EFFECTIVENESS OF '*TIME-OUT*' INTERVENTIONS STUDY ON DISRUPTIVE BEHAVIOR AMONG PRIMARY SCHOOL'S STUDENTS IN MALACCA

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Abstract - **The scope of this study to examine the effect of 'time-out' intervention on the disruptive behavior among Bukit Rambai primary's students in Malacca. The 'time-out' is a method to a help so called " the lost self control" students by segregating them away from the others with a specific schedule. The study involved a total of 49 standard four pupils with 25 of them is classified as a "control group" while the others and balance of 24 students classified as a "treatment group". The study is based on the collected data using the observation form by the researcher. The result showed that the most dominant disruptive behavior are playing or disturbing their other friends during their study, followed by disobeying the teacher's instruction, talking irrelevant matters while in class, not able to complete the given tasks or assignments on time and last but not least, leaving the class without prior permission or coming late to class. The T-test analysis shows significantly difference between the treatment group and control group in the inhomogeneous disruptive behaviour respondents. While the scoring result of pre-test and post-test for treatment group showing significance level 0.00 (<0.05). This 'time-out' intervention implementation will give the positive impact for the disruptive behavior and can become the alternative way for the punishment in order to change the disruptive behavior if properly conducted. In order to get the more significant and consistent result a further comprehensive studies need to be conducted.**

Keywords : "time-out' , negative reinforcement, behavior changes, disruptive behavior

I. INTRODUCTION

According to Herrera (2017), today's school discipline is one of the most critical issues faces by our education system. There is no national standard specifically for dealing with disciplinary issues at school, so every teacher needs to develop the most appropriate strategy to deal with this problem. According to him, the intervention program that is being implemented to students with disruptive behavior will cause them to change their behavior. He argues that negative reinforcement such as 'time-out' succeeds in shaping students' behavior. Teachers can also control the class well compared to the traditional methods where, disruptive problems among pupils cannot be curbed.

The significant issue faced by teachers in the classroom is disruptive behavior. Meany-Walen, Bratton and Kottman (2014) stated that the disruptive behavior displayed by the students interfered the ability of teachers to teach in the class, as well as the ability of students to learn. If the problem is not dealt properly, disruptive behavior will be conducive and can lead to more serious antisocial behaviors that can eventually lead to crime (Gonsoulin, Zablocki & Leone, 2012), truancy, drop outs and dropouts in academics (Hoff & Ervin, 2013).

Disruptive behavior has high potential in reducing the students' learning process in the classroom. This is because disruptive behavior occurs because the students disrupt the teaching process such as disturbing the learners, making a lot of noise and playing in the classroom. In fact, the delivery time of teachers will also be shorter because they need to respond to the situation (Greenwood, Horton, & Utley, 2002). In addition, according to Conroy, Sutherland, Snyder, and Marsh (2008) as well as Sayeski and Brown (2011) disruptive behavioral problems among the pupils gave pressure on teachers.

Garret (2017) argues that time-out interventions have enormous potential for parents, educators, and behavioral analysts to overcome, control and reduce behavioral problems among primary school children.

"Time-Out"

The 'time-out' intervention is also another option according of Buzenski (2017). 'Time-out' (TO) is a widely recommended behavioral management strategy that has been reviewed and has a minimum relation to components and application or training procedures for teachers. According to him, the use of TO is very effective in classroom management.

Furthermore, Blazevic's (2014) study focuses on discipline and provides an overview of methods to encourage and maintain students' discipline that will produce better teaching and learning procedures or process. He has been using these method of positive discipline and 'time-out' as a process to deal with disciplinary problems among students. Findings show that positive disciplines can be well-formed in the classroom without the use of money-reward methods.

'Time-out' focuses on how to assess the teacher's assessment of students' disruptive behavior problems. Teachers who value disruptive behavior and manage to change students' behavior in a more positive direction indicated that the teacher used a 'time-out' approach well.

This study illustrates to teachers and parents that they can do time-out at home to ensure that pupils can manage their behavior well in everydays' life.

