CW-FIT: Group Contingency Effects Across the Day

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Abstract

This study explored the effects of a group-contingency intervention on student behavior across academic instructional periods. Research suggests group contingencies are evidence-based practices, yet calls for investigation to determine the best conditions and groups suited for this type of intervention. CW-FIT (Class-Wide Function-related Intervention Teams), an interdependent-group contingency intervention, was implemented in a first grade general education classroom across three academic periods. Results indicate student on-task behavior and teacher praise increased after intervention in all three settings. In addition, three students identified as at-risk for problem behaviors decreased disruptive behaviors in response to the intervention.

Teachers rate disengagement and disruptive classroom behaviors as a major concern for their students (Harrison, Vannest, Davis, & Reynolds, 2012; Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008; Walter, Gouze, & Lim, 2006). These behaviors frequently interfere with teacher instruction and impede academic progress for everyone in the classroom (Chafouleas, Volpe, Gresham, & Cook, 2010; Lane, 2007). Often these problems serve as early indicators of learning disabilities and social-emotional/behavioral disorders that place students at risk for school failure (Iacono, Malone, & McGue, 2008; Stingaris & Goodman, 2009; Thomas, Shapiro, DuPaul, Lutz, & Kern, 2011). In the absence of research-based interventions these problem behaviors typically increase in intensity and become resistant to treatment over time (McKinney, 1988; Verhulst, Koot, & Berden, 1990; Webster-Stratton, Reid, & Hammond, 2001). Thus, teachers need practical classroom-

based interventions to ameliorate problem behaviors for students and increase class-wide engagement (Simonsen et al., 2008).

Managing challenging student behavior plagues teachers and zero-tolerance policies create more problems for educators than provide relief. Zero-tolerance policies, originally designed to address dangerous behaviors such as carrying weapons on school property, now serve to remove students from the classroom for engaging in a wide range of infractions. In an effort to eliminate all undesired student behavior, many school districts employ a zero-tolerance policy and treat both minor and major infractions alike. Research reveals that zero-tolerance policies not only lead to indiscriminate suspensions and expulsions, but disproportionately impact students of minority-status backgrounds and student who have disabilities (Mendel, 2000; Skiba & Rausch, 2006; U.S. Department of Education, 1997). Suspension and expulsion in response to students' challenging or disruptive behavior removes opportunities to learn and places students at greater risk for school failure. Educators find more success in providing students with explicit instruction about classroom rules and behavioral expectations rather than temporarily or permanently removing the student from the learning environment. Research supports the use of a proactive method for addressing behavioral expectations and rules students routinely have difficult following (Colvin, Sugai, Good, & Lee, 1997; Peterson, 2005; Sprick, 2009). These practices allow students who struggle greater opportunity to stay in the classroom and engage in appropriate behavior. While schools need a consistent, systematic response to unsafe and inappropriate behavior, research-based prevention and interventions—not zero tolerance policy—reduce disruptive and off-task behaviors of youth in schools (Barkley, 2006; DuPaul & Weyandt, 2006; Eisenberg et al., 2003; Iacono et al., 2008; Mendel, 2000; Sugai & Horner, 2002).

Many youth displaying challenging behaviors in the classroom also have learning disabilities and social-emotion/behavioral disorders requiring mandated supports to provide them with a free and appropriate education (FAPE). Although these students' access to FAPE is protected by law, their individual needs are inconsistently met in the general education classroom which may exacerbate problem behaviors. These behavioral traits predict later engagement in substance abuse, violence, criminal behavior, and poor post-school outcomes that adversely impact the student's future, their family and their community (Iacono et al., 2008; Nelson, Benner, Lane, & Smith, 2004; Newman, Wagner, Cameto, Knokey, & Shaver, 2010; Vander Stoep, Weiss, Kuo, Cheney, & Cohen, 2003). Providing FAPE to all students in the least restrictive environment necessitates effective

classroom management strategies that support academic instruction to meet the learning abilities and individual needs of each student in the classroom (Simonsen et al., 2008).

