

BEHAVIOR MANAGEMENT IN PRESCHOOL CLASSROOMS: INSIGHTS REVEALED THROUGH SYSTEMATIC OBSERVATION AND INTERVIEW

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This mixed methods study examined behavior management strategies used by preschool teachers to address student noncompliance in the classroom. Specifically, the study aimed to (1) examine the methods that preschool teachers are currently using to respond to noncompliant behavior in their classrooms, (2) measure the frequency with which each strategy is used or attempted, and (3) examine the reasons that teachers have chosen to use particular strategies. Observations and teacher interviews were conducted in five classrooms across two preschools located in a Midwest state. Results revealed that teachers use a variety of strategies to address noncompliance, many of which were also preventative in nature and designed to increase students' self-regulation. In addition, behavior management techniques that are currently recommended by research (e.g., guided compliance and proximity praise) were generally practiced by teachers in the participating schools. However, students were reinforced for appropriate behavior following noncompliance less than one-third of the time. These results suggest that teachers are using a broad range of recommended strategies, but the results also serve as a reminder of the importance of providing positive reinforcement for appropriate behavior following an episode of noncompliance. Additional implications for school practitioners and future research are provided. © 2013 Wiley Periodicals, Inc.

In 2005, the Yale University Child Study Center conducted a study of state-funded preschool programs and found the national expulsion rate of preschool students to be 6.7 per 1,000, which is 3.2 times higher than that of K–12 students (Gilliam, 2005). Studies have found behavior problems in preschool to predict lower academic outcomes, as well as lower motivation, attention, persistence, and attitudes toward learning in students (e.g., Bulotsky-Shearer, Fernandez, Dominguez, & Rouse, 2011). Interviews with teachers indicate that classroom management is believed to be one of the most challenging aspects of teaching (Merrett & Wheldall, 1993). In 2006, the American Psychological Association distributed a survey nationwide to learn about teachers' classroom management, instructional strategies, classroom diversity, and parental communication needs. Classroom management was one of the highest ranked professional development needs, particularly among first-year teachers and teachers of preschool through fifth grade students. This need was cited across rural, suburban, and urban settings, which suggests that behavior problems in the classroom are universal (Coalition for Psychology in the Schools and Education, 2006).

Behaviors such as noncompliance, aggression, and destruction of property comprise some of the typical behavior problems found in preschool classrooms (Bear, Cavalier, & Manning, 2002). Behavior management strategies that specifically target noncompliance are among the most relevant strategies for preschool teachers, as all preschool children exhibit noncompliance on at least some occasions (Cipani, 1993). Compliance in the preschool classroom is beneficial for students academically, behaviorally, socially, and emotionally. It allows for all students to receive maximum educational opportunities (Cipani, 1998), and research has shown that academic engagement increases as student rates of compliance increase (Matheson & Shriver, 2005). Thus, noncompliance is a relevant issue in preschool classrooms, and early prevention and intervention for noncompliance—

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by educators, administrators, school psychologists, school counselors, and other related services personnel in schools—are important for positive student outcomes.

Noncompliance in the Preschool Classroom

Classroom noncompliance has been defined as “the failure to comply with a teacher request or instruction” (Cipani, 1993). There is some variation in the exact definition of “failure to comply,” but most of the literature defines noncompliance as a child failing to respond within 5 to 30 seconds of a request or instruction (Goetz, Holmberg, & LeBlanc, 1975; Roberts, Hatzenbuehler, & Bean, 1981). Classroom noncompliance can vary in appearance, from students doing nothing, to verbally or physically refusing to comply. Noncompliance can also vary in function, from the child seeking attention from adults or peers, to being incapable of or confused about how to perform the request, to preferring another activity over the one requested, to escaping or avoiding an aversive task (Cipani, 1993; Piazza et al., 1999).

It is particularly important for behavior problems such as noncompliance to be addressed during the preschool years, usually ages 2 to 5. These years represent a significant period of development for children, and the preschool classroom is often the first place that socially and educationally relevant behavioral difficulties emerge (Carey, 1997). Unaddressed behavior problems during preschool can result in later academic challenges such as lower motivation, attention, persistence, and attitudes toward learning, as well as behavioral challenges such as verbal and physical aggression, and conduct disorders (Bulotsky-Shearer et al., 2011; Cipani, 1998; Webster-Stratton, 1997).

In order to prevent or minimize these negative outcomes, interventions targeting preschool noncompliance must promote appropriate, socially responsible behavior and foster the development of children’s self-discipline. Self-discipline allows children to inhibit antisocial behavior, assume responsibility for their actions, differentiate between right and wrong, and develop cooperative relationships with peers and adults (Bear et al., 2002). Acquiring these skills in early childhood will likely prevent larger-scale social and behavioral difficulties later in life. Therefore, addressing a child’s noncompliance during preschool will benefit the individual child, the child’s peers and family members, as well as society as a whole.

Strategies to Increase Compliance

Proactive Approaches. Schoolwide programs to prevent discipline problems typically aim to promote positive behaviors and increase academic engagement across the general population of students (Luiselli, Putnam, Handler, & Feinberg, 2005; Walker et al., 1995). It is important, however, that schools also have specific positive behavioral strategies for students who need extra support. These strategies focus on the antecedents of behavior, in an effort to decrease the likelihood of noncompliance occurring among students. Proximity praise is one proactive strategy that is used to promote classwide appropriate behavior and increase compliance in all children in a classroom. It includes a teacher praising or giving attention to students who behave appropriately. This allows other students in the class, particularly those in need of extra behavioral support, to learn or be reminded, through observation, of the behaviors that are appropriate and that will lead to praise and attention from the teacher. This technique builds children’s self-esteem, reinforces their sense of competence, and increases their internal motivation (Webster-Stratton, 1999).

Guided compliance is another proactive strategy for increasing compliance in preschool children (Wilder & Atwell, 2006). It involves presenting the child with a command in clear behavioral terms, verbally prompting or physically guiding the child through the steps needed to comply with the command, and reinforcing the child for completing the command with guidance. Over time, less guidance is provided until the child is able to perform the command independently (Cipani, 1993).

This method is often recommended for children who do not understand the requirements or lack the skill needed to perform the requested command (Cipani, 1998).

A third proactive approach is behavioral momentum, or high probability sequences of requests. This approach involves presenting children with a sequence of simple requests or instructions with which they are likely to comply (i.e., high probability requests) and reinforcing their compliance before presenting them with the desired request, or the request with which they may be unlikely to comply. When implementing this procedure, teachers should choose high probability requests that result in consistent student compliance, require less than five seconds for the student to complete, and are followed by the desired request (i.e., the low probability request) within ten seconds (Cipani, 1993; Lee, Belfiore, & Budin, 2008).