II. METHODOLOGY

Research design

The design used in this study was a quasi experiment to evaluate the effect of time-out intervention on changes in disruptive behavioral among primary school children. The quasi experimental design was chosen because the researcher could not use the full statistical procedure. According to Kerlinger (1986), the purpose of the study design is to describe the research questions and control the variables. According to Mohd Majid Konting (2005) this design is suitable to identify students' learning problems when most research subjects are available in certain situations and situations.

In addition, researchers also use the ABA design in the data collection process. According to Syarinah (2015), the ABA design is also known as a reversal design that involves the collection of baseline data followed by interventions and returns to the final data collection as the initial withdrawal for the revaluation. In fact, this design is called a reversal design because the collection of final data is repeated as soon as the early data collection after the intervention is stopped to look back at behavioral changes caused by intervention implementation.

Table 1
The Implementation Process of the Intervention Program

Group	Intervention Program		
	A1	B	A2
Treatment	Baseline	Intervention	Baseline
Control	(No Intervention)	X	(Intervention Stopped)
Period	W1	W2-W4	W5-W6

A1: Phase to collect baseline data on five types of behavioral problems before intervention in the first week.

B: Phase of implementation of the current level intervention program using 'time-out' methods for 3 weeks.
A2: The cessation and revaluation phase at the end of the 6th week after the intervention program was terminated.
X: The control group does not accept any intervention to see the difference between the two groups
M: Runs the weekly intervention program.

Samples

This study was conducted at Sekolah Kebangsaan Bukit Rambai, Melaka using 49 Year 4 pupils as samples. The respondents were divided into two groups named the control group and treatment group. In this study, 24 respondents joined the control group and 25 respondents joined the treatment group. According to Gravetter and Forzano (2012), the sample size ranges from 25 to 30 samples reaches the goal of research in experimental studies. Although in this quasi experimental study there were two groups, however, the 'time-out' intervention program was only tested on the respondents of the treatment group. The implementation of intervention to the treatment group is aimed to evaluate the disruptive behavior changes in the classroom. For the control group, they were not given any intervention. However, the appointed teacher is still observing and observing the student's observations in the form provided by the researcher.

Instrument

In this study, researchers used the observation form as a measurement tool to measure the type of disruptive behavior problem.

Observation Form

The observation form in this study contained five items of behavioral problems observed in the classroom. There are five behavior problems observed during the intervention process that is talking about irrelevant things when teaching procedure took place, not listening to instructors' instructions, playing or disrupting study partners, not completing assignments or tasks given prior the time given and getting out of the class without permission or passing into class. This observation involves three phases that are the phase before, during and after the intervention.
Before the items in the observation form were distributed to the actual respondents, the researchers tested this observation form on a few respondents in a pilot test. According to Muijs (2004), the most effective strategy to reduce instrument-related problems is to administer a pilot study on a group of students not comprising actual survey respondents to obtain the reliability of the research instrument.

Respondents' background

Respondents of this study consisted of 49 selected Year 4 students to test the implementation of the intervention program. Table 2 showed that the respondents of this study were divided into two groups named the control group and treatment group. The control group involved 25 persons, of whom 7 (28.0%) were male respondents, while 18 (72.0) were female respondents. While the respondents of the treatment group consisted of 24 people, 7 persons (29.0%) male respondents and 17 others (70.0%) female respondents.

Type of Problem Disruptive Behavior

What kind of disruptive behavioral problems often occur during the teaching and learning process?

Analysis of findings can be seen in Table 2 which describes the frequency of disruptive behavior problems before and after intervention is given. Analysis findings show that the most dominant behavior problem is playing / disturbing a friend during the teaching and learning process ois 2065, followed by not listening to the teacher's instruction which is 1996, speaking of irrelevant / disastrous things during the teaching is 1856, not completing the assignment / training given before the given time is 970 and finally being outside the class without permission / passing into class is 218.

