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TEACHER DECISIONS IN CLASSROOM MANAGEMENT: LOOKING BEYOND
THE STUDENT

A thesis submitted in partial fulfillment
of the requirements for the degree of

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ABSTRACT

TEACHER DECISIONS IN CLASSROOM MANAGEMENT: LOOKING BEYOND THE STUDENT

Davina Huntwork

Student behavior can be classified as external, internal, or social, all of which can be symptoms of an Emotional-Behavioral Disorder (EBD; Cooper & Jacobs, 2001). There are a number of ways that teachers may respond to student behavior with some being considered more positive (e.g., keep the student in the classroom) and others more negative (e.g., refer the student to other school resources for permanent or temporary removal). However, it is not just the student behavior that determines how a teacher will respond. Teacher stress, self-efficacy, class size, the impact of the behavior on other students, teaching experience, and knowledge of classroom management can all impact the teacher's decision. This study attempts to determine how much influence these factors have on a teacher's decisions and if there are differences in responses based on the type of behavior exhibited by the student. Two hundred and one teachers completed a demographic questionnaire, measures of the aforementioned areas, and indicated how they would respond to different written vignettes representing student behavior. Results indicated that class size and teacher factors did not significantly impact the way teachers responded to student behavior. Concern for the behaviors exhibited by the students in the vignette were, however, impacted by knowledge, stress, self-efficacy, confidence, and training. Future directions are discussed to help clarify and go beyond the limitations found within this study.

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INTRODUCTION

Emotional-Behavioral Disorder is an umbrella term used to describe disorders and conditions such as anxiety, Attention-Deficit Hyperactivity Disorder (ADHD), depression, Oppositional Defiant Disorder, and aggression, among others (Forness, Freeman et al., 2012; Forness, Kim, & Walker, 2012; Webber et al., 2008). It is estimated that up to 25% of students in a general education classroom at one point in time had a moderate to severe Emotional-Behavioral Disorder (EBD), have one currently, or may later develop one (Forness, Freeman et al., 2012). Others estimate that within the Kindergarten through 12th grade population the prevalence of EBD, mild to severe, ranges from 2% to 32.3% (Conley et al., 2014; Infantino & Little, 2005; Lewis et al., 2010). Only 2.5% of these students will qualify for special education, so the rest will most likely remain in a general education classroom (Infantino & Little, 2005; Lane et al., 2005; Nelson & Pearson, 1991; Oshner et al., 2003). Others estimate that roughly 1% of all students displaying any symptom of EBD or who have been diagnosed, are served in special education while the other 99% remain in general education classrooms (Kauffman et al., 2007; Lane et al., 2005; Lewis et al., 2010; Nelson & Pearson, 1991).

Within a classroom these disorders can manifest as: being off-task, being verbally/ physically disruptive or aggressive towards others, isolating oneself, non-compliance (Alter et al., 2013; Crawshaw, 2015; Harrison et al., 2012; Poulou & Norwich, 2002); inattention, avoiding work, inappropriate banter, and skipping class (Crawshaw, 2015; Poulou & Norwich, 2002). These inappropriate student behaviors can be categorized into one of three behavior types: externalized (physical disruptions/aggressiveness, work avoidance, fidgeting, etc.), internalized (inattentive,

isolation, anxiety, etc.), or social (verbal disruptions/aggressiveness, inappropriate banter, etc.; Cooper & Jacobs, 2001; Poulou & Norwich, 2002).

Over 90% of teachers have reported experiencing these problem behaviors “sometimes” to “very often” every day (Brhane, 2016; Hermannsdóttir, 2017). Teachers have the option to respond positively to these behaviors; these responses include referring the student to a school counselor, requiring mandatory participation in a special program (Gottfredson & Gottfredson, 2001; Morrissey et al., 2010), or using positive reinforcement for appropriate behavior (Browne, 2013; Brunette, 2010; Doolittle et al., 2007; Ng, 2015; Oshner et al., 2003; Pas et al., 2015; Pisacreta et al., 2011; Reinke et al., 2008). More common and less effective responses from teachers are negative ones. These include: in- and out-of-school suspension (Bradley et al., 2004; Gottfredson & Gottfredson, 2001; Iselin, 2010; Oshner et al., 2003), school expulsion (Bradley et al., 2004; Gottfredson & Gottfredson, 2001; Oshner et al., 2003), a needed change of teachers during the school year (Gottfredson & Gottfredson, 2001; Martin et al., 1999; Oshner et al., 2003), referrals to the principal’s office (Infantino & Little, 2005; Oshner et al., 2003; Westling, 2010), brief removal from a classroom (Gottfredson & Gottfredson, 2001; Zentall & Javorsky, 2007), probation, after-school detention, or transfer to another school (Gottfredson & Gottfredson, 2001).

Multiple factors affect how a teacher in a general education classroom will respond to a student’s inappropriate behavior. A complete review of all these factors is beyond the scope of this study, but the factors examined in this research have been demonstrated individually to have an impact on a teacher’s response to a student’s behavior. These factors are: class size, the impact the student has on his/her peers, the

teacher's experience, teacher knowledge of classroom management strategies, teacher stress, and teacher self-efficacy. The research in these areas will be discussed below. If we can identify and predict factors that lead to negative responses from the teacher (e.g., detention, referral to the principal's office) we may be able to prevent them in the future.

Class Size

According to the United States' National Center for Educational Statistics (USNCES; 2012), the average number of students in an elementary school classroom is 21.6 (ranging from 17.4 to 27.6). In middle schools, there is an average of 25.5 students (ranging from 20.9 to 31.8), and high schools have an average of 24.2 students per class (ranging from 16.7 to 31.2). Despite the fact Finn and Achilles (1999) found the ideal number of students in the classroom to be 20, the range provided by the USNCES (2012) for average number of students in the classroom exceeds that. Blatchford and colleagues conducted several studies examining the effect larger class sizes had on teachers and students. Their results indicated that a teacher's and a student's response to the number of students in the class depend on multiple things, including attainment level (defined as being either above, at, or below grade level for academic achievement of the class as a whole), the subject being taught, grade level and/or age of the students (Blatchford et al., 2005, 2011; Blatchford et al., 2003), and teacher self-perception (Blatchford et al., 2003).

Within larger classes, students were observed to exhibit more off-task and inappropriate behavior, including not attending to their work, and not paying attention to the teacher (Blatchford, 2003). While the academic attainment level of the students was predictive of off-task behavior, the number of students in the classroom did not affect off-task behavior for students with a high attainment level (Blatchford et al., 2011). Further,

teachers of low and medium attainment (below and at grade level) students, and those who had larger classes dealt with more negative behavior, such as aggression and disruptiveness, than teachers who had high achieving students or smaller classes (Blatchford et al., 2011). With every five-student increase, in a low attainment class, students' off-task behavior increased by up to 11% in elementary schools, while secondary schools saw an increase of up to 40% for every additional five students (Blatchford et al., 2011). In a later, similar and more in-depth study conducted with older students, Blatchford et al. (2011) found that an increase in students created more off-task behavior, but the increase started to tail-off in the largest classes and actually decreased depending on attainment level of the students. That is, class size only affects off-task behavior if the number of students is within a particular range, otherwise class size does not have an impact on off-task behavior. As such, while it could be argued that smaller classes would be best to prevent off-task behavior, the same could be said of the largest classes.

Related to the impact that class size has on a teacher, is the teacher's *perception* of what having a small versus large class means for them. Teachers reported feeling that they had fewer interactions with individual students in larger classes compared to small classes, even though observations of teacher-student interactions showed that there was a minimal decrease (Blatchford et al., 2011). In fact, one study found that when students were waiting for the teacher to interact with them (i.e., waiting for the teacher to get to them when they raise their hand and need help) there was no difference in how long they waited between small and large classrooms. These results did not differ even when a teacher assistant was present in the classroom (Blatchford et al., 2005). Johnston (1989)

had also noted that when teachers went from a large class during one school year to a small class the next school year, they perceived themselves as having more time.

Teachers noted that it took them less time to manage classroom behavior, it also became easier for them to notice potential behavioral problems sooner and stop them (Almulla, 2015; Johnston, 1989). This may be why, despite small classes potentially having significantly more low achieving students and students with special needs, there are less off-task and inappropriate behaviors being observed by teachers and researchers (Blatchford et al., 2011; Johnston, 1989).

Interestingly, Blatchford et al. (2005) reported that when teachers were asked what factors contributed to students being placed in a small class (25 or fewer students) or a large class (26 or more students), it was noted that within small classes there were more students who were eligible for free school meals, were considered lower achieving, and had special needs. This is interesting in that Blatchford et al. (2005) found that smaller classes exhibited fewer behavioral problems and when they considered these placement factors, they found it did not affect their results. So, if smaller classes do in fact have a higher number of lower attainment students and students with special needs then it is possible that the higher number of behavioral problems that occur in larger classes is due, in large part, simply to the number of students in the classroom.

While Blatchford et al. (2005) makes it seem as if the placement of students is based purely on class size, Kalogrides and colleagues (2012) found that there were multiple factors considered when making decisions regarding class placement. Students known to be of low attainment or with special needs were more often assigned to female teachers compared to male colleagues within the same school. Schools also attempted to

match the race and ethnicity of students and teachers, with the hope that those teachers would be able to connect with the students better than a teacher of a different race or ethnicity. Teachers with more experience, who had attended a more competitive undergraduate school, or who had held a leadership position, tended to be assigned students of higher attainment compared to their colleagues within the same school. Kalogrides et al. (2012) also found that senior teachers, at least within the schools they examined, had influence over the principal, who ultimately made the final decision in class assignments. This supports the idea that teachers with more experience will encounter fewer problem behaviors because they potentially have more control over how large their class is, and/or which students are in their class.

Relatedly, smaller classes appear to be correlated with fewer episodes of undesirable behavior (Blatchford, 2003; Blatchford et al., 2005, 2011; Blatchford et al., 2003), and teachers of smaller classes have been found to distribute fewer disciplinary referrals (Finn & Achilles, 1999; Finn et al., 2003). This discrepancy between the number of disciplinary referrals distributed by teachers of large and small classes may be because there appears to be fewer disruptions in the smaller classrooms (Blatchford, 2003; Blatchford et al., 2005, 2011; Blatchford et al., 2003; Blatchford et al., 2009), as well as the fact that teachers have reported being able to manage behavior before it becomes a problem in smaller classes (Almulla, 2015; Blatchford et al., 2003; Blatchford et al., 2009; Johnston, 1989).

Undesirable Behavior's Impact on Peers

Undesirable behavior, such as challenging behavior, is a repeated pattern of behavior that interferes with student learning, and the ability of the student to engage in

prosocial behavior with their peers, as well as staff and faculty of the school (Powell et al., 2007). Two studies have looked at the teacher's perception, or understanding, of the impact a student's undesirable behavior has on peers. Westling (2010) found that teachers of both specialized and general education classrooms agree that students who displayed undesirable behavior made learning for their peers harder. Of the nine teachers in Axup and Gersch's (2008) study, six agreed they felt a student's undesirable classroom behavior disrupted the whole class.

Although misbehavior in the classroom can disrupt other students, it is not the only impact (Axup & Gersch, 2008; Westling, 2010). Multiple studies have found that having a student displaying undesirable behavior in the classroom lowers math scores (Carrell & Hoekstra, 2010; Figlio, 2007; Fletcher, 2010; Horoi & Osi, 2015; Kristoffersen et al., 2015), reading scores (Carrell & Hoekstra, 2010; Fletcher, 2010; Kristoffersen et al., 2015), and increases the chance of other students exhibiting undesirable behavior (Carrell & Hoekstra, 2010; Figlio, 2007; Powers et al., 2013). Carrell and Hoekstra (2010) also suggest that adding one disruptive student to a class of 20 reduces test scores and increases disciplinary infractions by 17%.

