

The Effects of a Token Economy System to Decrease Disruptive Behaviors of Children with Visual Impairment

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The purpose of this study was to evaluate the effects of a token economy system to children with visual impairment. The participants were three sixth grade students with a varied age in YPAB (Yayasan Pendidikan Anak Buta), Surabaya. The frequencies of disruptive behaviors were recorded. The overall outcomes indicated that token economy system effective in decreasing disruptive behaviors. The program was enjoyed by both the teaching staffs and the participants. The benefit of using token economy is discussed.

Keywords: token economy, academic behaviors, children with visual impairment

Introduction

Education is an important tool in developing the potential of individuals. A benchmark educational success is a good learning performance. Good learning performance is affected by various factors: internal factors and external factors (Azwar, 2011). Internal factors include physical aspects such as: the condition of the senses; and psychological conditions such as: interest, motivation, talent, and intelligence, while external factors include physical aspects such as: subject matter, learning conditions, facilities and equipment to learn, and the learning environment; and the social and cultural influences of social support. Among these factors, teachers' skills in classroom management are important external factors that can affect student achievement.

Classroom management is the ability to establish and maintain conditions of the class so that optimal learning can take place (Santrock, 2009). Effective classroom management maximizes the learning opportunities of students (Evertson, Emmer, & Worsham; Evertson & Weinstein, 2006; Larrivee; Weinstein & Mignano, in Santrock, 2009). Classroom management namely include several aspects of managing the physical classroom environment, creating a positive environment, being a good communicator, and deal with problem behavior (Santrock, 2009).

Handling problematic behavior is one of the aspect of classroom management is important to note. Problematic behavior or disruptive behavior is behavior that interferes with the learning process that takes place in the classroom (Malone, nd). Disruptive behavior interferes with the delivery of materials by teachers and by students' acceptance of the subject matter. According to Martella, Nelson, and Marchand-Martella (in Martinez, 2009), students only spend 42% of their time engaged in learning at school (on-task behavior). Time students undertake on-task behavior is student engagement time, ie the time actually spent on learning (Slavin, 2011). This means that 58% of students in the school time is filled students to engage in off-task behavior, namely behavior of disruptive students do like: sleeping in class, using a

cellular phone in the classroom, and annoy your friends. Behavior problems are not handled properly can also cause stress on teachers (Morrissette, in Malone, nd).

The teachers at elementary school YPAB, Surabaya have difficulty in dealing with problematic behaviors. Handling of problematic behaviors are influenced by the teacher competencies and the students conditions. In YPAB, there are some teachers have normal vision, and there is experienced visually impaired. Vision limitations affect the ability of the teacher in knowing the students' disruptive behaviors and influencing skills of teachers in the intervening minor reprimand such behavior as students.

The condition of students in elementary school may vary, there are students who have low-vision; there are of students have more than one disability, such as hearing-impaired and speech impaired, or no vision and ADHD. Blind students are students who can not accept the light of external stimuli at all (visual acuity = 0), and cannot use their sight at all to read the printed letters (Soemantri, 2007; Kauffman & Hallahan, 1994, 2006). Students who have low vision are of students who are still able to receive light stimuli from outside, but the sharpness is more than 6/21, or if the child only is able to read a headline in the newspaper, children can still learn with blurred vision the ability (Somantri, 2007; Kauffman & Hallahan, 1994, 2006). Students who have low-vision condition often take advantage of their teachers who have visually impaired, they can freely perform disruptive behaviors such as: using a calculator when calculating, sleeping, and do not pay attention. The diversity condition of the handling diverse students need as well.

This study aimed to describe the destructive behaviors by of students YPAB, and describe how to use of token economy as a form of intervention for of students destructive behaviors. This research is useful to add insight into behaviors interventions for children with special needs (ABK), and to provide input about the new learning method using token economy to support the teaching and learning process in the grade.

Methods

Subject

This study was conducted on six grade students. The subjects were five students 3rd grade. One class in YPAB specified maximum five students. This is in accordance with the regulations for school children with special needs. Selection of subjects due to the condition that six grade students will take the National Examination soon , so it is important to improve the climate for learning to improve the learning process , e.g. by increasing student academic behavior

The subjects were one student and two girls . A low-vision student, and two blind students . The first subject was named Hoki. Hoki is a boy aged 15 years , and having low-vision. He had no grade for two times . The second subject named Delima. Delima is a 12 - year-old girl with blind conditions. The third subject named Gita. Gita is a 19 -year -old daughter with blindness and impaired speeches.

