

Is Positive Feedback a Forgotten Classroom Practice? Findings and Implications for At-Risk Students

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Although using higher rates of positive to negative feedback is one best practice often recommended to teachers, particularly when it comes to students experiencing behavioral problems in classroom settings, research on the use of positive feedback in classroom teaching practice has revealed inconsistent results. Research has documented fluctuations in trends of teachers' use of positive feedback strategies, justifying further inquiry into the current state of classroom practice. This study aimed to examine the current state of classroom feedback practices among teachers of a district who were asked to rate their students' risk levels for developing emotional and behavioral disorders (EBD). The researchers found that students identified as high risk and low risk for EBD received teacher feedback at a significantly different rate. Students identified as high risk for EBD received negative feedback at a higher rate than their same-setting peers. Implications for teachers on the use of feedback for students at-risk for EBD are presented.

Keywords: at-risk, emotional and behavioral disorders, feedback, negative feedback, positive feedback

Students with challenging behavior often have educational experiences that include ongoing problematic relationships with peers and adults. The nature of the interaction between a teacher and a student who is identified as being at risk for emotional and behavioral disorders (EBD) often results in an over reliance on negative exchanges. As a means to further examine these atypical experiences and provide recommendations for increasing positive behavior and interactions in the classroom, this study examined a specific aspect of teachers' interactions with students who were rated as being at risk for developing EBD through the analysis of feedback.

There has been considerable research dedicated to analyzing delivery of approval and disapproval in teacher–student interactions. Often, studies have suggested that teachers generally rely on negative feedback strategies to convey disapproval of behavior specifically to those students who exhibit problem behaviors (Gunter & Coutinho, 1997; Kerr & Nelson, 2006; Shores, Gunter, & Jack, 1993; Sutherland, Lewis-Palmer, Stichter, & Morgan, 2008; Sutherland & Wehby, 2001). Despite an abundance of research demonstrating evidence in favor of the use of positive reinforcement strategies to teach and reinforce desired behaviors as an instructional practice (Gable, Hendrickson, Young, Shores, & Stowitschek, 1983; Keller, Brady, & Taylor, 2005; Myers, Simonsen, & Sugai, 2011; Partin, Robertson, Maggin, Oliver, & Wehby, 2009; Sutherland, Wehby, & Copeland, 2000), such strategies have still not become the norm in classrooms.

Feedback is a critical mechanism between a teacher and a student for building understanding, promoting healthy interactions, and fostering welcoming classroom climates (Jennings & Greenberg, 2009). Kerr and Nelson (2006) claimed feedback usually occurs in response to particular behaviors and as a result, affects the recurrence of those behaviors. Feedback can be categorized in the research literature as being either positive (e.g., teacher delivery of approval or praise for a desired behavior) or negative (e.g., teacher displays of disapproval for undesired behaviors). The student-intrinsic factors that may affect teacher use of feedback along these two dimensions, positive and negative, are a central focus of this study.

Feedback can also be information given to a person to scaffold learning experiences and evaluate performance successively toward a goal. As mentioned earlier, categories of feedback can vary qualitatively, with the two most broadly used definitions being *positive* or *negative*. For the purposes of this study, positive feedback is defined as verbal, nonverbal, or tangible feedback, which includes praise, behavior points, awards, and/or positive acknowledgement of a desired or appropriate behavior. For example, if a behavior or task is demonstrated correctly, the delivery of positive feedback may communicate the intent that a behavior should continue. Positive feedback can be used to indicate that an expected or desired behavior was demonstrated, or can be used to reinforce successive steps toward a goal. In contrast, the delivery of negative feedback suggests that a behavior or task was not performed correctly, thus indicating that a change of behavior is needed to demonstrate successive behaviors toward a goal. Negative feedback in this study is defined as the delivery of a verbal or nonverbal reprimand,

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consequence, ultimatum, and/or leave request to indicate the need to terminate a behavior (Nelson & Roberts, 2000).

Researchers have noted the ameliorative effects of positive feedback in promoting appropriate classroom behaviors (e.g., Beaman & Wheldall, 2000; Burnett, 2002; Hattie & Timperley, 2007; Keller et al., 2005; Sutherland et al., 2000). Accordingly, teachers have been encouraged to use strategies which encourage and reinforce appropriate classroom behavior and which may decrease problem behavior by focusing on building these alternative, classroom-appropriate behaviors. Positive feedback that specifically identifies the desired behavior has been suggested to be exceptionally effective in promoting appropriate behavior among school-age students (Chalk & Bizo, 2004). Review of the literature on feedback found this action to be among the strongest influences on student achievement, along with direct instruction, reciprocal teaching, and activating prior knowledge, with the most effective forms of feedback identified as those that were clear, goal-directed, and accompanied by additional reinforcement (Chalk & Bizo, 2004; Hattie & Timperley, 2007; Sutherland, 2000).

