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The Effectiveness of Behavior Management Systems in Grade 5 Classrooms

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Capstone Project: An Action Research Project

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Abstract

This action research project, conducted over a 6-week period, aimed to enhance classroom management techniques in response to evolving educational trends which emphasize students' self-regulation and intrinsic motivation. The study focused on a control and experimental group of grade 5 students, implementing two distinct behavior management systems: one grounded in a behavioral approach utilizing rewards and sanctions, and the other based on positive strategies. The researcher, a secondary school English teacher with 8 years international teaching experience, collected data through observations and interviews with former teachers. Even though the initial hypothesis proposed the superiority of a balanced system encompassing both positive and negative consequences, the analysis of the data rejected this notion. The findings indicated that both systems were equally effective. While the results may not be readily generalizable due to constraints in grade level and sample size, they offer valuable insights for educators, challenging conventional methods of behavior change. The study provides pertinent information for those navigating the delicate balance between maintaining discipline and fostering a positive learning environment.

Keywords: behavior management system, classroom, disruptive behavior, reward, punishment, sanctions, positive strategies, consequences

The Effectiveness of Behavior Management Systems in Grade 5 Classrooms

In an ever-changing society, new challenges arise in terms of dealing with disruptive student behavior that impacts the effectiveness of teaching and learning. This behavior is detrimental not just to students and the educational community, but to the whole functioning system of a society (Nitz et al., 2023). Educators everywhere are concerned with finding new and better ways to create that safe learning environment that is conducive to student success. As adolescents display a more frequent disruptive behavior, due to the transition period they're in, identity and psychological development wise (Sidin, 2021), teachers face bigger challenges in choosing the right disciplinary measures.

Debates and theories about the best strategies to use revolve around the behavioral theory and include a system of positive and negative consequences that mold appropriate behavior. Though a combination of both is integrated into human nature and prepares the students for the realities of life after school, as we advance into the 21st century, there is extensive talk and research about using more positive and inclusive strategies in the classroom. The father of behaviorism himself, B. F. Skinner, preferred positive reinforcers over negative, stating they are more effective in changing human behavior (Mehegan, 1981). Cognitive theories emerged since, placing more focus on the internal factors of an individual's learning process, passing more responsibility to the learner, and encouraging teachers to support and guide rather than just transmit knowledge (Payne, 2015). Various approaches emphasizing positive and proactive behavior management have emerged, including Positive Behavioral Interventions and Supports (PBIS), social-cognitive interventions like the Resolving Conflict Creatively Programme (RCCP) (Sibanda, 2018), and the teaching of social-emotional skills, such as SEL (in the US) and SEAL (in the UK). The problem is, despite their effectiveness in promoting positive behavior and

minimizing disruptions in the classroom, these approaches still incorporate negative consequences to some extent.

The purpose of this action research project is to assess the effectiveness of a behavior management system centered on exclusive positive reinforcement strategies within grade 5 classrooms. The project will identify and incorporate methods dedicated to enhancing teacher-student relationships and fostering a more positive learning environment. Notably, all forms of negative reinforcement, including positive and negative punishment, will be excluded. The research will determine the impact of using a balanced system integrating both positive and negative consequences versus a system that promotes positivity and relies on accountability.

The DeWitt Library at Northwestern College, Iowa, and Google Scholar were used to gather the sources for this study. The search was limited to peer-reviewed journal publications in the period between 2013 and 2023. Keywords searched included *positive and negative reinforcement, reward and punishment, PBIS, classroom discipline strategies, classroom management, classroom interventions, motivational techniques, disruptive behavior.* The studies found were used to understand the foundations of the behavioral theory and its applications in the classroom, to explore the use and impact of different types of consequences in the classroom, to compile and consolidate knowledge of evidence-based, positive strategies, and identify existing gaps in similar studies.

This literature review is structured into four main sections: an overview of disruptive behavior and its impact on teaching and learning, an analysis of the behavioral theory and its application to classroom management, a comparison of teacher and student perceptions, and an examination of modern educational trends proposing effective positive classroom strategies.

In the realm of classroom management strategies aimed at preventing or alleviating challenging behavior, a distinct pattern emerges from existing research: a majority of studies delve into the exploration and experimentation of both positive and negative consequences before substantiating the effectiveness of positive measures. This project endeavors to illustrate that an educational environment employing a solely positive behavior system may prove less efficacious than one incorporating both positive and negative elements. The findings are expected to resonate with teachers, administrators, and parents who are grappling with the challenges of adapting to new educational trends, emphasizing the ongoing importance of balance.

Review of the Literature

The Impact of Disruptive Behavior on Teaching and Learning

Disruptive behavior in classrooms is generally understood as acts of disobedience (Okesina & Famolu, 2022), a behavior that is sufficiently off-task as to digress teachers and peers from their objectives (Nash et al., 2016) and orderly classroom operations (Aloe et al., 2014). Frequently labeled as indiscipline, problematic or challenging behavior, anti-social behavior, or even deviant behavior (Okesina & Famolu, 2022), it includes a series of externalized behaviors. These behaviors, including refusal to follow instructions, lack of attention, attention seeking, disinterest, and disrespect, take various forms, all of which have the potential to disrupt lessons and hamper teaching and learning. A single student exhibiting such behavior can often lead to its spread across a group or even an entire classroom, ultimately having a detrimental impact on the educational environment and process. Managing these situations becomes a key stressor for educators everywhere and an important factor in the development of burnout.