Group contingencies are also used to increase compliance in students. They are structured so that students' access to reinforcement is dependent on the performance of one or all individuals in their group. Group contingencies can be organized in many ways, but they typically include specific rules, multiple teams, an allocation or reduction of points for the team's collective behavior or individual member's behavior, and reinforcement for the team who meets a specified goal (Bear et al., 2002). Group contingencies are often arranged in the format of a game and have been shown to be effective when delivered both as a form of proactive reinforcement and reactive response cost (e.g., Tanol, Johnson, McComas, & Cote, 2010).

Such proactive strategies should be implemented before reactive approaches, as they are viewed as nonaversive and are focused on teaching and encouraging positive, appropriate behaviors (Carey, 1997). It is important to note that although these strategies are most often used proactively, in an attempt to *prevent* misbehavior, some of them (e.g., proximity praise, guided compliance) can also be used reactively in an attempt to halt a noncompliant incident.

Reactive Approaches. Reactive strategies are those that focus on the consequences of behavior and are often useful in terminating already existing noncompliance. Reactive strategies such as ignoring, redirecting, and warning children are the least intrusive and should generally be used as first responses to noncompliance. However, verbal reprimands, overcorrection, response cost, and time-out have all proven effective in terminating noncompliance and decreasing future noncompliance when the initial, less intrusive techniques prove ineffective (Bear et al., 2002; Webster-Stratton, 1999). Each of these techniques will be discussed in further detail.

A verbal reprimand identifies the inappropriate behavior; communicates dissatisfaction with the behavior, not the child; and provides the child with an example of an appropriate behavior (Forehand, Roberts, Doleys, Hobbs, & Resick, 1976; Henderson & French, 1990). Verbal reprimands are sometimes preferred over other strategies because they do not require extra resources to administer, and a child's reaction cannot impede the administration of the reprimand (e.g., the child cannot refuse to cooperate, or perform a behavior that conflicts with the implementation of the strategy) (Forehand et al., 1976).

Overcorrection is another strategy that involves two components: restitution and positive practice. Restitution requires children to restore the environment to its same condition (or to an improved condition) prior to the inappropriate behavior. Positive practice requires children to practice appropriate manners of behaving in the particular situation (Carey, 1997). The goals of overcorrection are to teach children to assume responsibility for their behavior and to teach them more appropriate behaviors (Foxx & Azrin, 1972).

Response cost is also used to increase compliance in preschool children. Response cost refers to the removal of an earned reinforcer or privilege, contingent on inappropriate behavior. Reinforcers such as points, tokens, stars, and check marks are often used with preschool children. Response cost is believed to be easier to implement than other strategies because, unlike overcorrection or time-out, it does not require participation from the child (Walker et al., 1995).

Time-out is another strategy used to manage noncompliance that will be reviewed in greater depth because much variability can exist in its implementation. Time-out is a technique during which a child is denied access to reinforcement for a specified amount of time, contingent on inappropriate behavior (Forehand, 1985). Previous research has shown time-out to be most appropriate for the reduction of behaviors that are maintained by positive reinforcement, such as social attention or tangible reinforcers (Taylor & Miller, 1997). However, Foster (2005) argues that the effectiveness of time-out depends less on the function of the behavior, and more on the creation of a rich time-in environment and the use of effective instructions which are “highly specific, teach children what to do, and provide adequate time for compliance” (Foster, 2005).

The literature contains various guidelines for how to implement the most effective time-out (e.g., Shriver & Allen, 1996; Sterling-Turner & Watson, 1999; Webster-Stratton, 1999). However, a time-out involves multiple components (e.g., form, explanation, release contingencies, and duration), and much variability can exist within each component. In addition, the effectiveness of a time-out is influenced by the developmental level and individual differences of the child, as well as the context in which the time-out is applied. Therefore, several parameters have been researched in an attempt to understand the basic composition of a time-out so that it can be used appropriately with individual children. Four of these parameters will be reviewed in order for the present study to more accurately record and understand the behavior management strategies that are implemented in preschool classrooms.

Time-out can be administered in different forms. Exclusion time-out refers to the removal of a child from a reinforcing area to a separate but nearby area, such as the corner of the classroom, where the child cannot engage in reinforcing activities. During a nonexclusion time-out, the child is unable to receive reinforcement but is able to observe others engage in and obtain reinforcement for their appropriate behavior. Nonexclusion time-outs can involve the removal of reinforcing activities or objects as well as the removal of reinforcing attention (e.g., contingent observation or planned ignoring) (Carey, 1997; Harris, 1985). When administering a time-out, the least-intrusive form possible, and the same area, should be used each time (Harris, 1985; Sterling-Turner & Watson, 1999).

Another parameter includes the use of an explanation for the time-out. Both the presence and absence of an explanation for time-out have resulted in effective behavior change (e.g., Kendall et al., 1975; White et al., 1972). However, if children are confused about the instruction given or unaware that they have exhibited noncompliant behavior, an explanation will likely increase their tendencies to comply in the future. Walker et al. (1995) recommend that teachers state the reason for the time-out prior to its implementation, but do not lecture the children or discuss the events that led to the time-out, after it has been completed.

The contingencies under which to release a child from time-out have also been examined. Bean and Roberts (1981) found that time-outs with child-release and adult-release procedures for noncompliant preschool children both resulted in greater compliance; however, the adult release procedure resulted in a significant increase in compliance. These results suggest that, adults, rather than children, should determine the release from time-out.

The optimal duration of a time-out is another parameter that has been researched, but the results have varied. Some studies have found a shorter time-out to be more effective (e.g., Pendergrass, 1971), while others have found a longer time-out to be more effective (e.g., Burchard & Barrera, 1972) in managing behavior. Other studies recommend one minute of time-out per age of the child, but no longer than five minutes total (e.g., Webster-Stratton, 1999). Some studies have found equal effectiveness among durations, and these authors argue that it is the act of being in time-out, or away from reinforcement, that decreases the behavior, rather than the specific duration of time-out (Benjamin et al., 1983; Fabiano et al., 2004). For this reason, the exact duration may not predict the

effectiveness of the time-out as long as the child is denied access to reinforcement. However, Carey (1997) recommends time-outs for preschool children generally be brief and be determined by the particular child's history with time-out.