Research has suggested that teachers can initiate positive exchanges by clearly communicating high expectations for student success to all students, and providing frequent positive feedback to students, which allows them to recognize their behavioral and academic success (George, Kincaid, & Pollard-Sage, 2009; Sprick, Garrison, & Howard, 2002). Specifically, researchers recommend teachers make every effort to have their number of positive interactions exceed the number of negative interactions by a ratio of at least three to one (Sprick, 1981, 2006). Despite the appeal of this recommendation, positive interactions with teachers are not as frequent among students who demonstrate long-standing problematic behaviors in the classroom (Henricsson & Rydell, 2004) and negative student-teacher interactions have a strong association with long-term academic and behavioral problems (Hamre & Pianta, 2001; Hamre & Pianta, 2005; Pianta, Hamre, & Allen, 2012).

Beaman and Wheldall (2000) analyzed trends of teachers' rates of delivering approval and disapproval feedback across studies. These authors discussed the possibility of an increasing trend in rates of teachers' use of approval over disapproval in the classroom from the mid-1980s to 2000. In their review, they also noted that the approval statements were delivered more frequently for academic behaviors than for social behaviors (Beaman & Wheldall, 2000). These findings pinpoint a shortfall in the utility of positive feedback strategies to increase desired behaviors and reduce problem behavior. Thus, increasing teacher rates of positive feedback statements to students who experience behavioral difficulties in the classroom may play a vital role in increasing prosocial behavior and decreasing rates of school failure for those students.

Feedback and Students With EBD

The use of positive feedback is a validated universal strategy for working with students, but more specifically, its use has

been deemed particularly effective for students who are suspected to have or are identified as having EBD. Sutherland and colleagues (2000) examined the effects of increasing positive feedback within a classroom dedicated to educating students with EBD. They used teacher feedback as an intervention and discovered that increases in on-task behavior for the target student and the class as a whole were concurrent with increases in rates of teachers' use of positive feedback. Research on the use of feedback practices continually reveals that students with EBD learn to behave in socially appropriate ways when effective feedback practices are in place (Lingo, Jolivet, & Barton-Arwood, 2009).

Unfortunately, regardless of data that suggest positive feedback strategies are tied to increases in desired classroom behavior for students with or at risk for developing EBD, a long history of studies suggests teachers may tend to react selectively, or more reactively, toward students who demonstrate challenging behaviors. Across studies, students who exhibit problem behavior consistently receive disproportionate amounts of disapproval-focused feedback than do their peers, and many of the findings suggest teacher rates of positive feedback strategies for students with behavioral difficulties were consistently low and, in some cases, nonexistent (Kerr & Nelson, 2006; Shores et al., 1993; Sutherland et al., 2008; Sutherland & Wehby, 2001; Wehby, Symons, Canale, & Go, 1998).

This study originated in the Southwestern United States, in response to a school district request for more information about its schools' use of Positive Behavior Intervention and Support (PBIS) practices among classroom teachers. The district administrator, who was part of the district's PBIS team, asked one of the researchers to examine the actual teacher use of positive feedback in eight elementary schools. The district was in the process of training school-level faculty and staff to implement classroom-level positive behavioral interventions and supports and was hearing from teachers that they were currently already using positive feedback strategies within recommended parameters. All eight building-level administrators indicated interest in actual observations of the use of this strategy. More specifically, these administrators were interested in measuring the extent of teachers' use of positive and negative feedback between typically developing students and those who were identified as being at risk for developing EBD. In addition to examining classroom teachers' use of positive and negative feedback toward students who are identified as high-risk and low-risk for EBD, this study also explored how closely current classroom teaching practices reflected the recommended ratio of three instances of positive feedback to one instance of negative feedback (Sprick, 1981, 2006).

