INTRODUCTION

Effectively managing student behavior is critical to teaching; therefore, teachers need to have the skills and knowledge to implement evidence-based strategies that are simple and easy to use. Praise is a low-cost strategy that can be implemented with minimal preparation and has been extensively studied in schools dating back to the 1960s (Roach et al., 1967; Brophy, 1981; White, 1975). The literature provides extensive support for the use of teacher praise to prevent behavior problems and address on-going behavior challenges (Epstein et al., 2008; Simonsen et al., 2008). Furthermore, explicitly linking teacher approval to a specific student behavior (i.e., behavior-specific praise; BSP) is an important component in many positive behavioral interventions and supports (Royer et al., 2019). Even though teacher praise has been extensively studied and is considered evidence-based practice (Epstein et al., 2008; Royer et al., 2019; Simonsen et al., 2008), there are gaps in the literature, particularly understanding the extent to which praise has been studied in the secondary school setting (i.e., middle and high school classrooms). School-based preventive behavioral interventions and supports, like School-Wide Positive Behavior Interventions (SWPBIS), should be implemented with key components (i.e., praise) across all school settings (primary and secondary; Freeman et al., 2016). Therefore, systematically reviewing the praise literature among middle and high school settings is necessary to fill this gap in the literature.

PURPOSE OF THE STUDY

The aim of this study is to systematically review the praise research literature conducted within middle and high school settings to understand the extent to which praise has been studied at the secondary level and identify areas for further research. The following research questions were posed:

Research Questions
1. How many studies have examined praise in the secondary setting?
2. What types of praise studies (e.g., intervention, teacher training) exist in the literature?
3. How many studies have examined the impact of praise on student behavior? Findings/summaries of these studies?

METHOD

Systematic Review Procedures

STEP ONE:

- A systematic review was conducted using EBSCOhost (including PsycINFO, PsycARTICLES, ERIC, MasterFILE) and Google Scholar to identify research articles that have examined middle and high school teachers’ use of praise (see Figure 1 for a visual representation of the review process).
- The following search terms were used: search terms: teacher praise middle school, teacher praise junior high, teacher praise secondary, teacher praise high school, teacher positive approach middle school, teacher positive approach junior high, teacher positive approval middle school, teacher positive approval junior high, teacher positive feedback high school, teacher positive feedback junior high, teacher positive feedback middle school, praise intervention middle school, praise intervention junior high, praise intervention high school, praise intervention secondary.
- A total of 1,074 articles were identified with 523 remaining after duplicates were removed (see Figure 1).

STEP TWO: ARTICLE SCREENING FOR INCLUSION

- The article screening process took place in two phases. First, 523 articles were reviewed and nonempirical articles were excluded. The article was considered nonempirical if it was not a peer-reviewed publication (e.g., dissertation, thesis), a non-experimental case study, a qualitative study, a systematic review, or descriptive article (e.g., how to use praise).
- A total of 357 articles remained after nonempirical articles were removed.

METHOD (Continued)

STEP TWO: ARTICLE SCREENING FOR INCLUSION (Continued)

- Next, article abstracts were screened by trained, dyad teams to determine whether they met the following three criteria for inclusion:
  a) Middle or High School Students (i.e., grades 6-12)
  b) School/classroom Setting: An alternative school setting was included, whereas a group home, hospital, or a home setting was excluded
  c) Praise focus: Praise needed to be defined explicitly as either an independent or dependent variable. If praise was defined, but used with another strategy (i.e., opportunities to respond) or part of a multi-component system or intervention (i.e., CWFIT), the study was included. Studies surveying student or teachers’ perceptions of praise, praise in relation to other outcomes (i.e., sex, achievement), teacher training, and student intervention studies were included.
- Abstracts were screened for inclusion criteria. A full-text review was completed if inclusion could not be determined based on the abstract.

TRAINING

- Four reviewers (one school psychology graduate student, one undergraduate research student, and two school psychology faculty) were trained by first studying the inclusion criteria, asking questions, and discussing among themselves.
- All four reviewers coded two sets of 10 articles (i.e., 20 of the 357 articles) to determine whether they met criteria for inclusion.
- Cohen’s Kappa was calculated for each trial (κ = 0.709; κ = 0.661) indicating substantial agreement between reviewers.
- The remaining 337 articles were divided into six rotating, dyad teams (made up of the four trained reviewers).
- Cohen’s Kappa was calculated across the dyad teams and agreement among reviewers was substantial (κ = 0.687).

STEP THREE: FULL-TEXT ARTICLE REVIEW

- 60 articles were identified for full-text review. In looking at the 60 articles, 7 types of praise studies were identified (see R2 for study categories). Of the 60 articles, 9 were reviewed (as this project is ongoing).

Results

R1: How many studies have examined praise in the secondary setting?

7 types of praise studies were identified:
1. N = 20…. Intervention (Teacher Implemented)
2. N = 2…. Intervention (Student Implemented)
3. N = 1……… Teacher Training
4. N = 2……….Student Preferences for Praise
5. N = 11………. Praise Study (Survey, No Direct Observation)
6. N = 3………. Praise Frequency (Use) Correlation Study (Direct Observation)
7. N = 9………. Other (Not determined)

R2: What types of praise studies exist in the literature?