A 2022 NEA survey indicates that a staggering 90% of educators experience burnout, leading many to leave their profession early. Aloe et al. (2014), selected and analyzed 19 quantitative studies researching the correlation between student misbehavior and teacher burnout. All studies were written in English, included measures, samples of in-service teachers, and utilized Pearson's correlation(s). The results of this meta-analysis revealed significant relationships between misbehavior and teachers' emotional exhaustion, depersonalization, and personal accomplishment, with higher mean correlations in high-school and secondary school environments and for younger teachers. In fact, several studies (Green, 2009, as cited in Nash et al., 2016, CTA & UCLA, 2022, Chalkboard Review survey, 2022, as cited by Wigfall, 2022)

showed that approximately half of the teachers who leave the profession attribute their departure to student misbehavior. This trend is particularly prevalent within the initial five years of their teaching careers.

Peers of misbehaved students also bear an impact. According to a report from 2009, a concerning 43% of students faced challenges in maintaining focus in class due to the disruptions caused by their classmates. (Nash et al., 2016). Moreover, a study examining the link between peer delinquency and student achievement (Ahn & Trogdon, 2017) revealed a decrease in test scores.

While not a novel occurrence, this phenomenon has surged at alarming rates in recent decades. The escalation is attributed to a lack of consensus among policy makers, administrators, educators, parents, and notably students, whose voices have gained prominence and whose rights are now a significant consideration. The four main influencing factors are learner, teacher, school, and home related (Semali & Vumilia, 2016). Students nowadays come into an educational setting from very different backgrounds, belief systems, and parenting techniques. Similarly, globalization fills schools with a mixture of teachers and styles. It is not just variety, but also inconsistency that leads to confusion (Semali & Vumilia, 2016) and higher rates of misbehavior.

Young learners need structure and consistency to strive in their development, as various research has shown (Hemmeter et al., 2006, Whitcomb & Merrell, 2013). In and out of the classroom, the lack of may be expressed through disruptive behavior and negatively impact not just their long-term development, but the overall structure and operation of society (Nitz et al., 2023). Continuous research is being conducted to discover the best strategies and tools to prevent it.

The Dynamics of Positive and Negative Consequences

Classroom management strategies have always included a system of positive and negative consequences, particularly after Skinner's theory of behaviorism spread. Basing his experiments on nature's way to shape behavior, B. F. Skinner theorized that reinforcement, either negative or positive, would increase the chances of a certain behavior occurring or not (Mehegan, 1981). A study that examined this theory was conducted by researchers Kubanek et al. (2015) in the USA. 88 undergraduate students were selected to participate and perform a series of auditory and visual tasks to determine how the magnitude of a reward or penalty influences choices. The findings support Skinner's theory, revealing that rewards increase the behavioral frequency and punishments decrease it. The difference hinged on the scale of impact. While a larger reward size led to increased choice repetition, punishment consistently resulted in universal choice avoidance. This led to the conclusion that the influence of loss was approximately two to three times more powerful than the influence of gain in shaping behavior.

The way positive and negative outcomes impact human behavior and learning was also the focus of study by researcher Michely et al. (2022). As serotonin is known to play a role in more efficient learning, the researchers set out to explain its impact. In an experiment that lasted 7 days, 60 healthy human volunteers were administered either a daily oral dose of SSRI citalopram or placebo and performed two experimental sessions consisting of a modified version of a gambling game, with monetary wins and losses. Contrary to popular belief and a previous study by Iigaya et al. (2018) that serotonin enhances learning from reward, Michely's team found that boosting central serotonin with medication enhanced learning from punishment and reduced it from reward, thus revealing an asymmetry in reward and punishment learning. It can be

inferred that when in a positive mood, individuals are inclined to preserve that mood by steering clear of penalties or sanctions rather than seeking to enhance it through rewards.

Additional research delved deeper, investigating gender differences in behavior guided by reward and punishment. Investigating the dynamics of associative learning, Chowdhury et al. (2019) discovered no gender difference in response to reward but observed a heightened inclination for avoidance in females when faced with punishment. A parallel study by Chahal et al. (2021), examining sex differences in teenagers and their implications for sensitivity to reward and punishment, echoed these findings, highlighting that girls tend to respond more effectively to punishment. Contrary to Chowdhury et al.'s (2019) results, boys displayed a higher sensitivity to rewards. These outcomes align with anecdotal observations from the classroom, where girls often exhibit a tendency to internalize failure and avoid negative consequences, while boys are more inclined to take risks and prioritize potential gains.

The application of reward and punishment in guiding behavior was also extensively studied in classroom contexts. Researcher Sidin (2021) conducted a thorough data analysis, looking to uncover the definitions and presentations of rewards and punishments in exiting literature, the typical and effective implementation of teaching activities involving them, and the ways in which they affect adolescent students' motivation. According to Sidin's (2021) research, rewards and punishments can both be categorized as positive and negative. A positive reward is explained as an expression of appreciation or positive reinforcement, including verbal praise, symbolic or tangible tokens or items given to the students, whereas a negative reward is interpreted as a type of negative reinforcement, where the symbolic or tangible items are given to the teacher, in response to student's negative behavior. A positive punishment refers to the addition of an undesired task, while a negative one implies the elimination of a desired stimulus.

