

REDUCTION OF DISRUPTIVE BEHAVIORS USING AN INTERVENTION
BASED ON THE GOOD BEHAVIOR GAME (GBG) AND THE SAY-DO-REPORT
CORRESPONDENCE (S-D-R)

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ABSTRACT

Disruptive behavior can waste a great deal of teaching time in the classroom, leading to feelings of frustration in teachers and an increase in academic failure among pupils. The prior research indicates that intervening in these kinds of behaviors improves the classroom atmosphere and facilitates the learning process. With this in mind, the aims of this research paper are a) to reduce the incidence of disruptive behaviors such as standing up without the teacher's permission, shouting, fighting and interrupting the teacher or a fellow classmate, using a combination of the Good Behavior Game (GBG) and Say-Do-Report Correspondence (S-D-R) training; b) to achieve long-term maintenance of results following the gradual withdrawal of the intervention, and c) to introduce the GBG in a different educational context than those discussed so far in the empirical literature. The intervention took place with the 15 children of a standard Primary classroom (Cycle 1) at a state-run school in Andalusia (Spain). Using a Multiple Baseline design across situations, the GBG+Say not-not Do-Request not (Sn-nD-Rn) Correspondence training were introduced. A significant reduction in the incidence of disruptive behavior was observed, contingent on the respective application of the intervention in each Baseline. The combined application of the GBG and the S-D-R Correspondence proved to be an effective way of decreasing disruptive behaviors (shouting, interrupting, etc.) in the classroom, and the results were maintained for one year following the gradual withdrawal of the treatment.

Keywords: Good behavior game (GBG), intervention, disruptive behaviors, school context, Say-Do-Report (S-D-R) Correspondence, maintenance.

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Disruptive behaviors waste a great deal of teaching time in the classroom, giving rise to feelings of frustration among teachers and contributing to academic failure among the pupils (Van Lier, Muthen, Van der Sar & Crijnen, 2004). These behaviors hinder the teaching-learning process, as they contribute to distraction and lack of performance in students, in turn creating a feeling of tiredness and a lack of efficacy among teachers (Babyak, Gayle, & Debra, 2000; Tingstrom, Sterling-Turner & Wilczynshi, 2006; Van Lier, et al., 2004). Disruptive behavior is understood as the children's attempting to harm, verbally negating or not paying attention in the completion of a task assigned by their parents, teacher or another adult authority figure (Boelter, Wacker, Call, Ringdohl & Kopelman, 2007). There are several procedures documented in the literature to reduce disruptive behaviors that occur in excess: extinction, differential reinforcement, response cost, time out, satiation, over-correction, etc., along with procedures that use aversive stimulation (Herruzo, Luciano & Pino, 2001; Martin & Pear, 2007). These techniques, both in isolation and in conjunction, offer a wide range of advantages, although there are also problems depending on the context in which they are used, such as the cost of usage, the preparation and training required for the people who apply them, etc. One of the most important intervention techniques used in the school context to diminish disruptive behavior is the Good Behavior Game (GBG), based around a series of instructions given by an adult to be obeyed by a group of children. The GBG has been successfully implemented thanks to its development with group-oriented systems, reducing inappropriate conduct in the classroom (Embry, 2000, 2002; Ruiz, Pino & Herruzo, 2006; Tankersley, 1995; Tingstrom, et al., 2006). Fundamentally, it involves dividing a large group of children or teenagers into two or more teams, with a series of specific rules, such that the teams receive a cross against them if one of the members breaks any of these rules. A minimum criterion is established for possible crosses and all the teams that comply with and do not exceed said criterion are reinforced/rewarded (Embry,

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2000, 2002; Ruiz, et al., 2006; Tankersley, 1995; Tingstrom, Sterling-Turner & Wilczynski, 2006).

The first authors to develop this technique and verify its efficacy were Barrish, Saunders and Wolf in 1969 (Risley, 2005). They were aiming to analyse the effects of a procedure that improved conduct in the classroom based on natural classroom-based reinforcements, and also to reduce disruptive behavior in the classroom through the use of competition as a kind of game with the goal of achieving privileges. Since this initial project, a wide variety of studies have replicated the procedure, confirming its efficacy and effectiveness in terms of decreasing disruptive behaviors in diverse educational contexts (McCurdy, Lannie & Barnabas, 2009; Poduska, Kellam, Wang, Brown, Ialongo & Toyinbo, 2008; Ruiz, et al., 2006; Tingstrom, et al., 2006).

