

Can “Parachute Game” Improve the Emotional Intelligence of Deaf Students?

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Abstract: The purpose of this study is to obtain a picture on the development of emotional intelligence level of children with hearing impairment through the approach of playing using a parachute. The used method was experimental method with Pretest-Posttest Design. The samples of this research were all students' deaf in SLB Negeri Citeureup Kota Cimahi. Data were obtained from the results of pretest and posttest measurements using emotional intelligence questionnaire that has passed legibility tested by deaf students and has also passed the tests for validity and reliability. The obtained data were processed using T-Paired test. The results showed that the parachute game gave a positive effect on the improvement of emotional intelligence for deaf students, with the correlation value of 0.892. Differences obtained from pretest and posttest on emotional intelligence indicator show sig value of 0.026 for empathy (significant), sig value of 0.004 for Relationship (significant), sig value of 0.143 for self-motivation (not significant), and sig value of 0.594 for understanding emotions (not significant). In general, the parachute game contributes significantly to the improvement of deaf students' emotional intelligence.

1 INTRODUCTION

Emotional intelligence is important to be possessed by every individual, be it in the field of education, organization, or other (Alexander, 2015). Emotional intelligence has an equally important or more important influence on individual success in life than intellectual intelligence. According to Goleman, emotional intelligence can contribute to several aspects of life, such as increased education, decreased aggressive behavior, better decision-making and others, that help success in life. Mayer and Salovey (1997) explain that emotional intelligence "as the ability to generate emotions, to access emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth. Emotional intelligence has been proven in predicting successful relations in workplace and in private life (Campos, 2004). The skills to control and use emotion intelligently actually play an important role in ensuring the well-being of a person, including the deaf people.

Initially, the impact of deafness seems simple, they will only have hearing loss that can be diagnosed from medical procedures. However, there are actually greater impacts of social and emotional problems, even worse than hearing loss (Fraenkel, 2012; Glickman, 2007). Research conducted by Sinnot & Jones (2005) shows high emotional disturbance and behavioral abnormalities in students with hearing impairment. Deaf people have difficulties in expressing feelings, what they like or dislike (Greenberg, 1993). They tend to close themselves and are unable to express what they feel. Suarez's (2000) study shows that children with hearing impairment are less able to empathize, to have social perception, have social problem solving, and other social aspects, as well as lower academic achievement than their peers. For children with hearing problems, characteristics and emotions during the early stages of development are no different from children with no hearing loss, but as they grow older they will have a relatively limited understanding of the emotional process (Terwogt, 2004). During primary school, their emotional

development is no different from other children but when in high school, children with hearing loss will lack from other children in the development of emotions. The emotional characteristics of deaf people according to Marschark (1997) are as follows: show a high degree of egocentrism, misunderstand others' behaviors so they become aggressive, ignore others' feelings, suffer from emotional stability, negative and lack of desire and interest in life, doubting others and not trusting the people who can hear, more depressed.

Since deaf students are included as people with special needs, they need certain care to improve and develop their emotional intelligence. Emotional intelligence can be enhanced by social skills training. Emotional development is influenced by changes that occur in other areas, such as motor or language and cognitive, as well as a source of influence, for example, social development (Hindley, 2000). According to Stewart & David Alan (2005), "for many deaf adults, participation in deaf sport events is a major means of socialization. Deaf sport provides a place for meaningful interactions with others ... ". Sport activities through this game is one means for children with impaired hearing to socialize with others. The game to be used in this research is the parachute game. "Parachute games are an exciting way to develop cooperative skills, self-confidence, empathy, communication skills and emotional literacy. In addition, they are incredible fun" (Kirk, 2003). Games using parachutes are an interesting way to develop skills of cooperation, confidence, empathy, communication skills and emotional skills. In addition, the game uses a wonderfully fun parachute.

