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Middle and High School Teachers' Praise and Reprimand Delivery

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Middle and High School Teachers’ Praise and Reprimand Delivery

BY
Emma Riedesel

THESIS
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
SPECIALIST IN SCHOOL PSYCHOLOGY
IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS
2019

I HEREBY RECOMMEND THAT THIS THESIS BE ACCEPTED AS FULFILLING
THIS PART OF THE GRADUATE DEGREE CITED ABOVE
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I HEARBY RECOMMEND THAT THIS THESIS BE ACCEPTED AS FULLFILLING THIS PART OF THE GRADUATE DEGREE CITED ABOVE

THESIS COMMITTEE CHAIR DATE

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Abstract

The benefits of increasing teacher praise and decreasing teacher reprimand (for both students and teachers) is well-established in the literature. The purpose of this study was to expand the literature on teachers’ natural use of praise and reprimand, specifically in terms of how teachers deliver praise and reprimand. Sixty-six middle (sixth through eighth grade) and high school (ninth through twelfth grade) teachers’ delivery of praise and reprimand to individual (one student), small clusters (two to six students), and large groups (seven or more students) during a 20-minute observation were examined. Teachers delivered significantly more general praise to individual students, rather than small clusters of students or large groups of students. However, there was no difference in teachers’ delivery of behavior-specific praise to individual students, small clusters of students, or large groups of students. Teachers delivered significantly more mild reprimands to individual students compared to small student clusters; however, no differences were found between mild reprimand delivery to individual students and large groups of students. No significant correlations were found between praise delivery type and reprimand delivery type. Implications and suggestions for future research are offered.
Middle and High School Teachers’ Praise and Reprimand Delivery

Teachers report that managing student behavior is one of the most difficult parts of teaching (Barrett & Davis, 1993; Ingersoll, 2001; Reinke, Stormont, Herman, Puri, & Goel, 2011) and may be one reason some teachers decide to leave the field of education (Curtis, 2012; Ingersoll, 2001; Reinke, Herman, & Stormont, 2013). This is particularly concerning because retaining high-quality teachers is critical to student educational outcomes (Hanushek, Kain, & Rivkin, 2001; Rivkin, Hanushek, & Kain, 2005).

It is important for all teachers to competently and effectively manage student behavioral issues because many students with behavioral concerns receive special education services within the general education classroom (Forness, Freeman, Paperella, Kauffman, & Walker, 2011; Individuals with Disabilities Act, 2004). In fact, most children and adolescents with psychological and behavioral needs only receive services and intervention at school (Walter, Gouze, & Lim, 2006) and many teachers report feeling unprepared to meet the emotional and behavioral needs of students (Reinke et al., 2011). Thus, assisting teachers in finding easy to implement, effective, classroom management strategies, like monitoring their praise to reprimand ratio delivery, is crucial.

When teachers are trained to increase their use of praise and decrease their use of reprimand, student behavior improves (Gable, Hester, Rock, & Hughes, 2009; Lampi, Fenty, & Beaunae, 2005; Reinke et al., 2013). However, past researchers have largely focused on training teachers to deliver targeted intervention to single students with identified behavior concerns (i.e., Tier 3 intervention; Kamps, Wendland, & Culpepper, 2006; Lalli, Browder, Mace, & Brown, 1993). It is unclear how teachers’ use praise and reprimand at the universal level (i.e., Tier 1) in the absence of intervention or training.
Researchers suggest that behavioral problems that interfere with academic learning can be prevented by clearly teaching and reinforcing specific, positive behaviors (i.e., respect, compliance; Cameron & Pierce, 1994; Floress & Jenkins, 2015; Hall, Lund & Jackson, 1968; Reinke, Lewis-Palmer, & Merrell, 2008). However, no standards exist to measure whether teachers are using strategies (e.g., praise) to strategically strengthen students’ appropriate behaviors. Additional research is needed at the universal, Tier 1 level to determine what teachers do naturally compared to best practice, so that appropriate recommendations and standards can be established to not only measure student outcomes, but also measure the integrity in which teachers are delivering effective strategies (i.e., ideal praise to reprimand ratios) at the universal level. Few studies have examined praise beyond general praise (GP) and behavior-specific praise (BSP; Jenkins et al., 2015; Floress & Beschta, 2018; Floress, Beschta, Meyer, & Reinke, 2017c) and only one study has examined teachers’ natural delivery of praise (Floress & Jenkins, 2015). Therefore, the purpose of this study is to examine middle (sixth through eighth grade) and high school (ninth through twelfth grade) teachers’ natural use of praise (GP and BSP) and reprimand (mild, medium, harsh, and gesture) delivery to individual (one student), small clusters (two to six students), and large groups (seven or more students).

**School-wide Positive Behavior Intervention Supports**

School-wide Positive Intervention Supports (SWPBIS) is a systems-level framework that utilizes team- and empirically-based decision-making strategies to implement positive support systems for teaching and proactively managing all students’ behaviors in all school-related settings (i.e., classroom, hallways, library, school bus,
cafeteria, playground; Frey, Lingo, & Nelson, 2010; Reinke et al., 2013; Sugai & Horner, 2002). In practice, SWPBIS aims to prevent student inappropriate behavior and reinforce student appropriate behavior, as well as promote a positive overall school environment (Bradshaw, Reinke, Brown, Bevans, & Leaf, 2008; Nelson, Martella, & Marchard-Martella, 2002; Pas & Bradshaw, 2012). There are four components to the SWPBIS framework: 1) Define and teach appropriate student behavior, 2) Acknowledge and strengthen appropriate student behavior, 3) Address problem behavior in a systematic and fair manner, and 4) Evaluate the program to determine program effectiveness (Reinke et al., 2013).

Acknowledging and strengthening appropriate student behavior consistently across all school environments is important because it teaches students what to do and helps build positive school and classroom climates (Reinke et al., 2008; Reinke et al., 2013; Sugai & Horner, 2002). Teacher praise is an easy and efficient way to strengthen student appropriate behavior and promote a positive school climate. Praise is a simple, efficient, and cost-effective strategy that teachers can use to increase appropriate and decrease inappropriate student behavior in their classroom and other school settings (Jenkins et al., 2015; Reinke et al., 2013). This functional relation between teacher praise and student behavior is well-established (Haydon & Musti-Rao, 2011; Madsen, Becker, & Thomas, 1968; Pisacreta, Tincani, Connell, & Axelrod, 2011).

Teachers play a crucial role in ensuring that praise is delivered consistently to all students exhibiting appropriate expectations, especially within the classroom setting. However, the SWPBIS framework does not have a set criterion for how to use praise. Some SWPBIS trainings provide praise guidelines or recommendations. For example, a
PBIS classroom management PowerPoint found on the Illinois School Board of Education website (http://www.isbe.net/Documents/pbis-clsrm-mgmt.pdf) recommended that praise should be delivered immediately, should identify the specific behavior that was approved, should be used with eye contact, should be used frequently, and should be used five times to every reprimand given (Hoke & Sobel, 2010). There are various problems with these recommendations: 1) they have not been translated into a set criterion to help evaluate SWPBIS implementation integrity, 2) they have not been experimentally manipulated so we do not know which recommendations are most effective (Floress et al., 2017c), 3) it is unclear whether these recommendations are exhaustive (i.e., are there additional recommendations?), and 4) there are limited studies examining how often teachers’ naturally use praise (Jenkins & Floress, 2015). Because of these issues, it is difficult to know how close teachers are to following these recommendations with or without training.

When schools evaluate their SWPBIS programs to determine program effectiveness, student outcome data is commonly measured (i.e., student discipline referrals; Allday et al., 2012), rather than teacher implementation of the SWPBIS components (e.g., whether teachers use specific praise and how they are using it; Fullerton, Conroy, & Correa, 2009). By using a SWPBIS framework, the goal is to observe positive changes in student behavior; however, if staff are not implementing the SWPBIS components as intended (e.g., using praise to strengthen appropriate behavior), positive student changes are unlikely (Herschell, Calzada, Eyberg, & McNeil, 2002).

Furthermore, investigating teachers’ delivery of praise is likely to inform professional development needs and enhance existing recommendations. Understanding
how teachers’ use praise in the absence of intervention or training could allow comparisons to be made between teachers’ typical practice and current praise recommendations. Once teachers’ praise to reprimand delivery is examined, future research can examine whether one delivery method (e.g., individual, student cluster, large group) reliably leads to behavioral improvements via experimental manipulation. Knowing this would inform schools on the integrity in which their staff are implementing this important PBIS component. Therefore, studying how teachers naturally deliver praise is likely to increase the effective use of praise within the SWPBIS framework. The next section will review praise to reprimand research and recommendations.

### Praise and Reprimand

**Definitions.** Praise is defined as an “expression of approval or admiration that goes beyond feedback for a correct response” (Floress et al., 2017c, p. 227). Early studies (Beaman & Wheldall, 2000; White, 1975) defined praise and reprimand as verbal statements only, but then gestures (i.e. “approving or disapproving gestures”) were included and tokens and tangibles were also used in praise definitions (Nafpaktisis, Mayer, & Butterworth, 1985). Today, praise is commonly identified as general praise (GP) or behavior-specific praise (BSP; Floress & Jenkins, 2015; Floress & Jacoby, 2017a; Floress, Berlinghof, Rader, & Riedesel, 2017b; Floress, Rock, & HaileMariam, 2017d; Reinke, Stormont, Herman, Wachsmuth, & Newcomer, 2015).

GP is defined as “any nonspecific verbalization or gesture that expresses a favorable judgment on an activity, product, or attribute of the student” (e.g., “Thank you” or “Good job;” Floress & Jenkins, 2015, p. 4). BSP is defined as “any specific verbalization or gesture that expresses a favorable judgment on an activity, product, or
attribute of the student” (e.g., “Thank you for sitting so patiently;” Floress & Jenkins, 2015, p. 4). BSP is purported to be superior to GP because BSP specifies the behavior that is being praised (i.e., “Thank you for sitting so patiently”), whereas general praise does not (i.e., “Thank you;” Anderson, Everton, & Brophy, 1979; Brophy, 1981). BSP likely makes a clear connection between the praise statement and the child’s desired behavior that is more salient compared to GP (Floress & Jenkins, 2015; Hawkins & Heflin, 2011).