This study only used three children because the other children did not do behavioral problems in the classroom, so it is not included in the research criteria. In this study, the subject names replaced with pseudonyms. The research was carried out by the teachers who teach in the classroom.

Data Collection Method

Interview

This study was preceded by an interview to the principal and two teachers who taught in the 6th grade. This interview aims to find out the problems in the learning process in the classroom. This interview was conducted by using a semi-structured method. What topics are revealed, namely: the kinds of disruptive behaviors and how teachers deal with the disruptive behavior. Interviews were also carried out after the implementation of the treatment to evaluate the views of teachers on the implementation and effectiveness of treatment.

Observation

Dependent variable in this study is that the behavior of disruptive behaviors that interfere with the learning process (Malone, nd). Students have a variety of disruptive behaviors with each other. Researchers chose 2-3 disruptive behavior is most often done by each student. Each of these behaviors will be measured and recorded by using observation. This type of observation used is systematic naturalistic observation, the observed behavior of specific predetermined when the client is naturally engages in them (Spiegler & Guevremont, 2003). Carried observation method is to calculate the frequency of disruptive behaviors performed by each student during the learning process. Observations conducted from 07:30 to 12:30 p.m, for 24 days. Pre-treatment observations were used to determine the baseline of each behavior performed for 12 days. Post-treatment observations were conducted to determine the amount of gain subject behavior after treatment, carried out for 12 days.

Research Design

This study uses a design that AB is a pre-intervention baseline condition or series or phase and the B condition is an intervention series or phases. This design is sometimes referred to as the basic time-series design or an interrupted (or two-phase) time-series design (Kratochwill & Levin, 2010). Baseline conditions measured during the first 12 days, 5 hours from 07:30 to 12:30 p.m. Period of treatment carried out during the next 12 days, 5 hours from 07:30 to 12:30 p.m. Token exchange is done every four days, at the end of the lesson. Observations made during the baseline period and the treatment period.

Token Economy System

Token economy is a behavioral modification therapy in which a person is given a token to show the desired behavior (Ihiegbulem, Ihiegbulem, & Igwebuike, 2006). Giving token economy performed during the lesson in the classroom. This study begins with socialization Token economy by researchers to teachers and students. Researchers initially trained and provide examples to teachers on how to implement token economy. Once teachers master the ways of implementing the token economy, then teachers are welcome to practice Token economy.

If students perform on-task behavior behaviors, the teacher will give you a token. On-task behaviors are referred to in this study are: 1) answering the question correctly; 2) following the teacher's instructions or participate in class: like counting, writing, and reading. Used in the form of tokens made of origami paper. Each child was given a glass bottle as a token storage. Each time the students do on-task behaviors, the teacher will immediately insert a token into the bottle. If students do disruptive behavior or off-task behaviors, the

teacher will direct students to take one token. Behavior disruptive or off -task behaviors, namely are: 1) sleeping during a lesson; 2) playing alone, 3) making noise ; 4) banging the table ; 5) coming late , and 6) annoying their friends . Each day, before school, students are asked to calculate the returns token obtained and recorded on special paper that has been prepared. When students return the note and the bottle should be returned to the teachers, and the next day will be redistributed.

At the end of the week, before school, students are asked to calculate the token has been obtained for four days, and are allowed to exchange their tokens with rewards that have been provided. The menu of rewards, determined via a preference assessment, consisted of candies, chocolates, books, pins, bracelets, tumblers, pencil cases, and saving box.