Method

Setting

The study was conducted in 56 classrooms among eight suburban public K-5 elementary schools in a school district outside a large southwestern city. The average population of the

Table 1. Characteristics of Participating Schools

School	School population	Free and reduced-price lunch eligible (% of population)	Suspension and expulsion (% of population)	Special education population (% of population)	Emotional behavioral disorders rates (% of special education population)	Student–teacher ratio	Title I school
1	908	34.8	.04	7.8	.07	21.3	No
2	670	32.9	.02	8.6	.02	19.4	No
3	639	36.4	.00	10.2	.02	24.2	No
4	824	61.2	.05	10.9	.10	21.4	Yes
5	638	16.9	.04	6.4	.04	22.4	No
6	876	39.1	.09	7.9	.01	20.7	No
7	749	39.6	.07	10.6	.03	19.3	Yes
8	987	21.7	.01	6.5	.06	22.1	No

participating schools was 786 students. The student-teacher ratio in classrooms was 21:1. Two schools in the sample qualified as Title I status for federal funds. Schools varied in their rates of free and reduced-price lunch (16% to 61%), with an average of 35% of the population across the schools. The district's ethnic student demographics were as follows: White, 77.1%; Hispanic, 24.9%; Black, 3.8%; Native American, .9%; and other, 18.0%.

The English language learner population of the district was 6.9% with Spanish as the primary home language for the majority of English language learner students. There were 8.6% of students identified as having special needs. The suspension rate of the participating schools was an average of .04 suspensions per academic day, which was not dissimilar to the average of the district at large. Demographics of the district are reported in Table 1.

Participants

Teachers

We recruited 56 teachers from the participating schools on the basis of the following criteria: (a) teacher willingness to provide class-wide behavioral screening data to systematically screen for behavioral and academic needs and (b) the presence of two or more students in their classroom who scored in the high- and low-risk range for EBD on the screening instrument. The majority of teachers were White women, who earned a bachelor's degree and held an elementary education licensure. Demographics of the participating teachers are reported in Table 2.

Students

The Student Risk Screening Scale (SRSS; Drummond, 1994) was the district-approved screening tool used to identify high- and low-risk students in each teacher's classroom. Information derived from this tool was used by the district to initiate the Behavior Support Process for students identified as being at high risk for developing EBD. For this study, one student from the high-risk pool and one student from the low-risk pool were randomly selected as target students from each participating teacher's classroom, although teachers were not informed about which student was chosen from

among the three they had nominated for each risk category. Selection of one high-risk student and one low-risk student from each classroom resulted in 112 total student participants for the study. Demographics of the participating students are reported in Table 3.

Measures

Student Risk Screening Scale

Each participating teacher provided their ratings on the SRSS, a brief screening instrument designed to find children who are at risk for developing antisocial behaviors (Drummond, 1994). The SRSS uses a 4-point Likert-type scale that requires the classroom teacher to rate behaviors of each

Table 2. Demographic Characteristics of Participating Teachers ($N = 56$)

Characteristics	<i>n</i>	Percentage of sample
Grade assigned		
K	6	10.7
1	6	10.7
2	13	23.2
3	8	14.2
4	10	17.8
5	13	23.2
Teaching license type		
Early childhood	5	8.9
Elementary education	51	91.1
Highest level of education		
Bachelor's degree	25	44.6
Bachelor's +	7	12.5
Master's degree	19	33.9
Master's +	5	8.9
Race		
White	50	89.2
Black	1	1.7
Hispanic	3	5.4
Native American	2	3.5
Gender		
Male	3	5.4
Female	53	94.6

Table 3. Demographic Characteristics of Target Students ($N = 112$)

Characteristic	Low risk ($n = 56$)		High risk ($n = 56$)	
	n	Percentage of low-risk sample	n	Percentage of high-risk sample
Race				
White	33	58.9	33	58.9
Black	3	5.3	10	17.8
Hispanic	15	26.7	12	21.4
Other	5	8.9	1	1.8
Gender				
Male	46	82.1	48	85.7
Female	10	17.8	8	14.3

student. Teachers assign a score (0–3) to each student in the class relative to certain behavioral criteria. Total scores on the SRSS range from 0 to 21. Scores of 9 to 21 indicate high risk, 4 to 8 moderate risk, and 0 to 3 low risk. Validity and reliability studies have yielded strong correlations ($r = .79$), with the Aggressive Behavior subscale of the Child Behavior Checklist (Achenbach, 1991) and the SRSS, along with other commonly used and psychometrically sound instruments (Lane, Parks, Robertson, Kalberg, & Carter, 2007).

