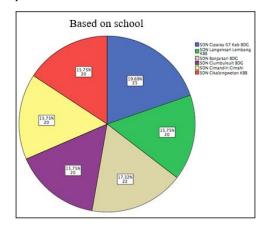


Figure 5: Percentage of Subject Number Based on School Graphic.

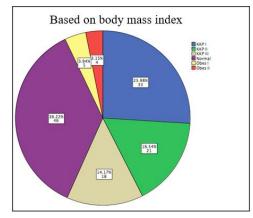


Figure 6: Percentage of Subject Number Based on Body Mass Index Graphic.

Figure 1 describes percentage of subject number based on year of birth graphic. Figure 2 explains percentage of subject number based on age graphic. Figure 3 explains percentage of subject number based on classes graphic. Figure 4 explains percentage of subject number based on gender graphic. Figure 5 explains percentage of subject number based on school graphic. Figure 6 explains percentage of subject number based on body mass index graphic. Figure 7 explains percentage of subject number based on physical health graphic.

Table 2 describes recapitulation of weight and height measurement results based on the origin of the school. Table 3 explains recapitulation of tap 5 measurement results, grid exercise, healthy life behavior, anxiety, and physical activities based on the origin of the school.

Table	2:	Recapitu	lation	of	Weight	and	Height
Measur	emen	t Results	Based	on the	origin of	the Sc	hool.

No	Name's	Body V	Veight	Body I		
	school	mean	sd	mean	sd	n
1	SDN Banjarsari	30.20	8.46	1.34	0.070	25
2	SDN Ciparay 07	32.60	7.03	1.37	0.074	20
3	SDN Langensari Lembang	36.00	9.81	1.33	0.105	22
4	SDN Ciumbuleuit	35.50	850	1.41	0.099	20
5	SDN Cimandiri	38.40	5.38	1.35	0.065	20
6	SDN Cikalong Wetan	38.10	11.25	1.39	0.094	20

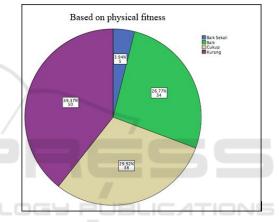


Figure 7: Percentage of Subject Number Based on Physical Health Graphic.

Table 3: Recapitulation of Tap 5 Measurement Results, Grid Exercise, Healthy Life Behavior, Anxiety, and Physical Activities Based on the origin of the School.

No	School	Tap 5		Grid Exert		PHS		Anxiety		AF	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	SDN Banjarsari	88.92	20.22	4.00	1.53	207.92	18.50	48.32	5.92	43.64	7.38
2	SDN Ciparay 07	89.60	25.36	4.45	1.76	186.10	15.91	52.65	7.99	44.90	5.70
3	SDN Langensari Lembang	86.73	24.99	4.45	2.11	213.55	18.25	72.18	13.69	33.18	7.49
4	SDN Ciumbuleuit	105.00	24.40	4.25	2.07	222.85	14.46	111.05	10.75	43.05	6.28
5	SDN Cimandiri	95.25	24.97	5.20	2.46	182.75	9.26	113.50	22.25	44.60	8.05
6	SDN Cikalong Wetan	75.75	19.68	5.40	1.85	195.75	15.18	102.15	15.82	37.65	4.20

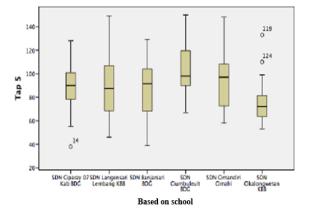


Figure 8: Boxplot Graphic Based on Tap 5.

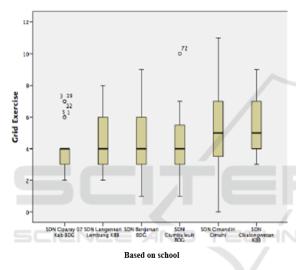


Figure 9: Boxplot Graphic Based on Grid Exercise.

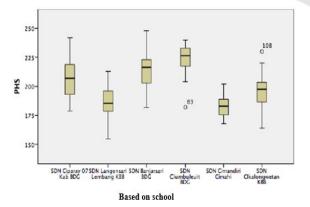


Figure 10: Bloxspot Graphic Based on Healthy Life Behavior.

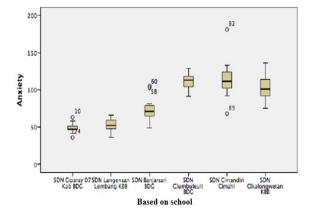


Figure 11: Boxplot Graphic Based on Anxiety.

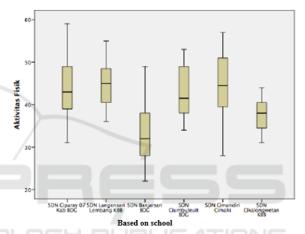


Figure 12: Boxplot Graphic Based on Physical Activities.

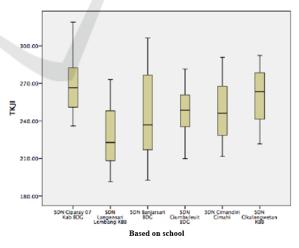


Figure 13: Boxplot Graphic Based on Physical Fitness.

Figure 8 describes boxplot graphic based on tap 5. Figure 9 explains boxplot graphic based on grid exercise. Figue 10 explains bloxspot graphic based on healthy life behavior. Figure 11 explains Boxplot graphic based on anxiety. Figure 12 explains boxplot graphic based on physical activities. Figure 13 explains boxplot graphic based on physical fitness.

4 CONCLUSIONS

Based on the results of field surveys and data analysis results, it can be concluded:

The physical fitness of students in Bandung showed that 39.70% of the students were in the category of inadequate, 29.38% were in good category, 26.77% were in enough category, and 3.94% were very good.

Each school with high physical fitness had a negative relationship to the decrease of anxiety. This means that students, who had high physical fitness, had low anxiety.

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