Result

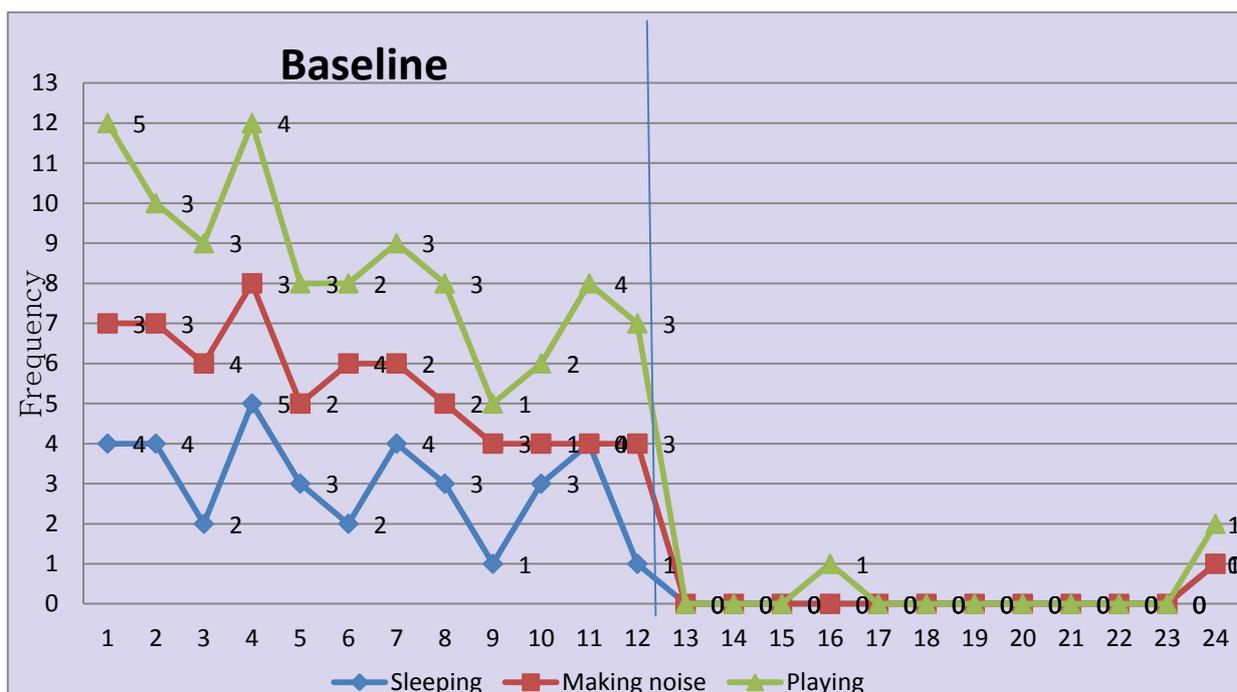
The types of disruptive behavior

The types of disruptive behavior by students , namely are: 1) annoying friends ; 2) coming late; 3) cheating in lessons ; 4) sleeping during a lesson; 5) did not care about learning; 6) did not do their homework, school work, teachers orders, and 7) using electronic devices during class

Hoki 's Background

Hoki is the only blind child with low vision in the 6th grade. Hoki is 15 years of age. Hoki had no grade for 2 times at school in YPAB He had previously attended public schools. However, he was transferred to a school for children with special needs due to vision impairment.

Hoki's disruptive behavior showed great influence on the values in the subject area so that he never does the next grade. Disruptive behavior performed by Hoki is sleeping during lesson, playing alone during lesson, and making noise. Hoki often fell asleep in class when the lesson, especially when the class is being taught by teachers who are blind. Hoki also often perform other activities that are not related to ongoing lessons. Hoki like to fold papers, make webbings, or perform other crafts work. Hoki also liked chatting with friends, making a noisy classroom.



Graph 1. Hoki's disruptive behavior across days

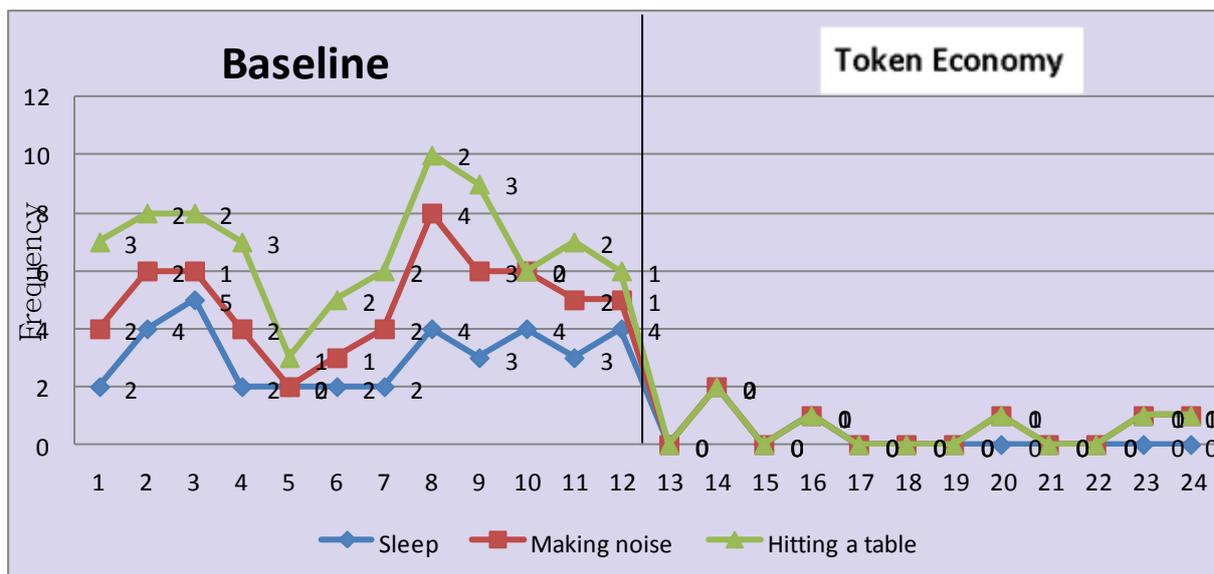
Overall the results of the study showed a decrease in the disruptive behaviors. During baseline the average frequency of sleeping was 3.00 (range 1-4), the average number of making noise was 2.50 (range 0-5), and the average number of playing alone was 3.00 (range 1-5). When the Token economy system was in effect, the frequency of sleeping declined to an average of 0.83 (range 0-1). The mean number of making noise also declined to 0.00 (range 0). The average number of playing alone declined to 0.16 (range 0-1).