One of the limitations of this procedure is the lack of data showing the generalisation of results to other behaviors or other unplanned contexts, and the maintenance of results when the intervention is withdrawn (Barrish, et al., 1969; Harris & Sherman, 1973; Johnson, Turner & Konarski, 1978; Medland & Stachnik, 1972; Patrick, Ward & Grouch., 1998; Ruiz, et al., 2006; Salend, Reynolds & Coyle, 1989; Swiezy, Matson & Box, 1992; Tingstrom, et al., 2006). Other procedures reported in the literature have worked with instructions and indeed achieved the generalisation and maintenance of results. An important example is Say-Do (S-D) Correspondence training. This involves differentially reinforcing the correspondence or coincidence between what people say they are going to do (normally, children speaking to adults) and what they subsequently do (Baer, 1990; Lloyd, 2002). Since it was first used by Risley and Hart (1968), several related procedures have been developed in the literature (for example, the revisions by Baer, 1990; Herruzo & Luciano, 1994; Lloyd, 2002) to increase adaptive behaviors and decrease disruptive behaviors in children with and without developmental delays, and even in adults, in diverse contexts. These procedures include the Differential Reinforcement of the Say-Do-Report Correspondence (S-D-R) (Herruzo & Pino, 2002;

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Herruzo, et al., 2001; Luciano, Herruzo & Barnes-Holmes, 2001;), which aims to promote generalisation and maintenance by making the correspondence between what is said and done explicit (Herruzo & Luciano, 1994) by asking the participants a series of questions about what they said, what they did, and whether or not the two coincide (Anderson & Merret, 1997; Luciano, et al., 2001). This procedure evaluates whether the participants have understood the correspondence between what is said and done, in other words it checks that the participants discriminate between what they said they were going to do and what they actually did. When this procedure is used to prevent a certain form of behavior from taking place, the children verbalise that they will not do something and the procedure involves training in the correspondence between saying they are not going to do something, not doing it, and then reporting that they did not do it (Sn-nD-Rn). This procedure has been applied both individually and in groups with very positive results in terms of generalisation to other behaviors and the maintenance of the behavioral changes once the intervention is withdrawn (Herruzo, et al., 2001).

Therefore, given the lack of data on maintenance and generalization in the GBG once it is withdrawn and given the functional similarity of both procedures, it seems reasonable to attempt to combine them with the goal of improving the results of both processes, especially in terms of maintenance. Hence, one of the aims of this study was to reduce the frequency of disruptive behaviors such as standing up without the teacher's permission, shouting, fighting and interrupting the teacher or a fellow classmate, and maintaining these results over time through the combined application of the GBG and Sn-nD-Rn Correspondence training. Furthermore, this is the first time the GBG has been applied in the Spanish education system, a different educational context to those reported so far in the empirical literature. In addition, this study aimed to achieve the maintenance of behavioral changes through the gradual withdrawal of the intervention procedure, monitoring

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progress for one year.

Method

Setting and Participants

The study was conducted in a randomly-chosen public school in a town of less than five thousand inhabitants in Southwestern Andalusia (Spain). It was a rural school with more than fifteen teachers, with an age range between 27 and 60, and a teaching experience between 2 and 25 years. The socioeconomic status of students was average, considering that most working parents had working-class jobs (masons, plumbers, etc.) or worked in agriculture. Among the participants were fifteen children (ten girls and five boys) in the same class standard of the first cycle of primary education aged six and seven years. All children showed normal levels of intelligence and development in the routine screening that the school had performed prior to the start of their primary education. Also participating in the intervention were two professors, Professor 1 (man of 28 years) with less than five years of teaching experience and responsible for most of the material that students had to learn, and Professor 2 (woman of 38 years), with over ten years of teaching experience and responsible for the subject of religion.

Behaviors

Having observed the most frequent disruptive behaviors in the classroom and discussed with the teacher which conducts were the most problematic in terms of classroom dynamics, it was decided that the intervention should focus on the following behaviors:

Behavior 1 (B1): *Standing up without the teacher's permission*, in other words, leaving the desk and chair and abandoning the assigned activity in favour of doing something else, whether at the desk of a classmate or elsewhere around the classroom. The following circumstances were not taken into account: when the children got up with their book and went to the teacher's desk for their work to be

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corrected; when they were going to put a sheet of paper away in their folder; when they stood up to blow their nose; when they got up to borrow something from a classmate; or when they were doing a manual activity (cutting out, sticking, drawing, etc.).