Instruction and Reinforcement for Appropriate Behavior

The ultimate goals of behavior management strategies in preschool classrooms are (a) to stop the problem behavior, (b) to decrease the likelihood of the child repeating the behavior, and (c) to replace the problem behavior with a more appropriate one (Bear et al., 2002). Therefore, reinforcement, and in some cases, explicit instruction, of appropriate behaviors must occur in order for students to replace their problem behaviors with more acceptable ones (e.g., Cipani, 1993; Matheson & Shriver, 2005). It is recommended that teachers repeat the original command after using a behavior management strategy, and that they give immediate and specific verbal reinforcement so children can connect their appropriate behavior to the reinforcement (Walker et al., 1995; Webster-Stratton, 1999). Without the accompaniment of instruction and reinforcement, reactive behavior management strategies may reduce inappropriate behavior (i.e., noncompliance), but they will not necessarily promote appropriate behavior (e.g., Bostow & Bailey, 1969). Therefore, effective behavior management strategies must be comprehensive and include methods to decrease inappropriate behavior as well as teach and reinforce positive, appropriate behavior.

The literature is rich with empirically supported and socially acceptable strategies to increase compliance in preschool children. However, less is known about the strategies that are actually being used in real classrooms, the frequency with which the techniques are being used, and the reasons teachers have chosen to use particular techniques. Given the rates of preschool expulsions and teacher reports of a lack of training in classroom management, there is a need to explore the relationship between behavior management research and actual classroom practices. Knowledge of recommended and current behavior management practices is important so teachers can evaluate and/or strengthen their own practices. This knowledge is also relevant for administrators, school psychologists, counselors, and other school personnel who interact with teachers and students because it provides a context for examining the classroom environment and an empirical base to guide consultation. The purpose of the study is threefold: (1) to examine, through observation and interview, the methods that preschool teachers are currently using to respond to noncompliant behavior in their classrooms, (2) to measure the frequency with which each strategy is used or attempted, and (3) to examine the reasons that teachers have chosen to use particular strategies.

METHOD

Setting and Participants

Classroom observations and teacher interviews were conducted in five classrooms across two preschools located in a Midwest state. Two classrooms were from a privately managed preschool program, and three classrooms were from a Head Start program. The students across all of these classrooms were Caucasian, African American, Asian American, and Hispanic. Their ages ranged from 3 years 0 months to 5 years 11 months old. There were 13 to 16 students in each classroom and all students in each classroom were observed. All five of the teachers were female. Four of the teachers were Caucasian, and one was Asian American. Their years of experience ranged from 2 years to 21 years. Permission was obtained from the directors of the preschools and consent was obtained from the teachers. Parent permission for students to be observed had also been obtained by the directors of each preschool prior to the study.

Materials

Observation Form. For each instance of observed noncompliance, the researcher (i.e., first author) completed an observation form that included (a) the command given, the number of times it was restated, and whether or not it was directed toward an individual student or a group; (b) the activity occurring (i.e., independent work, small or large group work, inside or outside free play, snack/lunch, transition, or other); (c) the student's response to the command (i.e., saying "no," ignoring the teacher, or other); (d) the adult who responded to the noncompliance (i.e., teacher or aide); (e) the adult's response to the noncompliance (i.e., a verbal reprimand, overcorrection, response cost, proximity praise, time-out, offering a choice, a warning, guided compliance, or other); and (f) whether or not reinforcement was given for the student's appropriate behavior following the termination of the behavior management strategy. If a time-out was administered to the student, the researcher also recorded variables related to the specific implementation of the time-out, including (a) the form (i.e., nonexclusion, exclusion, or isolation), (b) whether or not an explanation was given to the student, (c) the duration, (d) the release contingencies (i.e., child, teacher, or time-released), and (e) whether or not the student received attention while in time-out. The researcher created the observation form to gather a detailed record of the behavior management strategies used in preschool classrooms. Most of the features recorded were directly related to the application of these techniques, and emerged from the literature review. Others were added to explore additional factors that might influence how these strategies are applied. For example, recording the adult who responded to an incident is useful because a teacher and an aide are typically in the classroom together but each may have a different level of education related to behavior management. In order to accurately evaluate the strategies teachers use, or determine what, if any, training may be beneficial for teachers (and/or aides), it is important to specify on the observation form who used a given strategy. The form was pilot tested with a one hour classroom observation prior to beginning the study. As a result of the pilot observation, the form was revised to differentiate small and large group work; differentiate inside and outside play; and to include choices, warnings, and guided compliance as possible strategies to observe. Inter-rater reliability of this form was calculated by comparing the researcher and the research assistant's observations. This procedure and its results are described in the "Inter-rater Reliability" section.

Semistructured Interview. The researcher interviewed teachers using a semistructured format. The interview included questions such as: (a) "Do you use any strategies to try to prevent non-compliance from occurring in the first place?" (b) "How do you typically respond to noncompliant students in your class?" (c) "Why do you use those particular strategies?" (d) "Do you ever use (any strategy from the observation form that wasn't observed)?" (e) "What is the most challenging part of managing noncompliant students?" (f) "Do you ever use time-out? How do you usually implement it? What do you think makes a time-out most effective?" (g) "What kind of behavior management training have you received, if any? Do you feel that this training has adequately prepared you to manage behavior in your classroom?" and (h) a question related to the researcher's observation of the specific teacher's classroom (see the Appendix for these specific questions). The researcher created these interview questions to develop a context in which to interpret the data collected through observations, and to obtain information and insight from the teachers that the researcher may not have been able to observe (e.g., preventative strategies). The researcher asked follow-up questions, as deemed appropriate, to clarify information or elicit specific examples from the teachers. The goal of the interview was to gather a thorough understanding of the general approaches and specific strategies that teachers use to manage noncompliance, and the reasons for the use of such strategies.

Research Design and Procedure

This study employed a mixed methods research design. Mixed methods designs combine quantitative and qualitative techniques and approaches within a single study, in an attempt to capitalize on the strengths of each design (Johnson & Onwuegbuzie, 2004). This design allowed for an exploration of the strategies that are used to manage noncompliance in preschools, and the reasons that these strategies are chosen, using both quantitative (e.g., systematic observation) and qualitative (e.g., interview) techniques. The design also allowed for interdata confirmation between the observations and teacher interviews.

After obtaining permission from the principals, the teachers were presented with consent forms that described the purpose and procedures of the study. After consent was acquired, the researcher began observing classrooms for one to two hour sessions. The researcher observed each classroom for a total four to six hours across two to three days, for a total of 28 hours across all classrooms.

During the observations in one preschool, the researcher observed from a separate observation room and did not interact with the students. The other preschool did not have an observation room so the researcher observed from within the classroom, but remained on the outer edges of the class activities. The researcher used the observation form to record environmental, child-related, and teacher-related variables surrounding each occurrence of a student's noncompliance to which a teacher/aide attended, and the strategy that was used to address it.

