



Performance Feedback by School-based Personnel to Increase Teachers' Treatment Integrity

Lindsay M. Fallon, Rose Jaffery, Lisa M. Hagermoser Sanetti, and Sandra M. Chafouleas
University of Connecticut



Introduction

Data from numerous studies indicate that providing verbal and graphic performance feedback (PF) to teachers implementing classroom behavioral interventions can produce high, stable levels of treatment integrity (TI; e.g., Jones, Wickstrom, & Friman, 1997; Noell, Duhon, Gatti, & Connell, 2002; Noell et al., 2005). To date, no study has utilized personnel other than a university researcher to assess TI and offer teachers PF, when needed. This study recruited a school's special education coordinator to act as an "internal consultant," providing PF to two teachers when implementation of a class-wide behavioral intervention was low.

Method

Participants and Setting

These data were collected as part of a larger study that assessed the effectiveness of a Direct Behavior Rating—Self Monitoring (DBR-SM) intervention in increasing students' preparedness, academic engagement, and completion of homework. In the larger study, three eighth-grade teachers and a special education coordinator from a suburban public middle school (i.e., grades 5-8) in the Northeast participated. Data from the special education coordinator and two teachers are presented. Ms. S implemented the intervention in her fifth period science class as well as her first period science class. Ms. B implemented the intervention in her third period social studies class.

Design

A multiple baseline design across three 8th grade classrooms was used.

Procedures

The behavioral intervention consisted of the DBR-SM procedure, designed for students to monitor their performance on the three goals, and an intergroup contingency reward system. Classes were divided into teams of 3-5 students, and researchers trained students to use the DBR-SM sheet. At the end of class each day, students rated their performance on an ordinal scale from 0-10 (0=Not at all, 5=Some, 10=Totally) for each of the three behaviors on the DBR-SM sheet. Teachers calculated and recorded the average score for each team on a Team Tally Sheet. Teachers also made daily updates to team graphs posted in the front of the classroom so that students could visually track their team's progress toward a weekly point goal. If a team met or exceeded the weekly goal, all members of the team earned a reward.

A three-tiered reward system was used. The rewards increased in value (e.g., candy, soda, gift card) as teams met the goal for one week, two consecutive weeks, and three consecutive weeks. After three weeks, the reward cycle began again. Researchers provided teachers and the internal consultant with materials needed for implementing the DBR-SM intervention and intergroup contingency reward system.

Method, cont.

During baseline, students and teachers provided ratings on the DBR-SM sheet daily. During the intervention phase, rewards were introduced and teachers met with the internal consultant weekly to discuss how the intervention was progressing. During these meetings, teachers received PF, if earned. PF was provided if teachers' adherence to the steps of the intervention fell below 80% for two days or more within a week. Although the internal consultant conducted the weekly check-in meetings, the researchers assessed teachers' TI and compiled a Weekly Check-in Meeting Script and PF graphs, when needed, for the internal consultant. The meetings were audiotaped for researchers to later review.

Dependent Variables

Student outcomes. Ratings of preparedness and academic engagement were combined to produce the student outcome data presented below. Ratings for homework completion were excluded from analyses as homework was inconsistently assigned in the three classes.

Treatment integrity. Treatment integrity was assessed for (a) teachers implementing the classroom DBR-SM intervention, and (b) the internal consultant's weekly meetings with the teachers, by review of permanent products (e.g., DBR-SM sheets, Team Tally Sheets, Daily Class Graphs, Weekly Check-in Meeting scripts).

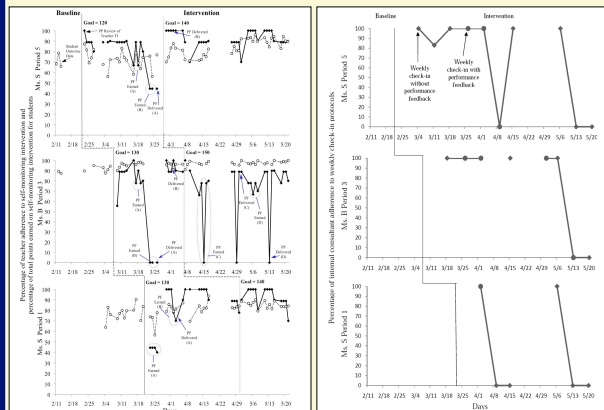


Figure 1. Teacher treatment integrity (solid line) and student outcomes (dashed line) based on student engagement and preparedness across study phases. Ms. S Period 1 earned PF for low adherence levels on 4/2 and 4/3, but the internal consultant was unable to meet, therefore PF was not delivered.

Figure 2. Internal consultant treatment integrity to the weekly check-in meeting protocols.

Results

Student outcomes

•Combined ratings on the preparedness and academic engagement scale were moderate and variable during baseline and at the start of the intervention phase, but showed an increasing trend when the point goal was raised for each of the three classes (see Figure 1).

Teacher treatment integrity

•Overall, teachers implemented the DBR-SM intervention with a moderate to high, but variable, level of TI. PF increased implementation immediately, but was needed repeatedly for maintenance.
•Ms. S, during class period 5, initially maintained an adequate (i.e., above 80%) level of adherence. She earned PF during the week of March 18th and 25th. The internal consultant provided PF the week following. After the first PF meeting, Ms. S' adherence levels increased and she did not meet criteria for PF again.
•Ms. B demonstrated a variable, but generally high level of adherence initially. During the week of March 18th, she earned PF. The internal consultant provided PF the next week. Her implementation increased after the first PF meeting for 8 days, but then declined. She earned PF again twice. After PF, Ms. B's adherence increased in the final week of the study.
•For period 1, Ms. S demonstrated a low level of adherence during her first week of implementation, thus she earned PF and her implementation improved. Ms. S earned PF again the week of April 1st, but the PF was never provided. Her implementation, however, was high (above 80%), if somewhat variable, throughout the rest of the study.

Internal consultant treatment integrity.

•The internal consultant implemented the check-in meetings, both with and without PF, with a high level of adherence for the first 5 weeks of the intervention phase. As evident in Figure 2, his implementation became more variable during weeks 6 through 12 (i.e., adherence to meeting procedures was 100% when meetings occurred, but meetings were not consistently held).

Conclusions

Overall, results indicated that (a) teachers demonstrated moderate to high, but variable, levels of treatment integrity; (b) when teachers demonstrated lower levels of treatment integrity, the school-based consultant implemented PF with high adherence for 5 weeks, after which adherence varied; and (c) student outcomes improved.

Consistent with previous research, PF appeared to help increase teachers' TI, even when provided by an internal consultant. More research is needed to explain preliminary results for the internal consultant's variable level of TI and the feasibility of utilizing an internal consultant to monitor TI in schools.