Reinke et al. (2015) defined reprimands as explicit or harsh. Explicit reprimand was defined as a “verbal comment or gesture by the teacher to indicate disapproval of behavior; concise (brief) in a normal speaking tone” (e.g., “You are not making good choices;” Reinke et al., 2015, p. 163). Harsh reprimand was defined as a “verbal comment or gesture to indicate disapproval of behavior using a voice louder than typical for the setting or harsh, critical, or sarcastic tone” or lasting for 30 seconds or longer (e.g., “I am very disappointed in you!”; Reinke et al., 2015, p. 163; Reinke et al., 2013).

**Operant theory.** Operant theory is a well-established behavior modification technique that uses principles of reinforcement and punishment to modify the likelihood that a target behavior will reoccur. Conceptually, praise (when used effectively) is a form of positive reinforcement in that praise is what is added (positive) and appropriate behavior is what increases (reinforcement; Maag, 2001). For example, if an individual student raises his hand to answer a question and, after calling on the student, the teacher says, “thank you for raising your hand,” the BSP that was added in response to the individual student raising his hand has been effective if the student raises his hand in the future to answer another question. Conceptually, reprimand (when used effectively) is a
form of positive punishment in that reprimand is what is added (positive) and inappropriate behavior is what decreases (punishment). For example, if a student talks to a peer sitting next to her while the teacher is lecturing and, in response, the teacher says to the student, “stop talking to your neighbor and pay attention,” the reprimand that has been added in response to the inappropriate talking behavior has been effective if, in the future, the student is less likely to talk while the teacher is lecturing. However, teachers’ frequent use of disapproval and/or reprimand are not always effective forms of punishment (Nafpaktitis, Mayer, & Butterworth, 1985) because teacher reprimand can increase student inappropriate behavior when the students’ inappropriate behavior is maintained by attention. Therefore, when using praise as a Tier 3 (targeted) intervention strategy, it is important to assess the function of (or what is maintaining) a student’s inappropriate behavior. Furthermore, to avoid inadvertently maintaining student inappropriate behavior via reprimands, it is important for teachers to focus on identifying student appropriate behavior (praise; Nafpaktitis et al., 1985).

In the current study, the same praise definitions described above will be used. However, reprimand definitions will be expanded into four categories. In a video pilot study, Floress, Zoder-Martell, Beaudoin, and Yehling (under review) found that teacher reprimand could also be coded as medium and gestural. Medium reprimand was coded when a teacher used sarcasm or another critical statement that went beyond mild redirection, and gestural reprimand was coded when a teacher physically redirected or positioned a child to a preferred area (Floress et al., under review). Complete operational definitions used in the current study are described in the method section. Next, recommended praise and reprimand rates are reviewed.
**Recommended rates.** Although no study has experimentally examined how frequently teachers’ need to praise to have a positive impact on student class-wide behavior, recommendations exist. Floress and Jenkins (2015) reviewed the praise training literature, where teachers were trained to use high rates of praise with students targeted for intensive intervention (Tier 3) and found that positive changes in student behavior were observed when teachers used BSP at a rate of 3-5 times per 10 min (or 18-30 times per hour). The praise to reprimand ratio of 5:1 is also commonly recommended (Hoke & Sobel, 2010; Gottman, Coan, Carrere, & Swanson, 1998). The next section will further explore studies that support high teacher praise to reprimand ratios.

**Research supporting high praise to reprimand ratios.** Nafpaktitis and colleagues (1985) observed praise and reprimand rates in relation to students’ disruptive and off-task behaviors during teacher-led instruction in sixth through ninth grade classrooms and found that the frequency of teacher praise and reprimand was related to student behavior in the classroom. Their study differed from previous studies (Heller & White, 1975; White, 1975) in two ways: the researchers included verbal and nonverbal definitions of praise and reprimand, and they recorded praise and reprimand only when it followed students’ behavior. Nafpaktitis et al. found that classrooms with low rates of teacher reprimand had low rates of student off-task and disruptive behavior, whereas those with high rates of teacher reprimand had high rates of student off-task and disruptive behavior. Nafpaktitis et al. also found that high rates of inappropriate approvals (i.e., praising off-task behaviors) were related to high rates of disruptive behaviors, whereas high rates of appropriate approvals were related to low rates of disruptive and off-task behaviors. Floress et al. (2018) found a similar relation between
teacher praise and student off-task behavior, in that classrooms with higher BSP were observed to have less student off-task behavior. However, a similar relation was not found between GP and student off-task behavior, which may stress the importance of specificity when describing appropriate student behavior (i.e. using BSP; Anderson et al., 1979; Brophy, 1981). The Floress et al. (2018) finding that classrooms with more BSP had fewer incidences of student off-task behavior may also stress the importance of precision when defining subcategories of praise and reprimand. For instance, praise and reprimand can be reliably measured using various subcategories (Anderson et al., 1979; Burnett & Mandel, 2010; Reinke et al., 2013; Sutherland, Wehby, & Copeland, 2000) and each subcategory may not equally influence student behavior.

Although dated, Heller and White (1975) also found a relation between frequency of teacher reprimand and student behavior. In this case, teachers used more reprimands with students with low reading ability (38.1 reprimands per hour) compared to students with high reading ability (24.3 reprimands per hour). Although the current study will not compare praise to reprimand ratios among low and high achieving students, this finding is important because students with academic difficulties are more likely to be reprimanded. This is particularly concerning because students with academic difficulties are also at an increased likelihood of having behavior problems, which may be related to receiving more critical feedback (Good & Grouws, 1977; Heller & White, 1975). The next section reviews the literature that has examined teachers’ natural use of praise and reprimand.

**Natural rates.** Measuring how frequently teachers’ praise and reprimand naturally (without training or consultation) may inform professional development needs.
Unfortunately, few studies have examined teachers' natural use of praise and reprimand. White (1975) investigated teachers’ natural praise to reprimand ratios by directly observing teachers’ use of verbal “approval” and “disapproval” in first through twelfth grade classrooms and found that as grade level increased, teachers naturally praised less. Teacher reprimands also declined, but less dramatically than praise. Early elementary (first through second grade) teachers delivered an average of 43.7 total praises and 33.2 reprimands per hour (1.3 to 1 ratio), late elementary (third through fifth grade) teachers delivered an average of 21.0 praises and 31.2 reprimands per hour (0.67 to 1 ratio), middle school (sixth through eighth grade) teachers delivered an average of 17.1 praises and 28.1 reprimands per hour (0.61 to 1 ratio), and high school (ninth, tenth, and twelfth grade) teachers delivered an average of 8.4 praises per hour and 15.0 reprimands per hour (0.56 to 1 ratio; Floress, Caldwell, & Yehling, in preparation; White, 1975). Teachers’ natural praise to reprimand ratios range from 1.3 to 1 (in early elementary) to 0.56 to 1 (in high school; White, 1975).

Heller and White (1975) directly observed teachers’ natural use of verbal praise and reprimand during instruction among seventh through ninth grade teachers. Overall, the natural rate of praise and reprimand across all teachers was 17.1 praises and 31.2 reprimands per hour (0.55 to 1 ratio), which is a similar ratio to what White (1975) reported among six through eighth grade classrooms (i.e., 0.61 to 1 ratio). Furthermore, Nafpaktitis et al. (1985) observed sixth through ninth grade teachers and found that they delivered 54.0 praises and 17.4 reprimands per hour (3.1 to 1 ratio), which was a higher praise to reprimand ratio compared to White (1975) and Heller and White (1975). One explanation for the elevated ratio reported by Nafpaktitis et al. (1985) may be that, unlike
White (1975) and Heller and White (1975), the definitions of praise and reprimand included nonverbal (i.e., gestures, tangibles) praise and reprimand.

Thomas, Presland, Grant, and Glynn (1978) observed praise to reprimand ratios among seventh grade classrooms in New Zealand. They found that teachers delivered 12.0 praises and 34.9 reprimands per hour (0.34 to 1 ratio), a similar ratio to Heller and White (1975) and White (1975) in the United States. However, Wheldall, Houghton, and Merrett (1989) found that sixth through tenth grade teachers delivered 38.3 praises and 31.9 reprimands per hour (1.22 to 1 ratio), a similar ratio to Nafpaktitis et al. (1985) among sixth through ninth grade teachers (3.1 to 1 ratio).

In summary, the praise to reprimand ratios ranged from 0.34 to 1 (seventh grade; Thomas et al., 1978) and 3.1 to 1 (sixth through ninth grade; Nafpaktitis et al., 1985). It is important to note that the 3.1 to 1 ratio is an outlier considering the next largest ratio was 1.3 to 1 (early elementary; White, 1975). Furthermore, Nafpaktitis et al. included gestures in their definitions, which may have influenced their results. Although White (1975) found a higher praise to reprimand ratio among younger grades (1.3 to 1); overall, teachers reprimanded more frequently than they praised. This contrasts with the current 5 to 1 (praise to reprimand) ratio recommendation. However, it is important to keep in mind that the most recent study in this summary was published over three decades ago and may not reflect teacher ratios today.

The studies reviewed so far have reported total praise to total reprimand ratios. Reinke, Herman, and Stormont (2013) examined teacher praise and reprimand ratios by subcategories. Reinke et al. observed 33 classrooms (kindergarten through third grade) during teacher-led instruction and found that, on average, teachers delivered 33.6 total
praises per hour (25.8 GP and 7.8 BSP per hour) and 40.2 total reprimands per hour (39.0 explicit per hour and 1.2 harsh per hour). Overall, teachers in this study used more reprimands than praise (0.84 to 1 praise to reprimand ratio), which is consistent with the studies from the 70s and 80s reviewed previously. Reinke et al. also found that teachers used more GP than BSP and more explicit reprimands than harsh reprimands. The BSP to total reprimand ratio was 0.19 to 1, whereas the BSP to harsh reprimand ratio was 6.5 to 1.

Recently, Floress et al. (in preparation) examined teacher praise and reprimand ratios using the subcategories Reinke et al. used (i.e., explicit/mild and harsh), but also added two additional categories (i.e., medium and gesture). In this study, 47 classrooms (sixth through twelfth grade) were observed during teacher-led instruction. On average, teachers delivered 11.7 total praises per hour and 10.4 total reprimands per hour. Overall, teachers in this study praised as often as they reprimanded (1.1 to 1 praise to reprimand ratio).