Several studies mentioned by Sidin (2021) endorsed an educational framework that incorporates both positive and negative consequences in the classroom. Hakim (2018), for instance, demonstrated support for this approach, revealing that a combination of rewards and sanctions effectively facilitated English teaching for ninth-grade students in Surakarta, enhancing motivation and injecting an element of enjoyment and excitement into the lessons. In this setting, the applied rewards included gifts, high scores, and applause, while punishment was given in the form of singling out, singing, and squad jumps. Matera's (2010) research exposed how a system of rewards and punishments, once successfully implemented, should be consistently upheld, otherwise the students' behavior risks going back to its initial state. The recommendation is concurrent with the idea that children benefit from a well-established routine and structure.

The latest study conducted by Yin et al. (2023) corroborates Sidin's (2021) findings. The researchers set out to examine how combining punishment and reward influence motor learning and memory. 60 adult, right-hand participants from Beijing, China were chosen to perform a motor adaptation task. They were divided into four equally sized groups, each receiving a distinct type of feedback: punishment, reward, a combination of punishment and reward, and none (control group). No difference was found between the groups in terms of memory consolidation and retention. However, both the punishment-only and punishment-and-reward groups demonstrated a notably swifter learning pace across various phases of the experiment. Additionally, the punishment-and-reward group exhibited transferability to opposite motor learning, a trait absent in the pure punishment group. The findings suggest that the synergistic application of positive and negative feedback surpasses their individual use, potentially accelerating the learning rate and improving the quality of learning content. Cultural background and participants' age should be factored in when interpreting these results.

Teacher vs Student Perceptions on Behavior Management Strategies

Examining studies that explore teachers' and students' perceptions on the use of positive and negative consequences in the classroom, a mix of results come to light. However, an overall inclination toward positive strategies and feedback emerges. Payne's (2015) research considered the opinion of approximately 1100 students on rewards and sanctions. The participants attended a single school in the UK and were aged 11 to 18. The survey they had filled out revealed intriguing information. Among the findings, younger students displayed a preference for public reprimands as a motivational tool for improved behavior, whereas older students leaned towards private conversations. They reached consensus that verbal warnings and mild sanctions were effective in enhancing behavior but fell short of serving as strong motivators for increased effort. Harsher sanctions, such as exclusion from class trips or missed breaks, proved ineffective in yielding the anticipated results, except for school reports, which, whether positive or negative, did have an impact on behavior modifications. Evidently, the students' level of maturity significantly influences their perception of the management tools employed.

Another study investigating adolescents' perceptions was undertaken by Raufelder et al. (2016), who delved into the influence of teacher likeability on students' academic self-regulation. After analyzing the survey responses of 1088 secondary school students from Brandenburg, Germany, researchers discovered a notable correlation. Establishing high-quality teacher-student relationships and being motivated by a well-liked teacher were proven to produce greater levels of academic self-regulation and enhance intrinsic motivation, especially among female students. These results align well with the awareness of girls' sensitivity to punishment, as highlighted by Chahal et al. (2021).

"Good teaching is charged with positive emotion" (Hargreaves, as cited by Raufelder et al., 2016). To substantiate this claim, a parallel study examined the role that exclusionary discipline strategies play in how students perceive school climate. Researchers Mitchell and Bradshaw (2013) assessed the feedback from 1902 fifth-grade students and 93 fifth-grade teachers across 37 schools in Mayland, USA, and unveiled an unquestionable negative influence of punitive practices on student-perceived school climate. The exclusionary practices investigated encompassed office discipline referrals (ODRs) and other types of student removal from the classroom. These practices were found to be conducive for a greater level of aggression in both teachers and students, resulting in more confrontational interactions and lower-quality relationships. In contrast, the use of positive behavioral strategies was proven to be positively associated with the aspects of fairness, order and discipline, and student-teacher relationship, thus facilitating a safer and more productive learning environment. Congruent findings were revealed by the research of McCluskey et al. (2013), while exploring the results from a large-scale national study on behavior in Scottish schools. Both primary and secondary school students expressed value for caring relations, fairness, listening skills and inclusion in decision-making when it came to managing misbehavior, criticizing the focus on punishments and teachers' lack of consistency.

Conflictingly, two studies that analyzed teachers' perspectives on using rewards and punishments (Okesina & Famolu, 2022, Bibi & Abid, 2016) found a preference for a system that uses both. Despite selecting positive reinforcement strategies, such as praise and rewards, as the most effective, 20 English teachers in Pakistan maintained a favorable view on utilizing both positive and negative reinforcers. They regarded the system as essential for bringing about long-term behavior change (Bibi & Abid, 2016). Moreover, 200 secondary school teachers in Nigeria

considered student punishment effective, choosing 19 out of 20 given reasons why (Okesina & Famolu, 2022). Interestingly, this study also revealed that punishment was preferred by older teachers and teachers with less experience, calling for better teacher training and continuous professional development to balance inconsistencies.

On the topic of punishment, researchers Twardawski & Hilbig (2022) compared both teachers' and students' perspectives. 260 pre-service and in-service teachers and 238 secondary school students from three public schools in Germany completed rating scale questionnaires and informed about their preferences. Teachers opted for general prevention and special prevention over retribution, while students put forward retribution and special prevention over general prevention. These choices indicate that teachers aspire to cultivate team spirit, wanting all students to learn the lesson and deter future misbehavior, while students do not appear entirely receptive to the "one for all, all for one" approach. Considering the limitations of closed-ended questions and the students' lack of familiarity with an alternative behavior management system is crucial.