Feedback Coding System

Teacher feedback was measured using an adapted version of a student and teacher observation system created by Nelson and Roberts (2000). The system was originally designed to record ongoing reciprocal behaviors between a teacher and a student in classroom settings. Teacher behavior codes were solely selected and adapted to include a series of five descriptors of teachers' actions, which were coded as positive or negative feedback during data collection. The descriptors selected for data collection were *reprimands*, *ultimatums*, *consequences*, *leave requests*, and *approvals*. Nelson and Roberts (2000) provided operational definitions of the seven codes. *Reprimands* were coded when the teacher asked the target student to stop a problem behavior (e.g., "Stop hitting" or "Stop teasing"). *Ultimatums* were coded when the teacher provided the target student a verbal choice to stop a problem behavior or the student would encounter a response cost (e.g., "If you don't stop, then I will..." or "I need you to be quiet or..."). *Consequences* were coded when the teacher gave the target student a designated consequence for a problem behavior (e.g., loss of a privilege or points). A *leave request* was coded when the teacher asked the target student to leave the classroom due to problem behavior (e.g., requests to go to the principal's office or to the hall outside the classroom). *Approval* was coded when the teacher used positive actions to acknowledge the target student's appropriate behavior or reacted in a positive manner toward the target student's appropriate behavior (e.g., providing points for a positive behavior program or tangible response such as a sticker or points, social response such as a smile, "Thank you," "I like your behavior when you..." or "Good job").

The coding system comprised of daily data collection sheets with the positive and negative feedback descriptors on

rows and columns. Observers were trained in the definitions and documentation of each descriptor. The data collection sheets were used during every 20-min observation session. The designated codes were placed into one of the two groups: positive feedback toward target students and negative feedback toward target students. Approvals for positive actions were counted as positive feedback; reprimands, ultimatums, consequences, ad leave requests were added toward negative feedback. Vibrating timers were used to alert the observers of the end of each observation data collection session.

Description of Observers and Observer Training

Three graduate students, two school psychologists, and one researcher with a doctoral degree in special education collected data for the study. These six individuals constituted the observer/research team. The observers received a 10-hr training on the modified version of the observational coding system originally constructed by Nelson and Roberts (2000) before data collection to establish interobserver reliability. Observers worked on definitions and examples of positive and negative feedback. Videotapes of actual and simulated classroom situations, group discussions to clarify operational definitions, and successful completion of mastery quizzes were the main components of the training sessions. Observers were required to demonstrate mastery of objectives by meeting the criteria of 90% accuracy on three precoded instructional videos of classrooms. All observers reached the mastery criterion after receiving training.

Interobserver Agreement

During the data collection phases, interobserver agreement was calculated for 25% of all observation sessions. Agreement for accurate observations of positive and negative feedback occurrences was calculated by taking the smaller number of occurrences of each code and divided by the larger number of occurrences of that code obtained by both observers then multiplied by 100. The principal researcher served as an independent observer across all the observers and conducted interrater reliability for 25% of the sessions. The interobserver agreement ranged from 90% to 100%, with an average of 96%.

Procedures

Data Collection

Data were collected in two phases: In Phase 1, researchers collected data on teachers' normative levels of feedback toward all students in their general education classrooms; and during Phase 2, researchers focused on collecting data on teachers' positive and negative feedback toward the target high- and low-risk students. Each participating teacher's classroom was observed 12 times during Fall 2011. The duration of each observation session lasted 20 min.

During Phase 1, every teacher was observed twice for 20 min per session. Each teacher's normative use of positive and negative feedback toward all students in the classroom was coded. A teacher's normative rate of feedback was defined as the rate of teacher feedback in the general education classroom regardless of the risk level of the student. The data obtained during this phase provided an average of each teacher's use of positive and negative feedback toward any student in the general education classroom regardless of student risk level. Data from this phase were used to generate a baseline level of teachers' normative, rather than targeted, use of positive and negative feedback.

Phase 2 consisted of ten 20 minute observation sessions during which delivery of positive and negative feedback toward identified high- and low-risk students was noted. Each teacher was observed for 200 min during this phase. The data collectors were instructed to vary the days and times of their observations to contribute to a more reliable estimate of the overall feedback delivery. The observers revisited classrooms on another day if either target student was absent to meet the required observations.

Results

Baseline Feedback Data

Phase 1 data collection was conducted before the identification of target high- and low-risk students. During the two 20-min observation sessions, baseline data were collected for each participating teacher on their normative and typical use of feedback with their classroom students. The results of the baseline data collection revealed that for all participating teachers, the average ratio of positive to negative feedback was 1:1, one positive to one negative, across the students in their classrooms.

