

MITIGATING STUDENTS' DISRUPTIVE BEHAVIOR THROUGH OPERANT CONDITIONING

Glyza Marie M. Peras , Janine Corraine F. Castro , JR A. Mantog

Department of Elementary Education, Davao Oriental State University - Cateel Extension Campus, Cateel, Davao Oriental, Philippines, 8205

ABSTRACT

One of the biggest problems today that every teacher is facing is the ongoing need to address behavioral problems: disruptive student behavior, to be precise. These behaviors are disruptive to the teacher instruction and classroom discussions. Creating a classroom environment includes proactive methods of handling the problems to help address these disruptive behaviors. This study aimed to mitigate the students' disruptive behavior through Operant Conditioning. A true experimental design was utilized in this study. This tested the effectiveness of positive reinforcement and negative punishment in mitigating the student's disruptive behavior. The respondents was the Grade 6 pupils, particularly the section 5 in Cateel Central Elementary School, comprising 24 pupils. Results shown that before the intervention, the total number of occurrences of disruptive behavior during the pre-intervention was significantly high yielded 1105 total occurrences. After the intervention, the total number of occurrences of disruptive behavior among grade 6 pupils has been reduced to 711 occurrences. Overall, the results suggest that the intervention had a significant effect on the measured outcome, as evidenced by the statistically significant difference between the pre and post-intervention scores. The intervention had a positive effect on reducing disruptive behaviors among the students.

Keyword : *disruptive behavior, operant conditioning, reinforcement, punishment, rewards*

1. INTRODUCTION

One of the biggest problems today that every teacher is facing is the ongoing need to address behavioral problems: disruptive student behavior, to be precise. Inappropriate classroom among pupils that interferes with learning and teacher directions is disruptive (Gómez Mármol et al., 2018; Närhi et al., 2017). Some of the most typical disruptive behaviors among pupils include making inappropriate gestures, conversing with classmates, acting physically and verbally confrontational, roaming the classroom, shouting, and disregarding the rules (Esturgó-Deu & Sala-Roca, 2010).

The educational system in the Philippines also faces several problems in dealing with students with disruptive behavior (Lumanug, 2015). Public school teachers pointed out that a significant issue in today's schools is how students act toward their teachers, mainly when they are apathetic or disrespectful (Chen, 2015). The teachers also face the severity and frequency of behavioral issues, which slow instruction and hinder students' and their classmates' learning (Amado & Guerrero, 2018). School-age students frequently display disruptive behavior in the classroom, low task persistence, high activity levels, and negative reactivity. These traits make them more likely to engage negatively with their teachers (McClowry et al., 2013).

In Philippine classrooms, misbehaviors include talking in class, making fun of other students, and asking for papers or school supplies despite being told by teachers to bring those things and arrive late for class (Limbo et al., 2013). The teachers in De Luna's (2019) study stated that disruptive behaviors in their classes are pupils being aggressive toward each other, playing games during discussions, being noisy, distracting others during activities, roaming around, transferring seats, and always eating during class discussions.

Creating a classroom environment includes proactive methods of handling the problems to help address these disruptive behaviors. The most crucial aspect of the teaching and learning process is classroom management. Good

classroom management improves learning outcomes for students (Slater & Main, 2020), deals effectively with students who have behavioral concerns (Zulkifli et al.,2019), and decreases disruptive behaviors among students (Affandi et al.,2020). Hence, although studies on classroom management emphasized different evidence-based approaches, less was mentioned about disruptive behaviors and how in context, the Grade 6 teachers of Cateel Central Elementary School will mitigate them through operant conditioning. Thus, the researchers conducted the study with the belief that teachers should be knowledgeable about techniques to deal with disruptive behaviors in the classroom in successfully running the classes and supporting pupils' learning (Simonsen et al.,2008).

In drawing a connection between our actions and the results of those actions, according to psychologist B.F. Skinner is essential to influencing and learning how to behave. Operant conditioning is a crucial topic in behavioral psychology and the word used to describe this learning of behavior. Comprehending the distinctions between positive reward and punishment while implementing operant conditioning in the classroom is critical. The desired behavior is made more likely by using positive reinforcement. Treats, awards, or praise are a few instances of positive reinforcement. Punishment was imposed, making it less likely that lousy conduct would not occur again. A consequence of some form frequently included punishments for those who engage in unpleasant behavior. Positive reinforcement was the primary tool for controlling pupils' behavior in the classroom. Operant Conditioning was used to mitigate the Disruptive Behavior of the Grade 6 pupils of Cateel Central Elementary School because it primarily deals with classroom and student management difficulties instead of learning content (McLeod, 2018).

1.1 Statement of the Problem

The researchers conducted this study due to the growing and observable disruptive behavior of the Grade 6 pupils of Cateel Central Elementary School. It happens every time in the classroom, making it difficult for the teacher to deliver successful lessons. The teacher devoted a lot of time and attention to the behavior. The teacher interrupted the lesson or discussion to address the conduct, removing the critical time needed to instruct the other students.

This study aimed to mitigate the disruptive behavior of the Grade 6 pupils of Cateel Central Elementary School through Operant Conditioning. Moreover, it sought to answer the following research questions:

1. What is the pre-intervention total number of occurrences of disruptive behavior of the Grade 6 pupils of Central Elementary School?
2. What is the post-intervention total number of occurrences of disruptive behavior of the Grade 6 pupils of Central Elementary School?
3. Is there any significant difference between the pre-intervention and post-intervention total number of occurrences of disruptive behavior of Grade 6 pupils of Cateel Central Elementary School?

1.2 Scope and Limitation

The study was conducted in Cateel Central Elementary School, specifically for Grade 6 pupils enrolled in the school year 2022-2023. The school's location is at Castro Avenue, Poblacion, Cateel, Davao Oriental. Only one section is the subject of this research for an experimental group. The data gathered in this study was focused on the objectives mentioned earlier. One (1) month was allotted for the pre-intervention with five (5) sessions upon the agreed schedule of the Grade 6 adviser, and another month was dedicated to post-intervention.

This study is limited in mitigating the pupils' disruptive behavior through Operant Conditioning. Researchers only imposed positive reinforcement and negative punishment to mitigate the said behavior aided by classroom rules.

2. REVIEW OF RELATED LITERATURE

This chapter presents the literature related to the study. It is to position this study correctly amidst many studies conducted in this field.