Teacher Stress

It is logical to assume that much like the impact a student's misbehavior has on his or her peers, it also may have an impact on the teacher, more specifically their emotional responses. Having even one student who displays undesirable behavior can contribute to a teacher experiencing stress (Brown et al., 2002; Forlin, 2001; Greene et al., 2002; Kokkinos, 2007; Stauffer & Mason, 2013). Teacher stress can be defined in several different ways. What each definition has in common is that stress is a negative

emotion experienced by the teacher as a reaction to the perception of their work situation. Specifically, their work situation threatens their self-esteem or well-being (Kyriacou, 2001; Kyriacou & Harriman, 1993). Multiple factors contribute to a teacher's stress level in addition to a student's behavior. These factors include interactions or lack thereof with colleagues and parents (Brown et al., 2002; Huk et al., 2019; Stauffer & Mason, 2013), lack of resources, feelings of unappreciation (Brown et al., 2002; Stauffer & Mason, 2013), time constraints (Brown et al., 2002; Kokkinos, 2007; Kyriacou, 2001; Stauffer & Mason, 2013), class size (Brown et al., 2002), and self-efficacy (Gordon, 2001; Klassen & Chiu, 2010), among others.

In addition, while difficult students are one of the most frequent sources of stress for teachers (Poulou & Norwich, 2002), Blatchford et al. (2005) points to another major source, educational beliefs (i.e., that they, the teacher, should be able to assist every student individually). Teachers in England believe strongly in addressing the individual needs of their students, however, between curriculum and assessments (time constraints), this is not always possible (Blatchford et al., 2005). Further, addressing these individual student needs becomes even harder as class size increases, creating a conflict between the teachers' beliefs and their practice. Blatchford et al. (2005) suggest more teacher training and professional development for strategies to ease this conflict. A lack of adequate skills and trainings has been demonstrated to be a link to teacher stress (Alvarez, 2007).

An increase in training may allow teachers to be more tolerant of disruptive behavior as it may reduce stress levels (Blatchford et al., 2005). An increased stress level can lead to teachers being less tolerant of disruptive behavior (Kokkinos et al., 2005), increase the likelihood to respond to student behavior in a negative way (Greene et al.,

2002; Kokkinos, 2007; Kokkinos et al., 2005) and can hinder an accurate appraisal of the severity level of student behavior (Kokkinos, 2007; Kokkinos et al., 2005), regardless of training and experience. Appraisal of a student's behavior has to do with how the teachers assess the behavior; they observe the behavior and determine the best route to handle it. An example of an inaccurate appraisal would be characterizing a minor disruption (such as a student leaving their seat) in the same way as a more serious behavior (a student shoving another student down) and giving the students the same consequences.

Stress hinders a teacher's appraisal of student behavior (Kokkinos et al., 2005) and may explain why Green and colleagues (2002) found that teachers consider different subsets of ADHD more stressful to work with than others. Not surprisingly, teachers consider students with ADHD significantly more stressful to teach compared to students without the disorder. Within the subgroup of students with ADHD, though, those who display oppositional or aggressive behavior, or display a social impairment, were rated as more stressful to teach than students with ADHD who do not display this behavior or impairment.

Despite the multiple sources of stress stated previously, and the findings that stress interferes with an accurate appraisal of student behavior (Kokkinos, 2007; Kokkinos et al., 2005), Abidin and Robinson (2002) concluded that a student's referral for special education was not primarily due to stress. Regardless of the teacher's stress level (high or low) teachers referred students for special education evaluation at the same rate. It is important to note that the teachers in Abidin and Robinson's (2002) study completed the stress measure three weeks after completing a referral judgement, and so

may have believed that “help is on the way,” potentially reducing their stress. Despite Abidin and Robinson’s (2002) conclusion that stress plays no part in referrals, the methodology of the study resulted in limited conclusions and the results are uncertain.

As evidenced by Abidin and Robinson (2002), as well as Kokkinos (2007), and Kokkinos et al. (2005), studies for years have linked stress to appraisal of student behavior by teachers. Huk and colleagues (2019), in a more recent study, suggested that the type of behavior displayed by a student affects how a teacher appraises them. Stressed teachers may take inattentive students’ behavior as a personal affront as it may be seen to be a reflection on their teaching ability (Huk et al., 2019). This goes back to the definition of stress where the teacher experiences a negative emotion when their work situation threatens their self-esteem (Kyriacou, 2001; Kyriacou & Harriman, 1993).

As a result, external behavior displayed by a student may be perceived as a threat to a teacher’s well-being, which can also produce a negative emotion (Kyriacou, 2001; Kyriacou & Harriman, 1993). This may explain why Green et al. (2002) found that the external behaviors displayed by students were more stressful to teachers.

Teaching Experience

In addition to stress and undesirable student behavior’s impact on peers, how long one has been teaching (teaching experience) has been shown to affect a teacher’s perceived seriousness of a student’s behavior within the classroom (Borg, 1998; Borg & Falzon, 1990; Kerebih et al., 2016; Kokkinos et al., 2004; Kokkinos et al., 2005; Noltemeyer et al., 2012; Schultz & Evans, 2012). The longer individuals teach and the more they are exposed to students, the more likely it is they will become exposed to problem behavior, particularly behavior stemming from EBD. This exposure modifies

how the teacher will view and go about handling these behaviors (Kokkinos et al., 2005). While there have been several studies that have found teachers to be more willing to work with students displaying symptoms and/or behaviors of EBD (Borg, 1998; Borg & Falzon, 1990; Kokkinos et al., 2004; Kokkinos et al., 2005; Panayiotou & Davazoglou, 2005), there have also been studies finding the opposite. MacFarlane and Woolfson (2013) found teachers to be less willing to work with these types of students while Soodak and colleagues (1998) found more experienced teachers to be hostile towards students who displayed a behavioral disorder. As such, while there are many studies supporting the idea that a more experienced teacher will perceive undesirable behavior within the normal range, or as acceptable behavior (Borg, 1998; Borg & Falzon, 1990; Kokkinos et al., 2004; Kokkinos et al., 2005; Panayiotou & Davazoglou, 2005) that is not necessarily true all the time (MacFarlane & Woolfson, 2013; Soodak et al., 1998). Although, it appears that teaching experience alone does not determine a teacher's understanding of how to handle EBD students, self-efficacy was found to be a protective factor against teaching experience, i.e., the higher the level of self-efficacy (e.g., confidence in their ability to teach) teachers had the more willing they were to work with students falling under the EBD category regardless of experience (MacFarlane & Woolfson, 2013).

As mentioned previously, experience teaching can influence the perception of the level of seriousness of undesirable behavior (Borg, 1998; Borg & Falzon, 1990; Kokkinos et al., 2004; Kokkinos et al., 2005; Panayiotou & Davazoglou, 2005). In fact, the difference in years of teaching experience appears to predominately impact how teachers perceive the severity of a student's behavior (Borg, 1998; Borg & Falzon, 1990;

Kokkinos et al., 2004; Kokkinos et al., 2005; Panayiotou & Davazoglou, 2005), and whether they perceive externalized or internalized behavior as more serious (Kokkinos et al., 2004; Kokkinos et al., 2005). When groups based on teacher experience (least, moderate, or highly experienced) are compared to each other, they differ significantly in their perception of seriousness of undesirable behavior (Borg, 1998; Borg & Falzon, 1990). Teachers in the least experienced group perceived undesirable behaviors as more serious than those in the moderately and highly-experienced groups, while teachers in the moderately experienced group perceived undesirable behaviors as more serious than those in the highly-experienced group (Borg, 1998; Borg & Falzon, 1990). When it comes to the type of undesirable behavior, teachers with little to no teaching experience, view externalized behaviors, such as aggression or fidgeting, as more serious while the more experienced teachers viewed internalized behaviors, such as anxiety and inattention problems, as more serious (Kokkinos et al., 2004; Kokkinos et al., 2005). Externalized behaviors also tend to be more obvious as the behavior calls attention to itself creating an immediate problem, while internalized behaviors do not call for immediate management as they tend to be less disruptive and less obvious (Kokkinos et al., 2004). Inexperienced teachers may focus more on behavior that is more disruptive and harder to ignore. It makes sense for a more experienced teacher to view internalized behaviors as more serious, as the longer a person has been teaching, the more exposed they are to behavioral problems and the more they will have a sense of the normal range of behavior (Kokkinos et al., 2004).

Willingness to work with students displaying undesirable behavior and perceived seriousness of the behavior are not the only things affected by a teacher's experience.

Previous research has found that less experienced teachers were more likely to refer students for special education evaluation (Schwartz et al., 1997), while more recent articles point towards teacher experience playing no role (Egyed & Short, 2016; Tejeda-Delgado, 2009). Cooper and Yan (2015) also found that teaching experience did not have an impact on a teacher's awareness of undesirable behavior occurring in the classroom. In other words, regardless of how long individuals have been teaching, whether it is their first year or their twentieth, they are equally aware of the behavior that occurs in their classroom, and they are equally likely to refer a student to special education (Cooper & Yan, 2015; Egyed & Short, 2016; Tejeda-Delgado, 2009).

Teacher Knowledge of Classroom Management

The impact that teaching experience has on whether a teacher will refer a student for special education evaluation produces mixed research results (Egyed & Short, 2016; Schwartz et al., 1997; Tejeda-Delgado, 2009). Despite this discrepancy, experience appears to play a role in a teacher's *knowledge* of how to handle a student's undesirable behavior (Walter et al., 2006) as well as *how* a teacher handles the undesirable behavior within the classroom (Westling, 2010). Teachers acquire their knowledge of classroom and behavior management in three ways: from their college program, through experience, and through professional development or in-service training (training they receive while employed as a teacher; Stough & Montague, 2015). Stough and Montague (2015) found that less than half of the top 50 colleges of education within the United States offered a course whose focus was solely classroom management. Oliver and Reschly (2010) reported similar results when they found that only 27% of education programs devoted an entire course to classroom management. In Florida, just over one-quarter of special

education college programs offered a course in classroom management (Stough & Montague, 2015). In general, classroom management is part of another course, such as educational psychology (Stough & Montague, 2015). The Department of Education in each state has requirements for behavior competencies; in almost 90% of states there are requirements not only for special education teachers but teachers in general education as well (Doolittle et al., 2007; Hettrich, 2009). Over 90% of states require elementary schools to have competencies developed to support a student's social behavior at the individual, classroom, and school wide level (Doolittle et al., 2007; Hettrich, 2009).

While there is evidence that college programs are not adequately preparing their teachers for the classroom (Hettrich, 2009; O'Neill & Stephenson, 2011; Oliver & Reschly, 2010; Stough & Montague, 2015; Stough et al., 2015; Westling, 2010), teachers have also expressed that they feel unprepared for the behaviors they encounter within the classroom (Browne, 2013; Hicks, 2012; Stough et al., 2015; Tsouloupas et al., 2014; Westling, 2010). The majority of inexperienced secondary teachers in Hicks (2012) study believed their college programs had not adequately prepared them and they were forced to learn behavior management strategies on the job. Tsouloupas and colleagues (2014) found that 88% of their participating teachers believed their training for handling undesirable classroom behavior was inadequate; 79% of their participating teachers believed that the undesirable behavior of students continued to happen because of inadequate training. Inadequate training in behavior and classroom management has been shown to have a number of adverse effects on teachers, including higher stress levels (Browne, 2013) and lower efficacy levels (Gebbie et al., 2012; Gordon, 2001).

While inadequate training can have adverse effects on teacher factors (Browne, 2013; Gebbie et al., 2012; Gordon, 2001), it can also affect how a teacher will respond to undesirable behavior in the classroom, creating an adverse effect on students. Teachers with inadequate training in behavior management refer students displaying undesirable behavior out of the classroom at a higher rate than teachers who have had more training (Alvarez, 2007; Avery, 2016; De Sa Maini, 2011). To test this theory, Polirstok and Gottlieb (2006) conducted a study that involved teachers and other school staff and faculty participating in a training program for either eight half days or five half days, followed by a follow-up session. Of the three schools involved in the training program, one school saw disciplinary referrals drop significantly compared to the school year prior to training, as well as compared to two school years prior to training. Special education referrals also dropped significantly within all schools compared to the school year prior to training. Polirstok and Gottlieb's (2006) support what Bullock et al. (1994), and Tsouloupas and colleagues (2014) found, which is that more and adequate teacher training may decrease the removal of disruptive students from the general education classroom (Alvarez, 2007; Avery, 2016; De Sa Maini, 2011).