After the observations were conducted in each classroom, the researcher conducted a 20 minute interview with each teacher. Three of the interviews were conducted in person and two were conducted over the phone.

Inter-Rater Reliability

A research assistant also observed two of the classrooms in order to obtain inter-rater reliability of the observations. The research assistant was a graduate student whose training involved observing a classroom with the researcher for two hours prior to independently recording his own observations. The researcher and the research assistant observed two classrooms together for seven hours, or for 25% of the total observations. Inter-rater reliability was calculated by first comparing the types of strategies that they both observed and recorded. When the researcher and the research assistant observed the same incident of noncompliance, there was 100% consistency in the strategies and related variables that they recorded. For example, if a command was given for students to clean up the blocks and the researcher and the research assistant both recorded it, they also recorded with 100% accuracy the same information regarding the number of times the command was given, the audience to which the command was given, the activity during which the command was given, the student's response to the command, the teacher/aide's response to the command, and whether reinforcement for appropriate behavior was given following the command. When the researcher and the research assistant observed a time-out, there was 100% consistency in the components of time-out that they recorded (i.e., the form, whether or not an explanation was given, the duration, the release contingencies, and whether or not the student received attention while in time-out). Next, the total number of strategies observed by the researcher and assistant were compared. The strategies that the assistant observed were added and divided by the number of strategies that the researcher observed during their observations together. Inter-rater agreement for the total number of strategies was found to be .92.

Data Analysis

Results were analyzed using descriptive statistics and chi square tests for the observational data, as well as qualitative coding for the interview data. Specifically, frequencies were calculated

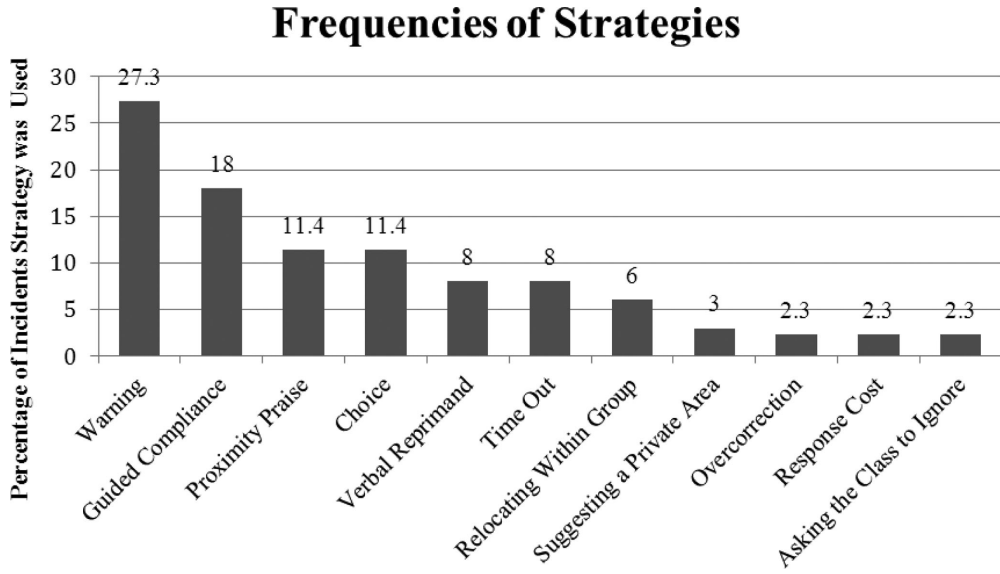


FIGURE 1. Breakdown of observed strategies used to address noncompliance across classrooms.

to measure the behavior management strategies and components of time-out that were observed. In addition, chi square analyses were used to determine whether significant differences in behavior management strategies existed between teachers/aides and classrooms. Finally, interview data were transcribed and coded by the researcher. Data were not transcribed verbatim, but as close to verbatim as possible. They were then coded and analyzed to identify common themes among teachers' responses.

RESULTS

Strategies Used in Preschool Classrooms and Their Frequencies

Observations. Descriptive statistics were calculated to measure the overall frequency of each observed strategy. Overall, across the 28 hours of observation of five different classrooms with 13–16 students per class, warnings were used 24 times, or during 27.3% of the observed noncompliant incidents (called “incidents” hereafter); guided compliance was used 16 times, or during 18% of the incidents; proximity praise and choices were used 10 times, or during 11.4% of the incidents; verbal reprimands and time-out were used seven times, or during 8% of the incidents; relocating the student within the group (either away from certain classmates or closer to the teacher) was used five times, or during 6% of the incidents; suggesting that the student opt to sit in a private area of the room was used three times, or during 3% of the incidents; and overcorrection, response cost, and asking the rest of the class to ignore the particular student were used two times, or during 2.3% of the incidents (see Figure 1). Overall, these strategies were used most often during large group activities (38.6% of the time) and transitions (38.6% of the time). They were used less often during free play (14.8% of the time) and small group activities (8% of the time).

Descriptive statistics were also used to calculate the frequency of components that were used across incidents involving time-out. Overall, a nonexclusion time-out was used two times, or in 28.4% of the incidents; while an exclusion time-out was used five times, or in 71.4% of the incidents; and an isolation time-out was used in 0% of the incidents. An explanation for the time-out was given

Table 1
Breakdown of Components Used During Incidents Involving Time-Out

	%
Form	
Nonexclusion	28.6
Exclusion	71.4
Isolation	0
Explanation	
Yes	100
No	0
Duration	
1-2 minutes	42.8
3-4 min	42.8
8 min	14.4
Release Contingencies	
Child	0
Teacher	100
Time	0
Attention Given	
Yes	28.6
No	71.4

in 100% of the incidents. In addition, time-outs of one to two minutes were administered three times, or in 42.8% of the incidents; time-outs of three to four minutes were administered in 42.8% of the incidents; and a time-out of eight minutes was administered one time, or during 14.4% of the incidents. The time-outs were based on a teacher-release contingency in 100% of the incidents. Finally, attention during time-out was given to students in 28.6% of the incidents; thus it was withheld in 71.4% of the incidents (see Table 1).

Finally, descriptive statistics were calculated to measure the frequency with which reinforcement was given for a child's appropriate behavior after an incident of noncompliance. Reinforcement was given for appropriate behavior after 31.8% of the incidents and was not given after 68.2% of the incidents.