Fortunately interventions exist for youth engaging in problem behaviors at school. One method commonly used to support schools in proactively managing student behavior is School-Wide-Positive Behavioral Intervention Supports (SW-PBIS). This data-driven framework guides implementation of evidence-based practices for improving school outcomes for all students (Sugai & Horner, 2002; U.S. Department of Education, Office of Special Education Programs, 2007). A classroom intervention that aligns well with the SW-PBIS model and demonstrates strong effect sizes for managing challenging behavior is a group contingency (Stage & Quiroz, 1997; Tingstrom, Sterling-Turner, & Wilczynski, 2006; Wright & McCrudy, 2012). Group-contingency interventions in the classroom setting consist of delivering a predetermined preferred item or activity in response to desired behaviors displayed by a group of students. Maggin, Johnson, Chafouleas, Ruberto, and Berggren (2012) further validated the use of group contingencies in a recent literature review. The review also called for future research to better document the settings and populations best suited for this type of intervention.

A second classroom strategy that increases student opportunity to engage in appropriate behavior and aligns well within SW-PBIS model is the explicit teaching and reinforcement of classroom rules and behavioral expectations. After implementing these strategies within the classroom setting teachers report fewer student problem behaviors, report using a higher ratio of praise to reprimands with students and report feeling less distracted by problematic behaviors and feel they have more time to teach (Peterson, 2005; Sprick, 2009; Reinke, Herman, & Stormont, 2013; Simonsen et al., 2008).

CW-FIT (Class-wide Function-related Intervention Teams) employs a group contingency intervention to manage problem behaviors and is easy for classroom teachers to incorporate into their daily routine (Wills, Kamps, Hansen, et al., 2010). Comprised of empirically supported practices, CW-FIT includes (a) teaching students socially appropriate classroom behaviors, (b) eliminating reinforcement of student engagement inappropriate attention-seeking and escape behaviors, (c) differential reinforcement of both group and individual contingencies, and (d) self-management strategies. The intervention was developed to support classroom management of problem behaviors within a SW-PBIS framework and research has demonstrated its effectiveness in over 35 classrooms with more than 700 students (Kamps et al., 2011; Wills, Kamps, Hansen, et al., 2010). Specifically, during the

use of CW-FIT direct observation and teacher report documented a decrease in disruptive student behaviors, an increase in group on-task and an increase in teacher attention to and praise of appropriate student behaviors. In addition, teachers demonstrated a higher ratio of praise statements to student reprimands while implementing CW-FIT (Kamps et al., 2011; Wills, Kamps, Hansen, et al., 2010).

During the most difficult academic periods of instruction teachers have implemented CW-FIT adhering strongly to fidelity and reporting high social validity of the intervention (Kamps et al., 2011; Wills, Kamps, Hansen, et al., 2010). While there is growing a body of evidence to support CW-FIT and its positive impact on classroom management, little has been studied on the effects of this intervention across the day and within a classroom already implementing SW-PBIS.

The purpose of this study was to implement CW-FIT in a general education classroom and:

1. Investigate effects of replicating the intervention across the day under multiple academic settings.

2. Demonstrate the application of the CW-FIT intervention in a classroom nested within a SW-PBIS school.

3. Contribute to the literature on group contingency interventions by providing documentation of a specific population's response to CW-FIT under multiple academic settings.

The researchers hypothesized that in response to CW-FIT (a) classroom on-task behavior would increase (the primary dependent variable), (b) the teacher would increase her praise to reprimand ratio, and (c) students identified as at-risk for challenging behaviors would increase their on-task behavior and decrease their disruptive behavior.

Method

Participants and Setting

After obtaining informed consent, this study was conducted in a first-grade elementary classroom in an urban Midwestern U.S. city public school that served 310 students, 47.6% of whom qualified for a free and reduced lunch. A majority of students attending the school (71.8%) identified themselves as Caucasian. The largest ethnic minority groups of students (reported as Hispanic (18.8%) or as Black (2.4%). Less than 7.1% of the student population reported being from another ethnic group. The general education classroom participating in the study mirrored the ethnic and social economic diversity reported for the school.

The present study began in the winter, after the students in the classroom were introduced to SW-PBIS in the fall assembly and through the teacher's lessons on teaching the expectations and routines. The school staff adopted a SW-BPIS three years prior to the study and demonstrated high fidelity (85%) in implementation of SW-PBIS as indicated on the School-wide Evaluation Tool (SET). The SET is a PBIS tool designed to evaluate a school site on key indicators evidencing the implementation of a School-wide PBIS through a site visit, review of artifacts and brief interviews of faculty, staff and students. At this school in the fall prior to the study, expectations were clearly posted throughout the school and in classrooms and the school implemented a behavior reward program by awarding tickets to individual students demonstrating the behavioral expectations. Students who gathered enough tickets to meet weekly and monthly goals participate in a predetermined school-wide reward (such as hat day or a bonus recess). Prior to this study, the lead classroom teacher relied on managing classroom problem behavior using the school-wide system, verbal reprimands, redirection, loss of privileges and office discipline referrals.