Effective Positive Strategies

Students' preference for more positive classroom management strategies is congruent with the latest educational trends. Following the discoveries and recommendations of cognitive theories, teachers are being encouraged to support and guide students in becoming self-regulated and self-motivated learners rather than just transmitting knowledge (Payne, 2015). Various approaches that focus on positive, proactive, and inclusive strategies have been developed to support the concept.

Positive Behavioral Interventions and Supports (PBIS) is by far the most popular. Thoroughly researched and tested, this approach is designed as a three tiers framework and is

meant to support students in the areas of behavior, academic performance, social and emotional skills, and mental health, all the while also improving teachers' wellbeing (Center on PBIS, 2023). As a primary focus, the use of PBIS reduces reactive techniques and replaces them with preventive ones, by providing students with the necessary tools to become active learners. Researchers Nitz et al. (2023) have conducted an experiment in 18 elementary schools in Germany, where they applied the principles of PBIS to manage and improve the disruptive behavior of 29 targeted students. Over a period of seven months, teachers and administrators were trained to implement Tier 1 and 2 interventions and report feedback using DBR surveys. The Good Behavior Game (GBG), chosen as a Tier 1 intervention, employs positive reinforcement to incentivize students and diminish misbehavior. The findings revealed an improvement in behavior for all students involved. However, the addition of the Daily Behavior Report Card (DBRC) as a Tier 2 intervention was found to have an insignificant impact on further improvement. These results are in concurrence with those of another study, by Heine et al. (2020), which showed reward giving is more effective in a team contest than punishment. Interestingly, PBIS proposed interventions are still embedded into the behaviorism theory, rewarding desirable behavior and sanctioning the undesirable. Numerous Tier 2 and Tier 3 interventions, such as Behavior Contracts, Behavior Intervention Plans or Functional Behavior Assessments, include both positive and negative consequences.

A research study that evaluated classroom behavior management strategies based not only on behavioral approaches, but also on social-cognitive and ecological ones, was published by Browne in 2013. By evaluating 10 research articles from different countries, featuring students, teachers, psychologists, and administrators as participants, it was concluded that the strategies employing a behavioral approach were most prevalent as effective. Positive

behavior was highly increased with positive reinforcement, clear communication of expectations, and good teacher-student relationships. The researcher drew, however, attention to the simplistic way in which disruptive behavior is seen and managed (Evans et al, 2003, as cited by Browne, 2013), recommending that more importance be placed on meeting students' individual needs, while considering cultural and developmental implications, rather than teachers' needs. The aspect of bias is clearly brought into discussion. Historically, teachers have a tendency to guide students' behavior in a direction that matches their expectations and teaching style.

In the discourse of bias and the expectations of those overseeing the educational process, Kelly and Pohl's (2018) study holds considerable relevance. As they reviewed exiting literature, looking for positive, research-based practices that are most efficient in modifying disruptive behavior and achieving academic success, the researchers also shed light on the fast evolution and implementation of zero-tolerance policies across the USA. Incorporating numerous severe punitive measures and lacking ample opportunities to understand and assist students, these practices were proven ineffective in reducing violent and disruptive behavior. In fact, they often have the opposite effect. On the other hand, practices associated with positive relationships, approaches emphasizing students' social behavior, positive intervention practices, and student-friendly institutional disciplinary codes were identified as effective in fostering positive changes. This goes to show that listening to students and involving them in decision-making can and does bring upon a behavior that is more conducive to teaching and learning.

As a matter of fact, various studies focused on the importance of social behavior in schools and how teaching social and emotional skills can be a game-changer. The terms SEL (US) and SEAL (UK) are commonly used to refer to such educational practices and programs. One of the studies, by Sibanda (2018), investigated the benefits of teaching social skills to

secondary school students in Bulawayo province, Zimbabwe, country where corporal punishment has only recently been outlawed. By interviewing school heads, school counselors, education officers, members of the disciplinary committee, prefects, and school development committee chairpersons, Sibanda concluded such approach molds a more positive behavior and keeps students engaged in more productive activities. The explanation lies in the fact that, by learning social skills, children improve their self-control, respect for others, and the sense of responsibility. When combined with learning emotional competences, students develop healthy identities (CASEL, n.d.) and become better equipped to face daily challenges in academic, professional, and social environments. Debates and lack of consensus arise on whether these skills should be taught at home or at school and the time that should be spent taking away students' focus from their academic duties. Teachers do take on multiple roles and responsibilities, while dealing with numerous challenges so finding a good balance is still under the microscope.

Methodology

As shown, managing disruptive behavior is the focus of many researchers and there is still a lot of debate on which strategies are the most effective. In this study, the researcher has tested the effectiveness of two systems, one using positive strategies only and another using a blend of strategies with positive and negative consequences.