**Praise Delivery**

Examining how teachers’ deliver praise (i.e., who teachers direct their praise statement/gesture to) may influence the effective use of praise. Researchers have argued that BSP is more effective because students easily make a connection between teacher approval and the specific behavior performed (Anderson et al., 1979; Brophy, 1981). In other words, BSP may be a more salient stimulus compared to GP (Floress & Jenkins, 2015). Similarly, when teachers deliver praise to an individual student rather than a large group (e.g., the entire classroom), individual praise delivery may be more salient
compared to large group delivery. Unfortunately, praise research has had a narrow focus and, therefore, few studies have examined praise delivery.

Floress et al. (2017c) reviewed the published praise research literature ranging from 1981-2015. Results indicated that, out of 29 studies, the most frequently studied praise characteristics included contingent (100%), individual (97%; i.e., praise delivered to a single student), behavior-specific (90%) and verbal praise (90%), whereas the most infrequently studied praise characteristics included physical (17%), written (14%), private (3%), and public (3%). This is important to the current study because, although individual praise has been frequently studied, the natural rates of other praise delivery characteristics (i.e., small clusters, large groups) has only been reported in one other study (Floress & Jenkins, 2015). Floress and Jenkins (2015) found that there was a statistically significant difference in delivery of praise among Kindergarten teachers. They found that Kindergarten teachers praised large group (21.6 praises per hour) and individual students (24.7 praises per hour) significantly more often than small groups (1.0 praises per hour) of students.

Furthermore, according to Floress et al. (2017c), only 5 (17%) of the 29 studies reviewed the characteristics of teacher praise in the absence of training. In other words, few studies have examined teachers’ natural use of praise (in the absence of training). It is important to study teachers’ natural praise rates because these rates are more likely to give an accurate estimate of what teachers do “day-to-day.” Knowing what teachers do day-to-day without training or intervention is important because it is likely to inform universal professional development needs. In terms of praise delivery, only one study has examined how teachers’ naturally deliver praise.
Floress and Jenkins (2015) examined four kindergarten teachers’ natural delivery of praise. In their study, praise was examined by praise type (i.e. GP and BSP) and delivery type (i.e. individual students, small student clusters, and large groups of students). Floress and Jenkins (2015) found that teachers naturally praised individual students (24.7 total praises) and large groups of students (i.e., seven or more students; 21.6 total praises) more frequently than they praised small student clusters (i.e., two to six students; 1.0 total praise). Floress and Jenkins (2015) also examined praise by delivery and praise type and found that teachers used more GP than BSP when delivering praise to individual (5.5 BSP and 19.2 GP), large groups (3.0 BSP and 18.6 GP), and small clusters of students (0.3 BSP and 0.7 GP).

The average rate of total praise across all four kindergarten teachers was 47.3 per hour, which is consistent with the total praise rate reported by White (1975; 43.7 praises per hour) among first and second grade teachers. Total GP was also delivered more frequently than total BSP (38.5 GP and 8.8 BSP per hour; Floress & Jenkins, 2015). In summary, there was a statistically significant difference between praise delivered to individual students and small groups of students as well as large groups of students and small groups of students; but not a significant difference between delivery of praise to individual students and large groups of students. No other study had examined teacher delivery type regarding praise. Additional research is important in determining whether prior findings can be replicated. As mentioned earlier, determining how teachers deliver praise naturally (without training) is likely to inform professional development and future research, which may lead to best practice recommendations. Furthermore, this research (which examines infrequently studied praise characteristics) is likely to bring attention to
the various understudied facets of praise that may also lead to research on the effective use of this easy to implement strategy.

Saliency. It is important to consider the theoretical underpinnings for why delivery may influence the effective use of praise and, therefore, be an important area of study. As mentioned earlier, the way in which teachers’ deliver praise may be more salient to students. Saliency is described as the “discriminability” (p. 745) or “distinctiveness of the behavior-consequence relations” (Fisher, Pawich, Dickes, Paden, & Toussaint, 2014, p. 740). In other words, the delivery of praise (i.e., to an individual student versus the entire class) may make the relation between the behavior and praise statement more or less salient (discriminable or distinctive) to those receiving the praise.

BSP is purported to be more effective because students can easily make a connection between their behavior and teacher approval (Conroy, Sutherland, Snyder, Al-Hendawi, & Vo, 2009). Anderson et al. (1979) argued that one reason teacher praise is ineffective is because teachers often use GP (i.e., praise that does not specify the approved behavior), which leads to an unclear connection between the praise and behavior for the student. Floress and Jenkins (2015) further argued that learning occurs more effectively when BSP is used rather than GP because BSP is more salient or discriminable, thus making a clearer connection between the behavior and the praise statement. Also, Floress and Jenkins (2015) extended the argument of saliency to individual praise delivery by stating that, like BSP, praise may be more salient to specific children when they are praised individually rather than in a small cluster or large group. Thus, individually delivered praise may be more effective than other delivery methods because it makes a clear connection (between approval and the behavior performed) and
The child receives one-on-one attention (which is a strong reinforcer for most children; Cooper, Heron, & Heward, 2007)

Another example of the importance of saliency is in the effective delivery of instructions. When teachers are trained to deliver instructions effectively, they stand close (i.e., proximity) to the student and make eye contact (Everett, Olmi, Edwards, & Tingstrom, 2005). Close proximity is not only an important component of effective instruction delivery, but also decreases problematic student behaviors (Oliver, Oxener, Heam, & Hall, 2001) and increases student academic engagement (Conroy, Asmus, Ladwig, Sellers, & Valcante, 2004). Effective instructions are also likely to be delivered to one person, especially when standing in close proximity and giving eye contact. Standing close and making eye contact increases the likelihood that the student will follow directions because it makes the directions more salient or noticeable to the student. When teachers’ instructions for completing academic tasks are more noticeable to a student, he or she is more likely to engage in the instructions rather than problematic behavior, thus saliency in how instructions are delivered likely influences effective instruction delivery (similarly to how saliency may influence effective praise).

Identifying a student individually with BSP may be more powerful (i.e. strengthen appropriate behavior more readily) than if that same BSP was delivered to a large group of students. In other words, it is possible that both BSP and individual delivery, in combination, has the strongest influence on student appropriate behavior. Floress and Beschta (2018) made a similar argument for the use of diverse praise (DP), which was defined as “the delivery of approval by the teacher to students in a variety of distinguishable ways” (p. 6). Floress and Beschta argued that like BSP, DP may be a
discriminant and relevant stimulus that signals the likelihood of praise to students and, when combined with specificity, may be even more powerful than BSP alone. In other words, DP may work similarly to BSP in that it is more salient and obvious than GP. Therefore, a teacher who uses DP may become a discriminative stimulus more easily than a teacher who uses GP; however, unlike BSP and GP, DP is examined by considering a teachers’ collective use of praise, so a teacher who uses DP might strengthen appropriate behavior more readily than a teacher who uses BSP alone. For example, a teacher who uses a variety of rewards, such as offering tangibles (i.e., special pencils), edibles (i.e., M&Ms), and extra free time for a desired behavior (i.e., returning their homework on time), may be more effective at getting the child to continue the desired behavior than a teacher that only offers one type of reinforcement (Floress & Beschta, 2018). In summary, the delivery of teacher praise has been understudied. With additional research, it is possible that delivery, in combination with other praise characteristics, may influence the effective use of praise.

Saliency may also be important to consider when using reprimands. For example, a reprimand that individually identifies a single student who is doing something inappropriate or wrong may be more powerful (i.e., strengthen or weaken inappropriate behavior) than reprimanding an entire classroom collectively. This is important to consider for two reasons. One, students with problem behaviors are more likely to be individually reprimanded (Gable, Bullock, & Evans, 2006; Gable et al., 2009; McKerchar & Thompson, 2004) and second, teachers are less likely to praise students with problem behaviors (Gable, Hendrickson, Young, Shores, & Stowitschek, 1983; Shores et al., 1993; Wehby, Symons, & Shores, 1995). It is possible that students who receive more
individual attention (albeit reprimand) than praise are more likely to continue to display inappropriate behavior because that behavior more readily (and reliably) leads to teacher attention (Alstot & Alstot, 2015; Downing, Keating, & Bennett, 2005). Considering this, a teacher who uses high rates of individually delivered BSP may evoke more appropriate student behavior, whereas a teacher who uses high rates of individually delivered reprimands may evoke more disruptive and off-task student behavior. In terms of praise to reprimand ratio, if praise and reprimand is strengthened by individual delivery, then it would be important for teachers to have high BSP, individual praise and low rates of total, individual reprimands.

**Dispersion.** In addition to saliency, dispersion and magnitude of the reinforcer may offer another explanation for why delivery may influence the effective use of praise. Dispersion is the act of distributing (i.e., delivering) something (i.e., reinforcer) over a wide area (Oxford English Dictionary). For example, a teacher can disperse praise to an individual, small cluster or large group of students and the magnitude of the praise may change depending on the delivery. Magnitude is defined as the “importance, quality, or caliber of something” (Merriam-Webster Dictionary) and it is important to consider when talking about strengthening behavior because how praise is delivered may change the magnitude of the praise (i.e., reinforcer). For example, it is reasonable to hypothesize that when praise is distributed to a large group, it might have diminished reinforcer magnitude for any single individual. For example, if you have one cupcake and it is distributed to 20 students (who all like cupcakes) in the class instead of one child, the cupcake may maintain its desirable strength; however, the magnitude is likely diminished for any individual and therefore less effective in strengthening behavior. On the other hand,
naming a single student (e.g., Nicholas) specifically might strengthen the magnitude of the praise for that individual, but completely neutralize it for others. It may be important to deliver praise widely (e.g., slice the cupcake 20 ways) to prevent behavior problems (e.g., Universal or Tier 1) and at other times it may be important to give the entire cupcake to Nicholas (e.g., Tier 2 or Tier 3 intervention). No study has examined the extent to which middle and high school teachers deliver praise to individual, small student clusters, or large groups. This is a worthy area of research as it is likely to draw attention to how teachers naturally use praise and inform professional development related to using praise within multi-tiered systems of support.