More training may see a decrease in the removal of disruptive students, but it may not be as simple as just including an extra day or two of in-service training. Stough and Montague (2015) found that for training to be effective and increase the use of positive strategies, while decreasing the use of negative strategies for handling undesirable behavior, the amount of training is important. Having a teacher complete one day of in-service training will have little impact on both them and their students. For training to have a significant effect, a considerable amount of time must be dedicated to training.

Stough and Montague (2015) suggest that training expand over hours and throughout a teacher's career to be truly effective.

Not only does the amount of time spent in in-service training matter, but so too does the type. In-service training for teachers can be offered either through their school district, which is how it most often is, or, through a university (Zentall & Javorsky, 2007). Zentall and Javorsky (2007) found that, regardless of the type of in-service training, an increase in training was linked with a higher confidence and a willingness to include a student with behavioral problems. Although confidence increased within both groups, the local (training provided by the local school district) and the university training, teachers who had participated in the local training had an increase of removing students from the classroom after they completed their training compared to before training (Zentall & Javorsky, 2007). Zentall and Javorsky (2007) suggest that those who run local training may not be qualified to teach behavior management and may not be providing teachers with adequate behavior management strategies, or they may be encouraging negative strategies.

Inadequate behavior management training can result in an increase of removing students from the classroom (Alvarez, 2007; Avery, 2016; De Sa Maini, 2011; Westling, 2010) and an increase in special education referrals (Polirstok & Gottlieb, 2006). More training alone, though, does not combat negative responses from teachers towards student misbehavior (Stough & Montague, 2015; Zentall & Javorsky, 2007). Another variable that may be important to consider as it relates to teacher behaviors is that of teacher's self-efficacy.

Teacher Self-Efficacy

Teacher self-efficacy is defined as the extent to which teachers believe they have influence over how well a student performs in school (Tschanhen-Moran et al., 1998). Low teacher efficacy was seen to predict a higher use of a negative response to undesirable behavior (Gebbie et al., 2012). Gordon (2001) suggests that more training in classroom management could combat this.

Level of self-efficacy has been shown to be influenced by professional preparation. Westling (2010) found that the more preparation a teacher had, or felt they had, the more confident in their abilities they felt. Interestingly, Hicks (2012) found no relationship between perceived adequacy of professional preparation and level of self-efficacy. This difference could be due to several different factors, including the sample populations chosen by both authors, as well as the fact that the majority of Hicks' (2012) sample population felt unprepared to manage classroom behavior, compared to Westling's (2010) slight majority who felt adequately prepared. Both studies also used different scales to check teacher self-efficacy: Hicks (2012) used the *Teacher Self-Efficacy Scale*, while Westling (2010) used the *Questionnaire About Teachers and Challenging Behavior*. This study will be using the same scale as Hicks (2010), so results may be comparable to their findings.

Professional preparedness is not the only time studies involving self-efficacy have had conflicting results. Self-efficacy's influence on likeliness to refer a student for special education has also had mixed results. While Meijer and Foster (1988) concluded that teachers with high self-efficacy are less likely to refer a student for special education, Tejada-Delgado (2009) found no link between the two. However, in addition to the fact

that the methodology between the two studies differed, there is almost a two-decade gap between the research during which time, the relationship of self-efficacy to referrals may have changed.

It is important to note that the level of self-efficacy in teachers is influenced by several factors. These factors include support systems, such as colleagues (Tsouloupas et al., 2014), years spent teaching, and, most notably, type of behavior displayed by a student (Zee et al., 2016). Zee and colleagues (2016) found a negative correlation between a student's display of externalized behavior and the teacher's self-efficacy toward particular students and their behavior. The more externalizing behavior that was exhibited by a student, the less teachers were confident in their ability to manage the student. When more prosocial behavior was exhibited, teachers felt more confident in their ability to manage the student.

In sum, the variables of class size, the effect of a student's undesirable behavior on peers, an individual's teaching experience, a teacher's knowledge of classroom management strategies, teacher stress, and teacher self-efficacy have all been shown to affect a teacher's response to classroom behavior. These factors may also affect each other, as Zee and colleagues (2016) found with teacher experience and self-efficacy: the more experience teachers had, the higher their self-efficacy. Similarly, class size has been shown to impact teacher stress level: the larger the class, the more stress that was experienced (Brown et al., 2002).

This research examines how all of these factors influence how a teacher responds to undesirable student behavior.

As research has demonstrated a relationship between class size and amount of undesirable student behavior (Blatchford et al., 2011), class size and disciplinary referrals (Finn & Achilles, 1999; Finn et al., 2003), and teacher concern and type of undesirable behavior displayed by students (Hyland et al., 2014), it is hypothesized that:

1. Using vignettes, in a class of 30 students, the student displaying externalized behavior will have more negative teacher responses than the students displaying social and internalized behaviors.
2. Using vignettes, in a class of 30 students, the student displaying social behavior will have more negative teacher responses than the student displaying internalized behavior
3. Using vignettes, in a class of 25 students, the student displaying externalized behavior will have more negative teacher responses than the students displaying social and internalized behaviors.
4. Using vignettes, in a class of 25 students, the student displaying social behavior will have more negative teacher responses than the student displaying internalized behavior.
5. Using vignettes, in a class of 20 students, the student displaying externalized behavior will have more negative teacher responses than the students displaying social and internalized behaviors.
6. Using vignettes, in a class of 20 students, the student displaying social behavior will have more negative teacher responses than the student displaying internalized behavior.

As research has demonstrated a relationship between teacher knowledge of classroom management and referral rates (Alvarez, 2007; Avery, 2016; De Sa Maini, 2011), it is hypothesized that:

7. Teachers' classroom management knowledge as measured by the Survey of Classroom and Behavior Management will negatively correlate with negative teacher responses to the students exhibiting externalized, internalized, and social behavior in the vignettes.

As research has demonstrated a relationship between teacher stress and student behavior (Kokkinos, 2007; Stauffer & Mason, 2013), and teacher concern and type of undesirable behavior displayed by students (Hyland et al., 2014) it is hypothesized that:

8. Teacher stress as measured by the Maslach Burnout Inventory (MBI) will positively correlate with a teacher's negative response to the students in the vignettes.
9. Externalized behavior displayed by the student in the vignette will be rated as more concerning than social and internalized behaviors by the teachers.
10. Social behavior displayed by the student in the vignette will be rated as more concerning than internalized behavior by the teachers.

As research has demonstrated a relationship between teaching experience and referrals/requests for a student (Schwartz et al., 1997), it is hypothesized that:

11. Teaching experience will negatively correlate with a teacher's negative response to the students exhibiting externalized, internalized, and social behavior in the vignettes.

As research has demonstrated a relationship between teacher self-efficacy and referral/request rates (Gebbie et al., 2012; Meijer & Foster, 1988) it is hypothesized that:

12. Teacher self-efficacy as measured by the Teacher's Sense of Efficacy Scale

(TSES) will negatively correlate with a teacher's negative response to the students exhibiting externalized, internalized, and social in the vignettes.

METHODS

Participants

Participants were recruited through social media websites ($n = 34$), and survey websites (Mturk and Survey Circle; $n = 167$). The sample was composed of 201 participants (140 females, 45 males) out of 477 who agreed to participate. For a list of reasons for participant removal please see Table 1. Participants either were currently a teacher/substitute teacher ($n = 178$), or previously a teacher/substitute teacher in grade kindergarten through 12th ($n = 9$). For a full list of demographics please see Tables 2 and 3.

Participants reported that on average they teach 22.65 students ($SD = 8.65$) a year in one class. As the vast majority (79%) of participants reported that they had between 15 and 32 students in one class on average a year, the numbers used for the vignettes were within a realistic range. Participants were also asked on average how many students displayed externalized behavior in one class each year. The average was 5.38 students ($SD = 4.67$). For internalized behavior students the average was 6.50 students ($SD = 5.55$); the average number of students with social behavior problems was 6.38 students ($SD = 6.45$) a year in one class.

Procedure

Participants were recruited through teacher organizations and alumni of Schools of Education and Colleges of Education. Organizations were identified by searching the internet for “teacher organizations” and “organizations for teachers.” Every non-specific organization (e.g., National Education Association instead of National Council of Teachers of English) was contacted by phone or email (see Appendix A and B).

Universities were identified through two websites: collegeboard.com and colleges.startclass.com; sorted by size of the school, biggest to smallest, and every fourth university was chosen to be contacted. Every repeat university with multiple campuses were skipped over. Universities were contacted either by phone or email (See Appendix A and B). Survey links were requested to be distributed by the organization and university via any message board and/or email list to the teachers/alumni. Each source received a different link with the same exact survey (see Appendix C). Teacher groups on social media sites (Facebook, tumblr, etc.) were also contacted through private messaging to distribute a survey link (see Appendix A and C). Participants were also recruited through two survey websites: Survey Circle and Mturk. Only participants who worked in the education and teaching industry were able to see the survey on Mturk. Those who were recruited through Mturk were compensated with \$0.25 USD.

Participants received the survey online via Qualtrics. Participants were first requested to consent (See Appendix D, E, and F). Without consent, they were unable to continue the survey. Participants were then asked to read the Vignettes (see Appendix G) and answer what they believed would be an appropriate response to the student behavior and how stressful they found the behavior. After completing the vignettes, participants were then provided with the demographics (see Appendix H) and measures (TSES; MBI; Survey of Classroom and Behavior Management, see Appendix I) presented in a randomized order. Lastly, participants were given a debriefing (see Appendix J), after which they could close the window and the survey would be complete. The survey was available for approximately ten months.

Measures

Vignettes

Vignettes were written by the researcher describing either externalized, internalized, or social behavior problems identically within a class of 30, 25, and 20 students. Behaviors used in the vignettes were taken from teachers' accounts of behavior witnessed in the classroom (Alter et al., 2013; Crawshaw, 2015; Harrison et al., 2012; Poulou & Norwich, 2002). Externalized behaviors were described based on what would be visible to a teacher in a classroom and what affected the external environment (Liu, 2004). Internalized behaviors were described based on what would be affecting the student's "internal psychological environment rather than the external [environment]" (Liu, 2004, p. 94), such as anxiety or social withdrawal. Social behavior problems were described based on behavior requiring an interaction with a peer or the teacher. Letters were used in place of names and neutral pronouns were used in each vignette to avoid any possible gender bias of the student on the teachers' part (Kokkinos et al., 2004; Kokkinos et al., 2005; Mullola et al., 2012). Participants were given all three student behaviors in three separate vignettes, with the same class size for each participant. So, if participants received a vignette of 20 students for externalized behavior, they also received a vignette of 20 students for internalized behavior and social behavior.