Teachers and settings. The consenting lead classroom teacher was present during the entire study. She had over 15 years teaching experience and had been at the school over 10 years. She was supported by a paraprofessional instructor who was also in the classroom for a majority of the intervention. While in the classroom, the paraprofessional provided one-on-one assistance to a student with autism and a student with a learning disability. The lead teacher initially selected one academic instructional period to implement the intervention. Period 1 was scheduled immediately following the lunch recess break and consisted of spelling and writing activities that typically lasted 40 min. Upon the teacher's request, however, a second and then third academic period were added to the study. Period 2 occurred prior to lunch during math instruction which lasted 25-30 min. A third academic period, towards the end of the school day, was then added. During Period 3 the teacher led 25-30 min of either science or social studies activities. Data were not collected on days these academic activities did not occur or when a substitute teacher was present.

Students with challenging behavior. Three, male, first-grade students were nominated by their teacher for externalizing problem behavior, specifically off-task and disruptive behavior using the Systematic Screening for Behavior Disorders (Walker et al., 1990). The Systematic Screening for Behavior Disorders (SSBD) employs a standardized and norm-based multiple-gating assessment procedure which includes (a) teacher screening and ranking of all students in

Table 1
Target Student Demographics

Name	Ethnicity	Lunch Type	Exceptionality & Notes	Behavior
Zach	Hispanic	Free	Retained in kindergarten	At-risk
Paul	Caucasian	Free	None	At-risk
Ethan	Hispanic	Free	Multiple disabilities	At-risk

Note: Ethan was identified as having a learning disability and hearing impairment.

the classroom for internalizing or externalizing behavior criteria, (b) teacher rating of the top three ranked students on critical events, and (c) direct observation of the students who exceed the normative criteria on the standardized teacher's rating. Each of the boys passed the three gates of the SSBD and informed parental consent was obtained for their participation in this study. Table 1 provides demographic information for the three students referred to throughout this manuscript as Zach, Paul and Ethan.

Data Collection Procedures

Data were collected for (a) on-task behavior of all students in the class, (b) teacher praise and reprimands, and (c) disruptive behavior of the three students with challenging behavior. The on-task behavior of all students in the class was the primary dependent variable and was measured using a paper and pencil momentary time sampling measure. Intervals were 30 s, and observations were 20 min in duration. The class was divided into six groups (not physically relocating) for the observation. The three students were each their own group and the rest of the class divided into three groups based on proximity. For each group to be recorded as on-task, every child in that group had to be on-task. On-task was defined as students being within the instructional area, complying with instructions for academic tasks or other activity, and attending to appropriate materials, teacher, or peer (during peer-tutoring or turn taking activities), asking and answering questions, and writing or reading. Every 30 s the observer scanned each group and recording a "+" if all students in the group were on-task and a "-" if any student in the group was off-task.

Throughout the 20 min on-task observation the observers (graduate research assistants) recorded the frequency of the primary teachers' praise and reprimands. Teacher praise was defined as a verbal statement that

Table 2
Summary of MOOSES Observations Conducted

Name	# Baseline	# Intervention
Zach	6 (over 2 months)	11 (over 5 months)
Paul	2 (over 2 weeks)	5 (over 4 months)
Ethan	4 (over 2 months)	7 (over 4 months)

indicates approval of behavior over and above an evaluation of adequacy or acknowledgement of a correct response to a question. Teacher reprimand was defined as verbal comments the teacher used to scold student(s) or negatively comment about a student's behavior often with the intent to stop the student from misbehaving including statements of negative consequences or threats of such consequences.

In separate observations data were taken on the three nominated students' on-task and disruptive behavior during Period 1. The observations were collected using the Multiple Option Observation System for Experimental Studies (MOOSES) adapted for use on hand held computers (Tapp, Wehby, & Ellis, 1995). Observations for each student were 10 min in duration. The duration of on-task and off-task behavior (following the same definition as above) was recorded with the MOOSES program which yielded a total time in seconds that a student was on and off-task. Frequency data were taken on disruptive behavior defined as name calling, arguing, talking to teacher or peer without permission, noise making, and playing with materials. Table 2 summarizes the number of MOOSES observations for each student.