Behavior 2 (B2): *Shouting*, in other words, raising their tone of voice above others so they could be heard, regardless of the activity being carried out, to ask for something, to complain to the teacher or to talk about a personal experience. When they shouted out in unison, this action was only taken into account if the teacher corrected them or reprimanded them.

Behavior 3 (B3): *Interrupting*, in other words, any verbal action (“Teacher, teacher....”) or physical action (putting their workbook in the middle of another conversation) which interrupted the teacher when he was explaining something to the whole class or to a classmate individually, correcting an activity; if a classmate was interrupted when answering the teacher’s questions, or trying to understand a correction that had been made.

Behavior 4 (B4): *Fighting* with one another, hitting each other with their hands or other objects (pencil, eraser, pencil case, bag, etc), insulting, pulling hair, pinching, sticking their tongue out, etc. In general, displaying bad manners towards the teacher or other classmates.

Materials

The materials used were: record sheets designed for research; paper and pencil to keep records; cardboard and felt-tip pens to make the corresponding panels; and various enforcers, including sweets (chewing gum, jelly sweets, etc.), school material (erasers, pencil sharpeners, paperclips, post-it notes, etc.), stories, etc.

Experimental Procedures and Interobserver Agreement

The conducts in the different stages of the intervention process were recorded by two independent observers, who limited their intervention to gathering data without interacting with the participants.

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The observers reached a level of 80% interobserver agreement prior to the start of the study. The observers were situated at the rear of the classroom, behind the children, taking care not to be noticed. Initially, disruptive behavior was recorded during ten-minute intervals. We recorded every disruptive behavior, what the behavior was, and who performed it. During the baseline, two to three ten-minute intervals were recorded every hour. During the intervention, the recording intervals lasted the duration of the game, which at first was ten minutes and subsequently increased by five minutes (ten, fifteen, twenty, etc.) as the game progressed. During the monitoring phase, we recorded three to four ten-minute intervals each hour within the regular school hours of 9 a.m. to 2 p.m. The interobserver reliability (IOA) was assessed for 30% of the intervals across all conditions. The IOA was calculated for each behavior by tallying the point by point agreements, and dividing the number of agreements by the number of agreements plus disagreements and multiplying the result by 100 to obtain a percentage (Kazdin, 1982). We calculated an average IOA for ten-minute intervals sampled from each of the phases of the intervention. Mean IOA was 88.07% (DT= 3,06; range, 85%-96%).

Experimental Design

The effects of the intervention (GBG+Sn-nD-Rn Correspondence) were assessed using a Multiple Baseline design across situations, where one situation is referred to as *teacher 1*: lessons with the form tutor; and the other as *teacher 2*: lessons with a teacher other than the form tutor. After the Baseline period (BL) (sessions 1 to 6) in which the data were established, the independent variable was applied with *Teacher 1*, whereas *Teacher 2* continued with the Baseline (sessions 7 to 12). From session 13 onwards, the independent variable was also applied with *Teacher 2*. The **independent variable** was the combination of the Good Behavior Game and Sn-nD-Rn Correspondence training, which will be described in detail in the next section. The **dependent variable** was the frequency of behaviors B1, B2, B3 and B4 observed per hour. In this case, scores were transformed to a unit of

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time paralleling that of the usual activities performed in the classroom, because at the end of the intervention, the game lasted nearly forty minutes, coinciding with the completion of any usual activity.

Procedure

After randomly selecting a school, the intervention was implemented for a first-grade class at the request of its tutor, who had been having problems with his classes owing to the high incidence of disruptive behaviors such as shouting, fighting, constantly standing up, etc. The problematic behaviors were defined with the help of teacher and an intervention was suggested entailing the combination of the GBG and Sn-nD-Rn Correspondence training. The aim was to reduce the incidence of disruptive behavior, thereby improving and creating a more appropriate working environment, since the teacher was wasting a great deal of time providing explanations, and activities overran their allotted time due to constant interruption. The intervention was applied by two teachers (teacher 1 and teacher 2), who had been previously trained in the GBG and the Sn-nD-Rn Correspondence, following the corresponding Baseline (BL) periods. With the help of the two teachers, three groups of pupils were created. The distribution was random, except for three children who had a higher frequency of disruptive behavior, who were distributed equally among the three groups. The form tutor informed the parents and the head teacher, and handled the relevant permission procedures required to carry out the following tasks: a) Adaptation: the researcher and two observers spent four days in the classroom so the observers could adapt and adjust their operational definitions to the disruptive behaviors, confirming that the observers were providing reliable records. b) Baseline: over the course of six school days, the frequency of disruptive behaviors was recorded in periods of ten minutes, during the time the pupils spent with teacher 1 and teacher 2, in order to ascertain the baseline activity time to be used for the GBG. One day before