After each vignette teachers were asked to state what they believed would be an appropriate response to the student to address the behavior. Teachers gave responses that were considered to be either "positive" or "negative." Positive responses consisted of mentions of referring the student to the school counselor (Gottfredson & Gottfredson, 2001; Morrissey et al., 2010; Reddy et al., 2009; Shiba & Rausch, 2006), although this

approach does remove the student from the classroom, ideally the time removed would be constructive, similar to a student who has to leave the room to attend speech therapy. Mandatory participation in a special program (Gottfredson & Gottfredson, 2001; Morrissey et al., 2010; Reddy et al., 2009; Shiba & Rausch, 2006; Thompson, 2011) such as one to help the student learn social skills or self-soothing techniques was also considered a positive response. Positive reinforcement, although *not* negative reinforcement, for desired or appropriate behavior was considered positive (Browne, 2013; Brunette, 2010; Doolittle et al., 2007; Landrum & Kauffman, 2006; Ng, 2015; Oshner et al., 2003; Pas et al., 2015; Pisacreta et al., 2011; Reddy et al., 2009; Reinke et al., 2008; Shiba & Rausch, 2006). Negative punishment, although *not* positive punishment, was considered to be a positive response; the idea here is that something has previously been awarded, such as an extra recess, for appropriate behavior and the entire award is not being taken away (e.g., five minutes from the extra 15 minutes of recess) so the student is aware the behavior was inappropriate, but the punishment is fitting and does not completely remove the reward for previously appropriate behavior (Landrum & Kauffman, 2006). Teacher cues to the student when behavior is inappropriate is a positive response. This lets the student know the behavior is inappropriate without drawing attention to the individual student or the behavior (Reddy et al., 2009; Thompson, 2011). Reprimands or reminders are similar to the teacher cues as they are usually quiet and do not draw a lot of attention to the student or the behavior (Doyle, 1989). Using the student's behavior to benefit the student and their classmates' learning (e.g., letting the social student be the group leader or lead a group discussion; Thompson, 2011) was considered a positive response. Catering assignments to the interest of the student,

connecting lessons and assignments to interests, or providing additional work or more challenging work were considered positive as they have been shown to reduce the need for negative reinforcement which can sometimes reinforce the inappropriate behavior and instead these responses can encourage students to complete their work (Thompson, 2011). Partnering or pairing up the student with the inappropriate behavior or having them tutor another student were considered positive responses as both give the student someone of the same/similar age to form a bond with, which has been shown to reduce inappropriate and anxious behavior (Campbell, 2008; Skiba & Rausch, 2006; Thompson, 2011). Behavior charts or goal setting are considered positive responses, both allow the students and teacher to track the behavior while also incorporating positive reinforcement (Landrum & Kauffman, 2006; Thompson, 2011). Building rapport, mentions of pulling the student to the side to have a private conversation, or motivation and encouragement were all considered positive responses; these responses help the student and teacher build trust and allows the student to become more comfortable with the teacher (Doyle, 1989; Reda, 2009). Mentions of moving the student to a different seat was considered a positive response because it kept the student in the classroom, and motivation behind the move is to place students in a position that allows them and their peers to learn better. Talking to school administration was considered positive because the motivation behind the move is one of hope to gain extra support within the classroom for the student (Reddy et al., 2009; Skiba & Rausch, 2006). Having a parent meeting or calling parents to discuss the student with them was considered positive as it encourages parents to continuously be involved with the student and is more likely to result in consistency in response to the student behavior (Reddy et al., 2009). Although this is not an all-encompassing list of possible

positive responses, all participants who gave a positive response had a variation of these responses. These responses were coded/categorized after all data was gathered.

Negative responses included positive punishment and negative reinforcement as both are more likely to encourage inappropriate behavior compared to negative punishment and positive reinforcement (Browne, 2013; Brunette, 2010; Doolittle et al., 2007; Landrum & Kauffman, 2006; Ng, 2015; Oshner et al., 2003; Pas et al., 2015; Pisacreta et al., 2011; Reddy et al., 2009; Reinke et al., 2008; Shiba & Rausch, 2006, Thompson, 2011). Negative responses also include responses that removed the student from the classroom for non-constructive time. These included suspension (Bradley et al., 2004; Gottfredson & Gottfredson, 2001; Iselin, 2010; Oshner et al., 2003; Skiba & Rausch, 2006), expulsion (Bradley et al., 2004; Gottfredson & Gottfredson, 2001; Oshner et al., 2003; Skiba & Rausch, 2006), brief removal (Gottfredson & Gottfredson, 2001; Zentall & Javorsky, 2007); detention (Gottfredson & Gottfredson, 2001), and referring the student to the principal's office (Infantino & Little, 2005; Oshner et al., 2003; Westling, 2010). Suggesting the student change schools was also considered a negative response (Gottfredson & Gottfredson, 2001) as it does not address the behavior but only removes the student from the current classroom. Any response that mentioned threats or humiliation were considered negative, as humiliation often means drawing attention to the student and the behavior, and threats are not actions and so they may encourage the behavior if the student knows the teacher will not act on them (Landrum & Kauffman, 2006). No response was considered negative as it allows the behavior to continue and potentially affect the student's learning as well as their peers (Landrum & Kauffman, 2006). Within the internal student behavior vignettes, responses that mention forcing

students to work in a group or forcing them to present in front of the class were considered negative as they were likely to encourage resistance on the student's part to talking in front of the class as well as encouraging them to withdraw more (McCroskey, 1980; Reda, 2009). Although this is not an all-encompassing list of possible negative responses, all participants who responded with a negative response had a variation of these responses. These responses were coded/categorized after all data was gathered.

Following the open-ended question, participants were also given 12 statements describing possible reactions/attitudes towards the student in the vignette. Participants rated their level of agreement to the statements on a 9-point Likert scale (0 = "Not at All", 5 = "Some Degree", 9 = "A Great Deal"; See Appendix G). Nine of the 12 statements referenced negative attitudes towards the student in the vignette. These items were reverse coded (items 1, 3, 4, 5, 7, 8, 9, 10, and 12). For example, if a participant responded with a 3 ("Very Little") to the statement "I would not have the patience to teach this student" it was coded as a 7 ("Quite a bit"), indicating they have quite a bit of patience for this student. The nine reverse coded statements were combined with the three items referencing positive attitudes to characterize a participant's positive attitude score towards the student in the vignette.

Demographics

A demographic questionnaire was used to determine teacher's gender, teaching experience, degree level/area of study, grade level taught, how long they have been teaching at that grade level, average number of students taught, confidence in managing behavior, and how concerning they find each behavior: externalized, internalized, and social. Participants were also asked on average how many students they have a year that

display externalized, internalized, and social behavior, as well as what they believed the impact on a student's peers' learning and behavior was (See Appendix H).

Teachers' Sense of Efficacy Scale (TSES)

Designed by Tschanhen-Moran and Hoy (2001), the TSES measures a teacher's self-perception "of their competence in using various teaching tasks and strategies" (Huk et al., 2019, p. 798). The measure used in this study is a shortened version consisting of 12 items assessing the degree to which teachers feel competent with various classroom tasks such as classroom management. Teachers were asked to respond using a 9-point Likert scale (0 = "Not at all", 5 = "Some Degree", 9 = "A Great Deal"). A Total Efficacy score, which was used as the teacher's efficacy score in this study, can be found by summing all the Likert scores, with higher scores indicating a higher level of efficacy. Both the short and long form of the TSES have high reliability for all three subscales: Efficacy in Student Engagement, Instructional Practice, and Classroom Management (range of 0.87 to 0.91). Both forms "measure the underlying construct of efficacy" and are correlated with other measures of efficacy (Tschanhen-Moran & Hoy, 2001, p. 801).

Maslach Burnout Inventory (MBI)

Designed by Maslach and colleagues (1996), the MBI measures burnout among human service professionals. Using a 7-point Likert scale (1 = "Never"; 7 = "Everyday"), the 22 statements measure the frequency with which employees experience emotional exhaustion, depersonalization, and a lack of personal accomplishment. Items were reverse-coded items. A total MBI score, which was used as the teacher's stress score in this study, can be found by summing all responses with higher scores reflecting more burnout. The version used within this study is a modified one created by Huk and

colleagues (2019) that has substituted key words to make it more relevant for students, and focuses on the school context as the workplace. The MBI has been found to measure burn-out and no other constructs such as depression or social desirability. Reliability for all three constructs, Emotional Exhaustion, Depersonalization, and Personal Accomplishment, range from 0.72 to 0.90. Test-retest ranged from 0.50 to 0.82 for retest lengths of three months to one year (Maslach et al., 1996).

Survey of Classroom and Behavior Management

First designed by Moore and colleagues (2017), the Survey of Classroom and Behavior Management measures a teacher's knowledge and use of positive behavior management strategies. Originally the survey consisted of 10 positive strategy sets. For the purposes of this study an additional four strategy sets were added to account for responses not included in the original (e.g., immediate removal from the classroom, referral to the school psychologist); each strategy set contains examples of the strategy. Each strategy set is followed by two questions, the first being: "How knowledgeable are you about these strategies?" Teachers rate their knowledge on a 5-point Likert scale (1 = "No Knowledge", 5 = "Very Knowledgeable"). The second is: "To what extent do you actually implement these strategies?" It is also rated on a 5-point Likert scale as well (1 = "Not at All", 5 = "Very Frequently"). Two of the items added to the survey for this study were reverse coded as they asked about implementing negative strategies. All responses to the first question following each strategy, with the exception of the two questions asking about negative strategies, were then added to create a knowledge of positive classroom and behavior management strategies score; the same is done for *all* responses to the second question following each strategy to create an implementation of positive

classroom and behavior management strategies score (See Appendix I). For the original ten strategy sets internal consistency across all items was 0.88. The test-retest showed that for both the knowledge and implementation items their sum scores at retest were significantly correlated with their sum scores on the initial test (Moore et al., 2017). In addition, three more questions were added to the end of the questionnaire: one asking about feelings of adequacy in training; as well as two questions asking how many courses in their educational programs were devoted to behavior management, and how many professional workshops in behavior and classroom management they have attended. Feelings of adequacy were rated from 1 (“Not at All”) to 9 (“A Great Deal”). The questions regarding number of courses and workshops were Yes/No questions, with “Yes” requiring the teacher to indicate how many course or workshops they attended.

RESULTS

The results section is broken into two main sections. The first section presents information about the teachers. The second section examines factors associated with the behavior of the students.

It is important to note here that for questions that were repeated for each behavior (e.g., level of concern for the behavior, impact on peers) participants may have responded to one or two items about the behavior in questions but not all three. This resulted in different n 's and means for those analyses even when they included the same factor. For example, 184 participants responded to the items about the impact externalized and internalized behavior had on peers, while 183 participants responded to both internalized and social student behavior, resulting in internalized behaviors having a different mean for both comparisons.

Participants

Experience Teaching

Participant experience ($N = 187$) ranged from one year to 39 years ($M = 11.04$, $SD = 9.15$). For a full breakdown of frequencies see Table 2.

Confidence in Behavior Management

Teacher confidence in behavior management was assessed with one question with a range of 1 ("Very Little") to 9 ("A Great Deal"), which simply asked participants how confident they were in their ability to manage their student's behavior in the classroom. Participant confidence ($N = 184$) responses ranged from 3 ("Some Degree") to 9 ("A Great Deal"). The overall mean confidence for the sample was 7.45 ($SD = 1.50$) which is considered "Quite a Bit" of confidence in their ability to manage their students' behavior

in the classroom. The majority of the participants (71.6%) rated their confidence between 7 (“Quite a Bit”) and 9 (“A Great Deal”).

Training in Behavior Management

Participants ($N = 178$) were asked to rate their agreement to the statement “I feel I have adequate training in behavior and classroom management” on a 1 (“Very Little”) to 9 (“A Great Deal”) Likert scale. The mean response for adequate training was 6.81 ($SD = 2.17$) which is between “To Some Degree” and “Quite a Bit” of agreement with the statement. Over half of participants (56.2%) rated their agreement to the statement between 7 (“Quite a Bit”) and 9 (“A Great Deal”).

Participant responses to the number of courses and workshops devoted exclusively to classroom and behavior management they participated in are recorded in Table 2.

Correlational analyses between participant factors (knowledge, stress, experience, self-efficacy, confidence, and training) are reported in Table 4. All correlations were significant.

Measures

Participants’ mean scores are displayed in Table 5 for all measures except responses to the vignettes which can be found in Tables 6 through 8. On average, participants had moderate levels of stress, and high levels of self-efficacy. Participants also had high levels of knowledge of positive classroom and behavior management strategies and indicated a moderate level of using these positive strategies.

Behavior of Students

Prevalence of Emotional-Behavioral Disorders as Reported by Participants

Participants reported an average of 5.38 students ($SD = 4.67$; range: 0-25; $N = 183$) in their classroom that displayed externalized behaviors; 6.50 students ($SD = 5.55$; range: 0-25; $N = 184$) that displayed internalized behaviors; and 6.38 students ($SD = 6.45$; range: 0-30, $N = 183$) that displayed social behaviors in their classrooms. One participant reported an average of 50 students with social behaviors in her classroom.

