Effect Of Behavior Contract To Reduce Maladaptive Behaviors Of Students With ADHD

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Abstract

Maladaptive behaviours of students with Attention Deficit Hyperactivity Disorder (ADHD) is negative behaviours, which disturb a learning process in the classroom. This study was conducted to identify the use of the behavior contract in reducing maladaptive behaviors in students with ADHD in Al Firdaus Elementary School Surakarta, Indonesia. Subject of this study was a third grade ADHD student. The Single Subject Research (SSR) with multiple baseline cross variables design was applied as experimental method. The target behaviors were directly observed, recorded in the instrument and analyzed by visual graphic analysis method. At the baseline-1 phase, the target behavior of verbally disrupting friends occured on average 20 times, while nonverbal disruption occured 24 times. The target behavior in the intervention -1 phase tended decrease, with an average of 5 times (verbal) and 4 times (nonverbal). At the baseline-2 phase, the target behavior of interrupting the teacher’s explanation occured on average 18 times. This behavior decreased in the intervention-2 phase with an average of 3 times. At the baseline-3 phase, the target behavior of unable to resist eating and drinking occured on average 10 times. At the intervention-3 phase, the behavior occured on average once. It can be concluded that the behavior contract may reduce maladaptive behaviors of student with ADHD.

Keywords: Behavior Contract, Maladaptive Behavior, ADHD.
1.0 INTRODUCTION

Education for children with special needs in Indonesia is usually held in Special School or called Sekolah Luar Biasa (SLB), and inclusive schools. Generally, students in Special School are grouped according to the type of disabilities or needs, whereas in inclusive school, children with special needs are co-educated with normal children of their age in the same classroom. The last type of school focuses on training and nurturing special needs children to be accustomed and able to fully participate in the real society (Praptiningrum, 2010).

A type of special needs that is specifically catered in inclusive schools is children with Attention Deficit Hyperactivity Disorder (ADHD). ADHD in children is a condition characterized by the inability to concentrate, hyperactivity, and impulsivity that can cause hindrances in their lives (Baihaqi & Sugiarmin, 2006: 2).

Diagnostic and Statistical Manual 5 or DSM-5 (author, 2013: 32) described that ADHD is a neurodevelopmental disorder determined by levels of inattention, disorganization, or hyperactivity-impulsivity. Children with ADHD have difficulty in controlling themselves, so they appear to be unable to concentrate for long periods of time, having difficulty with quiet activities, and harassing other people, both verbal and nonverbal. Their attention is easily distracted by various thing. They are forgetful and easily confused. They are also often seen move constantly, as if they never feel tired. These characteristics caused ADHD children to experience various problems during the learning activities in the classroom. Pelham and Bender (Wood, 2005: 87) based on teachers’ reports state that they (children with ADHD) are often involved in fights, tend to interrupt people and being rejected or unpopular with their peers.

Various problems of children with ADHD in the classroom are caused by children’s behaviors which tend to be maladaptive or inappropriate. According to Latipun (2008: 135), maladaptive behavior or problem behavior is a negative habit or behavior that is inappropriate and unexpected. Maladaptive behaviors must be anticipated immediately to prepare the ADHD children to avoid rejection of the society in the future.

There are numerous ways to reduce maladaptive behaviors of children with ADHD, which can be done through the use of medical treatment and behavioral therapy. According to Barkley (Martin, 2008: 233), the drugs used in the treatment of children with ADHD are stimulant medications that effectively improve behavior, academic performance and social adaptation in children with ADHD up to 70-90 percent. The result of medical treatment does appear to provide a very drastic change in a short time. However, it does not last long. Medical treatments cause side effects that affect the health of children as well. Smucker & Hedayat (Wood, 2005: 89) stated that some side effects of medication treatment for children with ADHD are trouble sleeping (insomnia), loss of appetite, abdominal pain, dizziness, the emergence and worsening of anxiety, slowed growth, tachycardia, increasing blood pressure, recurring maladaptive behaviors after the influence of drugs ended, unstable emotions, obnoxiousness, social withdrawal, and damaging effects.

Another alternative for reducing maladaptive behaviors of children with ADHD is to use behavioral therapy or behavioral counseling. Behavioral therapy or behavioral counseling is certainly safer for children's health and the outcomes tend to last longer. Firestone (Wood, 2005: 95) states that the progress gained from behavioral counseling lasts longer, does not disappear easily like the influence of drugs. Thus, nonmedical methods play important role in achieving sustainable success for children with ADHD.

One technique of behavioral therapy or behavioral counseling that can be used to reduce maladaptive behavior is the behavior contract. Martin & Pear (2011: 323) stated that maladaptive behavior concerned self-control can be overcome by behavioral model of behavior contract. Behavior contract -also called contingency contracting- is a contract between counselee or student and counselor or teacher to arrange the conditions so that the counselee shows the desired behavior (Komalasari, Wahyuni, &Karsih, 2011: 172). The contract that will be used must be based on an agreement between both parties. Children should already know the reward when they behave in accordance with the contract, it basically is expected that the child always tried to behave accordingly. The aim is that children with ADHD can consciously
determine the consequences of the actions they did. Latipun (2008: 144) stated the same thing, where "...individuals anticipate the change of their behavior based on the agreement that the consequences will arise".