This research is aimed to answer some questions: 1) how much is the contribution of parachute game, separately, to empathy, relation to others, self-motivation, and understanding of emotions for deaf students, 2) how much is parachute game's contribution in improving deaf students' emotional intelligence generally?

2 METHODS

2.1 Participants

The sample in this study was saturated sampling, i.e. students in SLB Negeri Citeureup Cimahi City, amounted to 24 people.

2.2 Procedures

The used research method was experimental method with pretest-posttest experimental design. The study was conducted from September 17, 2014 to October 27, 2014. The study began with a pretest and ended with a posttest. The study was conducted 16 times with three meetings per one week pace, using different parachute game materials, adopted from Making Wapes: Exciting Parachute Games To Develop Self Confidence And Team-Building Skills as well as added some form of parachute game variations that fit the theme at the meetings. Treatment with parachute game was done from 08.00 until 09.30 on every meeting. The implementation of the exercise program is as presented in the table below:

Table 1: Research Implementation Program.

Meeting	Parachute Game Materials	Time
-	Implementation of pre test	Wednesday, September 17, 2014
1	- Excitaball (Interesting Ball)	Friday, September 19, 2014
2	- Side to Side (Side to Side)	Monday, September 22, 2014
3	- Jumping Bean (Jumping Bean)	Wednesday, September 24, 2014
4	- High Ball (High Ball)	Friday, September 26, 2014
5	- Snap and Catch (Happiness and Capture)	Monday, September 29, 2014
6	- Pass The Parachute Along	Wednesday, October 1, 2014
7	- Shaking all over	Friday, October 3, 2014
8	- Bucket Ball (Bucket Ball)	Monday, October 6, 2014
9	- The Tortoise (Turtles)	Wednesday, October 8, 2014
10	- Presents (Prizes)	Friday, October 10, 2014
11	- Spring Cleaning (Spring house cleaner)	Monday, October 13, 2014
12	- Beat The Count (Counts)	Wednesday, October 15, 2014
13	- Fly The Kite (Fly Kites)	Friday, October 17, 2014
14	- Out in The Boat (On the boat)	Monday, October 20, 2014
15	- Shake a Score (Shake the score)	Wednesday, October 22, 2014

16	- On an Off (flame and Off)	Friday, October 24, 2014
-	Implementation of Post test	Monday, October 27, 2014

2.3 Instrument

The used instrument was a questionnaire about emotional intelligence which was prepared based on indicators. Before the questionnaire was disseminated, there was legibility test for the questionnaire since the vocabularies of deaf children were still very limited, so there must be a legibility test. Later, the questionnaire was tested to see the validity and reliability of the questionnaire. Processing was done by using the statistic of Paired Sample Test.

3 RESULTS AND DISCUSSION

From the results of research that has been done, obtained data were as follows:

Table 2: Paired Samples Correlations.

		N	Correlation	Sig.
Pair 1	Pre-test of Emotional Intelligence & Post-test of Emotional Intelligence	24	.892	.000

Table 2 describes the relations between variables and the following test criteria:

- If the significance value is > 0.05 , then there is no relation between the parachute games with increased emotional intelligence.
- If the significance value is < 0.05 , then there is relation between the parachute games with increased emotional intelligence

The table above shows a significance value of 0.000 with a significance level of 0.05 which means that the value of significance (0,000) was < 0.05 . This means that there is a relationship between the parachute games with the increase in the emotional intelligence of the deaf students.

Table 3: Paired Samples Test.

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Paired Differences				
					Lower	Upper			
Pair 1	Pre-test of Emotional Intelligence & Post-test of Emotional Intelligence	-5.042	8.111	1.656	-8.466	-1.617	-3.045	23	.006

The hypotheses are:

- H0: There is no significant difference in the emotional intelligence level before and after treatment with parachute game.
- H1: There is a significant difference in the emotional intelligence level before and after treatment with the parachute game.