Table 2
Frequency Of Data Distribution On Type of Behavior Problems

No	Type of Disruptive behavior problem	Teaching And Learning Process		Frequency
		Treatment	Control	
1	Speaking of irrelevant / bad things when teachers are teaching	1058	798	1856
2	Not listening to teacher's instruction	1122	874	1996
3	Play / disturb their friends while during the teaching and learning process	1245	820	2065
4	Not completing assignments / exercises in the given time	591	379	970
5	Exit class without permission / passing in to class	146	72	218

In relation to this finding, the researcher presents the mean value and standard deviation in Table 3 for all disruptive behavior problems before the intervention is implemented. The mean score of the highest type of problem of behavior is playing / disturbing of a friend during the teaching and learning process with the value of M = 24.8, SD = 4.15, followed by not listening to the instruction of teachers with M = 24.1, SD = 4.28, talking about irrelevant things when the teacher is teaching has the value of M = 21.5, SD = 5.48. In addition, those who did not complete the assignments / exercises given in the time given gain a mean value of M = 12.8, S.D = 2.00 and out of class without permission / passing through the class to obtain the value of M = 2.91, S.D = 1.15.

Table 3
Min Value and Standard Deviation Type of Behavior Before Intervention

No	Type of Disruptive behavior problem	Min	SD
1	Speaking of irrelevant / bad things when teachers are teaching	21.5	5.48
2	Not listening to teacher's instruction	24.1	4.28
3	Play / disturb their friends while during the teaching and learning process	24.8	4.15
4	Not completing assignments / exercises in the given time	12.8	2.00
5	Exit class without permission / passing in to class	2.91	1.15

Table 4 shows the disruptive behavior problems after intervention is implemented. The highest mean score of the type of behavior problem is playing / disturbing a friend while teaching and with the value of M = 18.0, SD = 9.66, followed by not listening to the instruction from the teacher with the value of M = 17.3, SD = 6.94, talking irrelevant things when the teacher is teaching has the value of M = 16.9, SD = 6.51. In addition, not completing assignments / exercises given in given time obtained a mean value of M = 7.26, S.D = 4.87 and exit the class without permission / passing into class obtained M = 1.59, S.D = 1.45

Table 4 Min Value and Standard Deviation Type of Behavior After Intervention

Group		Min	S.D
Treatment	Pre	17.7	1.03
	Post	6.77	.622
Control	Pre	16.8	2.07
	Post	17.4	2.39

Table 5
Min Value Difference Comparison and Standard Deviation

No	Type of Disruptive behavior problem	Min	SD
1	Speaking of irrelevant / bad things when teachers are teaching	16.9	6.51
2	Not listening to teacher's instruction	17.3	6.94
3	Play / disturb their friends while during the teaching and learning process	18.0	9.66
4	Not completing assignments / exercises in the given time	7.26	4.87
5	Exit class without permission / passing in to class	1.59	1.45

The mean difference for disruptive behavior of pre and post test of control and treatment groups.

Is there a min difference for disruptive behavior of pre and post group tests of the control and treatment group?

There was no significant difference in the mean score of the disruptive behaviors of pre and post treatment tests.

Table 5 shows the difference between pre and post min difference between the two groups. Overall,the researchers found that there was a low mean difference between the treatment group and the control group for disruptive behavioral problems. In the comparison analysis of mean value difference in pre-observation showed that treatment group obtained M = 17.7, S.D = 1.03 and control group obtained M = 16.8, S.D = 2.07. The mean difference in mean value of post observation showed that treatment group obtained M = 16.8, S.D = 2.07, while control group obtained M = 17.4,

S.D = 2.39. Overall, there was a low change in behavior in this comparison in terms of the type of behavioral problems exhibited by respondents during pre and post observations.

Table 6 shows that the pre test value p = .053 is greater than the significant level .05 while the pre test shows p = 0.00. This shows that the treatment groups and control groups are different and significant where disruptive behavior of respondents is not homogeneous

Table 6
Comparative analysis of pre and post test control and treatment groups

Control and treatment group	T-test		
	Sig 2 tailed	df	t
Pre	.053	47	-1.98
Post	.000	47	21.2

Effectiveness of The Time Out method

Is time-out intervention effective in reducing disruptive behavior problems before intervention is given and after intervention is given?

There was no significant difference in mean score of disruptive behavior of pre and post test of the treatment group.

The t-test for samples was also conducted to test whether the use of 'time-out' interventions is given to the respondent or not. Hence, comparison of pre test scores with the post-test scores for the treatment group were highlighted. The findings showed that there was a significant difference between the pre test and the post test for the treatment group of significant level 0.00 (<0.05). This shows that this intervention is appropriate and effective in reducing the problem of respondents' behavior in the classroom.