Research Question: *What is the effectiveness of a classroom behavior management system when negative consequences are eliminated?*

Drawing from the formulated question, the following hypothesis was generated, which served as the foundation for this study's evaluation:

Hypothesis: *A strictly positive behavior system will be less effective than a system using both positive and negative consequences.*

Research Site

The action research project took place at Swiss International School (SIS) Stuttgart-Fellbach, in Fellbach, Germany, where the researcher currently occupies the position of Secondary School English teacher. As a semi-private bilingual school (German-English), it accommodates the needs of many international families. The school has a kindergarten, primary, secondary, and high-school section. The teaching and administration staff are also people with different nationalities or backgrounds, ensuring the creation and maintenance of a space where diversity is nurtured.

Participants

The students selected for this study are representative grade 5 students, aged 10-11. The choice was made to ensure that the students were unfamiliar with the researcher's classroom

management style and strategies, thereby minimizing bias, expectations, and resistance towards a new system. The project was conducted during English classes, with a total of five periods per week, each lasting 45 minutes.

The control group consisted of 13 students, comprising five students from German families, five from mixed families (German-Mexican, German-Serbian, German-Tunisian, German-Chinese, German-Croatian), and three from immigrant or expat families (Moldavian, Japanese-Tunisian, Chinese). There were eight female students and five male students. Among them, 11 students were from SIS Primary school and two were newcomers.

The experimental group had 14 students, comprising six students from German families, five from mixed families (German-American, German-Spanish, German-Greek, German-Dutch, German-Australian), and three from immigrant or expat families (Indian, Chinese-Taiwanese). The gender distribution was nine female and five male students, of which eight were former SIS Primary school students and six were new to the school. Four students in this group were enrolled in DAF (German A1 intensive course) during weeks 2-6 of the experiment and, as a result, were absent from the morning lessons.

Intervention and Timeline

The intervention applied and studied for this action research project involved daily classroom management practices. The control group was subject to a behavior management system based on rewards and sanctions, while the experiment group experienced a system where sanctions or negative consequences were eliminated.

Behavior Management System employed with Control Group:

- Use of a teacher mood thermometer (placed on the board with magnets). Whenever the students began to display disruptive behavior, the teacher would move up the magnet from Happy towards Furious).
- Seat change (occasionally, students changed seats, either randomly or to prevent disruptions).
- Classroom rules (read out loud each lesson).
- Rewards and sanctions system.

Behavior Management System employed with Experiment Group

- No teacher mood thermometer.
- No seat change.
- Classroom rules (read out loud each class).
- Rewards system.

Data was collected throughout a period of six weeks, during which students had a total of 17 English lessons. Qualitative and quantitative data were obtained from observations and semi-structured interviews.

Independent Variables: Disciplinary classroom strategies

The disciplinary strategies considered positive included general and specific praise, rewards and recognition, constructive feedback, discussion and reasoning, reminders, ignoring misbehavior, and positive feedback to parents. The strategies considered to have negative consequences included verbal warnings, stopping the lesson to address misbehavior, negative feedback to parents, and sanctions.

Dependent Variables: Student behavior

Student behavior was measured in terms of disruptions' number and their type. The researcher considered a high noise level, the amount of talking without permission, inappropriate language use, German speaking, body language, not following instructions, and not staying on task as disruptions.

Other Variables: setting, number of participants, age, grade level, nationality, gender, class size.

Measurement Tools

The disciplinary strategies used had been peer-reviewed and approved by school management. The information obtained from interviews and observations achieved trustworthiness via disciplined subjectivity and peer-review.

Storage and security of the data

Data was registered on paper and electronic devices belonging to the researcher to which only they had access.

IRB

The research obtained an IRB exemption, as it involved daily classroom practices that did not put participants at risk and did not interfere with the teaching and learning process.

Data Collection

The data collected for this action research was both quantitative and qualitative and was obtained from semi-structured interviews and classroom observations. To get insight into the disciplinary strategies the student participants were accustomed to, the researcher interviewed the former homeroom and English teacher, before the research started. The selected interview type was semi-structured, to facilitate adaptable yet purposeful bi-directional communication. Two questions were prepared ahead of time, targeting the behavior management system used and its effectiveness. Additional questions were created during the interview, to discuss issues and obtain more details and suggestions. Information on specific students and their needs was thus obtained, in preparation for the project.

The observations were recorded as teacher notes, after each lesson. They included general and specific behavior issues, strategies used to prevent and manage misbehavior, rewards or sanctions given. The data was then transferred to a table containing predefined categories that documented the week, the day of the lesson, duration, the number of students, the number of disruptions, the type of disruption, the strategies used to manage disruptions, the effectiveness of each technique, and the number of class merits given. The names of the disruptive students were also mentioned, to potentially identify and prevent re-occurrences, as well as to guide the teacher in choosing more effective strategies. For data privacy purposes, no names will be mentioned and will remain confidential.