2.1 Disruptive Behavior Defined

Webster's dictionary defines the word disruption within three contexts: "to break apart, to throw into disorder and to interrupt the normal course or unity of." At the same time, it gives the following three contexts of the word behavior: "the manner of conducting oneself, how someone behaves, and how something functions or operates." Disruptive behavior is a behavior that (a) interferes with the act of teaching or with other students' learning or (b) is

psychologically or physically unsafe (Sida-Nicholls, 2012). Disruptive conduct refers to inappropriate behaviors in pupils that prevent learning and interpersonal relations (Peiró, 2013). Pupils misbehave intentionally, not inadvertently; they know they should not act in specific ways but do so (Dalgıç & Bayhan, 2014). Unavoidably, disruptive behavior in the classroom is a problem that affects educators of all generations (Abeygunawardena & Vithanapathirana, 2019). Cameron and Lovett (2015) asserted that disruptive classroom behavior was one characteristic that negatively influenced teachers' attitudes toward teaching. They also noted that when students engage in disruptive behavior, teachers lose interest in their instructor jobs. Additionally, it is believed that disruptive behavior on the part of students negatively impacts instructors' physical, mental, and emotional health and their capacity to instruct kids (Shakespeare et al., 2018).

2.2 Common Disruptive Behavior Among Primary Students

Numerous literary works contain examples of disruptive behavior. Identifying disruptive behavior in the classroom depends on the teacher's interpretation, which may explain why there are so many examples of disruptive behavior (Harrell & Hollins, 2009). What one teacher may view as acceptable behavior may be considered disruptive by another. Some of the most typical disruptive behaviors among students include making inappropriate gestures, conversing with classmates, acting physically and verbally confrontational, roaming the classroom, shouting, and disregarding the rules (Esturgó-Deu & Sala-Roca, 2010). Additionally, talking out of turn was the most frequent and disruptive behavior, followed by inattention, daydreaming, and laziness. The most offensive problem behavior was disrespecting teachers through disobedience and rudeness, followed by interrupting others and verbal violence (Sun et al., 2012).

In Philippine classrooms, disruptive behaviors include talking in class, making fun of other students, asking for papers or school supplies despite being told by teachers to bring those things, and arriving late for class (Limbo et al., 2013). The teachers in De Luna's (2019) study also stated that disruptive behaviors in their classes are pupils being aggressive toward each other, playing games during discussions, being noisy, distracting others during activities, roaming around, transferring seats, and always eating during class discussions.

2.3 Causes of Disruptive Behavior

Thirteen factors contribute to a pupil's disruptive behavior; include inconsistent parenting, uncaring parents, overprotective parents, negative influences on a student's local community, poverty, poor teaching, teachers who have a negative attitude toward students, repeating the same class or subject, lack of motivation from the teacher, load shedding and the lack of an alternative, poor classroom conditions, and psychological factors (Ghazi et al., 2013). While it acknowledged that issues like a child's home life or a disability are ones that the teacher has little to no power to change, they impact how the child behaves in the classroom. Additionally, a student's manifestation of challenging behaviors when "trauma comes to school" is highly influenced by the teacher's response and the culture of the learning environment (Jennings, 2019, p. 29).

Additionally, peer pressure, the community, the school, the family, and the new media negatively influence student behavior (Belle, 2017). To support this, Ardin (2020) divided the various causes of disruptive behavior into two categories: internal causes and external causes. One internal factor is the desire for attention. Students make noise to get the attention of their peers and teachers. The classmate, close friend, classroom, learning environment, family, and social environment are examples of external factors (Ardin, 2020). Johansen et al. (2011) investigated New Zealand teachers' beliefs about the causes of disruptive behavior at school. They concluded that teachers thought the causes were ascribed to external factors like parenting and home life. Teachers also thought that the disruptive kid was in charge of their actions and deliberately chose to act negatively. Many teachers did not think they had much of an impact on how students behaved, and the majority did not realize they were contributing to the disruptive behavior.

Peers are essential in children's and teenagers' social and emotional development. Their influence begins at a young age and grows during adolescence. For children to depend on and have companions as they develop is natural, healthy, and essential. The American Academy of Child and Adolescent Psychiatry (2018) notes that peers can have a negative impact. They may encourage one another to skip courses, steal, cheat, use drugs or alcohol, distribute inappropriate content online, or engage in other harmful behaviors. Kids frequently succumb to peer pressure in order to fit in. They want to be liked and fear being left out or mocked if they do not conform to the group's expectations (AACAP, 2018). People of all ages worry about what others think, which determines how much they

value various ideas and behaviors (Falk, 2021). Childhood peer interactions are highly connected with emotional, behavioral, and adjustment issues (Shin et al., 2016). Higher levels of peer attachment were linked to higher rates of school misconduct (Demant & Van Houtte, 2012).

Families provide emotional support and are crucial in developing a person's personality. The nature and quality of the child's parental nurturing will significantly impact his future development (Jogdand & Naik, 2014). Disrupted parenting affects a child's behavior negatively because it prevents the parent from supporting their child and giving them a sense of safety and security. Behavior is affected by living in a chaotic household with dysfunctional individuals (Chandler & Dahlquist, 2015). The events in those locations and the relationships in those areas impact a student's behavior. A kid will most likely react with higher levels of anxiety and destructive behaviors displayed in the environment of school if their family life is chaotic and dysfunctional (Jogdand & Naik, 2014).

2.4 The Effects of Disruptive Behavior on Classroom Climate

Disruptive behavior is a severe issue that cannot be ignored (Jati et al., 2019). Student behavior routinely interferes with learning activities, affects the habitual development of the activities done in the classroom, and requires the teachers to spend much time dealing with it when that time could be better spent on the teaching and learning processes (Jiménez, 2016). Teachers, school staff, and mental health specialists are increasingly concerned about disruptive behavior in the elementary school setting (Jacobsen & Kari, 2013).

Elementary school teachers witness disruptive behavior daily in their classes. Less time is dedicated to lesson planning, and more time is devoted to student management and redirection (Jacobsen & Kari, 2013). Disruptive behavior requires the teacher's undivided attention and is typically readily and swiftly handled with little effort. Every 30 to 60 seconds, depending on the class, an elementary school teacher has to deal with disruptive behavior. It is a risk factor for students' academic achievement and a significant source of work-related stress among teachers (Närhi et al., 2014). Additionally, it has been stated that students in public schools experience a lack of security due to ineffective disciplinary measures and the potential for aggressiveness and uncomfortable circumstances (Rehman et al., 2013).

2.5 Impact of Disruptive Behavior on Pupils' Academic Achievement

Academic achievement can deteriorate due to disruptive student behavior in the classroom (Casillas et al., 2012; Marugan de Miguelsanz et al., 2012). Students who engaged in disruptive behaviors like misconduct, a lack of self-control, or acting without thinking were more likely to experience academic difficulties (Casillas et al., 2012). Because disruptive students repeatedly breach the rules, they frequently engage in extracurricular activities and, as a result, typically lack fundamental academic abilities (Jolivette & Steed, 2010). Disruptive classroom behavior, in particular, made it harder for students to read at higher grade levels (Yu-Chu et al., 2013). Disruptive classroom behavior was particularly harmful to student performance. Students who disrupt math lessons miss out on crucial knowledge that, over time, makes it harder to keep up with the newly introduced material (Zimmerman et al., 2013). The more troublesome the disruptive behavior, the more subjects the disruptive student is likely to fail (Marugan de Miguelsanz et al., 2012), even though deficiencies in any academic area might cause academic failure (Pas et al., 2010).