Hoki liked the Token economy program. In fact, he had the most token because he was active and followed teachers' instructions and more rarely engaged in disruptive behaviors. Before the intervention, Hoki was fall asleep for seven times, but in the intervention period he just fell asleep once. This shows that Hoki is able to follow the teaching and learning activities with better and can reduce problem behavior in the classroom.

Delima's Background

Delima is 12 -year -old and blind. Delima was a smart kid, but once she often had epilepsy, her intelligence allegedly declined. Disruptive behavior that often arises is to appear bored by putting her head on the table. In the classroom, Delima tend to seek attention. Sometimes she's talking to herself or asking something that is not related. When she was not noticed by the teacher, then she would be angry or lift table.

During lessons, Delima is difficult to follow the lessons with a focus or direction. She wanted the lesson according to her wishes. She liked it better when given a lot of questions. Delimas are not too happy to learn that just listening material. Delima also have difficulty writing and reading fluently. Not infrequently she is often reprimanded by the teacher to read more smoothly and quickly, but even back then he was angry and said that was a good way to read it.



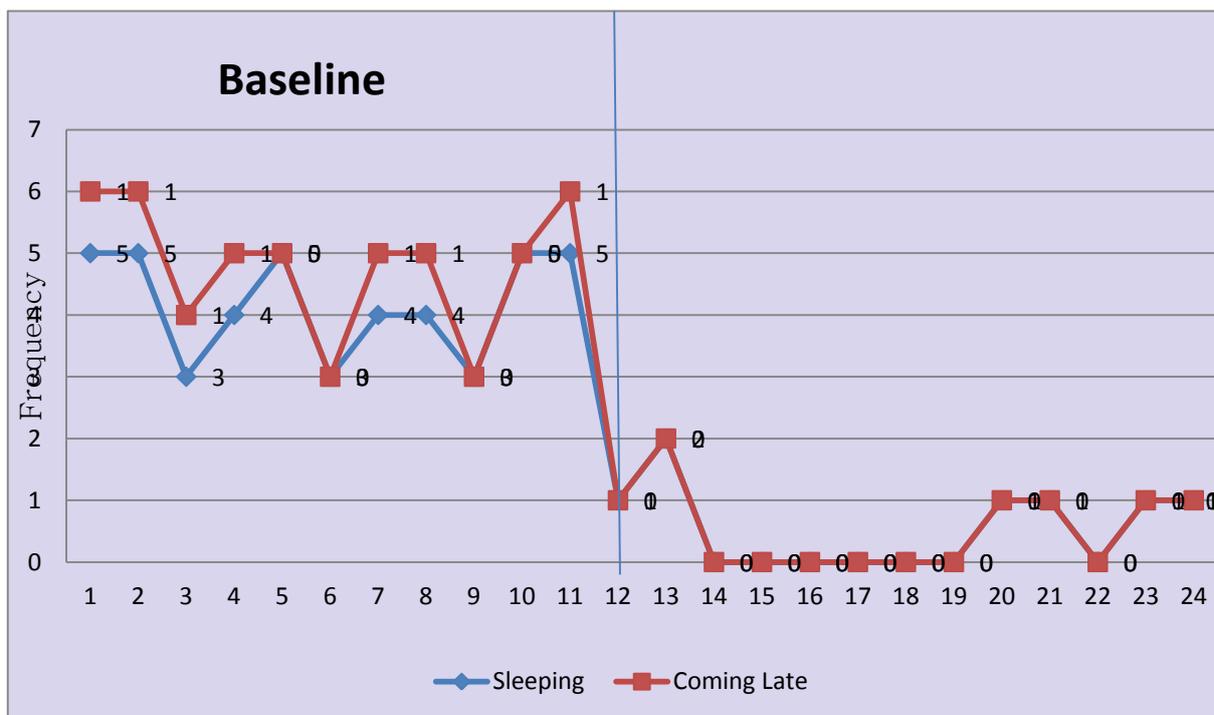
Graph 2. Delima's disruptive behavior across days