Attitude Towards Students With Emotional-Behavioral Disorders

Participants were given a series of 12 statements on a scale from 1 to 9 that checked for attitude towards the students in the vignettes. Possible scores of positive attitudes towards each student ranged from 12 to 108. On average, participants had a positive attitude score of 73.60 ($SD = 16.37$; range: 25-107) for externalized behaviors; 91.15 ($SD = 14.41$; range: 47-108) for internalized behaviors; and 79.46 ($SD = 16.49$, range: 33-108) for social behaviors.

A one-way within-subjects analysis of variance (ANOVA) was conducted with the factor being type of behavior and the dependent variable being teacher attitude towards the behavior. The results of the ANOVA indicated there was a significant behavior effect, Wilks's $\Lambda = 0.44$, $F(2, 164) = 106.14$, $p < 0.01$. Follow-up pairwise comparisons indicated that positive teacher attitudes towards externalized behavior ($M = 73.79$, $SD = 16.01$) was significantly lower than positive attitudes towards internalized behavior ($M = 91.55$, $SD = 14.22$), $t(173) = -14.22$, $p < 0.01$. Positive teacher attitudes towards externalized behavior ($M = 73.17$, $SD = 16.36$) was also significantly lower than positive attitudes towards social behavior ($M = 79.89$, $SD = 16.42$), $t(181) = -6.64$, $p <$

0.01, while positive attitudes towards internalized behavior ($M = 91.19$, $SD = 14.17$) was significantly higher than social behavior ($M = 80.23$, $SD = 16.20$), $t(173) = 11.33$, $p < 0.01$.

Correlations between positive attitude towards each student behavior (externalized, internalized, and social) and the following variables were calculated: knowledge, stress, experience, self-efficacy, confidence, and training. Positive attitude towards the three student behaviors each showed a significant positive correlation with knowledge, self-efficacy, confidence, and training. They also each showed a significant negative correlation with stress. For correlation coefficients refer to Table 4.

Concern for Students With Emotional-Behavioral Disorders

When asked how concerning 1 (*Not at All*) to 9 (*A Great Deal*) teachers found each behavior (externalized, internalized, and social), participants reported a concern of 6.10 ($SD = 2.05$) for externalized behavior, 5.89 ($SD = 1.95$) for internalized behavior, and 6.48 ($SD = 1.85$) for social behavior.

A one-way within-subjects ANOVA was conducted with the factor being type of behavior and the dependent variable being concern. The results for the ANOVA indicated a significant behavior effect, Wilks's $\Lambda = 0.90$, $F(2, 182) = 9.57$, $p < 0.01$. Follow-up pairwise comparisons indicated that externalized behavior ($M = 6.09$, $SD = 2.05$) was significantly less concerning than social behavior ($M = 6.48$, $SD = 1.85$), $t(183) = -3.02$, $p = 0.00$. Internalized behavior ($M = 5.88$, $SD = 1.95$) was also significantly less concerning than social behavior ($M = 6.48$, $SD = 1.85$), $t(183) = -4.09$, $p < 0.01$. There was no statistically significant difference between concern for externalized behavior and concern for internalized behavior.

Correlations between concern for each student behavior (externalized, internalized, and social) and each of the following variables were calculated: knowledge, stress, experience, self-efficacy, confidence, and training. Concern for social behavior showed a significant positive correlation with stress. For correlation coefficients refer to Table 4.

Gender. Independent-samples *t* tests were conducted to evaluate whether females rated student behavior as more concerning than males. Tests for externalized behavior, $t(181) = 1.29, p = 0.20$; internalized behavior, $t(181) = -0.06, p = 0.95$; and social behavior, $t(180) = -0.23, p = 0.82$ were not significant. Females did not find student behavior more concerning than males.

Impact of Emotional-Behavioral Disorders on Peers

Participants were asked if the behavior of externalized, internalized, and social students impacted the learning of their peers. Participants rated externalized behavior with a mean of 6.79 ($SD = 1.75$) for the impact they have on their peers learning, internalized behaviors receiving a mean rating of 3.95 ($SD = 1.95$), and social behaviors received a mean rating of 6.97 ($SD = 1.73$).

A one-way within-subjects ANOVA was conducted with the factor being type of behavior and the dependent variable being impact on peers' learning. The results of the ANOVA indicated there was a significant behavior effect, Wilks's $\Lambda = 0.37, F(2, 184) = 156.99, p < 0.01$. Follow-up pairwise comparisons indicated that the perceived impact externalized behaviors ($M = 6.79, SD = 1.75$) have on their peers was significantly higher than the perceived impact internalized behaviors ($M = 3.95, SD = 1.95$), $t(185) = 16.39, p < 0.01$ have on their peers' learning; which was significantly lower than the perceived

impact social behaviors ($M = 6.79$, $SD = 1.75$), $t(185) = -17.37$, $p < 0.01$ have on their peers' learning. There was no statistically significant difference between the perceived impact externalized behavior and social behavior had on the learning of student's peers.

Participants were also asked if the behavior of externalized, internalized, and social students impacted the behavior of their peers on a 1 ("Not at All") to 9 ("A Great Deal") scale. On average, participants rated externalized behavior as 6.40 ($SD = 1.91$), internalized behaviors as 4.03 ($SD = 2.17$), while social was rated an average of 6.65 ($SD = 1.88$).

A one-way within-subjects ANOVA was conducted with the factor being type of behavior and the dependent variable being impact on peers' behavior. The results of the ANOVA indicated there was a significant behavior effect, Wilks's $\Lambda = 0.45$, $F(2, 181) = 111.07$, $p < 0.01$. Follow-up pairwise comparisons indicated that the perceived impact externalized behaviors ($M = 6.40$, $SD = 1.91$) have on their peers' behavior was significantly higher than the perceived impact internalized behavior ($M = 4.03$, $SD = 2.17$), $t(184) = 13.99$, $p < 0.01$ have on their peers' behavior. The perceived impact internalized behaviors ($M = 4.02$, $SD = 2.16$) has on the behavior of their peers was also significantly lower than the perceived impact social behaviors ($M = 6.65$, $SD = 1.88$), $t(183) = -14.37$, $p < 0.01$ have on the behavior of their peers. There was no statistically significant difference between the perceived impact externalized and social behaviors have on the behavior of students' peers.

Vignette Response

Participants were given three vignettes each of a student displaying externalized behavior, internalized behavior, and social behavior after which they were asked what

they believed would be an appropriate response to the behavior. Responses were categorized by the researcher as either positive or negative based on previous studies that have classified responses as having either a positive or negative impact on students' behavior. For a breakdown of frequencies of both initial response type per class size and behavior see Tables 6 through 8. For the purposes of this study, only the first response participants wrote was used in analyses and are counted in Tables 6 through 8.

A chi-square test was conducted to evaluate whether in a class of 30 students teacher responses (positive or negative) differed depending on type of student behavior exhibited (externalized, internalized, and social). The relationship between teacher response and behavior type was found to be non-significant, Pearson $\chi^2(2, 185) = 2.51, p = 0.28$. The relationship was also non-significant for both a class of 25 students Pearson $\chi^2(2, 191) = 4.14, p = 0.13$, and a class of 20 student Pearson $\chi^2(2, 188) = 2.40, p = 0.30$

Logistical regressions were conducted to investigate class size's (30, 25, and 20 students) impact on teacher response (positive or negative) to student behavior (externalized, internalized, and social). Initial regressions saw zero of the negative teacher responses as being classified correctly and 100% of the positive teacher responses classified correctly. As these results would seem unlikely in that no teacher will respond negatively to students and all will respond positively, a decision was made to set a new cutoff value.

A cutoff value is the threshold at which point the outcome (teacher response) that has a probability value above the cutoff is classified as a positive response, and those below are classified as a negative response. Since it is unlikely 0% of responses are, or could be, negative, cutoff values were changed from the default 0.50 based on the ROC

curve for each behavior type. For each type of student behavior, a test of the full model with the class size predictor against a constant-only model was not statistically reliable. Externalized behavior: $\chi^2(2, 187) = 2.34, p = 0.31$; cut-off value was set to 0.087 resulting in an overall prediction success of 65.8%, with 67.2% of positive responses classified correctly, and 46.2% of negative responses classified correctly. Internalized behavior: $\chi^2(2, 192) = 1.77, p = 0.41$; cut-off value was set to 0.15 resulting in an overall prediction success of 64.2%, with 67.7% of positive responses classified correctly, and 42.3% of negative responses classified correctly. Social behavior: $\chi^2(2, 187) = 0.62, p = 0.73$, cut-off value was set to 0.08, overall prediction success was 65.8%, 67.6% of positive responses were classified correctly and 42.9% of negative responses were classified correctly.

Three logistical regressions were conducted to investigate nine predictors (knowledge; stress; experience; self-efficacy; confidence; positive attitude towards externalized, internalized, and social behavior; training; concern for externalized, internalized, and social behavior; and gender of teacher) impact on teacher response (positive or negative) for each type of behavior (externalized, internalized, and social). All cut-off values for these logistical regressions were also changed based off the ROC curve. For all three, all nine predictors, as a set, did not reliably distinguish positive teacher responses from negative teacher responses: teacher response to externalized behavior: $\chi^2(9, 134) = 11.44, p = 0.25$; cut-off value was set to 0.083, overall prediction success was 66.4%, 66.4% of positive responses were classified correctly, and 66.7% of negative responses were classified correctly. Teacher response to internalized behavior: $\chi^2(9, 129) = 13.18, p = 0.15$; cut-off value was set 0.152, overall prediction success was

69.0%, with 70.3% of positive responses classified correctly and 61.1% of negative responses classified correctly. Teacher response to social behavior: $\chi^2(9, 133) = 16.23, p = 0.06$; cut-off value was set to 0.05, overall prediction success was 70.7%, with 70.2% of positive responses classified correctly, and 77.8% of negative responses classified correctly.

DISCUSSION

This discussion section will look at the results of this study and link them to prior research. Limitations of this research and suggested future directions for research will be offered.

Student behavior for this study was classified as either externalized (physical disruptions/ aggressiveness, work avoidance, fidgeting, etc.), internalized (inattentive, isolation, anxiety, etc.), or social (verbal disruptions/aggressiveness, inappropriate banter, etc.; Cooper & Jacobs, 2001; Poulou & Norwich, 2002). Teacher responses to these behaviors were classified as either positive (referring to a counselor, positive reinforcement, etc.; Gottfredson & Gottfredson, 2001; Browne, 2013; Brunette, 2010, Doolittle et al., 2007; Morrissey et al., 2010; Ng, 2015; Oshner et al., 2003, Pas et al., 2015; Pisacreta et al., 2011; Reinke et al., 2008) or negative (suspension, brief removal, detention, etc.; Bradley et al., 2004; Gottfredson & Gottfredson, 2001; Iselin, 2010, Oshner et al., 2003; Zentall & Javorsky, 2007). The purpose of this study was to try to determine factors that contributed to the type of response a teacher chose when faced with a student who displayed externalized, internalized, or social behavior. Additional analyses were also run checking one factor's impact on another.

Participants

In contrast with previous research (Avery, 2016; Browne, 2013; Tsouloupas et al., 2014; Walter et al., 2006), the majority of participants in this study felt they had adequate training in classroom and behavior management with at least half having participated in one or more courses and/or workshops devoted specifically to classroom and behavior management. This difference is important to note as teachers may now be better equipped

to handle student behavior compared to those in the past. It is also possible that colleges are recognizing the need to revamp their programs to include topics previously ignored. However, this last point is hard to verify as participants were not asked where they attended their program or when. It is also important to note that within this study feeling that one had adequate training did not significantly impact the way a participant responded to the student behavior. While feelings may have changed over time, so too have factors that impact response type, with training taking a backseat to factors such as self-efficacy and attitudes towards the behavior.