Chi square analyses were also run to examine differences among the strategies used across classrooms and adults (e.g., teachers and aides). Nineteen chi square tests were run to examine whether the responses to the behavior varied depending on who implemented the response (i.e., teacher or aide). Only two of these 19 indicated significant differences: the number of times a command was given, $F(5) = 11.804$, $p = .038$, and whether a verbal reprimand was given, $F(1) = 4.719$, $p = .030$. Although teachers initiated a greater number of commands, aides tended to repeat the same command more often than teachers. In addition, aides gave verbal reprimands more often than teachers. An additional 19 chi square tests were completed to determine whether there were differences in responding between classrooms. Differences were found on only three of the 19 variables: the use of response cost, $F(4) = 10.115$, $p = .039$, the use of choice, $F(4) = 13.781$, $p = .008$, and the use of reinforcement of appropriate behavior following noncompliance, $F(4) = 18.109$, $p = .001$. Response cost was used more often in two classrooms, a choice was used more often in one classroom, and reinforcement following noncompliance was used more often in three classrooms.

Table 2
Preventative and Reactive Strategies Reported by Teachers

	% of Teachers Who Reported
Preventative	
Providing Positive Reinforcement	100
Regularly Reviewing Rules	80
Strategically Arranging Classroom	60
Warning of Transitions	40
Framing Instructions as in Need of Help	20
Phrasing Instructions as Statements Rather Than Questions	20
Controlling Proximity Between Certain Students	20
Providing Instructions in > 1 Language	20
Reactive	
Repeating the Instruction	100
Guiding Student Through Compliance	80
Providing a Break	80
Offering a Choice	60
Using a Behavior Chart	40
Verbally Acknowledging Student's Feelings	20
Ignoring Behavior	20
Verbally Reprimanding	20

Interviews. Interviews with teachers revealed information regarding their strategies to both prevent and respond to noncompliance (see Table 2 for a list and frequency of strategies that emerged). Common themes emerged across teachers' responses to preventative strategies. The first was classroom arrangement. Teachers reported that they try to minimize open spaces in the classroom that could encourage students to run, and they also avoid having areas that are out of view and could serve as hiding spaces for students. Second, several teachers noted that they regularly review the classroom rules. Some teachers have the rules posted in the class, and some have books or songs that they use to review the rules. One teacher noted that, in addition to reviewing the rules regularly throughout the school year, she has found it helpful to "hit the rules especially hard at the beginning of the school year." Third, several teachers mentioned that they use positive reinforcement to promote compliance and prosocial behavior in their classrooms. Specifically, many teachers noted that they use verbal praise for individual students as well as the whole class. Other teachers noted that they award stickers to students who demonstrate behavior that exceeds the regular classroom expectations, and one teacher noted that she rewards the class with an extra book or song if the entire class does something well.

Individual teachers also shared additional strategies that were not reported by the majority. One teacher noted that warning the students of transitions and keeping the classroom routine consistent were helpful in managing students' behaviors. Although these were only reported by one teacher, the researcher did observe these practices across all classrooms. Another teacher reported that asking her students for help often encourages compliance. Specifically, she would frame a request as though she does not know how to complete a task and that the student is more of an expert than herself. For example, she would say, "I can't figure out how to put these toys back on the shelf, can you help me?" On the contrary, another teacher noted that she tries not to end instructions with a question (e.g., "Pick up the blocks, okay?") because students are then given the choice to not comply. One teacher reported that she often keeps certain students separated from one another and also keeps

certain students in close proximity to her. Finally, another teacher who has Hispanic students in her class mentioned that she gives instructions in English and Spanish to ensure that all students fully understand what is expected.

In terms of reactive strategies, all teachers reported that their use of strategies is dependent on the particular student and the severity of the student's noncompliance. Teachers noted that their first response to noncompliance is to repeat the command or instruction to ensure that the student heard it and to encourage the student to respond. Common themes also emerged across teachers' responses to reactive strategies. The first included giving the students choices, either between performing two tasks or between performing a task independently and receiving assistance (e.g., "you can either pick up the blocks or pick up the puzzle" or "you may choose to do it yourself or I can help you do it"). Guided compliance was a second strategy commonly noted by teachers. This either involved physically guiding the student through the task, or joining in the task with the student (e.g., when cleaning up).

Third, teachers commonly reported some form of a break from the current activity to be a useful strategy. One teacher referred to the break as a "time-out," during which the student is required to sit alone at a table for a period of time. Some teachers reported that they require the student to move outside of the immediate group (e.g., during circle time, the student would sit on the outside of the circle) but still observe the activity. One teacher was opposed to the idea of requiring a student to sit still as a form of a break. Instead, she requires the student to work on some alternative activity or walk around, if outside. In addition to teacher-determined breaks, some teachers also reported employing a type of student-determined break during which students voluntarily go to a private area of the room in order to calm themselves and process their thoughts or feelings. Finally, two teachers reported using behavior charts. One teacher explained that her behavior chart is used for all students in the class and it has consequences attached to it. The other teacher explained that she sometimes uses behavior charts with individual students if they display particular behaviors, and these charts have rewards attached to them.

Individual teachers also reported reactive strategies that were not reported by the majority. One teacher reported that she tries to acknowledge the student's feelings while also using a previously mentioned strategy. Another teacher noted that she often ignores the student if she believes it is an attention-seeking behavior. One teacher explained that she will firmly point out that the behavior is wrong, suggest what the student should be doing instead, and tell the student to make a better choice, much like a verbal reprimand.

Reasons for Strategies

Interviews with teachers also revealed the rationales behind chosen strategies. The two main themes among these reasons included the schools' policy or curriculum and the teachers' personal experience. Teachers reported that they have received specific training based on the policies of their schools. In addition, one teacher noted that she was always told about these strategies during her own education, but has now seen that "they *do* work." Another teacher explained, "It's important for me to get to know the families and cultures of my students so I can tailor my techniques . . . different things work for different kids." Another teacher emphasized the importance of taking the students' developmental levels into consideration when responding to noncompliance. Some teachers mentioned that they use strategies that they were taught in school, as well as strategies learned in continuing education or professional development settings. Individual teachers also mentioned that these strategies are aligned with what they were taught in school or specialized trainings (e.g., trainings in positive reinforcement, time-out, and child abuse).

DISCUSSION

Summary and Conclusions

Overall, the information obtained through the interviews was fairly consistent with the observations. Strategies that were observed most often in the classrooms and those that were also reported by teachers during interviews included choices, guided compliance, and a time-out or a break from the current activity. Additional strategies that were frequently observed but not frequently discussed during the interviews included warnings, proximity praise, and verbal reprimands. Teachers tended to use these strategies most often during large group activities and transitions. Teachers also reported using preventative strategies such as appropriate classroom arrangement, regular review of the classroom rules, and positive reinforcement through praise or stickers. In addition, results of the classroom observations revealed common practices among teachers who administered time-outs or a similar type of break. The majority of observed time-outs were in the form of exclusion, where the student was removed from the immediate area of the rest of the class. Time-outs were always accompanied with an explanation and they were always contingent on the teacher's release. The majority of time-outs lasted between 1 and 4 minutes. Although attention was withheld from the students in time-out during the majority of observations, attention was given to students during time-out in over one-quarter of the observations. Reinforcement for appropriate behavior following noncompliance was given less than one-third of the time. Finally, teachers reported using these specific strategies due to previous training, school policies, and personal experience.