**Literature Summary and Impact of Proposed Research**

Many teachers find managing student behavior one of the most challenging parts of their job (Barrett & Davis, 1993; Ingersoll, 2001; Reinke et al., 2011) and report feeling unprepared (Reinke et al., 2011). Furthermore, when teachers have difficulty managing student behavior there are negative outcomes for both teachers and students (Curtis, 2012; Hanushek et al., 2001; Ingersoll, 2001; Reinke et al., 2013; Rivkin et al., 2005). This is a concern because teachers today are faced with more student behavioral concerns than ever before, possibly related to the fact that more students are receiving special education services within the general education environment (Individuals with Disabilities Act, 2004). Thus, it is important that teachers are trained to use easy to implement, effective, classroom management strategies, like praise.

Measuring teachers’ praise to reprimand ratio is one way to assess teachers’ effective classroom management. For instance, when teachers are trained to increase their use of praise and decrease their use of reprimand, student behavior improves (Gable et
Few studies have examined teachers’ natural use of praise and reprimand in the general education classroom and only one study (Floress & Jenkins, 2015) has examined teachers’ delivery of praise to individuals (one student), small clusters (two to six students) and large groups (seven or more students) in general education classrooms. Most praise research focuses on training teachers to deliver targeted praise to single students with identified behavior concerns (Kamps et al., 2006; Lalli et al., 1993). Thus, it is unclear how teachers (who are not receiving training) deliver praise and reprimands to student’s class-wide.

White (1975) was one of the first to directly observe teachers’ natural use of praise and reprimand in the classroom and found that teachers’ use of praise declined as grade level increased. The commonly recommended praise to reprimand ratio is 5 to 1 (Hoke & Sobel, 2010; Gottman et al., 1998) and previous findings suggest that the average rate of natural total praise to total reprimand is approximately 1 to 1 (Thomas et al., 1978; Heller & White, 1975; White, 1975; Nafpaktitis et al., 1985). However, these studies are dated and most of these studies examined total praise and total reprimand rates (rather than breaking down rates into praise and reprimand type). Floress and Jenkins (2015) were the first to examine how kindergarten teachers’ naturally delivered praise and found that teachers praised large group and individual students significantly more often than small groups of students. However, Floress and Jenkins (2015) did not measure teacher reprimands. The natural rate of praise and reprimand delivery among middle school and high school teachers has never been studied.

In summary, there are gaps in the literature regarding middle (sixth through eighth grade) and high school (ninth through twelfth grade) teachers’ natural use of praise and
reprimand in general and no study has examined delivery type (i.e., to individual, small clusters, or large groups of students) with middle and high school teachers. Examining how teachers deliver praise and reprimand is an important area of investigation because it may inform professional development and ignite future research regarding the study of effective praise use within a multi-tiered system of support (e.g., SWPBIS). It is important to have a better understanding of what teachers do in the absence of training because this information can be compared to best practice recommendations (e.g., 5 to 1 praise to reprimand ratio) and may inform professional development. Furthermore, specifically understanding how teachers’ delivery of praise may spur future research related to strategically using praise. For example, it may be helpful for teachers to individually praise certain students, while also maintaining a high frequency of praise to large groups of students. In addition, praise and reprimand delivered individually may be more salient or discriminable (compared to praise and reprimand delivered to student clusters or large groups) and thus may be more likely to influence student behavior compared to other delivery methods. Therefore, the overall aim of this study is to examine middle and high school teachers’ praise and reprimand delivery. The following research questions were posed:

1. What is the average rate of praise delivery by praise type among middle and high school teachers? Floress and Jenkins (2015) found that kindergarten teachers used 19.2 GP and 5.5 BSP (per hour) with individual students; 0.7 GP and 0.3 BSP (per hour) with small student clusters; and 18.6 GP and 3.0 BSP (per hour) with large groups of students. Since prior researchers suggest that praise rates decline as grade level increases (White, 1975), it was hypothesized that rates for praise
delivered to individual and large groups of students would occur more frequently, but overall rates of praise would be lower compared to kindergarten.

2. What is the average rate of reprimand delivery by reprimand type among middle and high school teachers? Reinke et al. (2013) examined teachers reprimand using two subcategories or types (i.e., explicit/mild and harsh) and found that teachers (kindergarten through third grade) delivered 39.0 explicit/mild reprimands per hour and 1.2 harsh reprimands per hour. However, no study has examined reprimand delivery; therefore, a hypothesis about the average rate of reprimand delivery by reprimand type among middle and high school teachers was not made.

3. Do middle and high school teachers deliver praise more frequently to large groups of students rather than small student clusters or individual students? Floress and Jenkins (2015) found that Kindergarten teachers praised large group and individual students significantly more than small student clusters. Therefore, it was hypothesized that middle and high school teachers would praise large and individual students more than small clusters.

4. Do middle and high school teachers deliver reprimands more frequently to large groups of students rather than small student clusters or individual students? No research has been conducted on the frequency of reprimand delivery type, and thus, no specific hypothesis was made.

5. Is there a relation between praise and reprimand delivery type? For instance, do teachers who use more individually delivered praise, more likely to use more individually delivered reprimand? No research has examined whether teachers
who use more individual praise are more likely to use more individual reprimand, therefore no specific hypothesis were made.

**Method**

**Setting and Participants**

This study was part of a larger data collection project measuring general education teachers’ (sixth through twelfth grade) praise and reprimand rates in general education classrooms. For the current study, 66 general education teachers from 13 middle and high schools in Central Illinois participated. Of the 66 participants, 25 were middle school teachers (sixth through eighth grade) and 41 were high school teachers (ninth through twelfth grade; see Table 1). Every teacher held a teaching certificate and a bachelor’s degree. Sixty-eight percent (n = 45) of the participants also held a master’s degree. Teachers who participated taught classes in which 20 minutes of teacher-led instruction could be observed. For example, teachers who taught traditional, lecture-based subjects such as English, math, science, and social studies were invited to participate. General education teachers whose classroom makeup included general and special education students were also invited to participate. Teachers excluded from the study included those who taught classes that were not conducive to at least 20 minutes of teacher-led instruction, such as band, choir, and physical education.

Most participants identified as female (71%; n = 47) and white/Caucasian (98%; n = 65). Sixty-one percent of teachers had been teaching for 15 or fewer years (20% had taught for 11-15 years, 23% had taught for 6-10 years and 18% had taught for 1-5 years). Fifty percent of teachers reported that they had not taken a behavior management class as part of their teacher education program (either undergraduate or graduate training). Of the
teachers who reported to have taken a behavior management course, 65% reported their highest level of education was a master’s degree. All teachers received a small incentive for participating in the study (i.e., the first 40 participants received a $5 gift card and all additional participants received chocolate).

Materials and Instruments

**Teacher demographic questionnaire.** The Teacher Demographic Questionnaire (see Appendix A) contained 13 questions. Teachers reported their age, sex, race, years of teaching experience, level of education, type of teaching certificate (i.e., general education or special education), specific teacher training (i.e., crisis management or reading interventionist training) and location of training, the name of the class to be observed (i.e., Freshman Algebra, Senior English), and a description of the student population in the class observed (i.e., all general ed., some general ed. and some special ed.). Teachers were also asked to rate the behavioral difficulty of the class compared to other classes they currently taught or had taught in the past.

**Teacher observation form.** The Teacher Observation Form (see Appendix B) was used by the researcher and trained research assistants during 20-minute direct observations of teacher-led instruction. Space at the top of the form was used to record the following information: observer’s name, date of observation, observer’s status (i.e., primary observer or reliability observer) and partner’s name, school ID, number of students in the class, and the teacher ID. The form also contained 20, 1-minute intervals. For each interval, there were spaces provided to record praise type (GP and BSP), reprimand type (mild, medium, harsh, and gesture), and delivery type (large group, small cluster, and individual). The following operational definitions for praise type, reprimand
type, and delivery type were used during observations to record and code teacher behavior.

**Praise type.** Praise was coded as either BSP or GP. BSP was defined as any specific verbalization or gesture that expressed a favorable judgment on an activity, product, or attribute of the student (e.g., “I like how you are sitting still”). GP was defined as any nonspecific verbalization or gesture that expressed a favorable judgment on an activity, product, or attribute of the student (e.g., “great” or “perfect”; see Appendix C).

**Reprimand type.** Reprimands was coded as either mild, medium, harsh or gesture. A mild reprimand was defined as any verbal comment (using a normal speaking tone) that indicated disapproval of a student(s) behavior. The verbal comment could be an instruction following student misbehavior. It could also be concise (brief) and/or referred to as a “redirection” of student behavior. Disagreeing with a student with the absence of sarcasm or a critical tone was considered a mild reprimand (e.g. “No thank you” or “That is not how we treat our friends”; see Appendix C).

A medium reprimand was defined as any verbal comment (using a sarcastic or critical tone) that indicated disapproval of a student(s) behavior. The verbal comment could be in the form of a question that was disapproving and had a mocking, rude, or critical tone (e.g., “Is that your best work?” or “No its not cold in here!”). A reprimand would be recorded as a medium reprimand if the teacher disagreed with the child using a critical tone (e.g., “I don’t remember telling you to talk to your friends,” said in a sarcastic tone).
Harsh reprimands included any verbal comment (using a louder than typical tone for the setting) that indicated disapproval of a student(s) behavior. A reprimand could be recorded as harsh if it implied negative consequences (e.g., a threat) or was a prolonged discussion (30 sec or longer) about misbehavior (e.g., “One more disruption and there will be extra homework,” or “How many times do we need to go over _____?”).

A gestural reprimand was coded when the teacher used any gesture (without speaking) that indicated disapproval of student(s) behavior (e.g., hands on hips). An example of a gestural reprimand could have also included physically guiding the child’s body to a preferred area or activity (e.g., shaking head to communicate “no, stop doing that” or putting hands on hips and making a disapproving look toward the student).

**Delivery.** Floress and Jenkins (2015) developed the delivery definitions that were used in this study. Both praise and reprimands were coded by type of delivery, either large group, small student cluster, or individual (see Appendix D). A praise or reprimand was coded as large group when it was directed toward seven or more students without using individual student names, physically touching individual students, making eye contact to a specific individual or small group, or gesturing to an individual student or small group. An example of praise delivered to a large group would be “Wow! You guys did an amazing job on your math assignment!” An example of reprimand delivered to a large group would be “The class is way too loud right now and needs to settle down.”