Teacher satisfaction survey. A satisfaction questionnaire was given to the teacher at the end of the school year. This survey included 11 questions with a 5-point Likert-type scale, and three open-ended questions. The open ended questions asked the teacher to list what she liked and did not like about CW-FIT, and what needed to be improved.

Interobserver agreement. Interobserver agreement was collected on 13% of all paper-apencil observations during both baseline and intervention conditions. A second individual (i.e., graduate research assistant) collected the interobserver agreement data. Across all conditions, interobserver agreement was 97% (94%-99%) for class on task behavior, teacher praise and teacher reprimand. Interobserver agreement data were collected for 12% of all sessions with MOOS-

ES. A higher percentage of reliability sessions were conducted, but due to the handheld computers losing power, observations were lost. Interobserver agreement was 95% (88%-98%) for all three target students' on task and disruptive behaviors across each phase of the study. Before the study, all data collectors practiced taking data with the observation systems and paper-pencil observation techniques using coded videos and then practiced in other classrooms until reaching the criterion of 85% reliability across three sessions.

Intervention Procedures

The major component of the CW-FIT intervention involves teaching functional replacement behaviors for the inappropriate behaviors that function to obtain attention (adult or peer), escape from tasks, and to gain access to materials and activities. The class was taught the three primary CW-FIT classroom expectation skills: (a) *how to get the teacher's attention*, (b) *how to follow directions the first time*, and (c) *how to ignore inappropriate behavior*. Each skill was broken down into steps to let students know what the behavioral expectations were. It was believed these were reasonable and relevant expectations for first graders and these behaviors were incompatible with the problem behaviors reported by the teacher (i.e., talking too loud, yelling out answers, not following directions, becoming distracted by peers, calling out to obtain the teachers attention, arguing, and making disruptive noises). All skills were presented on posters with symbols accompanying each step and posted where all students could see them.

To begin implementing CW-FIT, the teacher explained to the class she would be introducing some skills and rewarding students for following them. She assigned students to 5 teams and said each team would earn points for using a specific skill when the timer went off. The points would go towards a goal set and any team that met the goal would be eligible for a reward activity such as 5 min of extra recess or playing heads up seven up. The teacher taught one skill at a time across consecutive days. Teaching or introducing each skill lasted 10-15 min and included posting the skill, choral reading of the steps, discussing the importance and rationale as a class, discussing how the skill fit in with school-wide expectations, role play with examples and then non-examples followed by examples again, and reviewing with choral reading of the steps. Then during the instructional period the class participated in CW-FIT and each team had to demonstrate the newly introduced skill to earn a point. In each of the following days after a skill was introduced, the teacher started the instructional period reviewing the steps for the skills as she referred back to the poster, had the students recite the

skill, immediately following the two-minute review, CW-FIT was implemented. Each day the teacher kept points on an 11x17 in. point sheet that listed each group and each skill. Before beginning CW-FIT each day the teacher designated how many points were needed and what the reward would be for the successful teams. When the timer went off, she quickly scanned the room and immediately let each group know whether or not they had earned a point. She used specific praise to describe what desired behaviors she saw. If a group did not earn their point the teacher offered an instructive correction such as "remember to follow directions, I asked that you clear your desks." The intervals between opportunities for teams to earn points varied between 3-5 min with shorter intervals in the beginning—providing students with more frequent opportunities to earn points, and longer intervals with few opportunities as the children mastered the skills.

Intervention fidelity. Fidelity of the CW-FIT intervention was collected on 17% of the sessions throughout intervention. A 21-item fidelity form was completed by the observer at the end of the CW-FIT Period. Items such as "Teacher reviewed skills," "Teacher awarded points," "Winning teams announced and rewards delivered" were recorded as yes or no (occurring or not occurring). Fidelity averaged 96% across the three periods and ranged from 90% to 100%.