The majority of these techniques were used consistently across teachers/aides as well as across classrooms. However, a few differences in techniques were found across both teachers/aides and classrooms. Although teachers initiated commands more often than aides, commands were repeated by aides a greater number of times than by teachers before a strategy was employed. In addition, verbal reprimands were used more often by aides than by teachers. Because re-issuing commands has been shown to be ineffective at reducing noncompliance (e.g., Forehand et al., 1976), and verbal reprimands must meet certain criteria to be used effectively (e.g., Van Houten, Nau, MacKenzie-Keating, Sameoto, & Colavecchia, 1982), these may be areas to consider for skill development with the classroom aides. With regard to classroom differences, response cost was used as a technique more often in two classrooms, a choice was used more often in one classroom, and reinforcement for appropriate behavior following noncompliance was given more often in three classrooms. Although there were differences among a few of the strategies used across classrooms, it is difficult to conclude the specific reasons for these differences. The teachers could have chosen those strategies based on the particular student and/or the context in which the behavior occurred. These were the only differences in techniques found across the large number of variables analyzed; thus, it can be concluded that strategies to manage noncompliance are quite similarly employed across teachers/aides and classrooms.

The strategies used most often were typically those that are less intrusive (i.e., choices, guided compliance, warnings, and proximity praise) and are designed to increase to self-regulation in students. That is, the goal of these strategies is for students to be able to manage their own behavior rather than rely on the teacher to manage their behavior. Verbal reprimands were also observed and have been reported as effective in the literature when used appropriately. That is, they must identify the student's inappropriate behavior; communicate dissatisfaction with the behavior, not the student; and provide an example of a more appropriate behavior (Henderson & French, 1990). A time-out, or a break from the current activity, was another repeatedly used strategy. The observations

of time-out were consistent with the findings and recommendations of previous studies. Across the observations of time-out, isolation was never used; rather, exclusion and nonexclusion forms were used, as recommended by Carey (1997). In addition, an explanation was consistently given to students who were going to time-out, as recommended by Walker et al. (1995). All observed time-outs were released by the teacher, rather than by the student or a timer, and all lasted for a relatively short duration (i.e., 1 to 4 minutes), as suggested in much of the literature (e.g., Carey, 1997; Fabiano et al., 2004). However, the fact that students received attention during more than one-quarter of the observed time-outs suggests that the students were not completely denied reinforcement during all time-outs, as attention can be reinforcing for some students. This could undermine the effectiveness of time-outs at deterring future misbehavior, since the consequence may have had some reinforcing features.

A student-determined break, in which the student elected to go or the teacher suggested that the student go to a private area, was also used in some instances. Some teachers were observed to either use student-determined breaks or time-outs, while other teachers used both forms of breaks in their classrooms. A student-determined break is more consistent with the promotion of self-regulation, as it offers students an opportunity to calm themselves down when they feel out of control. It is a more preventative form of a break than time-out, which is used as a reactive technique when students have broken the rules.

Overall, the strategies used by preschool teachers in this study are generally consistent with previous research. Common types of strategies and methods of implementation were found across the classrooms in this study as well as previous research. The frequency of reinforcement given to students for appropriate behavior after an incident of noncompliance, however, is one difference to note. Matheson and Shriver (2005) suggest that reinforcement of appropriate behavior must occur in order for students to replace their problem behaviors with more acceptable ones. It therefore seems to be important for teachers to reinforce students' initial displays of appropriate behavior after instances of inappropriate behavior. However, of the observed incidents in this study, students were reinforced for appropriate behavior following noncompliance less than one-third of the time.

The results of this study indicate that the behavior management techniques that are currently researched and recommended are generally being practiced in today's preschools. Although this may not sound like a novel conclusion on the surface, prior research has found that behavior management is an area of weakness for teachers (Isaacs et al., 2007) and has also revealed that some teachers view certain research-based classroom management practices as less desirable practices (Johnson & Pugach, 1990). Therefore, it is positive to find that this sample of teachers not only felt good about their behavior management techniques, but also used techniques previously shown to be effective through research. It is also clear that teachers use a broad range of these strategies. Based on teacher reports and some observation, teachers appear to be sensitive to the developmental and individual differences of students in determining which strategies are most appropriate to use. For example, one teacher noted that asking students for help is often effective for her particular group, while another teacher noted that she never ends her requests with a question. It is also promising to see that the more commonly observed strategies are less intrusive and are consistent with the promotion of self-regulation. This suggests that these types of strategies are effective and that more intrusive or severe techniques are largely unnecessary.

In addition, teachers used strategies most often during large group activities and transitions, and least often during small group activities. Thus, it is likely that preschool students are generally more compliant and/or can be more easily redirected when in smaller groups. Finally, these results indicate that this sample of teachers is knowledgeable about managing student behavior, and these teachers purposefully use proactive and reactive techniques to foster an optimal learning environment for their students.

Limitations

There are several limitations of this study, the first of which relates to the data collection techniques. The interviews relied on the self-awareness of teachers and their honest disclosure about the information asked. However, the information that the teachers disclosed was similar to what was observed, which minimizes this as a limitation and actually strengthens the results of the study. Similarly, the observations were subject to the perceptions and interpretations of the researcher. However, inter-rater agreement verified the reliability of the observations, and the use of both observations and interviews, again, strengthened the reliability of the overall results of the study.

This study used a small, relatively homogeneous sample. Although the results of the study may not generalize to larger populations, they offer insight into the relationship among the strategies that preschool teachers use to manage behavior, the challenges faced by teachers in the classroom, and the reasons why teachers in the study's sample choose particular strategies.

This study did not specifically record which strategies were most *effective*. Teachers reported that they used particular strategies because they had been trained to use them and/or had found them to be most effective, but data were not collected on the effectiveness of each strategy. Finally, it was noted that teachers provided reinforcement for appropriate behavior after less than one-third of incidents of noncompliance. However, the occurrence of reinforcement is difficult to measure, as teachers could have used nonverbal forms of reinforcement that were not easily observable.