Student Behavior

Attitude

Positive attitudes among the three types of student behaviors were significantly different, with internalized behavior being shown the highest level of positivity and externalized the lowest. As externalized and social behaviors tend to be more of a distraction to teachers and other students, the results were as expected (Carrell & Hoekstra, 2010; Emmer & Stough, 2001; Figlio, 2007; Gebbie et al., 2012; Harrison et al., 2012). Externalized and social behaviors also tend to be viewed more negatively and more severe than they actually are compared to internalized behavior (Abidin & Robinson, 2002; Kokkinos, 2007; Kokkinos et al., 2004), which may contribute to the higher level of positive attitudes towards internalized behavior. While results indicate level of positive attitude towards student behavior only impacted the way participants responded to social behaviors, this may be a case of participants saying one thing while practicing another (Percy et al., 1993; Sougar & Mavroudi, 2017) and should be taken into consideration.

An important distinction between this study and previous research is that we found no link between experience and attitude. Previous research has found the more experience a teacher had working with EBD students, the less willing she/he was to work with the students and the lower their positive attitudes towards the students were (MacFarland & Woolfson, 2013; Soodak et al., 1998). Despite training having been previously shown to have a link to attitude (Ashworth, 2014; Jennison & Beswick, 2010), it may be that the hands-on learning that comes with experience is different than the classroom learning we typically think of with teacher training (with the exception of the one year of student teaching). A lack of link found could also indicate that there are multiple factors that are not taken into account when simple correlations are calculated. As MacFarland and Woolfson (2013) point out, as a teacher's experience increased, they were less willing to work with EBD students, but those who had a higher sense of self-efficacy and a more positive belief about EBD students, were more willing to work with the students despite level of experience.

Concern About Student Behavior

Participants found externalized and internalized behavior to be less concerning than social behavior, with no difference between externalized and internalized behavior. Internalized behavior being less concerning than social behavior does support one of our hypotheses, as well as matching up with previous research (Hyland et al., 2014; Kerebih et al., 2016; Kokkinos et al, 2005; Liljequist & Renk, 2007). It is unclear why social behavior was viewed as more concerning than externalized behavior, although there are several possibilities. One reason may have to do with the sample. The majority of the sample was composed of females and as Alter and colleagues (2013) found, females

consider verbal disturbances more problematic and prevalent than males. However, the current results indicate no difference between females and males. Harrison and colleagues (2012) found similar results with respect to prevalence. Externalizing and social behavior were both a higher concern for teachers than internalized behavior, but they were not as common within the classroom. It is also possible that the level of concern has to do not only with the prevalence of the behavior but the salience of the behavior. It is easier to notice a student talking out of turn or distracting classmates than it is if a student is withdrawn. In addition, internalized behavior does not appear to require immediate or urgent management (Kokkinos et al., 2004).

Concern About Student Behavior and Stress

As with attitude towards student behavior, stress is also related to concern. Our study found that the higher the concern for externalized and social behavior, the higher the stress level a participant tended to report. Kokkinos and colleagues (2005) found similar results, although their study reported their findings in general for undesirable student behavior. Concern for internalized behavior did not appear to influence stress level. This may have been because internalized behavior, for this sample, was the least concerning. Participants were more concerned with social behavior above externalized and internalized behavior, while externalized was rated as more concerning than internalized behavior. If stress had been broken down into how much stress is caused by each behavior, similar to what was done for concern, we may have found that social and externalized behaviors by themselves tended to lead to a higher level of stress. This is reasonable to see as teachers have rated social and externalized behaviors as salient, distracting, and needing immediate management, while internalized behavior can be

managed when the teacher has the time, or at least, it does not need *immediate* attention (Kokkinos et al., 2004).

Vignette Response

Our main hypotheses predicted that class size and type of student behavior would impact how a teacher responded to a student exhibiting symptoms of an EBD. Results indicated that neither behavior nor class size had a significant impact on whether a teacher responded negatively or positively to undesirable student behavior. A more recent study than the Percy et al. study from 1993 that found teachers referred students displaying externalized behavior out of the classroom more often than they did for students displaying internalized behavior, found type of behavior had no impact on how teachers responded to student behavior (Pas et al., 2015). This may be due to all the factors that can go into response decisions, such as training and knowledge of positive management strategies (Alvarez, 2007; Ashworth, 2014; Avery, 2016; Bullock et al., 1994; De Sa Main, 2011; Ng, 2015; Polirstok & Gottlieb, 2006; Stough & Montague, 2015; Tsouloupas et al., 2014). As a result, behavior alone does not hold a big enough impact on response type to be found significant.

As for class size, previous research had found that the larger the class the more likely teachers were to respond negatively to challenging behavior (Fin & Achilles, 1999; Fin et al., 2003; Meijer & Foster, 1988). One of the possible reasons we did not find a difference, besides the possibility class size makes no difference, is that the variable class size within this study was not salient enough. Class size was mentioned once in the beginning of the vignette and never again, it is possible that it was overlooked by participants and as such, did not factor into how they said they would choose to respond.

It is also possible that the way we choose to code responses, strictly either positive or negative, impacted outcomes, as responses are rarely so black and white, and this is true for the factor of both class size and type of student behavior. Future studies should consider a scale with positive and negative as the anchors that allow for responses to fall anywhere along it.

Vignette responses were not significantly impacted by any of the teacher factors: knowledge, stress, experience, self-efficacy, confidence, training, or gender, which did not support some of our hypotheses. For a full list of the support of the hypotheses please see Table 9.

Participant Factors

Experience and Confidence

Our study found that the more experience participants had teaching, the higher their confidence tended to be in their ability to manage classroom behavior. Although previous research did not look at the correlation between these two factors it would be interesting to see what they would have found. MacFarlane and Woolfson (2013) found teachers who were more experienced tended to be less willing to work with students displaying undesirable behavior. Although, it is possible, that participants within this study had control over the types of students who ended up in their classroom. Kalogrides and colleagues (2012) suggest that some schools allow this type of selection. This may especially be true for the current study since roughly a third of participants reported having between zero and two students who exhibited externalized behavior, and a quarter reported having between zero and two students who exhibited social behavior, the two most concerning and problematic behaviors. Previous studies have found classrooms

typically have between one and eight students with an EBD (Forness, Kim, & Walker, 2012; Infantino & Little, 2005).

The participant factors all influence each other, and we would expect them to, as can be seen from the correlations on Table 4. All the factors: experience, confidence, knowledge, self-efficacy, and training, all influence each other in real life. If an individual is not gaining experience or knowledge while training, then there is probably something wrong, some disconnect between what is being taught and what is being learned. If we had found non-significant results within our study for these items, we would have to seriously consider the representation of the sample to the population, as well as the measures that were used in the study.

Limitations

Several of our main hypotheses had to do with class size. As mentioned earlier it is possible the class size participants were meant to be thinking about was not salient enough. Another possible limitation to the vignettes is the way we choose to code responses, strictly either positive or negative, responses in real life are rarely so black and white. Also, for the sake of simplicity, we chose to count only the first response participants wrote, which excluded the few mixed responses we received. We also did not gather expert opinions on the vignettes, and so the vignettes may not have accurately reflected what we had intended them to. Vignettes were also not randomized, while the class size received was randomized. Student behavior was ordered the exact same way for every participant – externalized, internalized, then social – participants may have started to get exhausted and/or annoyed by the repeated questions for each student and as such responded without much thought after the first or second time.

There were numerous other methodological limitations to this study. The additional questions to the classroom and behavior management survey, and the questions following the vignettes were not piloted to check for reliability or validity. Items within these two questionnaires may have been inappropriate or inquiring about the wrong topic (i.e., questions following the vignettes may not have been assessing attitudes towards the students but another construct such as attitudes towards the job of being a teacher). Within the classroom and behavior management survey the scale had been increased from four to five to allow for a middle option, which the survey had also not previously been tested.

In addition to methodological limitations there were limitations within the sample population. Since gender was not among the hypotheses, there was no attempt to gather an even distribution of males and females and we ended up with many more females than males. While our numbers are comparable to the actual population (USNCES, 2018), the sample was so small that it would be impossible to make generalizations concerning male/female differences. Gathering participants from social media restricted the pool to only those who used, and had access to, social media. University participants were also restricted, in that only one university agreed to distribute the link. Participants may have chosen not to participate since there was little incentive for them to do so. For participants gathered from survey websites this restricted the participant pool to only those who knew about and had been granted access to the websites based on the website's own qualifications. While the survey websites claimed to properly appraise participants so experimenters would gather the specific participants they were looking for, it was obvious that many participants did not meet the qualification set by this study

through the website based on their responses to the question “Please state what you feel would be an appropriate response to the behavior displayed by Student A/B/C”.

Gender and race of the student have previously shown to impact teachers’ response (Green et al., 2008; Kokkinos et al., 2004; Kokkinos et al., 2005; Losen & Gillespie, 2012), although neither was mentioned in the vignettes and so participants could impose on the student any identity they wished and may have had an automatic bias. Additionally, some of the language in the questions was subjective, such as the term “adequate” when participants were asked about their training within their program.

Future Studies

Besides exploring these limitations, future studies should consider gathering actual observational data of student and teacher behavior from the classroom as well as provide vignettes to teachers to check for discrepancies between what they say and what they do (Clunies-Ross et al., 2008; Percy et al., 1993; Sougar & Mavroudi, 2017). This is especially important to avoid glitches that may occur in the survey system. A better way to avoid the glitches would be to conduct the survey in person to allow for follow up questions, specifically when it comes to how the teacher would respond to the student in the vignette; this would also allow the researchers to know for certain that the participants they are surveying are actually who they say they are, as well as more accurately assess to what degree the response is positive or negative.

Future studies should also consider looking at the specific grade taught by teachers (Gottfredson & Gottfredson, 2001). Elementary teachers, unless they are music or physical education teachers, tend to teach all subjects and have the same students all day. While music and physical education teachers, as well as middle and high school

teachers tend to have larger classes, teach a specific subject, and have the same students for a shorter amount of time. Special education teachers, regardless of grade level have an arrangement similar to elementary teachers. Grade level and subject not only changes the number of students a teacher has in general, but also the number of EBD students she/he has. Special education teachers tend to have the most EBD students, with one participant in this study reporting all 30 of his/her students fell in that category. Forness, Kim, and Walker (2012) estimated that in a tenth-grade class of 30 students eight students fell under the EBD category while there were six students in a sixth-grade class of 25 students, and five students in a first-grade class of 20 students.

It is also important to look specifically at elementary teachers compared to high school teachers as elementary teachers have to go to school to become a teacher, while if someone wanted to teach history in high school they could major in history in college and complete the licensing exam without taking a course in teaching. This is also related to our next suggestion for future studies, and that is to look at the specific type of training teachers have. As Zentall and Javorsky (2007) found, the type of training a teacher receives impacted how they responded to student behavior. Those who had minimal training responded more negatively compared to those with extensive training that continued over a long period of time. So even if a history major who wanted to teach high school took a workshop in classroom management it would not be enough to make a difference, they would need to take multiple workshops over several years.

Two last things future studies should consider that this study did not, is looking at confidence and stress in regard to specific student behavior. That would be confidence in being able to manage externalized student behavior specifically, or internalized student

behavior or social student behavior. This study asked participants about their confidence and stress in general, while previous studies have found that confidence and stress changes depending on the type of behavior exhibited (i.e., externalized behavior is more stressful than internalized behavior; Greene et al., 2002; Nelson et al., 2001).

Conclusion

The goal of this study was to identify factors that affect how a teacher responds to a student with an Emotional-Behavioral Disorder (EBD). We examined this by providing teachers with three vignettes, each containing a separate facet of the disorder: externalized, internalized, and social. Our main factors of interest were class size, knowledge of positive classroom and behavior management strategies, stress level, concern for the behavior being displayed, experience teaching, and level of self-efficacy. Class size appeared to not impact teachers' decisions in how they respond, although it is possible class size was overlooked by participants. Teacher factors also did not impact their response decisions.

This study had several limitations that may have impacted the results, but they should still be considered in conjunction with previous research when moving forward, especially when considering training in classroom and behavior management. We should also consider that the way teachers and schools are approaching reactions to student behavior is changing as well. There are schools that are changing their suspension guidelines – what they suspend for and for how long (Thompson, 2018), as well as how they approach detention, with meditation rooms becoming more common (Bloom, 2016). With that in mind, schools should move more in the direction of how well these positive

approaches to student behavior are affecting teacher and student behavior so training can be adjusted accordingly.