Table 7 *T-test For Sample Treatment Group For Pre and Post Test*

Pre and Post Test	**T-test in invariable sample**		
Treatment Group	*Sig 2 tailed*	Min	Standard Error
Variants Similarity	.000	10.9	.26

III. CONCLUSION

'Time-out' is used to help students who are just beginning to lose their self-control so that they can control their behavior and focus on their learning process. Practically, this study has implications in the field of education and specifically in the field of psychology and counseling as well as towards school teachers. The findings showed that there was a positive change in the students who were in the group that received 'time-out' interventions compared to those who did not receive interventions. Positive changes are shown in terms of the reduction of problematic behavior as well as the reduction of students involved in the misdemeanor in the classroom.

This study provides empirical evidence to support 'time-out' interventions as a method that teachers can use to address behavioral problems in the teaching and learning process. The implication of the success of this experimental study can also provide a contribution as this method can also be used by all teachers in the primary schools in Malaysia. Additionally, pupils also have the potential to change and improve themselves positively.

Therefore, educators and interested parties can take the appropriate steps to use the method. The persistent efforts of the educators to handle students who are experiencing disruptive behavior problems cannot be denied at all. However, efforts taken should be more focused in solving the problem.

REFERENCES

[1] Blazevic, T. (2014). Time-out room in the school setting. Stručni članak, 63 (1-2), 213-221.

[2] Buzenski, J.M. (2017). An evaluation of deferred time-out to treat noncompliance in the classroom setting. East Carolina University.

[3] Conroy, M. A., Sutherland, K. S., Snyder, A. L., & Marsh, S. (2008). Classwide interventions effective instruction makes a difference. Teaching Exceptional Children, 40(6), 24-30. http://dx.doi.org/10.1177/004005990804000603.

[4] Garrett, M.A. (2017). The effects of delayed timeout, delayed timeout with rule, and immediate timeout on shape choosing behaviors. The University of Memphis.

[5] Gonsoulin, S., Zablocki, M., & Leone, P. (2012). Safe schools, staff development, and the school to prison pipeline. Teacher Education and Special Education: The
Journal of the Teacher Education Division of the Council for Exceptional Children, 35(4), 309-319.

[6] Gravetter, F. J., & Forzano;, L.-A. B. (2012). Research methods for the behavioral sciences (4th edition). USA: Linda Schreiber-Ganster.

[7] Greenwood, C. R., Horton, B. T., & Utley, C. A. (2002). Academic Engagement: Current Perspectives on Research and Practice. *School Psychology Review*, 31, 328-349.

[8] Herrera, L.A. (2017). *When in Doubt, Put Them Out: Principal Perspectives on Suspension as a Disciplinary Practice*. Prescott Valley, Arizona

[9] Hoff, K. E., & Ervin, R. A. (2013). Extending self management strategies: The use of a classwide approach. Psychology In The Schools, 50, 151-164.

[10] Kerlinger, F. N. (1986). Foundations of behavioral research. (3rd ed.). USA: CBS College.

[11] Meany-Walen, K. K., Bratton, S. C., & Kottman, T. (2014). Effects of Adlerian Play Therapy on Reducing Students' Disruptive Behaviors. Journal of Counseling & Development, 92(1), 47-56.

[12] Mohd Majid Konting. (2005). Kaedah penyelidikan pendidikan. Kuala Lumpur: Dewan Bahasa & Pustaka.

[13] Muijs, Daniel. (2004). *Doing Quantitative Research in Education: with SPSS*. Thousand Oaks, CA: SAGE Publications.

[14] Sayeski, K. L., & Brown, M. R. (2011). Developing a classroom management plan using a tiered approach. Teaching Exceptional Children, 44(1), 8-17. http://dx.doi.org/10.1177/004005991104400102.

[15] Syarinah Mad Sehat. (2015). *Kesan token ekonomi, peneguhan dan peraturan terhadap perubahan tingkah laku disruptif dalam kalangan kanak-kanak*. Tesis tidak diterbitkan: Universiti Pendidikan Sultan Idris.

[16] Turner, H. S., & Watson, T. S. (1999). Consultant's guide for the use of time-out in the preschool and elementary classroom. *Psychology in the Schools*, 36, 135-148.