Table 3 shows that the t arithmetic value is -3.045 with sig of 0.006. Because sig is < 0.05 , it can be concluded that Ho is rejected, which means that for the average of emotional intelligence before and after parachute game, there is an increase, with the difference of -5,042. Therefore, it can be stated that the parachute game in general can affect the improvement of emotional intelligence of students with impaired hearing.

Table 4: Paired Samples Test.

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Paired Differences				
					Lower	Upper			
Pair 1	Pretest of Empathy – Posttest of Empathy	-1.583	3.269	.667	2.964	-.203	2.373	23	.026

Pair 2	Pretest of Relationship- Posttest of Relationship	-2.625	3.954	.807	-4.295	-.955	3.252	23	.004
Pair 3	Pretest of Self-motivating Posttest of Self-motivating	-.625	2.018	.412	-1.477	.227	1.518	23	.143
Pair 4	Pretest of understanding emotions - Posttest of understanding emotions	-.208	1.888	.385	-1.005	.589	-.541	23	.594

However, when seen on per-indicator of emotional intelligence, not all students experienced a significant increase after parachute game. Table 3.3. shows the influence of parachute game on the indicators of emotional intelligence.

• For empathy indicator, a significance value of $0.026 < 0.05$ means that the parachute game has a significant effect. This result supports Mosley, J. & Sonnet, H. "Parachute games are an exciting way to develop cooperation skills, self-confidence, empathy, communication skills and emotional literacy. In addition, they are incredible fun ". Characteristics of parachute game that allow participants to swap positions, exchange roles are expected to help a person understanding the same situation from other person's point of view. It can also contribute to the development of empathy.

For indicators relating to others, the significance value of $0.004 < 0.05$ means that the parachute game has a significant effect. This result supports the research conducted by Akhmad Olih Solihin (2015) on the influence of parachute games on improving cooperation. The result shows deaf students' cooperation is increasing [18]. The parachute game is a group game performed by at least two people. The characteristic is that each person works together to complete a movement mission or certain mission. With such characteristic, it would certainly help improving emotional intelligence of deaf students in aspects related to others.

• For self-motivating indicators, the significance value of $0.143 > 0.05$ means that the parachute game has no significant effect. In the self-motivating aspect, deaf students, by measuring their ability to solve problems, learn from their mistakes, and make decisions and the like. With regard to it, it is difficult for deaf students to be able to motivate themselves, even though they have been given the parachute games treatment.

• For indicators of understanding emotions, the value of significance is $0.594 > 0.05$. This means that the parachute game has no significant effect. As Cambra (2005) explains, it is difficult for deaf people to express what they feel like or dislike.

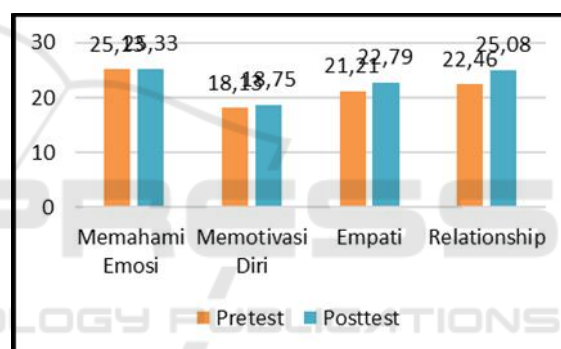


Figure 1: Results of Calculation on the Average of Emotional Intelligence Indicators.

4 CONCLUSIONS

Based on the results of this study, it can be concluded that the training using parachute games is an important component in providing the intervention of students with special needs, people with impaired hearing. Parachute games can be used to improve emotional intelligence on several aspects, such as empathy and relationships with others, as for the self-motivating aspect and self-understanding aspects, parachute games have no significant impact. However, in general, parachute games can improve deaf students' emotional intelligence. To be able to generalize the results, the research must be done with larger-sized samples. Further research is also needed to develop parachute games in improving emotional intelligence for children with other special needs.

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