Implications

Results of this preliminary study reveal several important areas for future research. For example, future research could replicate this study with a larger and more heterogeneous population, as the teachers in this study came from two preschools within the same geographic area. In addition, a person other than the observer could conduct the interviews, and a person other than the interviewer or observer could code the qualitative data in order to protect against a priming effect. Future research could also attempt to measure the effectiveness of each strategy, compare strategies to one another, or compare the effectiveness of strategies across various functions of student behavior. For example, the number of subsequent commands with which a student complies could be measured after a particular strategy is used in an effort to measure the strategy's immediate effectiveness. This measure of effectiveness could also be used to compare strategies to one another (e.g., whether or not guided compliance results in fewer instances of future noncompliance than a warning). In addition, a functional behavior assessment could be conducted on a number of students, and the effectiveness of the strategies used by teachers could be compared relative to the function of the students' behaviors (e.g., whether proximity praise is more or less effective for a student who is noncompliant in order to gain attention or escape a task). Finally, future research could explore the range of strategies that teachers use that are effective, but that are not explicitly outlined in the literature.

As mentioned above, future research is needed to determine the effectiveness of the strategies teachers are using and if strategies are being chosen based upon relevant theory and an understanding of the functions of the noncompliant student's behavior. While some teachers verbalized that they choose strategies based on what works with a specific child, they did not mention consideration of the function of a behavior when choosing a behavior management strategy. Thus, training that specifically addresses why different strategies might be more effective than others based on the function of a behavior may be useful for increasing the effectiveness of teachers' efforts to decrease future incidents of noncompliance.

School psychologists are ideally suited to provide this training in their role as educational consultants. Training could emphasize the theory behind various behavior management strategies,

as teachers may be better able to tailor their techniques to students when they can blend the theoretical principle of a strategy with the particular characteristics of the student and function of the student's behavior, rather than using a one-size-fits-all approach. For example, educating teachers about why it is important to give students the opportunity to demonstrate an appropriate behavior and earn reinforcement may result in teachers engaging in this practice more consistently. In addition, educating teachers about the theoretical basis of time-out may assist them in implementing this technique efficiently. Emphasizing that a time-out or a break from the activity can be administered in different ways and for various reasons (e.g., to help a student calm down if he/she is upset or as a consequence for serious misbehavior) may support teachers in administering the most appropriate form of a time-out or break. Likewise, educating teachers about why, when a student is noncompliant in order to gain attention, a warning might not be as effective as providing proximity praise to a compliant classmate, may also aid teachers in strengthening their practices. Ongoing demonstration, coaching, and mentoring should be used to reinforce these efforts over time.

In addition to educating teachers about behavior management strategies and theory, school psychologists can provide teachers with specific data on current classroom practices and how they align with research-based recommendations. For example, the school psychologist could provide observational data indicating that behavior management strategies, and therefore noncompliance, occurred most often during large group activities and transitions. Likewise, the school psychologist could provide observational data to a teacher indicating that reinforcement for appropriate behavior following noncompliance was only provided 33% of the time. The teacher may not realize this, so these data may increase awareness and help the teacher to become reflective about his or her own practices. These types of data can also allow school psychologists to provide consultation in specific areas of need for individual teachers. For example, whereas one teacher may consistently provide time-outs effectively but then fail to reinforce for appropriate behavior after the time-out, another teacher may have difficulty effectively and consistently implementing time-outs. Teachers have individualized behavior management strengths and weaknesses, and school psychologists' consultative efforts can be targeted to those needs.

The consistency among strategies used across teachers and aides also suggests that teachers and aides work collaboratively to develop common responses to noncompliance. Thus, training for new teachers could also emphasize collaboration with classroom aides. Although they used similar strategies across classrooms, there were differences in the number of times commands were repeated by teachers and aides. While some literature recommends giving commands only once (e.g., Barkley, 1997), teachers explained the need to repeat commands to ensure that the students hear them and to support those students who benefit from a reminder. Thus, whatever the philosophical approach, consistency between teachers and aides in aspects of managing behavior is important. Based on these results, teachers also may want to take preventative measures and remain particularly alert and responsive during large group activities and transitions, when noncompliance seems most likely to occur.

Finally, the results of this study serve as a reminder of the importance of reinforcement, especially after instances of noncompliance. It was widely noted that positive reinforcement is a useful strategy for preventing general classroom behavior problems; however, it is also important, and often forgotten, that positive reinforcement must be deliberately provided to students who display appropriate behavior following instances of noncompliance in order to promote positive, self-regulated behavior.

APPENDIX: ADDITIONAL INTERVIEW QUESTIONS

1. How does your behavior chart for the class work?
2. How do your behavior charts for individual students work?
3. Is a warning to go see the principal something that you use with all students? Does it seem to be effective?
4. How does the “student-determined” break work?
5. Is the “student-determined” break always the child’s choice? Do students ever use it to escape or avoid an activity?