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beginning the intervention with teacher 1, an evaluation was performed to see whether the pupils understood the correspondence between what an adult said and did. This evaluation was carried out by the researcher outside of the classroom and on an individual basis. We considered that the children understood the say-do correspondence (DH) if they performed correctly on three consecutive trials in which an adult displayed correspondence and the child was able to identify it. For the absence of DH correspondence, the criterion was performing correctly on at least five consecutive trials in which the child identified a lack of correspondence between what the adult said and did. **(Insert Table I around here)** c) Intervention: Bearing in mind the results of the empirical literature and the procedure followed in the research of Doland, Kellam, Brown, Werthamer-Larsson, Rebook, Mayer, Laudoff, Turkkan, Ford & Weeler (1993), we decided to increase the number of game sessions carried out in a school day. So, instead of carrying out one ten-minute game session a day, four or five game sessions would be conducted a day depending on the classroom dynamics and the activities planned by teachers 1 and 2. In line with this process, on the first day of intervention, teacher 1 explained to his students that they were going to play a game several times over the course of the morning, while they did their regular school work, and that for this game they would have to divide into teams. They were encouraged to give themselves a team name, which was written on a piece of cardboard and placed in an area visible to everyone. They were then told the rules of the game (during the game, the pupils could not stand up, shout, fight or interrupt), which were also printed on a piece of cardboard displayed in plain view of all the pupils. Upon the advice of previous work (Ruiz, et al., 2006; Tingstrom, et al., 2006), the criterion to win the game was to accumulate no more than four crosses; in other words, each team was allowed to perform a maximum of four of the disruptive behaviors described to them previously. Every time a team won a game, a small material reinforcement was given to each member of the winning team (chewing gum, sweets,

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marbles, balloons, paperclips, etc.) and on a panel an ‘apple’ was displayed by way of a collective reinforcement together with other social reinforcements (praise, congratulations, etc.). If, at the end of the school day, they had only lost one game or none, each member of the team would get a medium-sized material reinforcement (stick of glue, plasticine, felt-tip pen, etc.) and on another panel, a ‘strawberry’ would be displayed, which meant that they were the winners of the day. At the end of the week, on Friday, the numbers of strawberries were counted and if there was just one day or no days on which they had not been a winner, on another panel, a large ‘sun’ would be displayed with the name of each team. This meant that they were the winners of the week and each of the team members received a large material reinforcement (story, Walt Disney CD, giant balloon, etc.). All the teams could win the game sessions, and could also be the winners of the day and the week. A major objective in terms of maintenance was to gradually eliminate material reinforcements so that only the symbolic reinforcements remained (apple, strawberry and sun symbols) together with social reinforcements, such as praise and congratulations, etc., which teachers 1 and 2 provided throughout the intervention. The procedure followed in each of the game sessions corresponded to the typical Sn-nD-Rn Correspondence training sequence. In other words, first, each team was asked what they were going to *do*, and social reinforcements were provided if children said they would not behave disruptively. They were then given the opportunity to *do* and then provided with differential consequences for the Sn-nD-Rn Correspondence, while the teachers asked them questions to facilitate their understanding of the relationship between verbal and non-verbal conduct. Table II shows the sequence. **(Insert Table II about here)** They began with the *saying* part of the Sn-nD-Rn correspondence training. Then the ‘doing’ period began, in which the teacher taught his class as normal, noting down on the board the crosses earned by each team, as feedback. The teacher could ask the observers for help to carry out this task, since during this period two observers were