Ultimately, these deficiencies and shortcomings may result in school dropout (Saraiva et al., 2011). Aggressive students were more likely to have academic setbacks due to their behavior than nonaggressive students (Van Lier et al., 2012). Disruptive behavior is frequently ongoing and has a more substantial long-term impact on learning than violence in the classroom; it is more harmful to students' learning (Clement, 2010). Disruptive pupils may hinder other pupils' learning abilities and affect their learning potential. Disruptive pupils made the classroom boisterous, which made it harder for other students to pay attention to the teacher (Bru, 2009). Seven out of ten students reported encountering disruptive classroom activities that kept them off task, leading to subpar academic performance (Saraiva et al., 2011).

2.6 Strategies for Managing Disruptive Behavior in the Classroom

Teachers are expected to accommodate pupils whose disruptive and off-task actions interfere with their learning and detract from other students. When disruptive classroom behavior worsens, it becomes challenging to control the behavior (Sadrudin, 2012). The four elements of effective classroom management are (a) preparation, (b)

relationships, (c) processes, and (d) documentation (Jones et al., 2014). The authors stressed that competent classroom management plans and prepares all activities to enable them to respond proactively to developing challenging behaviors. Constructive interactions are encouraged, standard rules and routines are formed, and data-driven tactics are implemented. Applying classroom management practices aims to enhance students' prosocial behavior and boost academic engagement (Emmer & Sabornie, 2015).

Teachers have employed different techniques to manage disruptive behavior in the classroom. By using evidence-based strategies, teachers and students can learn more effectively and have fewer disruptions in the classroom. The self-regulation approach (Menzies & Lane, 2011), assertive discipline approach (Fallon et al., 2014), and group approach are among the classroom management strategies widely discussed in the research (Oliver et al., 2011).

Self-regulation approach. The self-regulation approach relies on students' inherent motivation and capacity to consider and control their conduct (Deed, 2010). The approach's processes can include behavior as well as self-motivation and self-awareness. The self-regulation strategy has primarily been used in the academic setting to improve classroom management. Self-regulated learning might be focused on social behaviors while managing a classroom for education (Alderman & MacDonald, 2015). Students are responsible for modifying their conduct to comply with the environmental and social requirements linked with the educational environment (Menzies & Lane, 2011).

Assertive discipline approach. As part of the assertive discipline approach, the teacher must establish, communicate, and enforce clearly stated standards and consistently administer suitable sanctions for noncompliance (Bear, 2013). Strategies for the assertive approach are designed to help teachers create a more democratic learning environment rather than a controlling and authoritarian one.

Group approach. A group approach assigns contingencies based on the group's behaviors (Wright & McCurdy, 2012). Since monitoring individualized contingencies take up valuable teaching time, assigning group contingencies was a helpful strategy for teachers to control disruptive conduct (Mckissick et al., 2010).

2.7 Operant Conditioning in the Classroom

School-based operant conditioning alters student behavior by changing the consequences associated with the behavior (Smith & Hains, 2012). The behaviorist theory, specifically Skinner's operant conditioning from 1953, served as the theoretical foundation for school discipline practices. Human behavior is learned, can be changed, and persists because it is reinforced (Skinner, 1953). Students misbehave to obtain desirable outcomes or to prevent undesirable outcomes.

The belief of Chin et al. (2012) is based on Skinner's (1953) theory that pupils discover lessons through the results of their actions. Practitioners of behaviorism encourage good behavior in pupils and discipline it when it occurs (Smith & Hains, 2012). Punishment weakens misbehaviors, but reinforcement promotes positive ones. The practical application of reinforcement emphasizes teaching the right social skills and the context of the behavior (Filter et al., 2009). Using punishment instead of alternative methods suppresses behavior briefly (Skinner, 1953). The environment influences behavior; hence teachers should concentrate on pupils' apparent behaviors (Skinner, 1953).

Maintaining control over the classroom environment through definite expectations, dependable routines, and effective time management, all essential elements of effective classroom management (Conroy et al., 2014), significantly predicts higher student achievement (Stronge et al., 2011). Teachers can shape and sustain desirable behaviors over time by implementing Skinner's operant conditioning techniques of positive and negative reinforcement or punishment in the classroom (Liner0s & Hinojosa, 2012).

Skinner (2013) describes behavior modification as "using operant conditioning techniques to modify behavior." The idea is to alter a person's behavior or interactions with the outside world (Onwuasoanya, 2016). Operant conditioning is crucial for understanding and changing behavioral processes (Harappa, 2022). Because natural consequences cause everyone to alter their actions, rewards and punishments may be purposefully applied in other scenarios to bring about a change (Cherry, 2019).

As a result of teachers' simultaneous use of operant techniques in the classroom and parents at home, Wheeler (1972) concluded that disruptive and inappropriate classroom behavior decreased in frequency in both groups of

subjects because of the indication of the pre-modification and post-modification baseline data. In a recent study, Rafi et al. (2020) used positive reinforcement strategies to deal with disruptive behavior in the classroom. Skinner's operant conditioning theory was found to have classroom implications for improving the chance of the desired action. When the intentions are good, operant conditioning can improve individual and public health (Mandriota, 2021).

3. METHODOLOGY

3.1 Research Locale and Duration

This study was conducted at Cateel Central Elementary School at Castro Avenue, Poblacion, Cateel, Davao Oriental. The Grade 6 classrooms are in building 6 and 7. The researchers conducted pre-intervention in 1 month for five (5) sessions, as agreed schedule by the grade 6 adviser. After the pre-intervention, five (5) sessions for intervention were administered, and another one (1) month for five (5) sessions for the post-intervention.



Figure 1. Research Locale Map of Cateel Central Elementary School

3.2 Research Design

This study used a true experimental research design. An effective research design for determining a cause-and-effect relationship between various variables. All studies have at least one dependent or outcome variable and at least one independent variable that is experimentally modified is referred to as true experiment (Dawes, 2010).

3.3 Sources of Data

This study's data collection was solely based on the researcher-made quantitative instrument, mainly the pre-intervention and post-intervention observation tally. The tally measured applied behavior analysis: repeatability, specifically Count/Frequency. It pertains to the number of occurrences of behavior (Cooper et al., 2014).

3.4 Respondents of the Study

The respondents of this study were the Grade 6 pupils, particularly section 6 in Cateel Central Elementary School. They were the experimental group, comprising 24 pupils. Their age ranges from 11-12 years old. The respondents' names are coded into pseudonyms for their data privacy.

4. RESULTS AND DISCUSSION

This chapter emphasizes the results of the pre-intervention and post-intervention studies based on the study's statement of the problem.