2.0 METHOD

This study was conducted for one month in Al Firdaus Elementary School Surakarta, Indonesia in 2016. This research used experimental method of Single Subject Research (SSR) with multiple baseline cross variables design. Multiple baseline cross variables design is the research design used if the teacher wants to change behavior using an intervention that can be applied to two or more of the target behaviors (Sunanto, Takeuchi, and Tanaka 2005: 74). Multiple baseline design is used to demonstrate the effectiveness of an action or treatment without returning to baseline conditions (Martin & Pear, 2011: 273). Thus, in this study, each variable or the target behavior was measured at one baseline phase and one intervention phase (A-B). The bound variables in this study were three target of maladaptive behaviors in ADHD subject, i.e. verbally and nonverbally disrupting friends (target 1), interrupting the teacher's explanations (target 2), and unable to resist eating and drinking (target 3).

The target behaviors’ data were collected using direct observation with recording instrument which its validity was tested by two experts in handling misconducts and psychological measurement experts. The data collection was carried out in 20 sessions, and analyzed by visual graphic analysis method. At each session, the data were collected by video camera for two-hour lessons (approximately 70 minutes). The sequence of the data collection is: baseline-1 ‘verbally and nonverbally disrupting friends' in 4 sessions, intervention-1 in 16 sessions; baseline-2 'interrupting the teacher's explanation' in 7 sessions, intervention-2 in 13 sessions; and baseline-3 unable to resist eating and drinking' in 10 sessions, and intervention-3 in 10 sessions.

3.0 RESULT

3.1 Target Behavior-1

The target behavior observed at baseline-1 phase is the behavior of verbally and nonverbally disrupting friends. This phase consists of four sessions. Intervention in this study is divided into three levels: level 1 in the form of motivation given by the researcher for not behaving maladaptive during the learning activity, level 2 for advice and warning given when the subject behaves maladaptive, not in accordance with the behavior contract in agreement, and level 3 in the form of penalties in accordance with the behavior contract if the intervention level 2 cannot overcome the subject's behavior. The following data is the result of the baseline-1 and intervention-1, consist of 16 sessions:

Figure 1: Reduction of Disrupting Friends Verbally and Nonverbally

![Image of graph showing reduction of disrupting friends verbally and nonverbally](image)

The average of the subject's maladaptive behaviors in baseline-1 phase were 20 times (verbal) and 24 times (nonverbal). Thus, the frequency of the subject’s maladaptive behaviors is in high category. Subject’s maladaptive behavior of verbally and nonverbally disrupting friends were reduced (Figure 1). The frequency of the subject’s behaviors in the beginning were 14 times (verbal) and 15 times (nonverbal), then it was decreased until less than 5 times. The mean of the subject’s maladaptive
behaviors in intervention-1 phase were 5 times (verbal) and 4 times (nonverbal). Thus, the frequency of the subject’s maladaptive behaviors was categorized as low.

### 3.2 Target Behavior-2

The target behavior observed at baseline-2 phase is the behavior of interrupting the teacher's explanations. This phase consisted of seven sessions. Furthermore, the intervention phase of the target behavior-2 consists of 13 sessions. The recording result as follows:

![Figure 2: Reduction of Interrupting Teacher Explanation](image)

The mean of the subject’s maladaptive behavior in baseline phase is 18 times. Thus, the frequency of the subject’s maladaptive behavior is in medium category. It can be noticed that subject’s maladaptive behavior of interrupting the teacher's explanations is reduced (Figure 2). The frequency of the subject’s behaviors in the beginning was 9 times, then it was decreased to less than 4 times. The mean of the subject’s maladaptive behaviors in this phase was 3 times. Thus, the frequency of the subject’s maladaptive behaviors was in low.

### 3.3 Target Behavior-3

The target behavior observed at the third baseline and intervention phases is the behavior of unable to resist eating and drinking. Both of these phases consist of ten sessions, with the recording result as follows:

![Figure 3: Reduction of Unable to Resist Eating and Drinking](image)

The mean of the subject’s maladaptive behavior in baseline-3 phase was 10 times. Thus, the frequency of the subject’s maladaptive behavior was grouped as medium category. Subject’s maladaptive behavior of unable to resist eating and drinking is reduced. The frequency of the subject’s behaviors in the beginning is once, it was increased 2 times in the third session. But the frequency was decreased again to
once until the end of the phase (Figure 3). The mean of the subject’s maladaptive behaviors in this phase 1 time. Thus, the frequency of the subject’s maladaptive behaviors was in low category.

Based on intervention result, it’s known that the frequency of the target behavior 1 became low with average 5 times (verbal) and 4 times (nonverbal), target behavior 2 become lower with mean 3 times, and target behavior 3 become lower with mean once. Thus, the subject’s behavior target become low after a few sessions in the intervention phase. Here is a graphic of summary subject’s maladaptive behavior based on intervention result as shown in figure 4.