Design

A modified, non-concurrent multiple baseline design across three academic subjects times (Riley-Tillman & Burns, 2009) was used to evaluate the effects of the CW-FIT program. The intervention was first implemented in the academic time immediately following lunch and recess. This was an approximately 50 min period, which allowed enough time to collect a 20 min observation using paper and pencil, and collect a 10 min MOOSES on all three target students. After implementing in the first period the teacher requested implementing in the 2nd and 3rd periods so these two periods have some overlapping data which introduces the modification to the design as typically there is no overlap. The other two academic subject times were approximately 20-30 min long, only allowing enough time for a 20 min paper and pencil observation. This design was used to determine the effects of the intervention on the primary dependent variable of classroom on-task behavior and the associated changes in teacher praise and reprimands. Multiple probes of direct observation were used to evaluate the effects of the intervention on the three nominated students on-task and disruptive behavior in the first period.
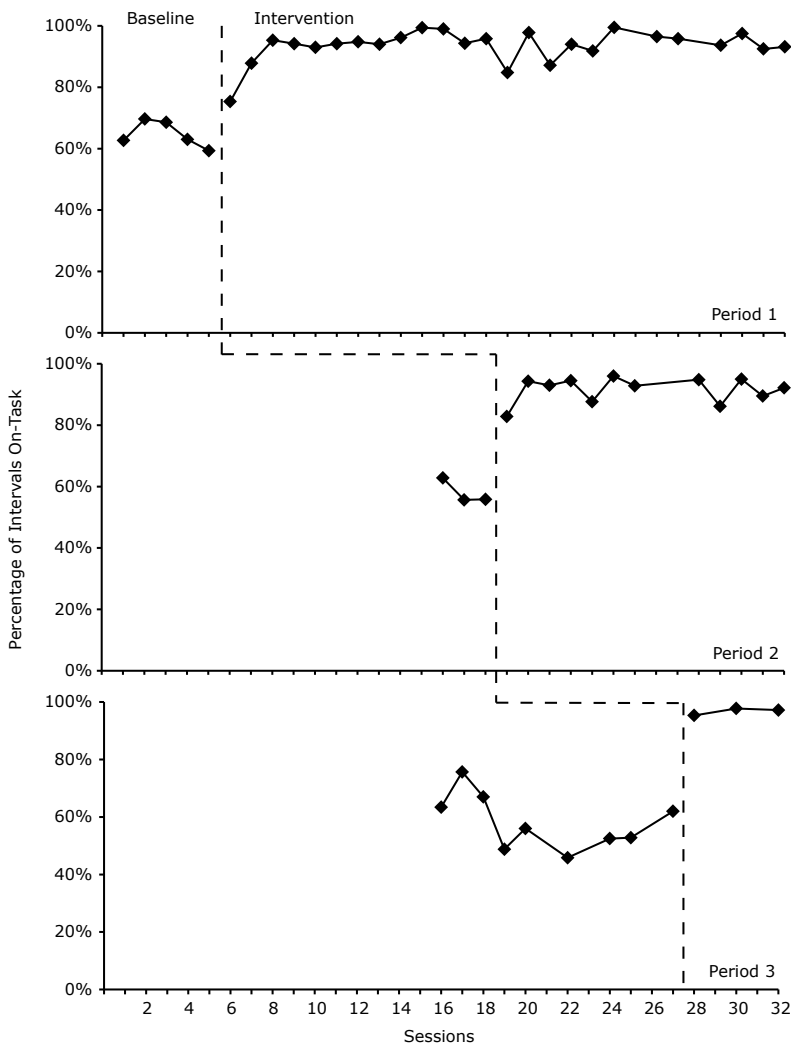
Figure 1. Average percentage of intervals of group on-task per session across periods.