Table 1

Removed Participants (N = 276)

Reason	n
No response	137
Misunderstood	131
Taught outside grade level	7
Responded in Spanish	1

Table 2

Demographic Characteristics of Participants (N = 201)

Characteristic	n	%
Gender		
Female	140	69.70
Male	45	22.40
Missing	16	8.00
Teaching Experience (in years)		
1 to 5	72	35.80
6 to 10	38	18.90
11 to 15	28	13.90
16 to 20	21	10.40
21 or more	28	13.90
Missing	14	7.00
Highest Educational Degree		
Bachelor	100	49.80
Master	83	41.30
PhD	3	1.50
Missing	15	7.50
Current Grade Level		
Elementary (k - 5)	83	41.30
Middle (6 – 8)	40	19.90
High (9 – 12)	59	29.40
Missing	19	9.50

Table 2 cont.

Demographic Characteristics of Participants (N = 201)

Characteristic	n	%
Workshop in classroom and behavior management		
Yes	111	55.20
No	71	35.30
Missing	19	9.50
Number of workshops devoted to classroom and behavior management		
0	2	1.00
1	20	10.00
2	26	12.90
3	21	10.40
4	10	5.00
5	8	4.00
6	4	2.00
7	3	1.50
8	4	2.00
10	8	4.00
11	1	0.50
15	2	1.00
20	3	1.50
Missing	1	0.50

Table 3

Response to Survey Question “What Area of Study Did You Receive Your Highest Educational Degree In?” (N = 201)

Characteristic	n	%
Area of study		
Education	67	33.33
Social Sciences	31	15.42
English	30	14.93
Administration	19	9.45
Science	17	8.46
Math	12	5.97
Humanities	10	4.97
Missing	15	7.47

Table 4

Descriptive Statistics and Correlations for Study Variables

Variable	M	SD	1	2
1. Knowledge	50.44	8.14		
2. Stress	63.17	23.37	-.44*	
3. Experience	11.04	9.15	.33*	-.20*
4. Self-Efficacy	86.03	14.27	.58*	-.57*
5. Confidence	7.45	1.50	.45*	-.47*
6. Positive attitudes towards externalized behavior	73.60	16.37	.42*	-.65*
7. Positive attitudes towards internalized behavior	91.15	14.41	.39*	-.47*
8. Positive attitudes towards social behavior	79.46	16.49	.53*	-.64*
9. Training	6.81	2.17	.48*	-.39*
10. Concern for Externalized behavior	6.10	2.05	.04	.19
11. Concern for internalized behavior	5.89	1.95	.08	.09
12. Concern for social behavior	6.48	1.85	-.04	.25*

* $p < 0.01$

Table 4 cont.

Descriptive Statistics and Correlations for Study Variables

Variable	3	4	5	6
1. Knowledge				
2. Stress				
3. Experience				
4. Self-Efficacy	.22*			
5. Confidence	.35*	.54*		
6. Positive attitudes towards externalized behavior	.11	.47*	.35*	
7. Positive attitudes towards internalized behavior	.11	.44*	.24*	
8. Positive attitudes towards social behavior	.14	.53*	.39*	
9. Training	.22*	.42*	.47*	.40*
10. Concern for Externalized behavior	-.03	-.03	-.11	
11. Concern for internalized behavior	-.01	-.04	-.01	
12. Concern for social behavior	-.00	-.07	-.10	

* $p < 0.01$

Table 4 cont.

Descriptive Statistics and Correlations for Study Variables

Variable	7	8	9
1. Knowledge			
2. Stress			
3. Experience			
4. Self-Efficacy			
5. Confidence			
6. Positive attitudes towards externalized behavior			
7. Positive attitudes towards internalized behavior			
8. Positive attitudes towards social behavior			
9. Training	.18	.35	
10. Concern for Externalized behavior			-.13
11. Concern for internalized behavior			-.05
12. Concern for social behavior			-.16

* $p < 0.01$

Table 5

Participants' Mean Scores

Measure	n	M	SD	Range
Teacher Sense of Efficacy Scale	182	86.03	14.27	52-108
Maslach Burnout Inventory	171	63.18	23.37	22-116
Survey of Classroom and Behavior Management				
Knowledge	174	50.44	8.14	27-60
Implementation	173	53.16	7.78	34-68

Table 6

Types of Responses to Student Behavior in Vignette with 30 Students

Student behavior	Positive	Negative	Missing
External	57	5	2
Social	57	4	3
Internal	53	9	2

Table 7

Types of Responses to Student Behavior in Vignette with 25 Students

Student behavior	Positive	Negative	Missing
External	57	6	5
Social	60	4	4
Internal	53	11	4

Table 8

Types of Responses to Student Behavior in Vignette with 20 Students

Student behavior	Positive	Negative	Missing
External	60	2	7
Social	56	6	5
Internal	58	6	5

Table 9

Summary of Hypotheses

<p>Hypothesis 1 In a class of 30 students, students displaying externalized behavior will have more negative teacher responses than students displaying social and internalized behaviors in the vignettes.</p>	<p>Not Supported</p>
<p>Hypothesis 2 In a class of 30 students, students displaying social behaviors will have more negative teacher responses than students displaying internalized behaviors in the vignettes.</p>	<p>Not Supported</p>
<p>Hypothesis 3 In a class of 25 students, students displaying externalized behavior will have more negative teacher responses than students displaying social and internalized behaviors in the vignettes.</p>	<p>Not Supported</p>
<p>Hypothesis 4 In a class of 25 students, students displaying social behavior will have more negative teacher responses than students displaying internalized behavior in the vignettes.</p>	<p>Not Supported</p>
<p>Hypothesis 5 In a class of 20 students, students displaying externalized behavior will have more negative teacher responses than students displaying social and internalized behaviors in the vignettes.</p>	<p>Not Supported</p>
<p>Hypothesis 6 In a class of 20 students, students displaying social behavior will have more negative teacher responses than students displaying internalized behavior in the vignettes.</p>	<p>Not Supported</p>

Table 9 cont.

Summary of Hypotheses

<p>Hypothesis 7 Teachers' classroom management knowledge as measured by the Survey of Classroom and Behavior Management will negatively correlate with negative teacher response to the students in the vignettes</p>	<p>Not Supported</p>
<p>Hypothesis 8 Teacher stress as measured by the Maslach Burnout Inventory (MBI) will positively correlate with a teacher's negative response to the students in the vignettes.</p>	<p>Not Supported</p>
<p>Hypothesis 9 Externalized behavior displayed by the student in the vignette will be rated as more concerning than social and internalized behaviors by the teacher.</p>	<p>Not Supported</p>
<p>Hypothesis 10 Social behavior displayed by the student in the vignette will be rated as more concerning than internalized behavior by the teachers.</p>	<p>Supported</p>
<p>Hypothesis 11 Teaching experience will negatively correlate with a teacher's negative response to the students in the vignettes.</p>	<p>Not Supported</p>
<p>Hypothesis 12 Teacher self-efficacy as measured by the Teacher's Sense of Efficacy Scale (TSES) will negatively correlate with a teacher's negative response to the students in the vignettes.</p>	<p>Not Supported</p>

Appendix A: Recruitment email

Recruitment letter sent to organizations/university emails/private messages:

Hi,

My name is Davina Huntwork and I am a graduate student at St. John's University working on my master's thesis. My research is examining the internal and external factors that may contribute to educators' decisions on classroom management. I am contacting you to inquire if you would be willing to distribute the survey link to teachers that are affiliated with your organization?

Thank you in advance for your consideration.

I can be reached at davina.huntwork16@stjohns.edu if you have any questions,

Thank you for your time,

Davina Huntwork

Appendix B: Recruitment Oral Script

Recruitment oral script:

Hi,

My name is Davina Huntwork and I am a graduate student at St. John's University working on my master's thesis. My research is examining the internal and external factors that may contribute to educators' decisions on classroom management. I am contacting you to inquire if you would be willing to distribute a survey link to your alumni of the School/College of Education once it was created?

Appendix C: Recruitment link

To be distributed with the survey link:

Hi,

I am attaching the survey link that is to be distributed to the members of the organization/alumni of the School/College of Education. When you post/distribute the link can you please attach the following.

“Hi,

This is being posted/emailed on behalf of Davina Huntwork, a graduate student at St. John’s University. She is currently working on her master’s thesis and is looking for participants who are or have been teachers to complete a survey. The survey will take roughly 30 minutes, and participation is completely voluntary. Your time is greatly appreciated.

Thank you,

Davina Huntwork”

Thank you again, I greatly appreciate your cooperation and willingness to do this for me,
Davina Huntwork

Appendix D: Social Media Consent Form



Dear Teacher,

You are invited to participate in a research study conducted at St. John's University in the Psychology department. The main investigator of the study is Davina Huntwork, a master's student of General Psychology. You are being given the opportunity to participate in this study because you are, or have been, a teacher of students who are/were kindergarten through 12th grade. Participation should require about 30 minutes of your time. Participation is entirely voluntary; you may withdraw from the study at any time or refuse to answer a particular question without consequences.

If you decide to participate in this study your responses will be anonymous. You will not be asked any identifying information, such as email address, name, or school location. There are no anticipated risks to you if you decide to participate, compensation or benefits, although participation may help increase the knowledge in this field of study as well as your own knowledge.

You will be asked to read several vignettes and respond to questions pertaining to them. Additionally, you will be asked to complete four questionnaires pertaining to demographics, patterns of emotional experiences as a teacher, as well as knowledge. The study will be conducted online so it will be completed in a place of your choice.

The purpose of this study is to investigate factors that contribute to the kind of responses a teacher makes in response to student behavior. Results of this study will be written up and submitted as part of a master's thesis. If you wish to know the results, or additional information on the study you may contact the principal investigator, Davina Huntwork at davina.huntwork16@stjohns.edu, or the investigator's faculty advisor, Dr. Mark Terjesen at terjesem@stjohns.edu. If you have any questions or concerns about this study or your rights as a study participant, you may contact Dr. Marie Nitopi, the Institutional Review Board coordinator for St. John's University, at nitopim@stjohns.edu or at (718) 990-1440. I thank you in advance for your time and participation.

By checking "I consent" you indicate that you have read and understand the information provided above, that you willingly agree to participate, that you may withdraw your consent at any time and discontinue participation without penalty.

Appendix E: Survey Circle Consent Form



Dear Teacher,

You are invited to participate in a research study conducted at St. John's University in the Psychology department. The main investigator of the study is Davina Huntwork, a master's student of General Psychology. You are being given the opportunity to participate in this study because you are, or have been, a teacher of students who are/were kindergarten through 12th grade. Participation should require about 30 minutes of your time. Participation is entirely voluntary; you may withdraw from the study at any time or refuse to answer a particular question without consequences.

If you decide to participate in this study your responses will be anonymous. You will not be asked any identifying information, such as email address, name, or school location. There are no anticipated risks to you if you decide to participate or benefits, although participation may help increase the knowledge in this field of study as well as your own knowledge. Compensation for completing the survey is one survey code for points for the website Survey Circle, amount of points will depend on the position of this survey in the Survey Ranking.

You will be asked to read several vignettes and respond to questions pertaining to them. Additionally, you will be asked to complete four questionnaires pertaining to demographics, patterns of emotional experiences as a teacher, as well as knowledge. The study will be conducted online so it will be completed in a place of your choice.

The purpose of this study is to investigate factors that contribute to the kind of responses a teacher makes in response to student behavior. Results of this study will be written up and submitted as part of a master's thesis. If you wish to know the results, or additional information on the study you may contact the principal investigator, Davina Huntwork at davina.huntwork16@stjohns.edu, or the investigator's faculty advisor, Dr. Mark Terjesen at terjesem@stjohns.edu. If you have any questions or concerns about this study or your rights as a study participant, you may contact Dr. Marie Nitopi, the Institutional Review Board coordinator for St. John's University, at nitopim@stjohns.edu or at (718) 990-1440. I thank you in advance for your time and participation.

By checking "I consent" you indicate that you have read and understand the information provided above, that you willingly agree to participate, that you may withdraw your consent at any time and discontinue participation without penalty.