A praise or reprimand was coded as small cluster when it was directed toward two to six students who were identified by the teacher by describing the small group, using the group’s name, or gesturing to the group. For example, “I like how the front row is prepared and ready to learn” could have been coded as praise to a small student cluster.
and “The back row needs to stay in their seats” could have been coded as reprimand to a small student cluster.

A praise or reprimand was coded as individual when it was directed toward a single (one) student who was identified by the teacher by using the student’s name, physically touching the student, gesturing to the student, or looking directly at the student. For example, “You did a great job, Lucy” could have been coded as individual praise delivery and “That is not appropriate, Jake” could have been coded as individual reprimand delivery.

**Cued Audio Tape.** A cued audio tape that identified the observation interval that was being coded (e.g., 1, 2, 3) was used to ensure standardization and keep observers aligned with the correct intervals. The recording was an mp3 file that was used on an electronic device, such as a cellphone. Earbuds were plugged into the electronic device used to play the mp3 file and the observer(s) placed one ear bud into their ear (to hear the intervals) and left the other ear bud out of their ear (to hear the teacher).

**Direct Observation Training**

As mentioned earlier, this study was part of a larger study in which the primary researcher and research assistants were trained to conduct direct observations in the classroom. The primary researcher and research assistants were first provided with a list of operational definitions for praise type, reprimand type, and delivery type. Examples and non-examples of each type of praise, reprimand, and delivery were discussed in a group format and questions were encouraged. Next, each trainee coded three training videos and needed to demonstrate 80% or better interobserver agreement (IOA) on each of the videos with a previously trained observer. Then the trainee coded at least one live,
classroom observation with a trained observer with 80% or better IOA and at that point was considered trained and could start collecting direct observation data independently.

**Interobserver agreement.** Of the 66, 20-minute observations, 37.87% were collected using two observers so interobserver agreement (IOA) could be calculated for individual, small cluster, and large group praise and reprimand. IOA was calculated using percent agreement (i.e., the number of agreements divided by the number of agreements plus disagreements; Mudford, Taylor, & Martin, 2009). Average IOA for praise was: individual BSP (97.60%; 90-100%), small cluster BSP (100%; 100-100%), large group BSP (99.80%; 95-100%), individual GP (93.80%; 78-100%), small cluster GP (99.60%; 95-100%), large group GP (98.24%; 71-100%). Average IOA for reprimand was: individual mild (98.12%; 85-100%), small cluster mild (98.80%; 90-100%), large group mild (96.84%; 80-100%), individual medium (99.40%; 95-100%), small cluster medium (100%; 100-100%), large group medium (99.20%; 90-100%), individual harsh (100%; 100-100%), small cluster harsh (99.8%; 95-100%), large group harsh (100%; 100-100%), individual gestural (98.60%; 95-100%), small cluster gestural (99.80%; 95-100%), and large group gestural (100%; 100-100%). IOA percentages indicated consistent and acceptable reliability among observers.

**Procedures**

Prior to collecting direct observation data, approval from Eastern Illinois University’s Institutional Review Board (IRB) was obtained. Then administrator approval was secured from middle and high schools in Central Illinois. Teachers were recruited by sending emails that included a Teacher Recruiting Flyer (see Appendix E), which provided a brief explanation of what the study was about and what participants would be
asked to do. The teachers were not explicitly told that the observers would be collecting praise and reprimand rates. Instead, teachers were told that the observers were interested in observing middle and high school teachers' classroom management skills. Teachers who agreed to participate were given a copy of the Teacher Consent Form (see Appendix F) and asked to provide preferred observation times (i.e. times when they were likely to lead the class in teacher-led instruction for at least 20-minutes).

Then, the primary researcher or the primary researcher and a research assistant completed the 20-minute, direct classroom observation using the teacher observation form. Approximately 30% of the observations included two observers so that IOA could be calculated. To ensure teacher and school confidentiality, each teacher and school were assigned a code. The teacher code was used on all materials associated with that teacher (i.e. teacher observation form, demographics form). Each observation was completed in a single, 20-minute observation. After the observation was complete, the primary researcher gave the teacher the demographic questionnaire and instructed the teacher to leave the completed questionnaire in a sealed envelope in the school's front office for the primary researcher or observer to pick-up later. At the time of pick-up, chocolate was left for the teacher to thank them for participating in the study.

Data Analysis

To answer the first research question, what is the average rate of praise delivery by praise type among middle and high school teachers, the frequency of praise delivery (BSP individual; BSP small student cluster; BSP large group; GP individual; GP small student cluster; GP large group) per min and hour was totaled and averaged across middle and high school teachers.
To answer the second research question, what is the average rate of reprimand delivery by reprimand type among middle and high school teachers, the frequency of reprimand delivery (mild individual; mild small student cluster; mild large group; medium individual; medium small student cluster; medium large group; harsh individual; harsh small student cluster; harsh large group; gesture individual; gesture small student cluster; gesture large group) per min and hour was totaled and averaged across middle and high school teachers.

To answer the third research question, do middle and high school teachers deliver praise more frequently to large groups of students rather than small clusters or individual students, an analysis of variance (ANOVA) was conducted. ANOVAs are used when there is one independent variable with multiple conditions (i.e., delivery; individual, small cluster, large group) and one dependent variable (i.e., praise). An ANOVA allowed the researchers to examine if the praise delivered by middle and high school teachers differed significantly across delivery type (individual, small cluster, large group). Appropriate follow-up tests were conducted to determine where significant differences lied.

To answer the fourth research question, do middle and high school teachers deliver reprimands more frequently to large groups of students rather than small student clusters or individual students, an ANOVA was conducted. Similar to question three, an ANOVA allowed the researchers to determine whether the reprimand delivered by middle and high school teachers differed significantly across each delivery type (individual, small cluster, and large group). Appropriate follow-up tests were conducted to determine where significant differences lied.
To answer the fifth research question, is there a relation between praise and reprimand delivery type (e.g., do teachers who use more individual praise, also use more individual reprimand), three Pearson’s $r$ correlations were conducted. Pearson’s $r$ is a correlation coefficient used to determine if a relation between two variables (individual praise to individual reprimand, small cluster praise to small cluster reprimand, large group praise to large group reprimand) exists. The correction coefficient can range from 1 to 1, depending on the type of relation between the variables. Pearson’s $r$ values with a significance of 0.05 or lower were considered significant.

**Results**

**Observations**

The primary researcher and 5 research assistants collected frequencies of teacher praise type (i.e., GP and BSP), reprimand type (i.e., mild, medium, harsh, gesture) and delivery type (i.e., individual, small cluster, large group) during teacher-led whole group instruction. A total of 1,320 direct observation minutes (22 hours) were collected across 66 middle and high school teachers. Each observation consisted of one, 20-minute observation for each teacher.

**Frequency of Praise Delivery**

To answer research question one, praise frequency was analyzed. The average rate of total individual praise was 8.32 per hour (or 0.14 per minute; see Table 2). The average rate of individual GP was 6.91 per hour (or 0.12 per minute), and individual BSP was 1.41 per hour (or 0.02 per minute). The average rate of total small cluster praise was 0.59 per hour (or 0.01 per minute). The average rate of small cluster GP was 0.23 per hour (or 0.00 per minute) and small cluster BSP was 0.36 per hour (or 0.01 per minute).
Last, the average rate of total large group praise was 1.55 per hour (or 0.06 per minute). The average rate of large group GP was 1.32 per hour (or 0.02 per minute), and large group BSP was 0.23 per hour (or 0.04 per minute).

**Frequency of Reprimand Delivery**

To answer research question two, reprimand frequency was analyzed. Across all 66 middle and high school teachers, the average rate of total individual reprimand was 6.59 per hour (or 0.11 per minute; see Table 3). Across reprimand type, the average rate of mild individual reprimand was 4.27 per hour (or 0.07 per minute), medium individual reprimand was 0.95 per hour (or 0.02 per minute), harsh individual reprimand was 0.23 per hour (or 0.00 per minute), and gestural individual reprimand was 1.14 per hour (or 0.02 per minute). The average rate of total small cluster reprimand was 1.32 per hour (or 0.02 per minute). The average rate of mild small cluster reprimand was 1.00 per hour (or 0.02 per minute), medium small cluster reprimand was 0.05 per hour (or 0.00 per minute), harsh small cluster reprimand was 0.09 per hour (or 0.00 per minute), and gestural small cluster reprimand was 0.18 per hour (or 0.00 per minute). Last, the average rate of total large group reprimand was 4.10 per hour (or 0.07 per minute). The average rate of mild large group reprimand was 3.68 per hour (or 0.06 per minute), medium large group reprimand was 0.27 per hour (or 0.00 per minute), harsh large group reprimand was 0.01 per hour (or 0.00 per minute), and gestural large group reprimand was 0.14 per hour (or 0.00 per minute).

**Praise Type and Delivery**

To answer research question three (do middle school teachers deliver praise more frequently to large groups of students rather than small clusters or individual students), a
one-way analysis of variance for repeated measures was conducted on delivery of praise. At a Bonferroni-adjusted alpha level of 0.008 (.05/6), results indicated that the teachers’ delivery of praise differed significantly across the various praise delivery types, $F(5, 325) = 31.08, p < .001, \eta^2 = 0.32$ (large). Post hoc Scheffe analyses further indicated that individual GP was significantly higher ($M = 2.30, SD = 2.71$) than individual BSP ($M = 0.47, SD = 1.22$), small cluster BSP ($M = 0.12, SD = 0.75$), small cluster GP ($M = 0.08, SD = 0.27$), large group BSP ($M = 0.08, SD = 0.32$), and large group GP ($M = 0.44, SD = 1.19$). All other pairwise comparisons were not found to be statistically significant.