Results

Figure 1 illustrates the average percentage of intervals on-task across all groups in all three academic periods. At baseline, a low rate of on task behaviors was observed ranging from 49%-76%. The mean percentage of on-task behavior was 65%, 58%, and 58% for each academic period, respectively. Following the implementation of CW-FIT in the first academic time, a steady increase in the rate of on-task
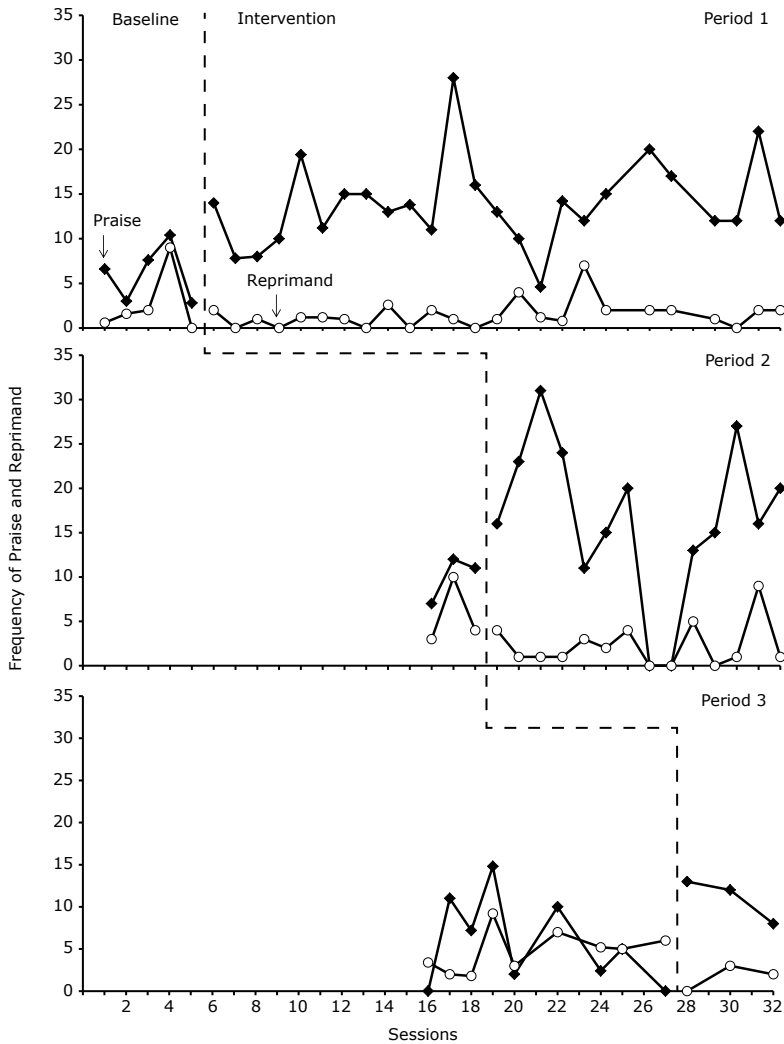
Figure 2. Frequency of teacher praise and reprimands per session across periods.

behavior was observed and maintained at a high level (75%-99%). The same effects were observed when the intervention was implemented in the other two academic periods, range of 84%-96% and 95%-98%, respectively. The mean rate of on-task behavior following the intervention was 94%, 92%, and 97%, respectively.

Figure 2 displays the frequency of the teacher's praise and reprimands. During baseline in each academic period praise rates were
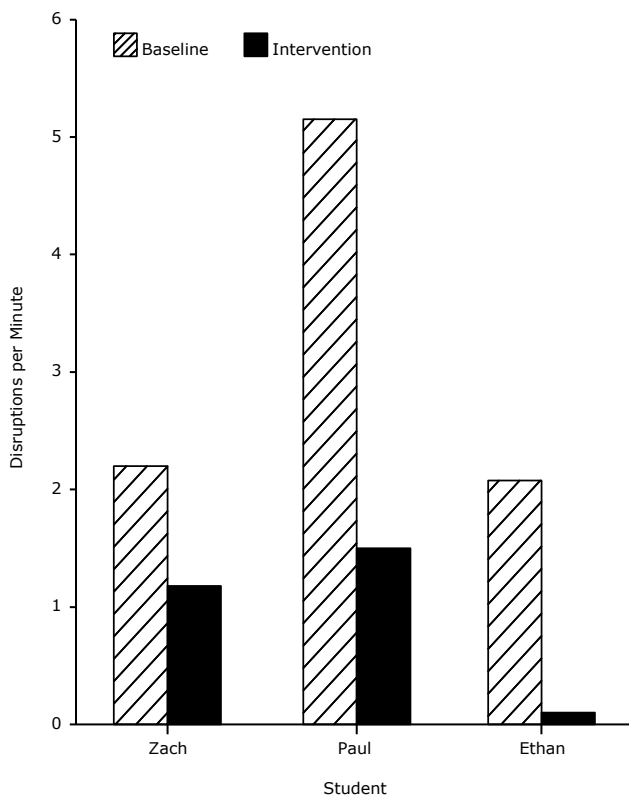
Figure 3. Average rate of disruptions per minute during baseline and interven-
tion for target students (10 minute observations).

variable and averaged 6.1, 10.0, and 5.8 per 20 minute observation,
respectively. After the implementation of the intervention, the rate
of praise increased to averages of 13.8, 19.3, and 11.0 per 20 minute
observation, respectively. Overall, the teacher's rate of praise almost
doubled during all three academic times during the intervention with
most notable changes in periods 1 and 2. Across all three periods a
noticeable separation in the ratio of praise to reprimands occurred ap-
proaching the desired 4:1 praise to reprimand ratio. During baseline
in each academic period, the rates of reprimands were slightly less
than praise and averaged 2.6, 5.7, and 4.7 per observation, respective-
ly. During intervention, the rate of teacher reprimands decreased to
averages of 1.5, 2.7, and 1.7 respectively.