4.1 Total Occurrence of Disruptive Behavior During Pre-intervention

The pre-intervention was conducted in Grade 6, section Malvar - the study's participants to determine the number of occurrences of disruptive behavior through a frequency count. They were observed for five days for the pre-intervention prior to the intervention. Table 1 presents the result of a number of occurrences or scores of disruptive behavior.

Table 1. Pre-intervention total occurrence of disruptive behavior of the Grade 6 pupils of Central Elementary School

STUDENT	PRE-INTERVENTION					TOTAL OCCURRENCES OF DISRUPTIVE BEHAVIOR
	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	
1. V	73	64	46	4	12	199
2. TOR	65	52	60	10	0	187
3. TA	31	27	17	8	19	102
4. TO	29	0	11	9	36	85
5. O	37	35	5	0	0	77
6. L	0	14	0	5	30	49
7. I	8	12	11	2	10	43
8. GAC	13	19	0	0	11	43
9. CO	0	21	10	2	7	40
10. E	0	0	28	3	6	37
11. M	4	15	11	1	3	34
12. S	0	0	31	4	0	35
13. C	8	25	0	0	0	33
14. P	0	5	11	0	16	32
15. B	1	1	21	4	1	28
16. R	7	4	2	6	7	26
17. GAL	0	6	4	3	8	21
18. OR	0	5	0	2	6	13
19. A	0	0	0	0	7	7
20. CA	0	0	0	0	6	6
21. SA	0	0	0	2	1	3
22. F	0	0	0	0	3	3
23. SE	0	0	0	2	0	2
24. RE	0	0	0	0	0	0
TOTAL	276	305	268	67	189	1105

Table 1 demonstrates that over five days, there were 1105 occurrences of disruptive behavior, which reached a total of 1105. Among 24 participants, student V scored the highest with 199 disruptive behavior, followed by student TOR with 187 and TA with 102. With the results relatively high in just five days of observation, it can be noted that it is alarming and exhausting for the class adviser and subject teachers to deal with this problem daily. It is a risk factor for students' academic achievement and a significant source of work-related stress among teachers (Närhi et al.,2014).

Pupils misbehave intentionally, not inadvertently; they know they should not act in specific ways but do so (Dalgıç & Bayhan, 2014). The different factors or causes could drive the resolve in such actions. Thirteen factors contribute to students acting out, including inconsistent parenting, uncaring parents, overprotective parents, negative influences on a student's local community, poverty, poor teaching, teachers who have a negative attitude toward students, repeating the same class or subject, lack of motivation from the teacher, load shedding and the lack of an alternative, poor classroom conditions, and psychological factors (Ghazi et al., 2013). While it acknowledged that issues like a child's home life or a disability are ones that the teacher has little to no power to change, they impact how the child behaves in the classroom. Additionally, a student's manifestation of challenging behaviors when "trauma comes to school" is highly influenced by the teacher's response and the culture of the learning environment (Jennings, 2019, p. 29).

Additionally, peer pressure, the community, the school, the family, and the new media negatively influence student behavior (Belle, 2017). To support this, Ardin (2020) divided the various causes of disruptive behavior into two categories: internal causes and external causes. One internal factor is the desire for attention. Students make noise to get the attention of their peers and teachers. The classmate, close friend, classroom, learning environment, family, and social environment are examples of external factors (Ardin, 2020).

Based on observation, the common factors of disruptive behavior that the pupils experienced that led to doing more during the learning process were external factors: peer pressure and family. Peers are essential in children's and teenagers' social and emotional development. Their influence begins at a young age and grows during adolescence. For children to depend on and have companions as they develop is natural, healthy, and essential. According to the American Academy of Child and Adolescent Psychiatry's (2018) report, peers may be detrimental. They may encourage one another to skip courses, steal, cheat, use drugs or alcohol, distribute inappropriate content online, or engage in other harmful behaviors. Kids frequently succumb to peer pressure in order to fit in. They want to be liked and fear being left out or mocked if they do not conform to the group's expectations (AACAP, 2018).

People of all ages worry about what others think, which determines how much they value various ideas and behaviors (Falk, 2021). Childhood peer interactions are highly connected with emotional, behavioral, and adjustment issues (Shin et al., 2016). Higher levels of peer attachment were linked to higher rates of school misconduct (Demagnet & Van Houtte). Families provide emotional support and are crucial in developing a person's

personality. The nature and quality of the child's parental nurturing will significantly impact his future development (Jogdand & Naik, 2014).

Moreover, living in a chaotic household with dysfunctional people impacts behavior (Chandler & Dahlquist, 2015). The events and connections that occur within the spaces have an impact on a student's conduct. If a kid's family life is chaotic and dysfunctional, the student will most likely respond with increased anxiety levels and undesirable behaviors in the school setting (Ayre & Krishnamoorthy, 2020).

4.2 Total Occurrence of Disruptive Behavior During the Post-intervention

Table 2. Post-intervention total occurrence of disruptive behavior of the Grade 6 pupils of Cateel Central Elementary School

STUDENT	POST-INTERVENTION					TOTAL OCCURENCES OF DISRUPTIVE BEHAVIOR
	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	
1. V	7	10	12	1	17	47
2. TOR	5	5	8	2	0	20
3. TA	18	18	8	4	23	71
4. TO	5	4	11	6	5	31
5. O	4	4	7	4	21	40
6. L	9	5	8	13	27	62
7. I	0	14	10	2	12	38
8. GAC	3	4	2	3	0	12
9. CO	2	1	3	2	4	12
10. E	1	2	2	11	0	16
11. M	5	5	3	13	12	38
12. S	5	3	16	0	6	30
13. C	3	1	6	5	3	18
14. P	2	2	7	0	0	11
15. B	2	0	5	0	0	7
16. R	3	11	14	1	8	37
17. GAL	2	2	4	10	2	20
18. OR	9	9	10	0	19	47
19. A	4	2	3	0	0	9
20. CA	0	1	4	7	2	14
21. SA	2	7	15	12	15	51
22. F	2	0	4	2	4	12
23. SE	3	3	2	5	8	21
24. RE	7	10	10	8	12	47
TOTAL	103	123	174	111	200	711

Based on the results shown in Table 2, the total occurrence of disruptive behavior was 711. Pupils who had a high total of disruptive behavior before the intervention, namely, TOR, V, and TA, have decreased, as well as the total number of occurrences of disruptive behavior after the intervention was conducted. It only suggests that operant conditioning as an intervention has mitigated their disruptive behavior. School-based operant conditioning alters student behavior by changing the consequences associated with the behavior (Smith & Hains, 2012).

Human behavior is learned, can be changed, and persists because it is reinforced (Skinner, 1953). Students misbehave to obtain desirable outcomes or to prevent undesirable outcomes. In the application of the theory, the researchers applied positive reinforcement and punishment as part of operant conditioning as well as setting rules and expectations in order to mitigate their disruptive behavior; since maintaining control over the classroom environment through definite expectations, dependable routines, and effective time management are all essential elements of effective classroom management (Conroy et al., 2014).

