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Implementation of Token Economic Techniques in Modifying the Disruptive Behavior of Hearing Impairment Students

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Abstract

Economic token behavior modification techniques are often used to change unwanted children's behavior. The purpose of this study was to look at the use of economic token techniques to reduce the disruptive behavior of a ten-year-old special education student. In the context of this study the behavior that you want to change is talking / gesturing with a friend without the permission of the teacher, frequently vomiting without mouthing, frequent sneezing, not paying attention to joking, biting nails, constantly moving in the seat, blindfolding and playing with tools write. This study uses a single case study method with design A-B-A Where A represents the baseline phase, B represents the intervention phase and A is the second phase of the intervention phase with the withdrawal of the intervention without the use of economic tokens. Data is collected through observations in the classroom. This study was conducted for 4 weeks involving 3 phases namely 1 week for the baseline phase, 2 weeks for the intervention phase and 1 week for the second baseline phase after withdrawal of the intervention. The data obtained are expressed in the form of frequency tables and linear graphs to see the effectiveness of the intervention. The findings indicate that there is a reduction in the frequency of disruptive behaviors after intervention and that this reduction persists even after withdrawal of the intervention. This shows that the economic token technique used to modify disruptive behavior has successfully reduced such disruptive behavior.

Keywords: Behavioral Problems, Disruptive, Economic Tokens.

Introduction

Behavior modification is required for students with special needs (MBK) who have disruptive behavior based on positive reinforcement methods namely economic tokens. Various studies have been conducted to establish positive behaviors for students with disruptive behaviors (Gann et al. 2015). The design of an A-B-A subject is a guide. The design involved three situations namely Situation A (baseline), Situation B (intervention) and Repeat Situation A (observation) in identifying the effectiveness of the use of economic tokens. Disruptive behavior involves children acting out of control. Disruptive behaviors that are common in the

classroom during the learning and teaching. Process such as moving around without permission, shouting, talking and playing with objects and acting aggressively. The strengthening of economic tokens is defined as an intervention involving reward or reward based on behavioral goals (White et al. 2018; Carnett et al. 2014; McLaughlin & Williams, 1988). Behavior modification involves the analysis and manipulation of the environment to change behavior (Miltenberger, 2011). Miltenberger proposes various steps as a procedure for conducting behavioral modifications. These include identifying behaviors, collecting data interventions and interpreting data.

Identify Behavior

The first step in conducting behavior modification is to select students who are negative or disruptive during the teaching and learning process implementation. A 10-year-old MBK was selected as the study subject. This female student had severe Congenital Hearing (profound), 90 dB <on both sides of the ear. Once an election is made, observations are conducted to identify the behavior that needs to be changed. Identifiable disruptive behaviors include talking / gesturing with a friend without the permission of the teacher, frequently vomiting without mouthing, frequent sneezing, not paying attention to joking, biting nails, constantly moving in the seat, blindfolding and playing with tools write. This behavior occurs repeatedly during teaching and learning process.

Data Collection

The data were collected by running a daily observation of teaching and learning process for 60 minutes daily from Monday to Friday for four weeks. Researchers observed and recorded negative behavior frequency for data collection procedures especially during baseline (White et al. 2018). Frequency data of disruptive behaviors are recorded in the table below.

Table 3.1
Frequency of Disruptive Behaviors

Baseline (Week 1)

Duration: 1-hour teaching and learning process
Date : 18 – 22 Mac 2019

Day	1	2	3	4	5	6	7	8	9	10	11	12	Total
Monday	2	2	1	2	0	1	1	3	1	3	1	0	17
Tuesday	1	1	3	0	4	3	2	1	4	1	0	0	20
Wednesday	0	4	2	0	3	4	3	2	1	3	2	1	25
Thursday	3	4	0	2	1	2	2	0	0	1	3	1	19
Friday	0	4	4	1	3	2	1	0	3	2	0	1	21

The table shows the frequency of first week (baseline) observations of disruptive behavior. Observations were conducted without the knowledge of the study subjects. The highest frequency recorded on Wednesday of 25 times disruptive behavior occurred. Data show high disruptive behavior and are likely to interfere with teaching and learning process smoothness.

Positive Strengthening Interventions

The intervention began in the second and third weeks. This process begins with the advice and description of the disruptive behaviors performed by the subjects of the study individually. Rewards are introduced with cartoon sticker tokens. The study subjects chose the reward or reward earned when disruptive behavior showed a decrease based on the number of targets in the reward book. Throughout the intervention, the subjects of the study were always rewarded, tokenized and praised and advised on appropriate and appropriate behavior. In the second week, the subject of the study received a threefold token amounting to four cartoon stickers starting on Monday. Comparisons are made based on the frequency of behaviors that decrease with the day. The subject of the study will receive a cartoon sticker token and paste it in the reward book. Each time a decline in disruptive behavior was recorded, the study subjects would receive 2 or 3 cartoon stickers. On Tuesday the third week, the subject of the study received a small box of Cocoa Krunch cereals as an incentive for the frequency of declining disruptive behaviors. The subject of the study stated that behaviors such as vaporizing, sparring and playing with objects are poor. The study subjects also advised their peers to avoid disruptive behavior. The fourth week is the last week without intervention. The behavior of the study subjects was monitored and recorded using the behavioral frequency table. The subject of the study was unaware that his behavior was still being observed. No tokens, rewards or accolades were given this week.