    Figure 3 depicts the rate of disruptive behaviors per minute for
the three target students. Zach's average rate of disruptive behavior
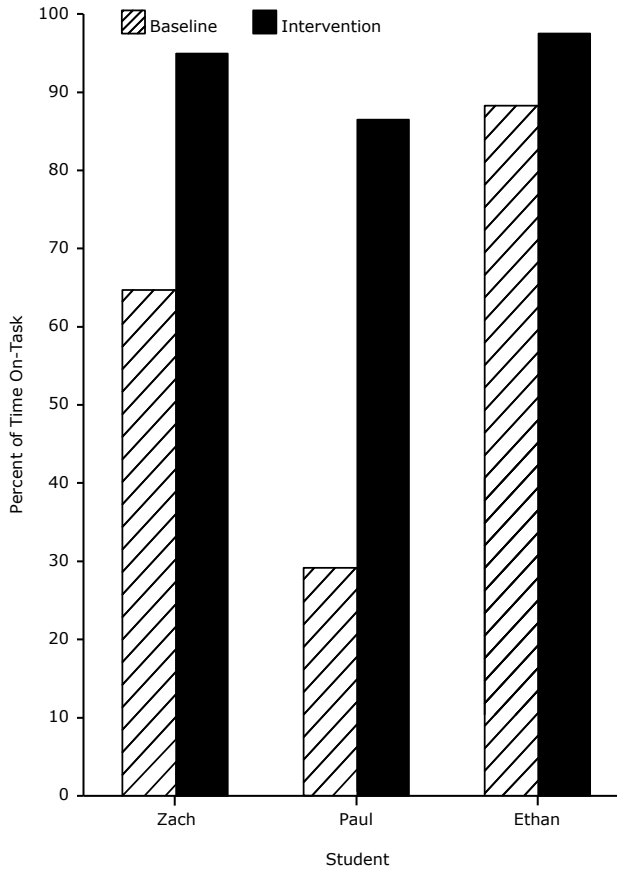per min decreased from 2.2 (.8-4.3) to 1.2 (.1-4.2). Paul's disruptive

Figure 4. Average percent of time on-task during baseline and intervention for target students (10 minute observations).

behavior decreased from an average of 5.1 (2,2-8.1) to 1.5 (.6-3.6). Ethan's disruptive behavior decreased from an average of 2.1 (.5-3.1) to .1 (.0-.4).

Figure 4 shows the on-task behavior of the three target students. With CW-FIT, Zach's on-task behavior increased by an average of 30%. Zach's baseline on-task percentage ranged from 0%-93% and averaged 65% and his intervention on-task ranged from 79%-100% and averaged 95%. Paul's average percentage on-task increased by 57% from a baseline average of 29% (range 0%-58%) to 86% with CW-FIT. Ethan's percent of time on task improved 9%, although his average at baseline was already at 88% (range 83%-93%). Ethan's on-task percentage with CW-FIT was 97% (range 90%-100%).

Teacher Satisfaction was rated as favorable. She rated all five's on the 5-point scale indicating *Acceptable*, *Very Likely*, *Very Easy*, *Very Little Time*, and *Very Effective* to items such as "To what extent did you like the intervention?," "How likely are you to use this intervention with future classes?," "How likely are you to recommend this intervention to a colleague?," "To what extent was this intervention easy to implement?," "Amount of time during instruction," and "How effective do you feel the intervention was?" In open ended comments the teacher noted that the reinforcement was immediate and visual and it was easy to use. She did not like that it was sometimes hard to see (determine) who needed a reward (point). She offered that an improvement to CW-FIT would be a more visual chart so that students could monitor their progress better.

Discussion

This investigation of CW-FIT, an interdependent group contingency, implemented in a first grade general education classroom was conducted for three primary reasons: (a) investigate effects of replicating CW-FIT across the day under multiple academic settings; (b) demonstrate the application of the intervention in a classroom nested within a SW-PBIS school; and (c) contribute to the literature on response to group contingency interventions by examining a specific population's response to CW-FIT in multiple academic settings.

Results supported the researchers' hypotheses that in response to CW-FIT (a) classroom on-task behavior would increase, (b) the teacher would increase her praise to reprimand ratio, and (c) students identified as at-risk for challenging behaviors would increase their on-task behavior and decrease their disruptive behavior during the CW-FIT intervention. Additional results suggested that CW-FIT can be used with ease and success to manage challenging student behaviors that occur throughout the day in a SW-PBIS classroom.