Data Analysis

The semi-structured interviews were recorded and transcribed verbatim. The main two questions had been guided by the literature review and formulated to relate to the research objective of behavior strategies used. The first questions were asked as *What was the behavior management system that you used with the current Year 5 students last year?* with a follow-up, *Which strategies did you find most effective?* The answers from both teachers were highlighted and compared, revealing similar classroom management techniques that had been employed and found effective. As only two people had been interviewed, no coding of the data was necessary. The homeroom teacher never used sanctions and mostly used reasoning and discussions, guiding students to take responsibilities and self-regulate, without external incentives. His classroom management style was mirrored in the book "You know the fair rule" by Bill Rogers, in which the author promotes a respectful and decisive discipline style and the use of positive corrective language. The previous English teacher revealed the use of similar techniques, following the guidelines laid out by Dr. Marvin Marshall in his book "Discipline without Stress, Punishments or Rewards", meant to increase responsibility and internal motivation in students. The difference lied in the fact that the English teacher would, occasionally, sanction disruptive behavior, by sending the student outside of the classroom and sending negative feedback to parents. The homeroom teacher also offered important information and suggestions on individual student behavior and needs (*Student 7 in 5a likes to push the buttons. He doesn't respond well to warnings or sanctions but does respond well to reasoning and discussions. He likes to feel seen and heard/ Student 6 in 5b is confrontational; Student 4 in 5a is immature; Student 5 in 5b is very quiet*). Similar information was not obtained from the English teacher. However, it guided the researcher's choice of using different strategies with certain students, as well as adding more

positive strategies to their behavior management system. To enhance validity and reliability, the transcripts were checked and approved by the participants.

The quantitative data collected from the observations referred to the number of disruptions. For statistical analysis, an independent, unpaired *t-test* was chosen to be conducted. The number of students and number of disruptions for each of the 17 lessons of the experiment were considered. After calculating the sample means for each group, the *t-test* was done using the formula *=ttest(array1,array2,tail,type),* where *array 1* represented all mean values for the experiment group, *array 2* represented all mean values for the control group, 1 was chosen for *tail*, as the goal was to uncover if one series of means is significantly greater than the other, and number 3 was chosen for *type*, as the two samples have unequal variance. The resulted *p value* of *0.14* shows insignificant statistical differences between the two groups, thus failing to reject the null hypothesis. As presented in the line charts below, the number of students and the different disciplinary strategies used had almost no impact on the frequency of misbehaviors.

Chart 1

Disruptions pattern of the Experimental Group

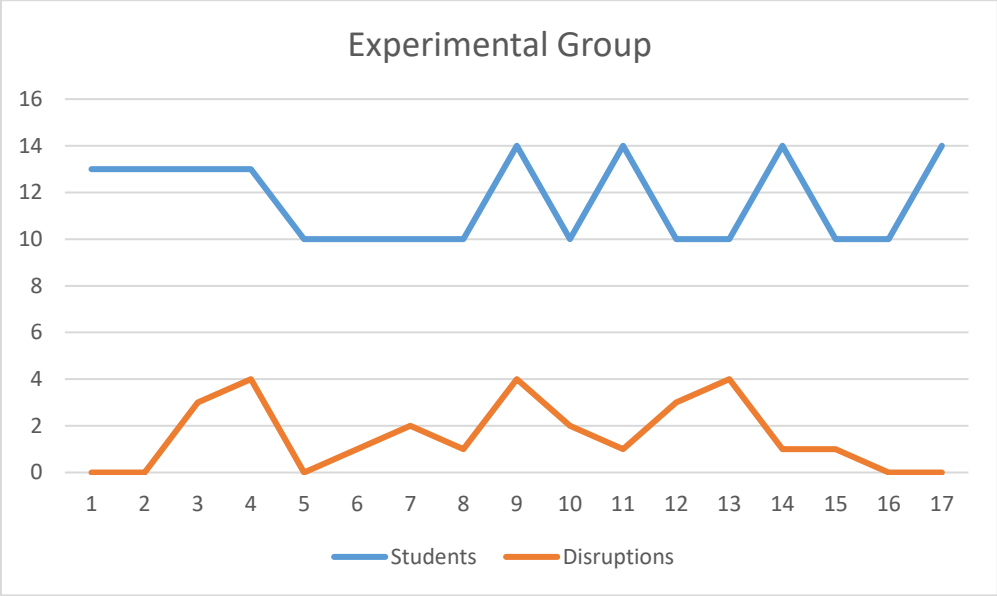
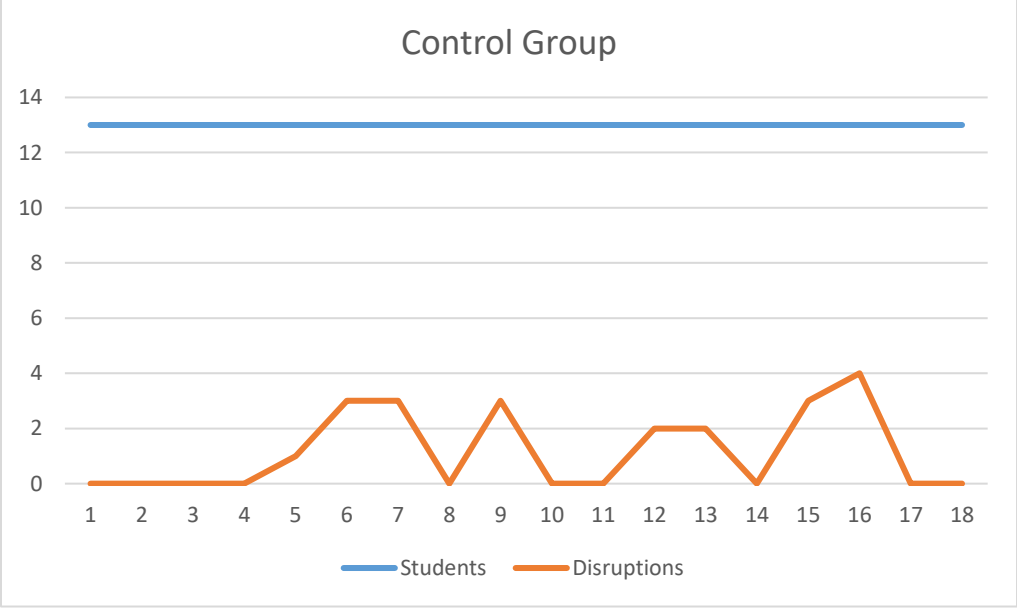