Operant conditioning primarily deals with classroom and student management difficulties instead of learning content (McLeod, 2018). It is crucial in developing a skill performance. Giving feedback on a learner's performance, such as compliments, approbation, encouragement, and affirmation, is a straightforward method of influencing behavior (Ackerman, 2019). The researchers used positive reinforcement to reinforce the pupils' behavior. Positive denotes adding something, whereas negative denotes removing something (Scott et al., 2022).

Skinner (1953) defined the concept of positive reinforcement as a response or behavior strengthened through rewards, which encourages the repetition of the desired behavior. The reward acts as a motivating factor. A reward works better to encourage a child to continue the positive action when each student receives a specific kind of positive reinforcement (Morin, 2017). Because it enables students to capitalize on their abilities, positive reinforcement benefits their self-esteem ("Positive reinforcement in the classroom," 2015). Positive reinforcement's primary purpose is to encourage children to engage in these positive behaviors because they can impact their learning (Morin, 2017). There is no inherent good or poor value in positive reinforcement. If applied correctly and with understanding, it is a method that can improve behavior. By realizing and appreciating its influence in our lives, we may employ this potent principle to align the world more with our beliefs (Boutros, 2023).

While the researchers aimed to increase the likelihood of good behavior through positive reinforcement, negative punishment was also used to mitigate the disruptive behavior of the pupils. During the intervention, pupils who misbehaved during the learning process three times were automatically not eligible for a pleasant stimulus (snacks, school supplies) that the researchers had prepared for them. It is because, as to the application of negative punishment, negative penalties occur when a stimulus is taken away after a behavior is carried out (Practical Psychology, 2022).

BF Skinner and other behavioral psychologists understood the connection between motivation and behavior. By removing a stimulus, the goal of negative punishment is to get an individual to connect the undesirable conduct with a bad outcome. When the pupils see their classmates receiving a reward for the good behavior they exhibited in class and realize they will not be receiving anything because they are punished for their disruptive behavior, the punished pupils now know that there is a consequence for their behavior. If a child knows they will be punished right away for misbehaving, they are less inclined to engage in that behavior (Practical Psychology, 2022).

Punishment weakens misbehavior, but reinforcement promotes positive ones. The practical application of reinforcement emphasizes teaching the right social skills and the context of the behavior (Filter et al., 2009). Because natural consequences cause everyone to alter their actions, rewards and punishments may be purposefully applied in other scenarios to bring about a change (Cherry, 2019).

4.3 The Significant Difference between Pre-intervention and Post-intervention

Table 3. Paired sample statistics on occurrences of disruptive behaviors

Factors	Mean	Number of Students	Std. Deviation	Std. Error Mean
Pre-intervention	11.3504	24	11.89349	2.47996
Post-intervention	6.1870	24	3.63122	0.75716

Table 3 presents the paired sample statistics on the occurrences of disruptive behaviors before and after the implementation of the intervention. The table shows that the mean number of disruptive behaviors before the intervention was 11.3504, while it decreased to 6.1870 after the intervention. The standard deviation of the disruptive behaviors before the intervention was higher (11.89349) than after the intervention (3.63122), indicating more variability in the disruptive behaviors before the intervention. The standard error of the mean before the intervention was also higher (2.47996) than after the intervention (0.75716), suggesting that the sample mean was less precise than after the intervention. Overall, the statistics presented in Table 3 suggest that the intervention effectively reduced disruptive behaviors among the students.

The pre-intervention results clearly stated that higher rates of occurrence of these disruptive behaviors in the classroom during the learning process were evident. Disruptive behavior is a severe issue that cannot be ignored (Jati et al., 2019). Student behavior routinely interferes with learning activities, affects the habitual development of the activities done in the classroom, and requires the teachers to spend much time dealing with it when that time could be better spent on the teaching and learning processes (Jiménez, 2016).

Teachers, school staff, and mental health specialists are increasingly concerned about disruptive behavior in the elementary school setting (Jacobsen & Kari, 2013). Elementary school teachers witness disruptive behavior daily in their classes. Less time is dedicated to lesson planning, and more time is devoted to student management and redirection (Jacobsen & Kari, 2013). Disruptive behavior requires the teacher's undivided attention and is typically readily and swiftly handled with little effort. Every 30 to 60 seconds, depending on the class, an elementary school teacher has to deal with disruptive behavior.

Compared to the post-intervention results, the results indicated that operant conditioning has effectively reduced disruptive behaviors among the pupils. To make this possible, examining one's ideas and intentions is not essential to understand behavior (Skinner, 1904). Applying the theory as an intervention to mitigate the pupils' disruptive behavior, the researchers focused on the pupils' observable behaviors because Skinner advocated focusing solely on the observable, outside factors influencing people's actions. Disruptive behaviors are mitigated because of the implemented positive reinforcement and negative punishment. Positive reinforcement seeks to increase desired behavior by introducing a positive stimulus following that behavior. As a result, praising and rewarding good

behavior of the pupils increased because they could get a pleasant stimulus out of their actions. Rewarding someone for their actions makes them more likely to repeat them (Li, 2022).

On the other hand, disruptive behavior was punished. Negative punishment was used to mitigate the behavior. Removing a rewarding stimulus that follows a behavior or response diminishes negative punishment, an operant training approach (Skinner, 1953). The stimulus must be pleasurable or necessary since negative punishment techniques work by removing a stimulus, reducing the likelihood that the conduct will happen again. The individual or animal learns to link the undesirable outcome with the activity (Li, 2023).

Table 4. Paired samples correlations on occurrences of disruptive behaviors

Factors	Number of Students	Correlation	Sig.
Pre-intervention & Post-intervention	23	0.624	0.001

Table 4 presents the paired sample correlations on the occurrences of disruptive behaviors among 24 students before and after the intervention. The correlation coefficient (r) value of 0.624 indicates a moderately strong positive correlation between pre and post-intervention measurements of disruptive behaviors. The significance level (p -value), which indicates that the connection is statistically significant at 0.05, of 0.001 further supports the relationship. Given this, the intervention effectively reduced the students' disruptive behaviors. However, further research is needed to determine the intervention's effectiveness, and this study's small sample size and absence of a control group maybe some of its weaknesses.

Teachers are expected to accommodate pupils whose disruptive and off-task actions interfere with their learning and detract from other students. When disruptive classroom behavior worsens, it becomes challenging to control the behavior (Sadruddin, 2012). The four elements of effective classroom management are (a) preparation, (b) relationships, (c) processes, and (d) documentation (Jones et al., 2014). The authors stressed that competent classroom management plans and prepares all activities to enable them to respond proactively to developing challenging behaviors. Constructive interactions are encouraged, standard rules and routines are formed, and data-driven tactics are implemented. Applying classroom management practices aims to enhance students' prosocial behavior and boost academic engagement (Emmer & Sabornie, 2015). Teachers can shape and sustain desirable behaviors over time by implementing Skinner's operant conditioning techniques of positive and negative reinforcement or punishment in the classroom (Linerós & Hinojosa, 2012).