Difference Between Feedback for High- and Low-Risk Students

Observers collected data for 10 observation sessions during Phase 2, counting the occurrences of positive and negative feedback delivered by the teacher directly toward each target high- and low-risk student during the observation sessions (see Table 4). Upon examination, data patterns revealed a significantly higher use of negative rather than positive feedback toward the high-risk students, which yielded an average of two negative feedback to one positive feedback occurrence.

Table 4. Mean Occurrence of Positive and Negative Feedback, by Risk Level and Reported Significance Level

	Low risk ($n = 56$)		High risk ($n = 56$)		p
	M	SD	M	SD	
Positive feedback	3.73	4.20	4.78	5.63	.264
Negative feedback	1.25	1.56	8.71	8.40	.000*

Note. Mean represents average occurrence of feedback observed across ten 20-min observation sessions.

* $p < .001$.

No significant differences between the high- and low-risk groups were observed with regard to positive feedback.

T test findings exposed significant differences in teachers' use of negative feedback between the target populations of high- and low-risk students ($p < .001$). In terms of the delivery of negative feedback, the high-risk group received, on average, eight negative feedback occurrences to four positive occurrences during an observation session. A much more restricted range was observed among teachers' use of positive to negative feedback among the low-risk student group; for every three positive feedback occurrences, there was one instance of negative feedback. When compared with results from Phase 1 data, which counted teacher feedback delivery among the general student population, however, the low-risk students received a significantly higher ratio of positive feedback to negative feedback (3:1) than did the general student population.

Overall, among all the students in the study, those in the high-risk group received significantly more negative feedback than positive feedback. Although the high-risk students overall also received more positive feedback ($M = 4.78$) than did the low-risk students ($M = 3.73$), the average occurrence of negative feedback for the high-risk group was higher ($M = 8.71$) than the baseline/normative rate ($M = 6.91$) and significantly higher than the negative feedback rate for the low-risk group ($M = 1.25$), suggesting that although teachers may have had more actual interactions with high-risk students, the majority of these were negative.

Discussion

Differential treatment of students at risk for EBD in educational settings has been related to a host of poor outcomes, both academic and social. Students with EBD are more likely to be placed in restrictive settings, experience a greater reoccurrence of academic and social failure, and are more likely to drop out of school (Center for Effective Collaboration and Practice, 2001) than are students identified with any other category of disability. It is important to examine the educational experience for these students to reduce factors that contribute to these atypical experiences, and which could potentially exacerbate existing problem behaviors in the classroom. Thus, the present study investigated disparities in teachers' use of positive and negative feedback among high- and low-risk groups of students.

These findings highlight the need for a critical analysis of how well various behavior modification practices are able to be implemented in the classroom. Despite the fact that positive feedback has been recommended as a very useful strategy for all students, and even more specifically with students at risk for EBD (Fedor, Davis, Maslyn, & Mathison, 2001; Hattie & Timperely, 2007; Sutherland et al., 2000), the present study results reveal that teachers in this district were not routinely relying on positive feedback in their classrooms to recognize appropriate student academic and social behaviors. The data reveal a pronounced overreliance on negative strategies toward students identified as at-risk for EBD.

Educational theorists such as Sprick have recommended that teachers strive for at least a 3:1 ratio in their use of positive to negative feedback. Students who receive positive feedback are more likely to be motivated and engaged, and to experience academic success (Illies & Judge, 2005; Pintrich & Schunk, 2002). This study's findings indicate that participating teachers' normative rate of positive feedback toward all students is much lower in practice than the rate recommended by the literature (Sprick, 1981, 2006; Sprick et al., 2002). More importantly, there is a drastic disparity in the ratios of positive to negative feedback for students in the at-risk population. It is interesting that only the students in the low-risk group received positive teacher feedback at the recommended rate of 3:1 (Sprick, 1981, 2006). Feedback comparisons by risk groups, baseline rates of feedback, and rates recommended by the literature are presented in Figure 1. Because these findings are limited to the participating schools in this study, it is important that more studies are conducted to examine the actual rates of positive feedback delivered in schools.

Prolonged overexposure to negative feedback from teachers functions as part of a detrimental cycle that can result in habitual negative interactions and relationships for students at risk of developing EBD. Moreover, students who are suspected to be at risk for EBD often have under-recognized barriers embedded in their educational experience; more disputes with peers and teachers, less supportive classrooms, and an absence of positive feedback can all contribute to poor adaptive trajectories (Hamre & Pianta, 2001). The lasting effect of these experiences on students has been related to lower

academic scores, deficits in social skills, and high risk of school failure and later adjustment problems (Kaufmann & Landrum, 2009).