Chart 2

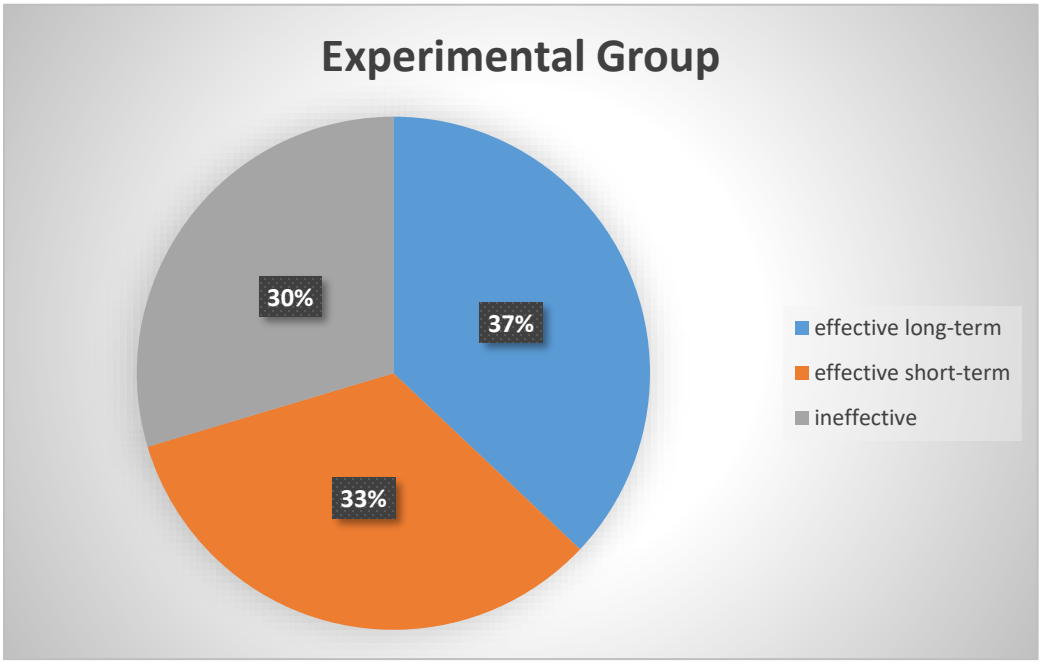
Disruptions pattern of the Control Group



The classroom observations also included information about the type of disruption and the strategies used to manage them. Focusing on these two categories, the researcher highlighted and compared the data from two groups and made connections to specific activities, students, and strategies used. It was found that most disruptions in the control group included "engaging in chats with classmates" and "speaking German". In the experimental group, "speaking without permission" and "engaging in chats with classmates" were predominant. Positive strategies were primarily used to manage the disruptions, such as "reminders of classroom rules", "discussion", and "specific praise", either separately or in combination. For the experimental group, these proved to be effective either long-term or short-term, in 70% of the cases where misbehavior happened.

Chart 3

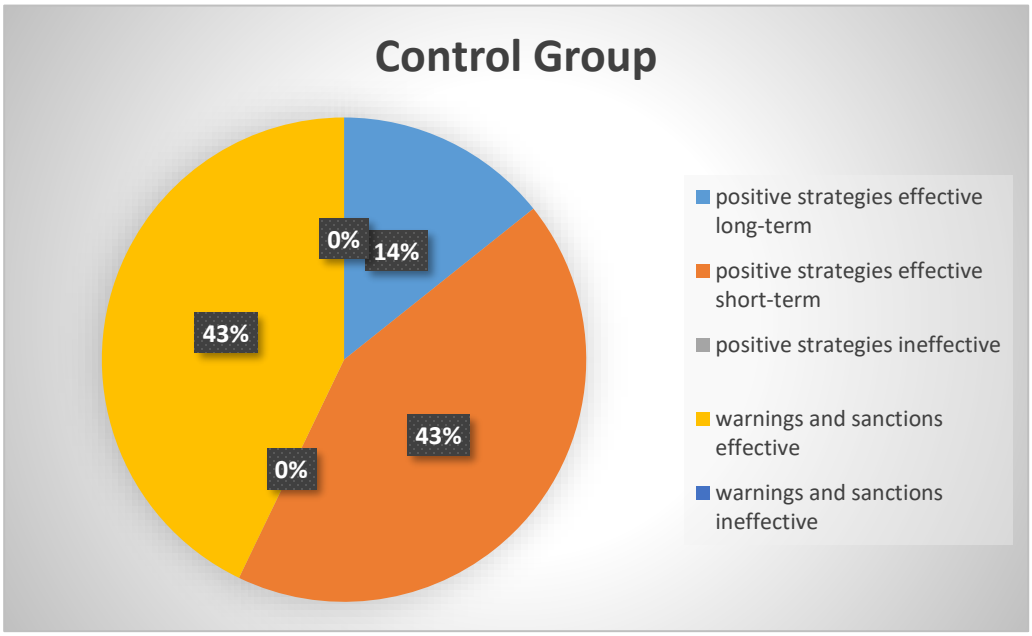
Effectiveness of positive strategies for the Experimental Group



With the control group, the researcher could also employ strategies that implied a negative consequence, either verbal warnings, sanctions in the form of written warnings or strikes, magnet raise on the mood thermometer, or sending a student out of the classroom. Their use was effective in 43% of the disruptive cases.