These findings are consistent with previous outcomes for group contingency intervention on disruptive classroom behaviors (e.g., Lohrmann & Talerico, 2004; Maggin et al., 2012; Stage & Quiroz, 1997). CW-FIT is like many interdependent-group contingencies, and these results suggest that CW-FIT is an easy intervention teachers can modify to fit within the classrooms educational and social context. This aspect of CW-FIT provides further evidence to support the use of this type of classroom management strategy as extensively discussed in both Wright and McCurdy (2012) and Tingstrom et al. (2006) reviews. Both reviews demonstrated that group interdependent group contingencies were viable for teachers to use as proactive classroom management strategies.

In addition, this study furthers recent literature (e.g., Lohrmann & Talerico, 2004; Colvin et al., 1997; Lewis, Sugai, & Colvin, 1998; Stage & Quiroz, 1997) to support the direct teaching of behavioral expectations to students and then reinforce appropriate behaviors to increases students' overall rate of desired classroom behaviors. This documentation of student and teacher response to a classroom intervention implemented within a SW-PBIS school also suggested that CW-FIT may be implemented across academic subjects to align with and extend SW-PBIS in the classroom.

Limitations

While the present study suggests additional evidence for using a group contingency intervention, the results should be viewed with caution. First, the nonconcurrent MB design is sighted in most single-case design texts with reservations. For example, David Gast, in his *Single Subject Research Methodology in Behavioral* Sciences (Gast, 2010) contends "Although the nonconcurrent multiple baseline design may have more flexibility, it does not and cannot, provide as convincing a demonstration of experimental control because it fails to concurrently evaluate dependent variable levels" (p. 393). However, the nonconcurrent MB design can adequetly adress most threats to internal validity, including those associated with history, as long as instrumentation, conditions, observer accuracy, and stimuli remain as close to constant as possible (Christ, 2007). In this study the same teacher and students participated across all 3 periods. The intervention was consistently implemented and instrumentation remained the same.

Second, the percentage of sessions with interobserver agreement was lower than the standard of 20-30% of sessions. Although this cautions interpretation of the validity of outcomes measures, consideration should be given to: (a) the high interobserver agreement (97% for group on-task and 95% for MOOSES); and (b) the established use of the measures and intervention with strong interobserver agreement (Bessette & Wills, 2007; Kamps et al.,2011; Shumate & Wills, 2010; Wills, Kamps, Abbott, Bannister, & Hansen, 2010).

Third, this intervention was only used with one teacher in a single classroom. The authors recommend additional exploration of implementing CW-FIT across the day in multiple grade-levels and across schools with a range of fidelity in implementing SW-PBIS. Specific attention is warranted to the possible slight adaptations of CW-FIT across classrooms to best support unique populations of students.

A fourth limitation of this study was that data were not collected to determine if the intervention had collateral effects on the academic

progress of students. While the teacher reported to have gained more instructional time in response to implementing CW-FIT (e.g., students were able to spend more time learning), future research needs to investigate the extent to which group contingencies and the CW-FIT intervention in particular result in students' improved academic achievement.

Finally, although student satisfaction was not collected in the current study, a recommendation for future studies is to systematically gather student satisfaction to CW-FIT in order to better explore student's social validation of the intervention. In this study high teacher satisfaction and social validation was reported. While these results are similar to past replications of CW-FIT (see Kamps et al. 2011), no direct measures for student satisfaction and social validity of CW-FIT were gathered at this time. Anecdotal evidence of student satisfaction was unsolicited and both the teacher and researchers reported that students expressed enthusiasm about participating in the CW-FIT intervention. Future research needs to incorporate student satisfaction surveys to evaluate whether or not students believe that the intervention has a positive effect on such things as their classroom environment, their productivity, and their behavior.

Conclusions

Despite these suggested limitations, the current study demonstrated the use of the CW-FIT group contingency intervention implemented with ease by a general education teacher during her most challenging academic periods across the day. The CW-FIT program strategies increased desired classroom behaviors and decreased disruptive student behaviors. In addition, the ratio of praise to reprimands increased for the teacher across all settings. Teaching positive behavioral expectations to students, providing frequent praise, and rewarding students through a group contingency are all strategies teachers may use to increase students' positive classroom behaviors and decrease students' socially inappropriate behaviors.

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