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recording disruptive behaviors (B1, B2, B3, B4). At the end of each game, the teacher carried out the third part of the training process, in other words the differential reinforcement of the Sn-nD-Rn Correspondence. In this intervention, the pupils answered together and honestly that they had said that they were not going to engage in behaviors B1, B2, B3, and B4, and that they had not done them. Table III shows the questions asked. **(Insert Table III around here)** Following six school days of intervention with *teacher 1*, the intervention was also applied to teacher 2 following the procedure described above. **d) Withdrawal of the intervention:** The withdrawal of the intervention began after day 20. During this phase, teacher 2 had to take some sick days and we were only able to collect data for three days. Table IV shows the process followed for this withdrawal. **(Insert Table IV around here)** The characteristics were: increasing the duration of each game, expanding the number of behaviors permitted; in this case, the number of games carried out in a school day also decreased, and hence so did the material reinforcements; and the teams merged, forming a single group, etc. The time was progressively increased in five-minute blocks until the duration of the game coincided with the everyday activities carried out in class, in other words, thirty or thirty five minutes. The number of disruptive behaviors permitted was increased progressively from four to twelve or sixteen. The feedback on the board also disappeared and references were no longer made to the number of disruptive behaviors committed by each team. Since the duration of each of the games increased, the number of games decreased, down from four or five games a day depending on the timetable, to just one game. Gradually, the material reinforcements also decreased in number, leaving only the social reinforcements expressed verbally by the teacher through praise, and the symbolic reinforcements of the 'strawberry' and the 'sun'. The correspondence training was maintained, coinciding with the number of games; hence in the end, the Sn-nD-Rn procedure was carried out by all the children at the same time, at the start and end of the day. **e) Follow-up:** After the summer holiday (two and half

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months), further observation data were gathered, recording one complete day every two weeks over the course of 9 months. During this period, only the disruptive behaviors were recorded, without carrying out any tests of the intervention procedure (GBG+Sn-nD-Rn Correspondence). For this phase, teacher 2 was only able to record six days, because of a work leave that lasted through the end of the course.

Results

The objectives of this intervention were, firstly, to reduce the frequency of disruptive behaviors such as standing up without the teacher's permission, shouting, fighting and interrupting the teacher or a fellow classmate, and to maintain this reduction over time through the combined application of the GBG and Sn-nD-Rn correspondence training; and secondly, to maintain the behavioral changes via the gradual withdrawal of the intervention procedure, collecting follow-up data for one year.

Figure 1 shows the average number of disruptive behaviors committed by the class group per hour.

The top graph represents disruptive behaviors during lessons with teacher 1 and the bottom graph shows disruptive behaviors during lessons with teacher 2. Following intervention with teacher 1, a drastic reduction was observed in the incidence of disruptive behaviors, although the numbers remained the same in lessons with teacher 2. However, once the intervention commenced with the latter teacher, this incidence also reduced. During the withdrawal of the intervention and follow-up, despite not having many of the teacher 2 data with sustained worker absenteeism, it seems that the results held with both teachers. **(Insert Figure 1 around here)**. The analysis of variance confirmed the visual results [$F(3.52) = 15.311, p < .001$], revealing statistically significant differences between baseline and intervention phases, removal and monitoring of both teachers **(insert Table V around here)**.

Discussion

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The results indicate that the study succeeded in its goal of significantly reducing the incidence of disruptive behaviors such as standing up without the teacher's permission, shouting, fighting and interrupting the teacher or a fellow classmate in a standard Primary classroom (Cycle 1), through the application of the GBG combined with Sn-nD-Rn Correspondence training, this being the first implementation of the GBG in Spain. These positive results tie in with the previous scientific literature concerning this procedure (McCurdy, et al., 2009; Poduska, et al., 2008; Ruiz, et al., 2006; Tingstrom, et al., 2006). Furthermore, the results were maintained for one year following the withdrawal of the procedure, meeting the demands expressed by several authors in the literature (Barrish, et al., 1969; Harris & Sherman, 1973; Johnson, et al., 1978; Medland & Stachnik, 1972; Patrick, et al., 1998; Ruiz, et al., 2006; Salend, et al., 1989; Swiezy, et al., 1992; Tingstrom, et al., 2006). Hence, the combination of the GBG and Sn-nD-Rn Correspondence training is effective in the reduction of disruptive behaviors in a standard class, since the frequency of these behaviors decreased following the introduction of the procedure in each of the baselines. However, this study does not confirm whether it is more effective, or less, than the traditional version of the GBG, since no comparisons were made between the two. Nevertheless, we must keep in mind, at a general level, that this modification of the GBG achieved the maintenance of results over an extended period of time, something that previously was difficult to achieve with the GBG. Hence, in this respect, the modification is an improvement. It should be highlighted that the combined procedure had a very powerful effect on the reduction of the behaviors studied here, probably enabling the natural contingencies to act with greater effectiveness. Another original aspect of this study is the modification of the GBG to promote the maintenance of results. In the literature reviewed, although many authors have shown an interest in the generalisation of results, the same cannot be said of the maintenance of results (Herruzo & Pino, 2002; Herruzo, et al., 2001; Luciano et