Analyses Data and Evaluate

Table 5.1
Frequency of Disruptive Behaviors
No intervention (Fourth week)
Duration: 1-hour teaching and learning process
Date : 15 – 19 April 2019

Day	1	2	3	4	5	6	7	8	9	10	11	12	Total
Monday	0	2	0	2	1	2	1	0	1	2	3	2	16
Tuesday	0	2	0	0	3	0	0	2	2	0	0	2	11
Wednesday	0	2	2	1	3	0	1	0	0	1	0	3	13
Thursday	1	0	0	2	0	2	0	2	1	0	2	0	10
Friday	3	0	2	1	2	3	1	0	1	0	0	0	13

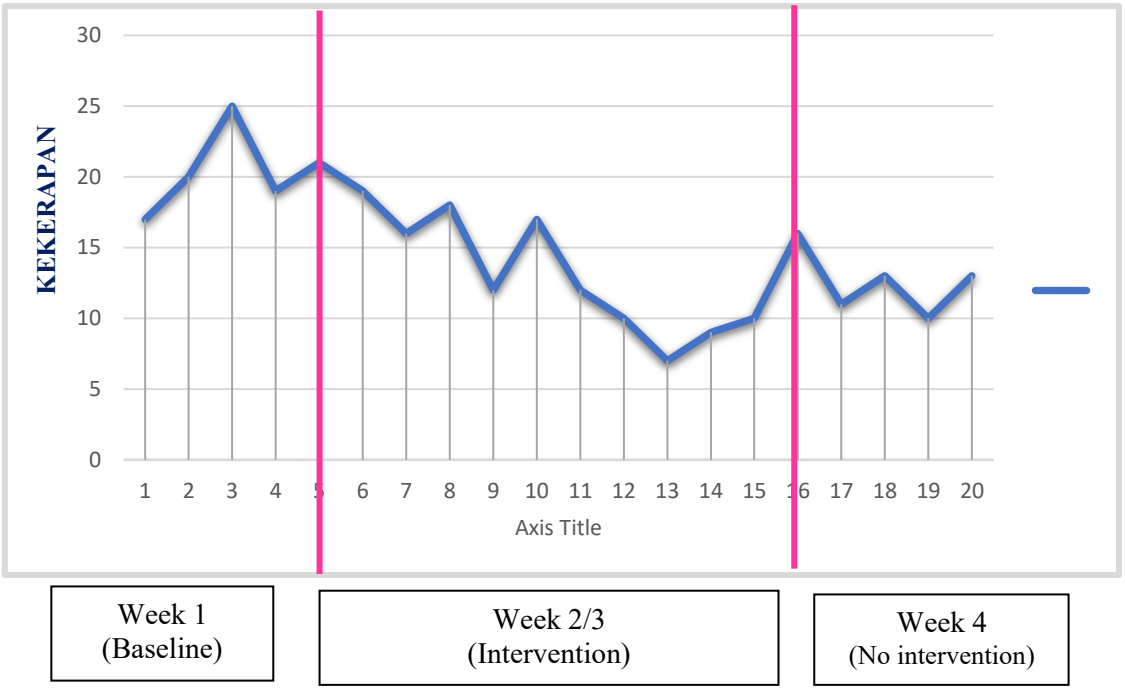

Figure 5.1 Frequency of disruptive behavior

The frequency of behavior during week two (intervention) ranged from 12 to 19 times. On Monday the frequency of behavior of the study subjects was 19 times compared to the previous frequency of 21 times. This shows a decrease of three times. The lowest frequency recorded this week was 12 times. Next week is the third week of this renovation project. The frequency recorded during the week ranged from 7 to 12 times. This indicates a decrease in the frequency of better disruptive behaviors.

Table 5.1 shows that the frequency recorded during the last week ranged from 13 to 16 times. This showed an increase in the frequency of disruptive behaviors compared to week three when no intervention was given. Figure 5.1 shows a graph of the overall frequency of behavior during the renovation project. The data shown in the graph makes it easier to see the effectiveness of this program. The effectiveness of this project can be seen by comparing frequency data in the first week (baseline) with the fourth week (without intervention). Disruptive behavior of the study subjects recorded in the first week was 17 to 25 times while last week's data was 10 to 16 times. This data shows the effectiveness of using positive reinforcement of economic tokens as a result of behavioral interruptions in the study subjects.

Suggestions and Conclusions

The first proposal is that the token is paired with another reinforce known as a supporting or terminal reinforce (Hackenberg 2018). This behavioral modification project using positive reinforcement only applies economic tokens without being paired with other reinforces. The second proposal is to use the A-B-A-B design. This design involves a longer period of time than this project which is over four weeks. The intervention can be performed twice. Lambert et al. (2015) also propose to extend the research time for the study of disruptive behaviors. Longer time may show better effectiveness. Syariman et al. (2016) emphasize that economic tokens are techniques that can be applied and have a positive impact and motivate students when they are in line with the problem they want to solve.

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