**Figure 4: The Change of Frequency of Subject’s Maladaptive Behaviour**

Based on Figure 4, the frequency of the target behavior 1 became low. Similarly, the frequency of the target behavior 2 and 3 which in baseline phase were in medium category became low after the interventions. At the beginning of the intervention phase, the subject's behavior generally has not stable yet. This is due to the subject still requires adjustment to the new regulations in accordance with the
behavior contract. But after a few sessions in the intervention phase, the subject's behavior then become completely stable.

4.0 DISCUSSION AND CONCLUSION

Based on the research result, it is known that there was a decline in the subject’s frequency of maladaptive behaviors after the intervention using the behavior contract. The decline in the subject’s frequency of maladaptive behaviors confirm that the hypothesis proposed in this study can be accepted.

Behavior contract can be applied to reduce maladaptive behaviors in ADHD students with the students’ approval and input from parents (US Department, 2006). The researcher used behavior contract technique that in the making involves the subject and the classroom teachers. This is done so that there is a concordance of the terms of the agreement between the classroom rules and the student’s conditions.

The main theory that the behavior contract derived from is the behavior modification. Martin & Pear (2011: 323) stated that there is a behavioral model that can be used for self-control that is called a self-control program. Self-control program is used to deal with behavior issues regarding self-control problem. An important component in this program is a contract contains the problems and goals, the steps to achieve the objectives, the effective date, and signatures as the evidence of approval. The contract used as a medium to handle issues related to self-control behaviors is then called a behavior contract.

In this study, the subject had maladaptive behavioral symptoms that are included in the form of self-control difficulties, i.e: disrupting friends verbally and nonverbally, interrupting the teacher's explanation, and unable to resist eating and drinking during the learning activity. Thus, the behavior contract is particularly appropriate to overcoming the problems of the subject.

The recorded results of the behaviors indicate that the subject has high frequency of maladaptive behavior. Upon entering the intervention phase, the subject's maladaptive behaviors tend to decrease. The cause is the immediacy of the interventions given by the teacher after the subject breaks the contract or the agreement. Intervention is provided by the teacher in the form of advice, motivation, and warning so that the subject behaves adaptively. If the warning given by the teacher is ignored (the subject breaks the contract again), the teacher will give the penalty according to the contents of the contract, which may be the subject doing his or her work outside the classroom, the subject does not get a lunch snack (provided after school), and/or the subject’s break time is reduced. When the subject can control himself or herself to not disrupt friends, the subject is rewarded in the form of stickers, drawing papers, and/or color pens at the end of each session.

In addition to the subject’s decreasing maladaptive behaviors, the researcher found that the subject began to have a sense of responsibility towards oneself. According to Barbara (Hamidah & Palupi, 2012), responsibility is someone’s attitude which is reliable, diligent, organized, on time, appreciate commitment and planning. A manifestation of the development of a sense of responsibility in the subject is the subject began to feel the need to complete tasks or take notes on the lesson. Subject began to appear diligently writing than committing acts that showed maladaptive behaviors.

Subject’s empathy also began to grow after entering the intervention phase. Empathy as stated by Ahmadi (Muhtadi, 2009) is a feeling of understanding others or tendency to position themselves as others, so they behave or act in others’ place. One form of empathy is shown in the form of helping teacher brings the goods such as a bag or a book without being asked at all. Prior to the study, subjects tend to be indifferent to the teacher or anyone else who does not pique their interest.

These findings indicate that children with ADHD who have low social skills and poor emotional control (Wood, 2005: 123) still have hopes to be able to be more sociable and well behaved ethically and morally. Good attitudes can be instilled on students with ADHD in various ways, for instance, advice, discussion, motivation, and so on. Muhtadi (2009) stated that good attitudes such as empathy and responsibility can be nurtured by example, moral stories, verbal reprimand, direct experience, playing with each other, and habituation. In this study, the subject’s attitude of responsibility and empathy began to detected in the intervention phase, in which the classroom teacher directly and continuously giving warning and advice whenever the subject’s maladaptive behaviors surface.
In spite of the fact that there is a change of behavior on the subject, this research need to be further continued. In this research, there are still some shortcomings that need to be considered, among others, is that the research on the maladaptive behaviors took a long time, it is because the subject is not familiar with the application of the behavior contract. In addition, the process to overcome or reduce maladaptive behaviors requires the cooperation of all parties, not just the subject, the researcher and classroom teachers or subject teachers only. Participation of the subject’s classmates basically is also needed, so as not to bring out other unwanted behavior. Giving interventions, penalties and rewards is more effective when given by those who feared or respected by the subject (e.g., classroom teachers). The lack of this result can be used as material of the next research.

It can be concluded that behavior contract may reduce maladaptive behavior of subject ADHD in the class, which are verbally and nonverbally disrupting friends, interrupting the teacher's explanations, and unable to resist eating and drinking.

References