**Reprimand Type and Delivery**

To answer research question four (do middle and high school teachers deliver reprimands more frequently to large groups of students rather than small student clusters or individual students), a one-way analysis of variance for repeated measures was conducted of delivery of reprimand. At a Bonferroni-adjusted alpha level of 0.0042 (.05/12), results indicated that the teachers’ delivery of reprimand differed significantly across the various reprimand delivery types, $F(11, 715) = 16.22, p < .001, \eta^2 = 0.20$ (large). Post hoc Scheffe analyses further indicated that individual mild reprimand was significantly higher ($M = 1.42, SD = 2.68$) than individual medium reprimand ($M = 0.32, SD = 0.68$), individual harsh reprimand ($M = 0.08, SD = 0.27$), individual gestural reprimand ($M = 0.38, SD = 0.67$), small cluster mild reprimand ($M = 0.33, SD = 1.01$), small cluster medium reprimand ($M = 0.02, SD = 0.12$), small cluster harsh reprimand ($M = 0.03, SD = 0.25$), small cluster gestural reprimand ($M = 0.06, SD = 0.24$), large group medium reprimand ($M = 0.09, SD = 0.34$), large group harsh reprimand ($M = 0.03, SD = 0.17$), and large group gestural reprimand ($M = 0.05, SD = 0.21$). Likewise, large group
mild reprimand was significantly higher \((M = 1.23, SD = 1.85)\) than individual harsh reprimand \((M = 0.08, SD = 0.27)\), small cluster medium reprimand \((M = 0.02, SD = 0.12)\), small cluster harsh reprimand \((M = 0.03, SD = 0.25)\), small cluster gestural reprimand \((M = 0.06, SD = 0.24)\), large group medium reprimand \((M = 0.09, SD = 0.34)\), and large group harsh reprimand \((M = 0.03, SD = 0.17)\). All other pairwise comparisons were not found to be statistically significant.

**Praise and Reprimand**

To answer research question five (is there a relation between praise and reprimand delivery type, e.g., do teachers who use more individual praise, also use more individual reprimand), Pearson’s \(r\) correlations were conducted. At an alpha level of .05, there was no significant relation between delivery of individual praise and individual reprimand, \(r(64) = 0.03, p = 0.82\) (two-tailed). Individual reprimand accounted for 0.1% of the variance in individual praise. Likewise, there was no significant relation between small cluster praise and small cluster reprimand, \(r(64) = 0.03, p = 0.79\) (two-tailed). Small cluster reprimand accounted for 0.1% of the variance in small cluster praise. Furthermore, there was no significant relation between large group praise and large group reprimand, \(r(64) = 0.11, p = 0.36\) (two-tailed). Large group reprimand accounted for 1.3% of the variance in large group praise.

**Discussion**

The current study examined middle and high school teachers’ natural praise and reprimand delivery. In other words, looking at how teachers (in the absence of training) delivered praise and reprimand to students individually, in small student clusters, and large groups. On average, middle and high school teachers praised individual students
8.32 times per hour, large groups of students 1.55 times per hour, and small student clusters 0.59 times per hour. Findings indicated that teachers delivered significantly more GP to individual students rather than small clusters or large groups of students. However, no difference in teachers’ delivery of BSP was found. In other words, teachers delivered similar amounts of BSP to individual students, small student clusters, and large groups of students. On average, middle and high school teachers reprimanded individuals 6.59 times per hour, large groups 4.10 times per hour, and small clusters 1.32 times per hour. Teachers delivered more mild reprimand to individual students compared to mild reprimand to small groups; however, no differences were found between mild reprimand delivery to individual students and mild reprimand delivery to large groups. Teacher praise delivery and teacher reprimand delivery were not significantly correlated. In other words, teachers who delivered high rates of individual praise did not deliver high rates of individual reprimand. Those who delivered high rates of small cluster praise did not deliver high rates of small cluster reprimand and those who delivered high rates of large group praise did not deliver high rates of large group reprimand.

This study is the first study to provide information on how middle and high school teachers deliver praise and reprimand and this information is important because it is likely to inform professional development needs and enhance existing recommendations. Understanding how teachers’ use praise in the absence of intervention or training allows for comparisons between teachers’ typical practice and current recommendations. Future research should examine whether one delivery method (e.g., individual, student cluster, large group) reliably leads to behavioral improvements via experimental manipulation. This information could also be incorporated into how teachers are trained to use praise as
part of SWPBIS and ultimately increase the effectiveness of using praise within the SWPBIS framework.

**Praise Delivery**

First, on average, middle and high school teachers praised more students individually (8.32 per hour) rather than large groups of students (1.55 per hour) or small student clusters (0.59 per hour). These results were somewhat consistent with the prediction that middle and high school teachers would deliver praise more frequently to individual and large groups of students. In a kindergarten sample, Floress and Jenkins (2015) found that teachers praised more individual (24.7 per hour) and large groups of students (21.6 per hour) compared to small clusters of students (1.0 per hour); however, the current study found that praise was delivered more often to individual students, but praise was not delivered more often to large groups of students. This difference may be related to the finding that overall rates of praise in this middle and high school sample were lower than those in the kindergarten sample.

Furthermore, as predicted, middle and high school teachers’ praised students less frequently than kindergarten teachers across delivery types, which is consistent with the earlier finding that praise rates decline as grade levels increase (White, 1975). Middle and high school teachers delivered 6.91 GP and 1.41 BSP to individual students per hour, whereas Floress and Jenkins (2015) found that teachers delivered 19.20 GP and 5.50 BSP to individual students per hour. Middle and high school teachers delivered 1.32 GP and 0.23 BSP to large groups of students per hour, whereas Floress and Jenkins (2015) found that teachers delivered 18.60 GP and 3.00 BSP to large groups of students per hour. Middle and high school teachers delivered 0.23 GP and 0.36 BSP to small student...
clusters, whereas Floress and Jenkins (2015) found that teachers delivered 0.70 GP and 0.30 BSP to small student clusters per hour. Differences were most notable between middle and high school teachers and kindergarten teachers when examining individual student delivery and large group delivery. The difference between middle and high school teachers’ and kindergarten teachers’ small cluster praise delivery was minimal.

Minimal differences in small cluster delivery, across middle and high school as well as kindergarten teacher samples, suggest that teachers do not think to praise small clusters of students. However, the reasoning behind this finding is unclear. Praising a small cluster of students may be more efficient than praising students individually. In addition, praising small student clusters may help teachers manage a larger portion of students in the classroom compared to large groups (when not everyone in the class is behaving appropriately). Reinke, Lewis-Palmer, and Martin (2007) found that praising specific (target) children was helpful in getting other (nontarget) children back on-task. It is possible that praising a small cluster of students may prompt another small cluster of students to get back on-task. Stated differently, increasing teachers’ use of small cluster praise might maximize teachers’ efforts to manage students’ behavior in the classroom compared to other praise delivery types. Instead of focusing on one student at a time, middle and high school teachers could strategically focus their attention on small clusters of students who are on-task to get multiple students to improve their behavior using minimal effort and time.

**Reprimand Delivery**

On average, middle and high school teachers delivered 4.27 mild, individual reprimands per hour, 3.68 mild, large group reprimands per hour, and 1.00 mild, small
cluster reprimands per hour. In total, teachers delivered approximately 8.95 mild reprimands per hour. Teachers delivered 0.95 medium, individual reprimands per hour, 0.27 medium, large group reprimands per hour, and 0.05 medium, small cluster reprimands per hour. In total, teachers delivered approximately 1.27 medium reprimands per hour. Furthermore, teachers delivered 0.23 harsh, individual reprimands per hour, 0.01 harsh, large group reprimands per hour, and 0.09 harsh, small cluster reprimands per hour. In total, teachers delivered approximately 0.33 harsh reprimands per hour. Teachers delivered 1.14 gestural, individual reprimands per hour, 0.14 gestural, large group reprimands per hour, and 0.18 gestural, small cluster reprimands per hour. In total, teachers delivered approximately 1.46 gestural reprimands per hour. Few studies have examined teachers’ natural use of reprimands (in the absence of intervention). Reinke et al. (2013) found that, on average, kindergarten through third grade teachers delivered 39.00 explicit (or mild) reprimands per hour and 1.20 harsh reprimands per hour. In contrast, the current study found that teachers delivered, in total, approximately 8.95 mild (or 10.22 mild and medium) reprimands and 0.33 harsh reprimands per hour. This suggests that middle and high school teachers deliver less total reprimand compared to kindergarten through third grade teachers, which is consistent with the previous finding that reprimand rates decrease as grade levels increase (White, 1975).

**Praise Type and Delivery**

Third, it was hypothesized that middle and high school teachers would praise large and individual students more than small student clusters. Floress and Jenkins (2015) found that kindergarten teachers praised large groups of students and individual students significantly more than small student clusters. As it was found, middle and high school
teachers delivered GP to individual students significantly more often compared to small student clusters and large groups of students; however, no significant differences were found in teachers’ use of BSP across delivery types in the middle and high school sample. This is not the first study to find that teachers delivered GP more than BSP (i.e., Floress & Jenkins, 2015; Reinke, Herman & Stormont, 2013), but it is the first study to examine middle and high school teachers’ use of GP and BSP across delivery types. In the current study, the rates of BSP delivery per hour was low across all delivery types (individual BSP = 1.41; small cluster BSP = 0.36; large group BSP = 0.23), whereas rates of GP delivery per hour were variable (individual GP = 6.91; small cluster GP = 0.23; large GP = 1.32), with the highest rate being individual GP compared to all other praise delivery types. In comparison, Floress and Jenkins (2015) found that rates of BSP delivery were low (individual BSP = 5.50; small cluster BSP = 0.30; large group BSP = 3.00) compared to GP delivery types (individual GP = 19.20; small cluster GP = 0.70; large group GP = 18.60), however individual GP was the highest of all delivery types to a smaller degree than in the middle and high school sample. Overall, there was a smaller difference between rates of individual and large group GP in the kindergarten sample compared to the middle and high school sample.

Middle and high school teachers delivered GP to individual students more than any other praise delivery type. The nature of the instructional periods observed may have influenced teachers’ delivery of praise to individual students. Teacher-led instructional periods usually consist of a teacher at the front of the room teaching a lesson with the students facing him or her, participating individually (i.e., raising their hand to answer questions, reading a passage aloud to the rest of the class). In other words, if teachers are
prompting individual student participation (rather than choral responding), it is likely that praise delivery may occur individually more frequently than praise delivered to the entire class or small student clusters.