REFERENCES

- Barkley, R. A. (1997). *Defiant children: A clinician’s manual for assessment and parent training*. New York, NY: The Guilford Press.
- Bean, A. W., & Roberts, M. W. (1981). The effect of time-out release contingencies on changes in child noncompliance. *Journal of Abnormal Child Psychology*, 9, 95–105.
- Bear, G. G., Cavalier, A. R., & Manning, M. A. (2002). Best practices in school discipline. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology* (4th ed., pp. 977–991). Bethesda, MD: National Association of School Psychologists.
- Benjamin, R., Mazzarins, H., & Kupfersmid, J. (1983). The effect of time-out (TO) duration on assaultiveness in psychiatrically hospitalized children. *Aggressive Behavior*, 9, 21–27.
- Bostow, D. E., & Bailey, J. B. (1969). Modification of severe disruptive and aggressive behavior using brief timeout and reinforcement procedures. *Journal of Applied Behavior Analysis*, 2, 31–37.
- Bulotsky-Shearer, R. J., Fernandez, V., Dominguez, X., & Rouse, H. L. (2011). Behavior problems in learning activities and social interactions in head start classrooms and early reading, mathematics, and approaches to learning. *School Psychology Review*, 40, 39–56.
- Burchard, J. D., & Barrera, F. (1972). An analysis of timeout and response cost in a programmed environment. *Journal of Applied Behavior Analysis*, 5, 271–282.
- Carey, K. T. (1997). Preschool interventions. In A. P. Goldstein & J. C. Conoley (Eds.), *School violence intervention: A practical handbook* (pp. 93–106). New York: The Guilford Press.
- Cipani, E. (1993). Non-compliance: Four strategies that work. *Exceptional children* (Vol. 38, p. 36). Reston, VA. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/8771810>
- Cipani, E. (1998). Three behavioral functions of classroom noncompliance: Diagnostic and treatment implications. *Focus on Autism and Other Developmental Disabilities*, 13, 66–72. doi: 10.1177/108835769801300201.
- Coalition for Psychology in Schools and Education. (2006, August). Report on the Teacher Needs Survey. Washington, D.C.: American Psychological Association, Center for Psychology in Schools and Education.
- Fabiano, G. A., Pelham, W. E., Manos, M. J., Gnagy, E. M., Chronis, A. M., Onyango, A. N., Lopez-Williams, A., Burrows-MacLean, L., Coles, E. K., Meichenbaum, D. L., Caserta, D. A., & Swain, S. (2004). An evaluation of three time-out procedures for children with attention-deficit/hyperactivity disorder. *Behavior Therapy*, 35, 449–469.
- Forehand, R. (1985). Time-out. In A. S. Bellack, & M. Hersen (Eds.), *Dictionary of behavior therapy techniques* (pp. 222–224). New York: Pergamon Press.
- Forehand, R., Roberts, M. W., Doleys, D. M., Hobbs, S. A., & Resick, P. A. (1976). An examination of disciplinary procedures with children. *Journal of Experimental Child Psychology*, 21, 109–120.
- Foster, N. R. (2005). Effectiveness of a time-out from reinforcement package for behaviors maintained by escape exhibited by typically developing children. Dissertation. Mississippi State University, May 2005.
- Fox, R. M., & Azrin, N. H. (1972). Restitution: A method of eliminating aggressive-disruptive behavior of retarded and brain-damaged patients. *Behavior Research & Therapy*, 10, 15–27.
- Gilliam, W. S. (2005). Prekindergarteners left behind: Expulsion rates in state prekindergarten systems. *Early Education*. New Haven, CT: Yale University Child Study Center.
- Goetz, E. M., Holmberg, M. C., & LeBlanc, J. M. (1975). Differential reinforcement of other behavior and noncontingent reinforcement as control procedures during modification of a preschooler’s compliance. *Journal of Applied Behavior Analysis*, 8, 77–82. doi: 10.1901/jaba.1975.8-77
- Harris, K. R. (1985). Definitional, parametric, and procedural considerations, in timeout interventions and research. *Exceptional Children*, 51, 279–288.
- Henderson, H. L., & French, R. (1990). How to use verbal reprimands in a positive manner (pp. 193–196). Retrieved from <http://faculty.virginia.edu/ape/Articles/Henderson.How-To-Use-Verbal-Reprimands-In-A-Positive-Manner.pdf>.

- Isaacs, M. L., Elliot, E., McConney, A., Wachholz, P., Greene, P., & Greene, M. (2007). Evaluating "Quality" methods of filling the "Teacher Gap": Results of a pilot study with early career teachers. *Journal of the National Association for Alternative Certification*, 2. Retrieved from <http://researchrepository.murdoch.edu.au/10092/>.
- Johnson, L. J., & Pugach, M. C. (1990). Classroom teachers' views of intervention strategies for learning and behavior problems: Which are reasonable and how frequently are they used? *Journal of Special Education*, 24, 69–84.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33, 14–26. doi: 10.3102/0013189x033007014
- Kendall, P. C., Nay, W. R., & Jeffers, J. (1975). Timeout duration and contrast effects: A systematic evaluation of a successive treatment design. *Behavior Therapy*, 6, 609–615.
- Lee, D. L., Belfiore, P. J., & Budin, S. G. (2008). Riding the wave: Creating a momentum of school success. *Teaching Exceptional Children*, 40, 65–70.
- Luiselli, J. K., Putnam, R. F., Handler, M. W., & Feinberg, A. B. (2005). Whole-school positive behavior support: Effects on student discipline problems and academic performance. *Educational Psychology*, 25, 183–198.
- Matheson, A. S., & Shriver, M. D. (2005). Training teachers to give effective commands: Effects on student compliance and academic behaviors. *School Psychology Review*, 34, 202–219.
- Merrett, F., & Wheldall, K. (1993). How do teachers learn to manage classroom behavior? A study of teachers, opinions about their initial training with special reference to classroom behavior management. *Educational Studies*, 19, 91–106.
- Pendergrass, V. E. (1971). Effects of length of time-out from positive reinforcement and schedule of application in suppression of aggressive behavior. *The Psychological Record*, 21, 75–80.
- Piazza, C. C., Bowman, L. G., Contrucci, S. A., Delia, M. D., Adelinis, J. D., & Goh, H. (1999). An evaluation of the properties of attention as reinforcement for destructive and appropriate behavior. *Journal of Applied Behavior Analysis*, 32, 437–449. doi: 10.1901/jaba.1999.32-437
- Roberts, M. W., Hatzenbuehler, L. C., & Bean, A. W. (1981). The effects of differential attention and time out on child noncompliance. *Behavior Therapy*, 12, 93–99.
- Shriver, M. D., & Allen, K. D. (1996). The time-out grid: A guide to effective discipline. *School Psychology Quarterly*, 11, 67–74.
- Sterling-Turner, H., & Watson, T. S. (1999). Consultant's guide for the use of time-out in the preschool and elementary classroom. *Psychology in the Schools*, 36, 135–148.
- Tanol, G., Johnson, L., McComas, J., & Cote, E. (2010). Responding to rule violations or rule following: A comparison of two versions of the Good Behavior Game with kindergarten students. *Journal of School Psychology*, 48, 337–355.
- Taylor, J., & Miller, M. (1997). When timeout works some of the time: The importance of treatment integrity and functional assessment. *School Psychology Quarterly*, 12, 4–22.
- Van Houten, R., Nau, P. A., MacKenzie-Keating, S. E., Sameoto, D., & Colavecchia, B. (1982). An analysis of some variables influencing the effectiveness of reprimands. *Journal of Applied Behavior Analysis*, 15, 65–83. doi: 10.1901/jaba.1982.15-65
- Walker, H. M., Colvin, G., & Ramsey, E. (1995). *Antisocial behavior in school: Strategies and best practices*. Pacific Grove, CA: Brooks/Cole Publishing Company.
- Webster-Stratton, C. (1997). Early intervention for families of preschool children with conduct disorders. In M. J. Guralnick (Ed.), *The Effectiveness of Early Intervention* (pp. 429–453). Baltimore: Brookes.
- Webster-Stratton, C. (1999). *How to promote children's social and emotional competence*. Thousand Oaks, CA: SAGE Publications Inc.
- White, G. D., Nielsen, G., & Johnson, S. M. (1972). Timeout duration and the suppression of deviant behavior in children. *Journal of Applied Behavior Analysis*, 5, 111–120.
- Wilder, D. A., & Atwell, J. (2006). Evaluation of a guided compliance procedure to reduce noncompliance among preschool children. *Behavioral Interventions*, 21, 265–272. doi: 10.1002/bin