These findings are consistent with the studies that have suggested that teachers tend to have negative reactions toward students demonstrating negative behaviors (Kerr & Nelson, 2006; Shores et al., 1993; Sutherland et al., 2008; Sutherland & Wehby, 2001), which could cause schools to become an aversive environment for students already at high risk for educational failure (McEvoy & Welker, 2000). Although the high-risk group did receive more positive feedback than expected, on the basis of the research literature, the occurrences of positive feedback were considerably lower than those of negative feedback. Thus, it could be speculated that the effects of the positive feedback, although more elevated than that of their low-risk counterparts, might be nullified by the relatively high rates of negative feedback received. Although the findings were viewed relevant by the district in realigning their efforts for establishing positive behavior supports, several limitations were noted within the study.

Limitations

The student risk population was generated from a single behavior screening measure (SRSS; Drummond, 1994). Teacher reports are inevitably subject to rater bias, halo effects, practice effects, and other problems associated with rating scales (Abikoff, Courtney, Pelham, & Koplewica, 1993). Future research using multiple or comprehensive measures of EBD risk might allay problems resulting from the use of a single instrument.

The ability to generalize results is the cornerstone of every research study. Given that this study used a convenience sample of teachers among schools already in the process of implementing a schoolwide PBIS model, results remain limited in their ability to generalize to trends of positive and negative feedback among all teachers in all schools. Replication studies would benefit the research and practice communities by highlighting more trends in feedback and identify exemplary positive teaching practices.

Implications for Practice

The results of this study may help to highlight a true disconnect between theory and practice in one Southwestern U.S. school district, and emphasize the critical need for continuous evaluation methods that educators can use to assess their own classroom practices. Practitioners should be made aware of how much positive feedback is used, and how often it is used for select student populations; they should know whether positive feedback is missing from their own repertoire of practices.

In a follow-up session, researchers shared these findings with the participating schools and teachers and raised their awareness about the need for positive feedback for high-risk students. In the follow up sessions, the primary researcher noted an increase in teacher awareness about positive feedback. Teachers in their conversations and anecdotal reports

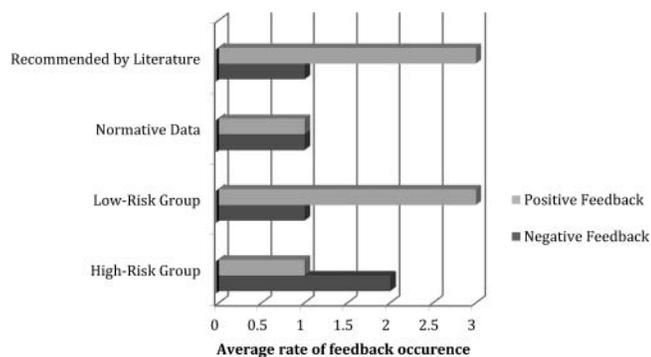


Fig. 1. Differences between the rate of feedback recommended by the literature and the averages of the observed rates of feedback.

indicated that awareness about feedback data helped them understand the importance of reducing their reliance on negative feedback. The district administrator has used this information to develop professional development opportunities for establishing positive behavior supports in his district. In more recent discussions with one of the principals of the participating schools, the researchers found that teachers of this school have been encouraged to use video samples to monitor their own use of positive feedback with all students. Peer coaching has also been identified as one of the strategies to facilitate more positive use of feedback. The administrator reported that greater awareness has contributed to greater action on the part of teachers to improve their classroom practice for all students and more importantly for those who are at high risk of developing EBD.

Conclusion

Although practitioners may understand that positive feedback that identifies the desired behavior has been shown to be exceptionally effective in promoting appropriate behavior (Chalk & Bizo, 2004), this study revealed that in practice, some teachers may still tend to rely on the use of negative feedback for all students in general, and for those students who are identified to be at risk for developing EBD in particular. Teachers of students in the high-risk group not only failed to deliver adequate ratios of positive to negative feedback when compared with feedback delivered to their low-risk classmates, but teachers also delivered more negative feedback to these students than they delivered to the entire classroom population of students, and in both comparisons, negative feedback exceeded literature-recommended rates. Results of this study emphasize the importance of positive feedback strategies to promote prosocial and appropriate behaviors for the purposes of reducing educational failure, and improving the outcomes for students who are already on a trajectory to school failure (Center for Effective Collaboration and Practice, 2001).

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