Table 5. Paired Samples Test

Factors	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pre-Intervention & Post-Intervention	5.16348	10.03849	2.09317	0.82251	9.50445	2.467	22	0.022

Table 5 outlines the results of a paired samples test conducted on the pre-and post-intervention data. The mean, standard deviation, standard error of the mean, and 95% confidence interval of the difference for the paired differences are all shown in the table. The paired differences refer to the change in scores between the pre-and post-intervention measurements for each participant. The test results show a mean paired difference of 5.16348 with a standard deviation 10.03849. The standard error of the mean was 2.09317, indicating the error associated with estimating the mean difference from the sample. The 95% confidence interval of the difference ranged from 0.82251 to 9.50445, indicating that we can be 95% confident that the true mean difference falls within this range.

The t -value of 2.467 indicates that the mean difference between pre-and post-intervention was statistically significant at a significance level of 0.05, with 22 degrees of freedom. The null hypothesis that there was no significant change between the pre-and post-intervention scores was refuted by the two-tailed test's p -value of 0.022, which is less than the significance level of 0.05. Overall, the results suggest that the intervention significantly

affected the measured outcome, as evidenced by the statistically significant difference between the pre-and post-intervention scores.

The disruptive behaviors displayed by pupils in the classroom while the lesson is in progress pose a significant difficulty for the teacher (Maxwell & Ukoima, 2020). The environment influences behavior; hence teachers should concentrate on pupils' apparent behaviors (Skinner, 1953). Practitioners of behaviorism encourage good behavior in pupils and discipline it when it occurs (Smith & Hains, 2012). Operant conditioning is crucial for understanding and changing behavioral processes (Harappa, 2022).

Skinner (2013) describes behavior modification as "using operant conditioning techniques to modify behavior." The idea is to alter a person's behavior or interactions with the outside world (Onwuasoanya, 2016). As a result of teachers' simultaneous use of operant techniques in the classroom and parents at home, Wheeler (1972) concluded that disruptive and inappropriate classroom behavior decreased in frequency in both groups of subjects because of the indication of the pre-modification and post-modification baseline data.

In a recent study, Rafi et al. (2020) used positive reinforcement strategies to deal with disruptive behavior in the classroom. Skinner's operant conditioning theory was found to have classroom implications for improving the chance of the desired action. When the intentions are good, operant conditioning can improve individual and public health (Mandriota, 2021).

Additionally, it has been claimed that a microsystem of rewards and punishment is a valuable training ground for a society that functions similarly (Mills, 2017). Rewards are frequently used in an efficient behavior management method in the classroom. When intrinsically or extrinsically rewarded, students are motivated to do well and adhere to appropriate behaviors (Dawe, 2017). Students that prefer intrinsic motivation take pleasure in compliments, personally demanding assignments, and completing academic work purely out of a desire to learn. A more extrinsic strategy calls for more material rewards, such as pencils, erasers, stickers, and occasionally confectionery. In addition to being equitable and uniform for all students, rewards for pupils must also differ depending on the work at hand (Dawe, 2017).

4.4 The Implication to Education

Discipline is essential for successful instruction and meaningful learning and fosters a child's success and development. Operant Conditioning by Burrhus Frederic Skinner (1904) is highly suggested for mitigating the disruptive behavior of pupils because of its numerous positive impacts on their behavior.

Furthermore, the findings of the current study featuring the application of Operant Conditioning point to the following implications in mitigating the disruptive behavior of the pupils such as:

1. Operant conditioning could be used to promote appropriate behavior in school, classroom, and during the learning process.
2. It could motivate the pupils to do more good than plainly displaying undesirable behavior in class.
3. The intervention could contribute to effective classroom management, changing the classroom dynamic from a pure informational exchange into a much more interactive, trusting, and accessible one.

5. CONCLUSION

Based on the data findings throughout the study, the researchers can conclude the following:

1. Before the intervention, the total number of occurrences of disruptive behavior during the pre-intervention was significantly high.
2. After the intervention, the total number of occurrences of disruptive behavior among grade 6 pupils has been reduced.
3. The pre and post-intervention results revealed a significant difference in their behavior throughout the learning process and after the implementation of the intervention.

6. REFERENCES

- [1]. Abeygunawardena, K.A. Vidyanjalie and Vithanapathirana, M. V. (2019). The Role of Teacher to address issues of disruptive behaviour of student learners in Mathematics classrooms: A study in the Sri Lankan context, PUPIL-International Journal of Teaching, Education and Learning 2 (3), 152-173 (ISSN-2454-5899)
- [2]. Ackerman, C. E., MA. (2019). Positive Reinforcement in Psychology (Definition + Examples).