**Reprimand Type and Delivery**

Fourth, analyses to determine if middle and high school teachers delivered reprimands more frequently to large groups of students rather than small student clusters or individual students were conducted. This study is the first to analyze teachers’ natural use of reprimand delivery to individual, small clusters, and large groups of students; therefore, comparisons to prior research were not possible. Results of the current study indicated that middle and high school teachers delivered significantly more mild reprimands to individual students compared to small student clusters; however, no differences were found between teachers use of mild reprimands towards individual students and large groups of students. In comparison to the praise delivery results of the current study, middle and high school teachers delivered mild reprimand to individual students more often than small groups, suggesting that teachers do not think to reprimand (or praise) small clusters of students. However, the reasoning behind this finding is unclear. Reprimanding a student individually may be more salient, having a greater impact on the student, than reprimanding students as a group. It should also be noted that reprimand, although seemingly negative, can still reinforce inappropriate behavior (depending on the student; Nafpaktitis et al., 1985). Students’ whose inappropriate behavior is maintained by teacher attention may find individual reprimand more reinforcing than small group reprimand or large group reprimand because individual reprimand is more salient than the other types of reprimand.
Fifth, the relation between praise delivery type and reprimand delivery type was analyzed. However, a significant relation between praise and reprimand type was not found. Researchers have not examined whether teachers who use more individual praise, also use more individual reprimand. Therefore, no specific hypothesis was made. However, the relation was analyzed because it could be that teachers rely on the same delivery type for praise and reprimand. In other words, teachers may prefer individual, small cluster, or large group delivery for both praise and reprimand. As it turns out, there is a weak relation between praise and reprimand delivery type, possibly because praise and reprimand delivery depend on the student behaviors that are occurring in the classroom. Rather than teachers preferring one delivery type over another, they may rely on reacting to misbehavior (with reprimand) rather than planning to strengthen appropriate behavior (with praise; Maag, 2001). Researchers have been found that teachers are more likely to use reactive classroom management strategies, like reprimand (Pas, Cash, O'Brien, Debnam, & Bradshaw, 2015; Shook, 2012), than proactive strategies. The current study found that teachers deliver more total reprimand than praise, specifically more mild reprimand than any other praise or reprimand subgroup, which may be a result of middle and high school teachers using these easy to implement behavior management strategies as mainly a reaction to mild classroom misbehaviors. Adding these results to the current body of literature may inform how teachers can improve their strategies for shaping the desired behaviors of their students.

**Limitations**

This study is the first to evaluate teachers’ praise and reprimand delivery in middle and high school, general education classrooms, but there are limitations to consider. First, findings reported in this study cannot be generalized to all middle and
high school teachers, considering this study took place in rural Central Illinois and the sample was largely homogeneous (i.e., Caucasian). It is unclear whether these results would be similar for teachers working in suburban or urban school settings. Furthermore, the sample size was small (n = 66). Continuing to collect teacher samples from schools outside of Central Illinois could improve this limitation.

Each teacher observation was short (i.e., 20-minutes), which may have limited the findings of this study. Although the short observation length allowed for a larger participant sample and for data to be collected more efficiently, only sampling teacher instruction for 20-minutes may not accurately represent teachers use of praise and reprimand. For example, some teachers were never observed to praise or reprimand during the 20-minute observation and it is unclear whether these teachers would have praised or reprimanded if observed for longer than 20-minutes or if multiple observations were conducted. It is also possible that teachers may have reacted differently (praised and reprimanded more or less) due to having an observer in the classroom. Observing the same teacher over multiple observations may help overcome this type of limitation.

**Future Research**

Praise and reprimand delivery are currently under researched. To date, one other study has analyzed the natural praise delivery of kindergarten teachers and the current study is the first to analyze praise and reprimand delivery among middle and high school teachers. This study did not answer whether a certain delivery method (e.g., individual, student cluster, large group) led to behavioral improvements. Future research should examine whether one delivery method reliably leads to behavioral improvements via experimental manipulation. Diversifying the sample to be more representative of the United States population would also aid in the generalization of results. Future research
should strive to collect data by asking teachers to video themselves. Video could then be coded in the lab, which may glean a larger, more representative sample. It may also be helpful to observe teachers’ natural use of praise and reprimand delivery by teachers’ gender, subjects taught, time of year (beginning vs. end of the school year), or years of teaching experience. It may also be helpful to examine delivery of students identified with behavior problems. That is, if teachers are more likely to deliver individual reprimand than individual praise to students with behavior problems. Future research could also examine praise and reprimand delivery in special education settings as well as other instructional periods than teacher-led instruction. Additional information is likely necessary to inform best practice recommendations and professional development. Future research regarding the study of effective praise use within a multi-tiered system of support (e.g., SWPBIS) could also be an area of future research.

The goal of this study was to examine the middle and high school teachers’ delivery of praise and reprimand. Overall, this study fills a gap in the literature regarding teachers’ praise and reprimand delivery, as it is the first to examine individual, small cluster, and large group delivery among middle and high school teachers. Continued research is needed to obtain a better idea of whether the rates reported in this study are consistent with teachers across the U.S. In addition to studying teachers’ natural use of praise and reprimand, future research should examine how praise and reprimand delivery impact students’ classroom behavior via experimental manipulation.
References


exhibit persistent errors. *Journal of Applied Behavior Analysis, 47*, 738-748. doi: 10.1002/jaba.172


Table 1.

**Teacher and Classroom Demographics**


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<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td><strong>Teacher Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
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<td>29</td>
</tr>
<tr>
<td>Female</td>
<td>47</td>
<td>71</td>
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<td></td>
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<td>6</td>
</tr>
<tr>
<td>Seventh Grade</td>
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<td>20</td>
</tr>
<tr>
<td>Eighth Grade</td>
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<td>12</td>
</tr>
<tr>
<td>Ninth Grade</td>
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<tr>
<td>Tenth Grade</td>
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<tr>
<td>20+</td>
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<td>Somewhat less difficult</td>
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<td>Average difficulty</td>
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<td>Much more difficult</td>
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<td><strong>Behavior Management Class Taken</strong></td>
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<td>Yes</td>
<td>31</td>
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**Average Rate of Praise Delivery per Hour and Minute**

<table>
<thead>
<tr>
<th>Praise Type</th>
<th>Individual</th>
<th>Small Cluster</th>
<th>Large Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior-specific</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Per hour</td>
<td>1.41</td>
<td>0.36</td>
<td>0.23</td>
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<tr>
<td>Per minute</td>
<td>0.02</td>
<td>0.01</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>General</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per hour</td>
<td>6.91</td>
<td>0.23</td>
<td>1.32</td>
<td>8.46</td>
</tr>
<tr>
<td>Per minute</td>
<td>0.12</td>
<td>0.00</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per hour</td>
<td>8.32</td>
<td>0.59</td>
<td>1.55</td>
<td>10.46</td>
</tr>
<tr>
<td>Per minute</td>
<td>0.14</td>
<td>0.01</td>
<td>0.06</td>
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</tr>
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</table>

<table>
<thead>
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<th>Table 3.</th>
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</table>

**Average Rate of Reprimand Delivery per Hour and Minute**

<table>
<thead>
<tr>
<th>Reprimand Type</th>
<th>Individual</th>
<th>Small Cluster</th>
<th>Large Group</th>
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</thead>
<tbody>
<tr>
<td>Mild</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per hour</td>
<td>4.27</td>
<td>1.00</td>
<td>3.68</td>
<td>8.95</td>
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<tr>
<td>Per minute</td>
<td>0.07</td>
<td>0.02</td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per hour</td>
<td>0.95</td>
<td>0.05</td>
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</tr>
<tr>
<td>Per minute</td>
<td>0.02</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Harsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per hour</td>
<td>0.23</td>
<td>0.09</td>
<td>0.01</td>
<td>0.33</td>
</tr>
<tr>
<td>Per minute</td>
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<td>0.00</td>
<td>0.00</td>
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<tr>
<td>Gestural</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Per hour</td>
<td>1.14</td>
<td>0.18</td>
<td>0.14</td>
<td>1.46</td>
</tr>
<tr>
<td>Per minute</td>
<td>0.02</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per hour</td>
<td>6.59</td>
<td>1.32</td>
<td>4.10</td>
<td>12.01</td>
</tr>
<tr>
<td>Per minute</td>
<td>0.11</td>
<td>0.02</td>
<td>0.07</td>
<td></td>
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Appendix A: Teacher Demographic Questionnaire
### Teacher Demographic Questionnaire

<table>
<thead>
<tr>
<th>Your Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (circle):</td>
<td>Male</td>
</tr>
<tr>
<td>Age:</td>
<td></td>
</tr>
<tr>
<td>Racial Background (circle):</td>
<td>American</td>
</tr>
<tr>
<td>Do you have your teaching certificate (circle)?</td>
<td>Yes</td>
</tr>
<tr>
<td>I am a certified (circle):</td>
<td>General Education Teacher</td>
</tr>
<tr>
<td>Years of Teaching Experience:</td>
<td></td>
</tr>
<tr>
<td>Highest Educational Degree Obtained (circle):</td>
<td>Two Year College Degree</td>
</tr>
<tr>
<td>Special Training:</td>
<td>For example: Crisis management training (member of school’s crisis management team). attended Autism Awareness Workshop. PBIS training. or received special training in reading intervention.</td>
</tr>
<tr>
<td>Location of Training / Provided by:</td>
<td></td>
</tr>
<tr>
<td>Name of Class Observed (circle):</td>
<td>For example: Freshman Algebra (grade) (subject)</td>
</tr>
<tr>
<td>The Class observed includes (circle):</td>
<td>Only general ed. students</td>
</tr>
<tr>
<td>How would you rate the behavioral difficulty of the class observed (as a whole) compared to other classes you have taught in the past? (circle answer below)</td>
<td>1 Much less difficult</td>
</tr>
</tbody>
</table>

Appendix B: Teacher Observation Form
Appendix C: Operational Definitions of Praise Types and Reprimand Types
### BEHAVIORAL CLASSROOM DEFINITIONS: Type of Praise

<table>
<thead>
<tr>
<th>Behavior Specific Praise:</th>
<th>Any specific verbalization or gesture that expresses a favorable judgment on an activity, product, or attribute of the student. Examples include:</th>
</tr>
</thead>
</table>
|                          | "That is a pretty picture you made!"  
|                          | "That is a cool shirt you are wearing"  
|                          | "Terrific job coloring your project"  
|                          | "Thank you for sitting so nicely"  
|                          | "I like how you are sitting still"  
|                          | "Good job getting right to work"  
|                          | "That is nice sharing"  
|                          | "You are sitting like I asked – gives star"  