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al., 2001). As indicated earlier, the combination with Sn-nD-Rn Correspondence training has improved the maintenance of the behavioral changes, and even though a controlled comparison has not been carried out by applying the GBG without Correspondence training, it can be compared with the results achieved so far in the literature. The advances made in Correspondence training were applied to this intervention: 1) progressive and intermittent withdrawal of contingencies; 2) the duration of each game session is increased; 3) social and natural reinforcements acquire a great deal of importance, and are maintained over time; 4) the different teams are merged to form a single group including the whole class; 5) Sn-nD-Rn Correspondence training is maintained at the start and finish of the school day. In other words, following Martin & Pear (2007), a gradual change occurred from intervention conditions to normal classroom conditions, thereby achieving the maintenance of results. In this respect, the role played by the self-instructions involved in the Correspondence procedure is also important, since the children verbalised that they were not going to engage in a certain behavior, and were reinforced for acting accordingly; but they were also asked about what they had said and done, thereby making it easier to establish the relationship between what they say and do, and the contingencies for the S-D-R Correspondence. This may also have facilitated the level of maintenance achieved. There was even some evidence of generalisation because when the teacher had to be substituted, there were no changes in the incidence of disruptive behaviors. The importance acquired by these kinds of tools should be emphasised, since not only do they diminish disruptive behaviors, but they also lay the foundations for more harmonious relations within the classroom. The main advantages of combining these two techniques are: 1) the low economic and human cost of implementation; 2) the short time period required for development; 3) the feasibility of its development and implementation by the teacher; 4) the effects are quick and maintained over time; 5) it improves the atmosphere in the classroom, promoting more prosocial behaviors to the detriment

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of the disruptive behaviors observed; 6) it improves the teaching-learning process; 7) it can be adapted to any context or type of population.

Limitations of the Study

Despite the positive results, there are several limitations in the work to be identified. One is the absence of data on the integrity of the implementation of the treatment. It would have been interesting to collect observational data documenting the exact procedure that the teachers conducted during the intervention. Another limitation is the lack of explicit procedures geared toward the generalisation of the learned behavior pattern to novel behaviors or novel contexts. Developing such procedures could be one of the future goals in this area of research (Stokes & Baer, 2003; Stokes & Osnes, 1989).

Future Research

It would also be interesting to compare the traditional GBG with this new procedure in order to verify which offers greater advantages and if actually the combination of the GBG and S-D-R correspondence better contributes to the maintenance of the behavioral changes. It would also be interesting to compare the pupils' academic performance before, during and after the intervention, since presumably the reduction of disruptive behaviors such as shouting, standing up, interrupting, etc, could allow their academic performance to improve. In this case, we only have the statements of the teachers that they did perceive a series of changes when working with the pupils; for example, it seems that much less time was required to explain contents and exercises after the intervention than before, since the teacher did not have to waste time trying to get the children to pay attention. The pupils also took less time to carry out their daily activities. For some of them, this also meant avoiding certain punishments such as staying in at break to finish their activities or having to take them home. Finally, it would be interesting to investigate how these types of interventions to

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decrease disruptive behavior may lead to prosocial behavior in the classroom. This idea came about after the unsystematic observation of spontaneous assistance and cooperation emerging among members of the team (such as encouraging the more disruptive classmates to control their behavior), which came as a pleasant surprise to the teacher. This latter aspect points to the importance of positively reinforcing appropriate behavior in the school setting, which, far from fuelling their desire for material reinforcements, actually promotes positive behaviors that facilitate social harmony, eliminating behaviors considered to be disruptive. Finally, we wish to highlight the importance of increasing the effectiveness of this procedure in other cultures. Given that this is the first study of its kind conducted in Spain, it would be interesting to examine its effectiveness across different cultures and establish what modifications would be necessary to perform the procedure successfully.

Implications for Psychologists and Educators

This study shows how children in the first cycle of Primary Education and with normal development can improve their behavior in class using the application of the GBG technique combined with S-D-R Correspondence training. It exemplifies how the teacher can intervene and improve the conduct of pupils without the intervention of any external agents. Since it is a simple intervention technique, easy to use and applicable in a short space of time with very quick results, it provides the teacher with an excellent tool to improve the behavior of pupils. Furthermore, this project represents a milestone in relation to the GBG, since never before has this technique been tested on a Spanish sample. Finally, we wish to highlight that this study presents the first clear and explicit procedure for promoting the maintenance of the behavioral changes.

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