Chart 4

Effectiveness of positive and negative strategies for the Control Group



Discussion

Findings

The action research study attempted to demonstrate there is a need and a place for classroom disciplinary strategies with negative consequences. Based on the research question, a hypothesis was developed, stating that *a strictly positive behavior system will be less effective than a system using both positive and negative consequences.* The data collected and analyzed surprisingly reveal findings that reject it.

Pre-intervention data indicated that a system with no sanctions proved to be effective for most of the participants for at least a year previous to the research. That meant that 19 out of 27 students would most likely respond well to a similar system, having already started a process of taking more responsibility for their learning. In addition, the information obtained about individual students helped the researcher prevent disruptive behavior. Students number 4 and 7 from the experimental group, for example, who had been described as “pushing buttons” and respectively “immature”, did not cause any significant disruptions. This outcome was achieved by employing reasoning and positive language, fostering a safe space for learning and preventing confrontational interactions and low-quality relationships (Mitchell & Bradshaw, 2013).

During the experiment, the researcher noticed a difference in behavior between the two groups. Given the 43% success rate of negative consequence techniques, there was an initial belief that the hypothesis would be confirmed. Analysis of the data, however, uncovered different findings and suggested potential, unconscious bias in the selection of these strategies. Charts 3 and 4 illustrate that positive techniques may often have a short-term effect, necessitating repetition or replacement. Consequently, there is a noticeable inclination among teachers to opt for strategies with immediate impact, likely to reduce stress and prevent burnout. This finding is

consistent with the studies of Okesina & Famolu (2022), Bibi & Abid (2016), Kelly & Pohl (2018), that revealed a teachers' preference for behavior systems that employ both rewards and punishments.

Systematic gathering and scrutiny of qualitative and quantitative data revealed that the promoting and sustaining positive behavior is largely contingent on positive reinforcement, clear communication of expectations, and the quality of teacher-student relationships. While meeting students' individual needs and employing positive intervention practices demand greater effort from educators, the potential outcomes align with Browne's (2013) recommendations.

Limitations

Inherent limitations were a factor in this action research. The project was conducted by a single researcher, and thus their personality, personal and professional experiences, and decisions regarding the implementation and adjustments could potentially have impacted the outcomes.

Preceding classroom management may be regarded as a potential limitation. As noted earlier, the student participants were familiar with a positive behavior system, unlike numerous other student groups who are accustomed to a behavioral approach. The inconsistency that could have led to confusion (Semali & Vumilia, 2016) and different results was hindered.

Another constraint lies in restricting data collection to a single grade level rather than encompassing multiple ones. Additionally, the sample sizes, of 13 and 14 students respectively, were small in comparison to the norm class size of 23.9 average, at SIS Fellbach school and secondary schools in Germany in general (Statista, 2023). Research shows that smaller class sizes are more beneficial for teaching and learning, in terms of improving student behavior, test scores, and higher quality interactions and relationships. As Thng (2017) points out, "with increased visibility, students cannot easily escape detection from teachers when they

misbehave", thereby facilitating better and more positive management. The findings of the study should thus be contextualized within this specific setting, noting that the outcomes cannot be generalized.

Future Research

Considering the limitations of this study, further research should be conducted across multiple grade levels, with sample sizes that better reflect the reality in schools. The topic is broad in terms of understanding the complex nature or human responses. Different age groups and population number present different challenges in terms of behavior and these variables ought to be incorporated.

Another important factor to be included in the future is the number of researchers involved. Past research has shown how important teacher-student relationships and consistency can be. Scaling up the study to encompass a larger sample, involving multiple school subjects, and fostering collaboration among researchers who support one another and share responsibilities can yield results with broader applicability.

Conclusion

Disruptive behavior and its management in the classroom have been and continue to be researched extensively. As a major key stressor for educators, in rapidly expanding globalized settings, stakeholders struggle to reach a consensus on effective discipline strategies. Existing literature exposes different educational approaches in regards. Traditionally used in education for decades, behavioral approaches stand out, as the combination of positive and negative feedback imitates human nature and life's realities. The latest educational trends, however, support more positive systems, which emerged from social-cognitive theories and consider students' cultural and developmental implications.

This study rejects the idea of a classroom behavior management system being effective only when incorporating strategies with both positive and negative consequences. Though various past studies demonstrated validity of a behavioral approach, 5th grade students at SIS Fellbach, Germany, showed the alternative is equally effective. Going forward, the researcher will continue to immerse students in a setting where teaching is charged with positive emotions (Hargreaves, as cited by Raufelder et al., 2016). While it may not be suitable to entirely eradicate negative consequences for all groups of students, sharing the findings of this study represents a step toward dismantling bias and prompts a reevaluation of conventional methods.

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