- [3]. Alderman, M.K., & MacDonald, S. (2015). A self-regulatory approach to classroom management: Empowering students and teachers. *Kappa Delta Pi Record*, 51(2), 52-56.
- [4]. Amado, J., & Guerra, P. (2018). Behavioral Problems of Intermediate Pupils as Perceived by the Teachers in Selected Public Elementary Schools. Retrieved January 3, 2023, from <https://research.lpubatangas.edu.ph/wp-content/uploads/2019/08/JETM-Vol11-005.pdf>
- [5]. Ardin, Hardiani. (2016). Decreasing student's disruptive behaviors in learning English through interpersonal communication: A Case Study at SMP Negeri 18 Makassar. Universitas Negeri Makassar, Indonesia.
- [6]. Ayre, K., & Krishnamoorthy, G. (2020). Trauma Informed Behaviour Support: A Practical Guide to Developing Resilient Learners. University of Southern Queensland.
- [7]. Belle, J. L. (2017). Factors that influence student behaviour in secondary schools. *European Journal of Educational and Development Psychology*, 5(5), 27-36.
- [8]. Bear, G.G. (2013). Teacher resistance to frequent rewards and praise: Lack of skill or a wise decision?. *Journal of Educational & Psychological Consultation*, 23(4), 318-340.
- [9]. Boutros, N. (2023). Positive Reinforcement: Definition, Theory, & Examples.
- [10]. Bru, E. (2009). Academic outcomes in school classes with markedly disruptive pupils. *Social Psychology of Education*, 12(4), 461-479.
- [11]. Bullough R.V.Jr., Richardson M. (2014). Teacher perspectives on classroom management. In Emmer E.T., Sabornie E.J. (Eds.), *Handbook of classroom management* (pp.283-300). New York, NY: Routledge.
- [12]. Cameron, M., & Lovett, S. (2015). Sustaining the commitment and realising the potential of highly promising teachers. *Teachers and Teaching*, 21(2), 150-163.
- [13]. Casillas, A., Robbins, S., Allen, J., Kuo, Y.L., Hanson, M.A., & Schmeiser, C. (2012). Predicting early academic failure in high school from prior academic achievement, psychosocial characteristics, and behavior. *Journal of Educational Psychology*, 104(2), 407-420.
- [14]. Chandler, L. K., & Dahlquist, C. M. (2015). *Functional assessment*. Frenchs Forest, NSW: Pearson Australia.
- [15]. Chandra, R. (2015). Classroom management for effective teaching. *International Journal of Education and Psychological Research*, 4(4), 13-15
- [16]. Chen, G. (2015). 10 Major Challenges Facing Public Schools. Retrieved March 08, 2016, from <https://www.linkedin.com/pulse/10-majorchallenges-facing-public-schools-debbie-hilbish>.
- [17]. Cherry, K. (2019). What is operant conditioning and how does it work. How reinforcement and punishment modify behavior. *Verywell Mind*.
- [18]. Chin, J.K., Dowdy, E., Jimerson, S.R., & Rime, W. (2012). Alternatives to suspensions: Rationale and recommendations. *Journal of School Violence*, 11(2), 156-173.
- [19]. Dalgıç, G., & Bayhan, G. (2014). A meta-analysis: Student misbehaviors that affect classroom management. *Cypriot Journal of Educational Sciences*, 9(2), 101-116. Retrieved from <http://www.world-education-center.org/index.php/cjes>
- [20]. Dawe, T. (2017). *The Advantages of Rewards in the Classroom*. The Classroom.
- [21]. Dawes, M. (Ed.) (2010). . (Vols. 1-0). SAGE Publications, Inc.
- [22]. Deed, C.G. (2010). 'Where do I begin?' A case study of student self-regulation. *The International Journal of Learning*, 17(1), 443-453.
- [23]. Demanet, J., Van Houtte, M. School Belonging and School Misconduct: The Differing Role of Teacher and Peer Attachment. *J Youth Adolescence* 41, 499-514 (2012).
- [24]. Dufrene, B. A., Lestremay, L., & Zoder-Martell, K. (2014). DIRECT BEHAVIORAL CONSULTATION: EFFECTS ON TEACHERS' PRAISE AND STUDENT DISRUPTIVE BEHAVIOR. *Psychology in the Schools*, 51(6), 567-580
- [25]. De Luna, J. M. (2019). Extent of utilization of strategies for managing challenging behavior in the early childhood classroom. Retrieved January 3, 2023, from <https://www.ijern.com/journal/2019/October-2019/13.pdf>
- [26]. Falk, E. (2021). The Power of Peers. Retrieved May 24, 2023, from <https://newsinhealth.nih.gov/2021/09/power-peers>
- [27]. Fallon, L.M., McCarthy, S.R., & Sanetti, L.H. (2014). School wide positive behavior support (SWPBS) in the classroom: Assessing perceived challenges to consistent implementation in Connecticut schools. *Education and Treatment of Children*, 37(1), 1-24
- [28]. Filter, K.J., Tincani, M., & Fung, D. (2009). Surveying professionals' views of positive behavior support and behavior analysis. *Journal of Positive Behavior Interventions*, 11(4), 222-234.
- [29]. Ghazi, S.R., Gulap, S., Muhammad, T., & Khan, A. Q. (2013). Types and causes of students' disruptive behavior in classroom at secondary level in Khyber Pakhtunkhwa, Pakistan. *American Journal of Educational Research*, 1(9), 350-354. doi:10.12691/education-1- 9-1

- [30]. Gómez Mármol, A., Sánchez-Alcaraz Martínez, B. J., Valero-Valenzuela, A., & Cruz Sánchez, E. D. L. (2018). Perceived violence, sociomoral attitudes and behaviours in school contexts.
- [31]. Gordan, M., & Krishanan, I. A. (2014). A review of BF Skinner's 'Reinforcement theory of motivation. *International Journal of Research in Education Methodology*, 5(3), 680-688.
- [32]. Gordan, M., & Krishanan, I. A. (2014). A review of BF Skinner's 'Reinforcement theory of motivation. *International Journal of Research in Education Methodology*, 5(3), 680-688.
- [33]. Harappa. (2022). Operant Conditioning. <https://us.harappa.education/about-us/>
- [34]. Harrell, I. L., II, & Hollins, T. N. (2009). Working with disruptive students. *Inquiry*, 14(1), 69-75. Retrieved from <http://www.vccaedu.org/inquiry/>
- [35]. Jacobsen, Kari, "Educators' Experiences with Disruptive Behavior in the Classroom" (2013). *Social Work Master's Clinical Research Papers*. 198.8
- [35]. Jennings, P. (2019). *The trauma-sensitive classroom. Building resilience with compassionate teaching*. W.W. Norton and Company.
- [35]. Jogdand, S. S., & Naik, J. (2014). Study of family factors in association with behavior problems amongst children of 6-18 years age group. *International journal of applied & basic medical research*, 4(2), 86-89.
- [36]. Johansen, A., Little, S. G., Akin-Little, A. (2011). An examination of New Zealand teachers' attributions and perceptions of behaviour, classroom management and the level of formal teacher training received in behaviour management. *Kairaranga*, 12(2), 3-10.
- [37]. Jolivet, K., & Steed, E. A. (2010). Classroom management strategies for young children with challenging behavior within early childhood settings. *NHSA Dialog*, 13(3), 198-213.
- [38]. Jones, S. M., Bailey, R., & Jacob, R. (2014). Social-emotional learning is essential to classroom management. *Phi Delta Kappan*, 96(2), 19-24.
- [39]. López Jiménez, J., Valero-Valenzuela, A., Anguera, M. T. et al. Disruptive behavior among elementary students in physical education. *SpringerPlus* 5, 1154 (2016).
- [40]. Li, P. (2022). *Positive Reinforcement Explained. Parenting for Brain*
- [41]. Li, P. (2023). *Parenting for Brain*. <https://www.parentingforbrain.com/negative-punishment/>.
- [42]. Limbo, N., Martínez, M., Méndez, Z. (2013) *Understanding Misbehavior: Perspective Of The Ateneo De Davao High School Students*.
- [43]. Lineros, J., & Hinojosa, M. (2012). Theories of learning and student development. *National Forum of Teacher Education Journal*, 22(3), 1-5.
- [44]. Lumanug, L. (2015). *Students with Behavioral Problems: Its Implication to Learning Outcome*.
- [45]. Mandriota, M. (2021). All About Operant Conditioning. *Psych Central*. Retrieved May 10, 2023, from <https://psychcentral.com/health/operant-conditioning>
- [46]. Martella, N., Woods, B., Thompson, S., Crockett, C., Northrup, E., Ralston, N. (2010). Positive behavior support: Analysis of consistency between office discipline referrals and teacher recordings of disruptive classroom behaviors. *Behavioral Development Bulletin*, 10(1), 25-33.
- [47]. Marugán de Miguelsanz, M., Carbonero Martín, M. A., & Martínez, M. P. (2012). Assertive skills and academic performance in primary and secondary education, giftedness, and conflictive students. *Electronic Journal of Research in Educational Psychology*, 10(1), 213-232. Retrieved from <http://www.investigacionpsicopedagogica.org/revista/new/english/index.ph>