<table>
<thead>
<tr>
<th>Article</th>
<th>Students Setting</th>
<th>Study Design</th>
<th>Praise only?</th>
<th>Results</th>
</tr>
</thead>
</table>
| Beers et al. (2018) | 6th, 7th, 8th | School | Yes | The praise to reprimand ratio improved (1:1 to 1:2).
| Gubler et al. (2015) | 6th – 8th | School | Yes | Teachers increased the use of praise.
| Stapert et al. (2017) | 4th | School | No | Student’s discipline improved, but teachers did not.
| Kopper et al. (2017) | 5th | School | Yes | Student-teacher relationship improved, but teacher’s behavior did not.
| Wilson et al. (2017) | 4th | School | Yes | Teachers increased the use of praise.
| Candelaria et al. (2017) | 6th, 7th – 12th | School | Yes | Correlation between teacher praise and improvement on outcomes.
| Stepp et al. (2017) | 4th | School | Yes | Disruptive behavior decreased.
| Candelaria et al. (2017) | 6th | School | Yes | The praise to reprimand ratio improved (1:1 to 1:2).
| Stepp et al. (2017) | 4th | School | Yes | Disruptive behavior decreased.

R3: How many studies have examined the impact of praise on student behavior? (i.e., How Many Intervention Studies)

- Of the 60 studies, 22 (37%) were Intervention studies (20 Teacher implemented and 2 Student implemented).

Figure 1. Systematic Review Process

Discussion
INTRODUCTION

Effectively managing student behavior is critical to teaching; therefore, teachers need to have the skills and knowledge to implement evidence-based strategies that are simple and easy to use. Praise is a low-cost strategy that can be implemented with minimal preparation and has been extensively studied in school settings (Backs et al., 1967; Brophy, 1981; White, 1975). The literature provides extensive support for the use of teacher praise to prevent behavior problems and address ongoing behavior challenges (Epstein et al., 2008; Simonsen et al., 2008). Furthermore, explicitly linking teacher approval to a specific student behavior (i.e., behavior-specific praise; BSP) is an important component in many positive behavioral interventions and supports (Royer et al., 2019). Even though teacher praise has been extensively studied and is considered an evidence-based practice (Epstein et al., 2008; Royer et al., 2019; Simonsen et al., 2008), there are gaps in the literature, particularly understanding the extent to which praise has been studied in the secondary school setting (i.e., middle and high school classrooms). School-based preventive behavioral interventions and supports, like Schoolwide Positive Behavior Interventions and Supports (SWPBS), should be implemented with key components (i.e., praise) across all school settings (primary and secondary). Freeman et al., 2016). Therefore, systematically reviewing the praise literature among middle and high school settings is necessary to fill this gap in the literature.

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**STEP TWO:**
- The following search terms were used during searches: teacher praise middle school, teacher praise junior high, teacher praise secondary, teacher praise high school, teacher positive appreciation middle school, teacher positive response middle school, teacher positive feedback middle school, teacher positive feedback junior high, teacher positive feedback high school, teacher positive feedback secondary, teacher positive feedback high school, praise intervention middle school, praise intervention junior high, praise intervention high school, praise intervention secondary.
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**STEP THREE: FULL-TEXT ARTICLE REVIEW**

In looking at the 60 articles, 7 types of praise studies were identified (see Table 2 for study categories). Of the 60 articles, 9 were reviewed (as this project is ongoing).

Results

R1: How many studies have examined praise in the secondary setting?

Of the initial 1,074 articles, 60 articles were identified (see Figure 1).

R2: What types of praise studies exist in the literature?

7 types of praise studies were identified:
1. N = 20...Intervention (Teacher Implemented)
2. N = 2...Intervention (Student Implement)
3. N = 14...Teacher Training
4. N = 2...Student Preferences for Praise
5. N = 11...Praise Correlation Study (Survey, No Direct Observation)
6. N = 3...Praise Frequency (Use) Correlation Study (Direct Observation)
7. N = 9...Other (Not determined)

R3: How many studies have examined the impact of praise on student behavior? (i.e., How Many Intervention Studies)

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Figure 1. Systematic Review Process

Results & Discussion

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3. N = 14: Teacher Training
4. N = 5: Student Preferences for Praise
5. N = 1: Praise Correlation Study (Survey, No Direct Observation)
6. N = 3: Praise Frequency (Use) Correlation Study (Direct Observation)
7. N = 9: Other (Not determined)

R3: How many studies have examined the impact of praise on student behavior? (i.e., How Many Intervention Studies)
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METHOD (Continued)

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- Cohen’s Kappa was calculated across the dyad teams and determined whether they met criteria for inclusion.
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Figure 2. Study Categories

Table: Study Categories
- | Article | Students | Setting | Study Design | Praise only | Results |
- | --- | --- | --- | --- | --- | --- |
- | 60: 60 | 5% 8% 8% | 5% | 5% | 5% | 5% |
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