<table>
<thead>
<tr>
<th>General Praise:</th>
<th>Any nonspecific verbalization or gesture that expresses a favorable judgment on an activity, product, or attribute of the student. Examples include:</th>
</tr>
</thead>
</table>
|                | "Great"  
|                | "Nice Work"  
|                | "Thumbs up"  
|                | "Perfect"  
|                | "Thank you"  
|                | "Hi-five"  

### BEHAVIORAL CLASSROOM DEFINITIONS: Type of Reprimand

<table>
<thead>
<tr>
<th>Mild Reprimand:</th>
<th>Any verbal comment (using a normal speaking tone) that indicates disapproval of a student(s) behavior. The verbal comment can be an instruction following student misbehavior. The reprimand is concise (brief). Also referred to as a &quot;redirection&quot; of student behavior. Disagreeing with a student with the absence of sarcasm or a critical tone would be identified as mild.</th>
</tr>
</thead>
</table>
|                | - No thank you  
|                | - Not now  
|                | - No, come sit down (child at desk, while other children are at the rug)  
|                | - That is not how we treat our friends  

<table>
<thead>
<tr>
<th>Medium (Sarcastic) Reprimand:</th>
<th>Any verbal comment (using a sarcastic or critical tone) that indicates disapproval of a student(s) behavior. The verbal comment can be in the form of a question that is disapproving and has a mocking, rude, or critical tone. A sarcastic reprimand is marked if the teacher disagrees with the child using a critical tone.</th>
</tr>
</thead>
</table>
|                                | - I don’t remember telling you to write about pumpkins! (sarcastic)  
|                                | - No it’s not cold in here! (critical)  
|                                | - Is that your best work? (critical, mocking)  

<table>
<thead>
<tr>
<th>Harsh Reprimand:</th>
<th>Any verbal comment (using a louder than typical tone for the setting) that indicates disapproval of a student(s) behavior. Harsh reprimand is also marked if the reprimand implies negative consequences (e.g., a threat).</th>
</tr>
</thead>
</table>
|                  | - One more outbreak and no recess (threat)  
|                  | - I won’t tell you again (threat)  
|                  | - Excuse Me!  
|                  | - How many times do I need to remind you to put your homework folder in your backpack!  

<table>
<thead>
<tr>
<th>Gesture Reprimand:</th>
<th>Any gesture (without speaking) that indicates disapproval of a student behavior (e.g., hands on hips). Teacher may also gesture by physically guiding the child’s body to a preferred area or activity</th>
</tr>
</thead>
</table>
|                    | - Teacher puts her hands on hips with a disapproving look towards students.  
|                    | - A child is not sitting on the carpet so the teacher moves over to the child, grabs the child’s hand, and moves the child to the carpet.  
|                    | - A teacher shakes their head at a student when the student is disrupting class.  

Appendix D: Operational Definitions of Delivery Types
## BEHAVIORAL CLASSROOM DEFINITIONS: Type of Delivery

<table>
<thead>
<tr>
<th>Large Group:</th>
<th>Use of reprimand toward 7 or more students without using individual student names, physically touching individual students, making eye contact to a specific individual or small group, OR gesturing to an individual student or a small group.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“Have you guys had too much sugar, you are really not listening today.”</td>
</tr>
<tr>
<td></td>
<td>“Be quiet.” Phrase spoken outwardly to the group without eye contact to a specific student or group, use of a student or group name, or physical contact.</td>
</tr>
<tr>
<td></td>
<td><strong>After the large group (whole class) laughs at a student who misbehaves</strong>, teacher responds by saying (i.e., “you know better than to laugh at that”).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Small Group:</th>
<th>Use of reprimand toward 2-6 students that is identified by the teacher describing the small group or using the group’s name OR gesturing to the group.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teacher gestures to the front row (hands on hips, disapproving look)</td>
</tr>
<tr>
<td></td>
<td>Teacher says “the <strong>back row</strong> is too loud”</td>
</tr>
<tr>
<td></td>
<td>Teacher says “if the <strong>lion group</strong> keeps it up, they won’t be going to recess”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Individual:</th>
<th>Use of reprimand toward a single student that is identified by the teacher using the student’s name, physically touching the student, gesturing to the student, OR looking directly at the student. Examples include:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teacher uses reprimand statement and then names individual students. Count reprimand for how many students were named, even if only one reprimand statement was used.</td>
</tr>
<tr>
<td></td>
<td><strong>After an individual student burbs</strong>, the teacher responds back to the individual (i.e., “that is not appropriate”).</td>
</tr>
</tbody>
</table>

---

Appendix E: Teacher Recruiting Flyer
Middle and High School Teachers’ Praise and Reprimand Delivery
You are invited to participate in a research study conducted by Margaret Floress, Ph.D & Emma Riedesel, B.A., from the Psychology Department at Eastern Illinois University.

PURPOSE OF THE STUDY
The purpose of the study is to examine middle school and high school teachers’ use of classroom management strategies in general education classrooms. There is little information about how often teachers use specific strategies in general education, especially among middle school and high school teachers. We are also interested in the relationship between classroom strategies and method delivery.

PROCEDURES
If you volunteer to participate in this study, you will be asked to:

1) Allow research assistants to complete ONE, 20-minute observation in your classroom during class instruction (lecture).
2) Complete a Brief questionnaire (approximately 5 minutes to complete).

INCENTIVES FOR PARTICIPATION
If you are one of the first 40 participants to participate in this study you will receive a small gift of appreciation (valued at approximately $5).

IDENTIFICATION OF INVESTIGATORS
If you are interested in participating or hearing more information about this study, please contact:

Margaret Floress, Ph.D.
217-581-3523 – office
812-219-8419 - cell
mfloress@eiu.edu

This study IRB #16-085 has IRB approval beginning on 9/27/2016-9/26/2017

Appendix F: Teacher Consent Form
CONSENT TO PARTICIPATE IN RESEARCH!

Classroom Strategies and Teacher Perceptions

You are invited to participate in a research study conducted by Dr. Margaret Floress, Emma Riedesel, and Melissa Beaudoin from the Psychology Department at Eastern Illinois University.

Your participation in this study is entirely voluntary. Please ask questions about anything you do not understand, before deciding whether or not to participate. You have been asked to participate in this study because you teach children in the middle school and high school setting.

PURPOSE OF THE STUDY

The purpose of the study is to examine middle school and high school teachers' use of classroom management strategies in general education classrooms. Research suggests that specific teacher strategies are linked to positive student behavioral and academic outcomes; but there is little information about how often teachers use these strategies. Furthermore, there is no information examining these skills across middle school and high school (e.g., 7th-12th grade) general education classrooms or relating them to teachers' perceptions of classroom strategies and student discipline.

The goal of the current study is to determine the typical, or normative, rate of classroom strategies used among middle school and high school teachers during classroom instruction. In addition, we are interested in whether there is a relationship between the number of strategies used and teacher perceptions of strategies and student discipline. We are not asking you to do anything differently. We simply want to count the number of times you use specific strategies. Our goal is to help educators, administrators, and researchers understand how often teachers use classroom strategies within a typical classroom setting and whether or not there is a relation to teachers' perceptions of strategies and student discipline.

PROCEDURES

If you volunteer to participate in this study, you will be asked to:

1) Allow research assistants to complete one, 20-minute observation in your classroom during class instruction (lecture). The trained research assistants will sit in an inconspicuous place in your classroom and will quietly and unobtrusively observe.

2) Provide the researchers with a schedule of potential observation times. Class instruction will be coordinated with research assistant schedules. A week prior to the observation we will communicate the name of the research assistant and confirm that the planned observation time still fits with your schedule.

3) Complete a brief questionnaire (approximately 5 minutes to complete).

POTENTIAL RISKS AND DISCOMFORTS

It is unlikely that you will experience significant physical or psychological discomfort from participating in the study. However, research assistants will be observing your classroom, so there may be some degree of discomfort associated with being observed.

Observational and questionnaire data will be collected anonymously by assigning identification numbers (e.g., T-1, T-2). If requested, general results regarding the study will be provided to participants and school administrators, but information regarding observations of a specific classroom will not be disclosed. Any information will be combined across all participating classrooms in the participating schools.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

Participating in this study is likely to benefit you and the field of education in general. First, sometimes participants in these kinds of studies enjoy being part of research. It can be exciting to be involved in research that is geared towards helping other educators and researchers have a better understanding of the way that general education classrooms work. Additionally, there is little information regarding teachers' natural use of strategies in general education classrooms. There have been a few studies examining strategies in special education classrooms, but hardly any information exists about how teachers use classroom strategies in general education classrooms.

INCENTIVES FOR PARTICIPATION

All participants who participate in this study will receive a small token of appreciation.
CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by several means. You will be assigned an identification number that will be used to collect observational data and questionnaire data.

Original observation and questionnaire data will be housed inside a locked filing cabinet in Dr. Floress' research lab for approximately 3 years. After 3 years, all observation and questionnaire data will be destroyed.

PARTICIPATION AND WITHDRAWAL

Participation in this research study is voluntary and not a requirement or a condition for being the recipient of benefits or services from Eastern Illinois University or any other organization sponsoring the research project. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind or loss of benefits or services to which you are otherwise entitled. There is no penalty if you withdraw from the study and you will not lose any benefits to which you are otherwise entitled.

IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about this research, please contact:

Margaret Floress, Ph.D.
217-581-3523
mfloress@eiu.edu

RIGHTS OF RESEARCH SUBJECTS

If you have any questions or concerns about the treatment of human participants in this study, you may call or write:

Institutional Review Board
Eastern Illinois University
600 Lincoln Ave.
Charleston, IL 61920
Telephone: (217) 581-8576
E-mail: eiuirb@www.eiu.edu

You will be given the opportunity to discuss any questions about your rights as a research subject with a member of the IRB. The IRB is an independent committee composed of members of the University community, as well as lay members of the community not connected with EIU. The IRB has reviewed and approved this study.

I voluntarily agree to participate in this study. I understand that I am free to withdraw my consent and discontinue my participation at any time. I have been given a copy of this form.

Printed Name of Participant

Signature of Participant Date

I, the undersigned, have defined and fully explained the investigation to the above subject.

Signature of Investigator Date

This study IRB #16-085 has IRB approval beginning on 9/27/2016-9/26/2017