Overall the results of the study showed a decrease in the disruptive behaviors. During baseline the average frequency of sleeping was 3.08 (range 0-4), the average number of making noise was 1.83 (range 0-5), and the average number of hitting a table was 1.91 (range 1-4). When the Token economy system was in effect, the frequency of sleeping declined to an average of 0.25 (range 1-2). The mean number of making noise also declined to 0.25 (range 0-1). The average number of hitting a table declined to 0.00 (range 0).

Implementation of interventions make a difference in the behavior of Delima, it appears there was some behavior that is much reduced than before the intervention implemented. Delima disruptive behavior is boring then she laid her head on the table, at the time of intervention frequency dropped from 11 to 3. This suggests that Delima is more interested in a way of teaching that actively invites her to answer. There are still 3 times the frequency of the boredom that comes to Delima, it relates to a passive way of teaching teachers.

Gita

Gita is a 19 -year-old teenager with a state of total blindness and speech impaired. Gita activities spelled out in the classroom most passive among other friends, it is due to constraints in the eye and talking. Disruptive behavior is often done Gita is sleeping with the head laying on the table. She did not attend classes because she is not able to respond back what is being asked by teachers who taught in the class, so she showed reticence that looks like a lesson ignored.



Graph 3. Gita's disruptive behavior across days

Overall the results of the study showed a decrease in the disruptive behaviors. During baseline the average frequency of sleeping was 4.00 (range 1-5), and the average number of coming late was 0.58 (range 0-1). When the Token economy system was in effect, the frequency of sleeping declined to an average of 0.50 (range 1-2). The mean number of making noise also declined to 0.00 (range 0).

Gita problematic behavior is not too much reduced, it is because the teachers do not care Gita, so when she sleeps it will be left. Gita at the time of the intervention could provide a bit of presence in the classroom, for example with the silent but not sleeping. She could answer some teachers who greeted her greetings, and even the occasional reprimand her up for her own bustling.

Discussion

Results token economies have a positive impact for students. The students rarely perform destructive behavior and are increasingly being actively involved in the learning process has taken place. Students become more focused and pay attention to the lesson the teacher's explanation. The students look happy and excited to learn during the period of the token economy.

Implementation of the token economy method received a positive response from students. The Grade 6 students also consider learning more fun this way and make them eager to learn, especially if there is a reward. According to Hoki and Gita, granting rewards to make them enthusiastic about learning because they rarely get the prize because of the struggle to learn. In general, they get them for free gifts from guests or donors.

Part of teachers responded positively to the implementation of the token economy.

According to one teacher visually impaired, token economy methods can provide motivation; make students more enthusiastic about learning. Token economy methods provide positive benefits for children and schools. He hoped that the token economy method can still be implemented in the teaching-learning process in YPAB.

The role of teachers as implementers of a token economy system is essential. If the teacher is not able to perform well token gift, then it will have an impact on children. Each teacher has different teaching competencies, and it also affects the students. Effective teachers can stimulate students' motivation and less skilled teachers more passive and unable to stimulate students (Arends, 2008). There are teachers who are able to provide an atmosphere that is encouraging, but there are also teachers who are more passive in carrying token economy. The teachers that are generous and active, children are also increasingly active in getting the token. Unlike the teachers who are passive, for example: teacher gave questions in a monotone or a teacher who basically dreaded by children. In the passive or the dreaded teacher, the children are less eager to compete to get as many tokens.

In addition, teachers' teaching methods also affect the response of the child in carrying token economy. One example in the form of lecture subjects only, and do not use the lecture method effectively. Ineffective lectures can make students become easily bored (Santrock, 2009) and sometimes behavior like sleeping in class or just put my head on the table to be resurfaced. Basically teaching methods for teachers to be triggered in response to the lessons children. If teaching was boring, the atmosphere of the class would also be boring.

Limitation

This study uses AB design is the simplest method to test the effectiveness of a treatment and only involves three research subjects. Therefore, the results can not be generalized. AB designs do not provide adequate information to do the calculation of effect size (Beeson & Robey, 2006).

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