- [48]. Maxwell, E., & Ukoima, R. N. (2020). Perceived Influence of Behaviour Modification Strategies in the Reduction of Truancy among Secondary School Students in Rivers State. *International Journal of Education and Evaluation*, 6(5), 77-94.
- [49]. Mckissick, C., Hawkins, R. O., Lentz, F. E., Hailley, J., & McGuire, S. (2010). Randomizing multiple contingency components to decrease disruptive behaviors and increase student engagement in an urban second-grade classroom. *Psychology in the Schools*, 47(9), 944-959.
- [50]. McClowry, S. G., Rodriguez, E. T., Spellman, M. E., & Carlson, A. (2013).
- [51]. Menzies, H. M., & Lane, K. L. (2011). Using self-regulation strategies and functional assessment-based interventions to provide academic and behavioral support to students at risk within three-tiered models of prevention. *Preventing School Failure*, 55(4), 181-191.
- [52]. Mills, G. (2017). Ethical Dilemmas in Rewards and Punishments in the Classroom. *The Classroom*. Retrieved May 10, 2023, from <https://www.theclassroom.com/ethical-dilemmas-in-rewards-and-punishments-in-the-classroom-12085380.html>
- [53]. Morin, D. (2017). The effects of inclusion and positive reinforcement within the classroom.
- [54]. Närhi, V., Kiiski, T., Peitso, S., & Savolainen, H. (2014). Reducing disruptive behaviours and improving learning climates with class-wide positive behaviour support in middle schools. *European Journal of Special Needs Education*, 30(2), 274-285.
- [55]. Oliver, R. M., Wehby, J. H., & Reschly, D. J. (2011). Teacher classroom management practices: Effects on disruptive or aggressive student behavior. *Campbell Systematic Reviews*, 7(1), 1-55.
- [55]. Onwuasoanya, I. (2016). Community reinforcement and the dissemination of evidence-based practice: Implications for public policy. *IJBCT*, 3(1), 7787.
- [56]. Ormrod, J. E. (2016). *Human learning*. Boston: Pearson Education Limited.
- [57]. Pas, E. T., Bradshaw, C. P., Hershfeldt, P. A., & Leaf, P. J. (2010). A multilevel exploration of the influence of teacher efficacy and burnout on response to student problem behavior and school-based service use. *School Psychology Quarterly*, 25(1), 13-27.
- [58]. *Practical Psychology*. (2022). Negative Punishment (Definition + Examples). Retrieved May 23, 2023, from <https://practicalpie.com/negative-punishment/>
- [59]. Rafi, A., Ansa, A., & Amir Sami, M. (2020). The Implication of Positive Reinforcement Strategy in dealing with Disruptive Behaviour in the Classroom: A Scoping Review. *Journal of Rawalpindi Medical College (JRMC)*; 2020; 24(2): 173-179.
- [60]. Rehman Ghazi, S., Shahzada, G., Tariq, M., & Qayum Khan, A. (2013). Types and Causes of Students' Disruptive Behavior in Classroom at Secondary Level in Khyber Pakhtunkhwa, Pakistan. *American Journal of Educational Research*, 1(9), 350-354.
- [61]. Robinett, D. (2012). Alternatives to student suspension. *Leadership*, 42(1), 32-36
- [62]. Sadruddin, M. (2012). Discipline: Improving classroom management through action research: A professional development plan. *Journal of Managerial Sciences*, 6(1), 23-42
- [63]. Saraiva, A. B., Pereira, B. O., & Zamith-Cruz, J. (2011). School dropout, problem behaviour and poor academic achievement: A longitudinal view of Portuguese male offenders. *Emotional and Behavioral Difficulties*, 16(4), 419-436.
- [64]. Scott, H. K., Jain, A., & Cogburn, M. (2022). Behavior Modification. In *StatPearls*. StatPearls Publishing.

- [65]. Shakespeare, S., Peterkin, V. M. S., & Bourne, P. A. (2018). A token economy: An approach used for behavior modifications among disruptive primary school children. *MOJ Public Health*, 7(3), 89-99.
- [66]. Shin, K. M., Cho, S. M., Shin, Y. M., & Park, K. S. (2016). Effects of Early Childhood Peer Relationships on Adolescent Mental Health: A 6- to 8-Year Follow-Up Study in South Korea. *Psychiatry investigation*, 13(4), 383–388.
- [67]. Sida-Nicholls, K. (2012). *What if it happens in my classroom? Developing skills for expert behaviour management*. New York, NY: Routledge.
- [68]. Skinner, B.F. (1953). *Science and human behavior*. Cambridge, MA: B.F. Skinner Foundation. Retrieved from http://www.bfskinner.org/bfskinner/Society_files/Science_and_Human_Behavior.pdf
- [69]. Skinner, B. (2013). Reinforce for performance: The need to go beyond pay and even reward. *Academy of Management Executive*, 13(2), 49-57.
- [70]. Smith, B.N., & Hains, B.J. (2012). Examining administrators' disciplinary philosophies: A conceptual model. *Educational Administration Quarterly*, 48(3), 548-576.
- [71]. Sun, R.C., & Shek, D.T. (2012). Student classroom misbehavior: an exploratory study based on teachers' perceptions. *The Scientific World Journal*, 2012, 208907
- [72]. Tee-Melegrito, R. A. (2022). What to know about positive punishment. *Medical News Today*.
- [73]. The American Academy of Child and Adolescent Psychiatry. (2018). Peer Pressure. Retrieved May 8, 2023, from https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Peer-Pressure-104.aspx
- [74]. Wheeler, J. (1972). *The Use of Behavior Modification to Control the Classroom Behavior of Socially Maladjusted Junior High School Student*. Eastern Illinois University the Keep.
- [75]. Wright, R.A., & McCurdy, B.L. (2012). Class-wide positive behavior support and group contingencies: examining a positive variation of the good behavior game. *Journal of Positive Behavior Interventions*, 14(3), 173-180.
- [76]. YuChu, L., Morgan, P.L., Hillemeier, M., Cook, M., Maczuga, S., & Farkas, G. (2013). Reading, mathematics, and behavioral difficulties interrelate: Evidence from a cross-lagged panel design and population-based sample of us upper elementary students. *Behavioral Disorders*, 38(4), 212-227. Retrieved from <http://www.ccbd.net/publications/behavioraldisorders>
- [77]. Zimmerman, F., Schütte, K., Takinen, P., & Köller, O. (2013). Reciprocal effects between adolescent externalizing problems and measures achievement. *Journal of Educational Psychology*, 105(3), 747- 761.