Appendix F: Mturk Consent Form



Dear Teacher,

You are invited to participate in a research study conducted at St. John's University in the Psychology department. The main investigator of the study is Davina Huntwork, a master's student of General Psychology. You are being given the opportunity to participate in this study because you are, or have been, a teacher of students who are/were kindergarten through 12th grade. Participation should require about 30 minutes of your time. Participation is entirely voluntary; you may withdraw from the study at any time or refuse to answer a particular question without consequences.

If you decide to participate in this study your responses will be anonymous. You will not be asked any identifying information, such as email address, name, or school location. There are no anticipated risks to you if you decide to participate or benefits, although participation may help increase the knowledge in this field of study as well as your own knowledge. Compensation for completing the survey is \$0.25 USD, to receive this compensation you must enter the four-digit code at the end of the survey into Mturk.

You will be asked to read several vignettes and respond to questions pertaining to them. Additionally, you will be asked to complete four questionnaires pertaining to demographics, patterns of emotional experiences as a teacher, as well as knowledge. The study will be conducted online so it will be completed in a place of your choice.

The purpose of this study is to investigate factors that contribute to the kind of responses a teacher makes in response to student behavior. Results of this study will be written up and submitted as part of a master's thesis. If you wish to know the results, or additional information on the study you may contact the principal investigator, Davina Huntwork at davina.huntwork16@stjohns.edu, or the investigator's faculty advisor, Dr. Mark Terjesen at terjesem@stjohns.edu. If you have any questions or concerns about this study or your rights as a study participant, you may contact Dr. Marie Nitopi, the Institutional Review Board coordinator for St. John's University, at nitopim@stjohns.edu or at (718) 990-1440. I thank you in advance for your time and participation.

By checking "I consent" you indicate that you have read and understand the information provided above, that you willingly agree to participate, that you may withdraw your consent at any time and discontinue participation without penalty.

Appendix G: Vignettes

Please read the following vignettes and respond to the questions

Vignette of external behavior: You are a teacher in your current grade level, or the last grade level you taught, with 30 [25; 20] students. Student A, one of your students, lives nearby and walks to and from school with their two siblings. During class time, Student A leaves their seat without permission and do not complete their work, which contributes to their C average. Student A enjoys reading about outer space but hates science. They have been caught bullying others and attempting to start fights. Student A often talks about visiting their grandparents on the weekend and watching the sports channel with their dad.

Please state what you feel would be an appropriate response to the behavior displayed by Student A.

For the following questions please rate how much you agree with the statements on a scale of 1 (*not at all*) to 9 (*a great deal*).

1. I do not think I would have the energy to teach this student

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

2. This student would benefit from being in my classroom

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

3. I would not have the patience to teach this student

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

4. I feel this student would be more successful in another class

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

5. This student would require more of my time than other students

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

6. I would not mind if I had to dedicate extra time to this student

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

7. This student's behavior causes me to feel stressed

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

8. This student's behavior takes the joy out of teaching

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

9. This student's behavior would make me feel frustrated with my job

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

10. This student's behavior would impact the learning of the other students in the class

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

11. I feel I have adequate resources to help this student succeed

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

12. The behavior of the rest of the class would be affected by the behavior of this student

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

Vignette of internal behavior: You are a teacher in your current grade level, or the last grade level you taught, with 30 [25; 20] students. Student B, one of your students, has no siblings and rides the bus by themselves to and from school. They are shy and often appear anxious, but they have no problem talking about their pet goldfish. Student B enjoys math the most and hates group projects. They often try to avoid interacting with their peers and become embarrassed when called on in front of the class. After school Student B attends an after-school program focused in robotics. You constantly catch them day-dreaming or appearing to be lost in thought, however, they receive mostly A's and B's and completes all their work in a timely manner.

Please state what you feel would be an appropriate response to the behavior displayed by Student B.

For the following questions please rate how much you agree with the statements on a scale of 1 (*not at all*) to 9 (*a great deal*).

1. I do not think I would have the energy to teach this student

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

2. This student would benefit from being in my classroom

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

3. I would not have the patients to teach this student

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

4. I feel this student would be more successful in another class

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

5. This student would require more of my time than other students

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

6. I would not mind if I had to dedicate extra time to this student

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

7. This student's behavior causes me to feel stressed

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

8. This student's behavior takes the joy out of teaching

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

9. This student's behavior would make me feel frustrated with my job

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

10. This student's behavior would impact the learning of the other students in the class

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

11. I feel I have adequate resources to help this student succeed

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

12. The behavior of the rest of the class would be affected by the behavior of this student

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

Vignette of social behavior: You are a teacher in your current grade level, or the last grade level you taught, with 30 [25; 20] students. Student C, one of your students, takes the bus to and from school with three of their four siblings. In class Student C is very outgoing and can often be found talking to their neighboring peer, usually about their new puppy or one of their siblings. Student C constantly talks out of turn and blurts out instead of raising their hand. English is their favorite subject and they dislike math. They receive mostly B's and C's. When talking, Student C talks quickly and tries to get as much out in one breath as possible.

Please state what you feel would be an appropriate response to the behavior displayed by Student C.

For the following questions please rate how much you agree with the statements on a scale of 1 (*not at all*) to 9 (*a great deal*).

1. I do not think I would have the energy to teach this student

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

2. This student would benefit from being in my classroom

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

3. I would not have the patience to teach this student

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

4. I feel this student would be more successful in another class

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

5. This student would require more of my time than other students

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

6. I would not mind if I had to dedicate extra time to this student

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

7. This student's behavior causes me to feel stressed

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

8. This student's behavior takes the joy out of teaching

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

9. This student's behavior would make me feel frustrated with my job

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

10. This student's behavior would impact the learning of the other students in the class

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

11. I feel I have adequate resources to help this student succeed

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

12. The behavior of the rest of the class would be affected by the behavior of this student

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

Appendix H: Demographic Questionnaire

What is your gender? Male Female

How many years have you been a teacher in the classroom?

What is the highest educational level degree that you currently hold? Bachelors

Masters Doctoral Degree

What area of study did you receive your highest educational degree in?

What is the current grade level you are teaching?

How many years have you been teaching at this grade level?

What is the average number of students you teach in one class?

How confident are you in your ability to manage your students' behavior in the classroom?

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

Please rate how concerning the following behaviors are for you on a scale from 1 (*not at all*) to 9 (*a great deal*).

Externalized behavior (Physical disruptions/aggressiveness, fidgeting, leaving seat, etc.)

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

Internalized behavior (Inattentive, isolation, anxiety, etc.)

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

Social behavior (verbal disruptions/aggressiveness, inappropriate banter, etc.)

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

On average, how many students a year would you say you have in a class that display

Externalized behaviors (physical disruptions/aggressiveness, fidgeting, leaving seat, etc.)

Internalized behaviors (inattentive, isolation, anxiety, etc.)

Social behaviors (verbal disruptions/aggressiveness, inappropriate banter, etc.)

Do you think students displaying externalized behaviors (physical disruptions/aggressiveness, fidgeting, leaving seat, etc.)

Have an impact on their peers' learning?

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

Have an impact on their peers' behavior?

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

Do you think students displaying Internalized behaviors (inattentive, isolation, anxiety, etc.) Have an impact on their peers' learning?

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

Have an impact on their peers' behavior?

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

Do you think students displaying Social behaviors (verbal disruptions/aggressiveness, inappropriate banter, etc.)

Have an impact on their peers' learning?

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

Have an impact on their peers' behavior?

1	2	3	4	5	6	7	8	9
Not at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

Appendix I: Survey of Classroom and Behavior Management

Please read the following classroom and behavior management strategies and respond to the questions.

1. Systematically teaching, posting, reinforcing, and monitoring classroom rules and routines (e.g., specific procedures for turning in work, requesting assistance).

How knowledgeable are you about these strategies?

1 (No Knowledge) 2 3(Somewhat Knowledgeable) 4
5(Very Knowledgeable)

To what extent do you actually implement these strategies?

1(Not at All) 2 3(Somewhat Frequently) 4 5(Very
Frequently)

2. Using procedures for promoting appropriate behavior for the class as a whole (e.g., reinforcing appropriate behavior with specific, contingent praise; tokens; special activities or group contingencies) and individual student' s appropriate behavior (e.g., providing specific praise or rewards, teaching students to self-manage, self-monitor, or self-evaluate their own behavior, developing behavior contracts).

How knowledgeable are you about these strategies?

1 (No Knowledge) 2 3 (Somewhat Knowledgeable) 4
5(Very Knowledgeable)

To what extent do you actually implement these strategies?

1(Not at All) 2 3(Somewhat Frequently) 4 5(Very
Frequently)

3. Monitoring student behavior and immediately removing student from the classroom for inappropriate behavior (e.g. referral to principal's office, sending student in the hall or to another teacher's classroom).

How knowledgeable are you about these strategies?

1 (No Knowledge) 2 3(Somewhat Knowledgeable) 4
5(Very Knowledgeable)

To what extent do you actually implement these strategies?

1(Not at All) 2 3(Somewhat Frequently) 4 5(Very
Frequently)

4. Actively monitoring students to provide assistance or to intervene as needed (e.g., actively scanning, using response cards, choral responding, verbal and written response).

How knowledgeable are you about these strategies?

1 (No Knowledge) 2 3(Somewhat Knowledgeable) 4
5(Very Knowledgeable)

To what extent do you actually implement these strategies?

1(Not at All) 2 3(Somewhat Frequently) 4 5(Very
Frequently)

5. Providing structured and predictable classroom activities; physically arranging the classroom to promote flow and traffic and minimize distractions.

How knowledgeable are you about these strategies?

1 (No Knowledge) 2 3(Somewhat Knowledgeable) 4
5(Very Knowledgeable)

To what extent do you actually implement these strategies?

1(Not at All) 2 3(Somewhat Frequently) 4 5(Very

Frequently)

6. Observing student behavior and referring student to other school resources for behavior (e.g. special education, school counselor/psychologist/interventionist).

How knowledgeable are you about these strategies?

1 (No Knowledge) 2 3(Somewhat Knowledgeable) 4

5(Very Knowledgeable)

To what extent do you actually implement these strategies?

1(Not at All) 2 3(Somewhat Frequently) 4 5(Very

Frequently)

7. Providing appropriate instructional supports to allow for high rates of opportunities for all students to respond correctly to academic questions or demands; Utilizing research-based instructional strategies and providing individually-adapted instructional supports to engage all students in learning (e.g., direct instruction, mediated scaffolding, learning strategies, peer tutoring, computer assisted instruction, providing guided notes, modifying curricula and materials to meet student needs).

How knowledgeable are you about these strategies?

1 (No Knowledge) 2 3(Somewhat Knowledgeable) 4

5(Very Knowledgeable)

To what extent do you actually implement these strategies?

1(Not at All) 2 3(Somewhat Frequently) 4 5(Very
Frequently)

8. Providing performance feedback and applying consequences to reduce problem behavior (e.g., planned ignoring, time-out from positive reinforcement, response cost).

How knowledgeable are you about these strategies?

1 (No Knowledge) 2 3(Somewhat Knowledgeable) 4
5(Very Knowledgeable)

To what extent do you actually implement these strategies?

1(Not at All) 2 3(Somewhat Frequently) 4 5(Very
Frequently)

9. Evaluate student behavior and requesting support for the student when deemed necessary (e.g. requesting a para-educator).

How knowledgeable are you about these strategies?

1 (No Knowledge) 2 3(Somewhat Knowledgeable) 4
5(Very Knowledgeable)

To what extent do you actually implement these strategies?

1(Not at All) 2 3(Somewhat Frequently) 4 5(Very
Frequently)

10. Providing differential reinforcement (withholding reinforcement for inappropriate behavior and providing reinforcement for desired behavior).

How knowledgeable are you about these strategies?

1 (No Knowledge) 2 3(Somewhat Knowledgeable) 4
5(Very Knowledgeable)

To what extent do you actually implement these strategies?

1(Not at All) 2 3 (Somewhat Frequently) 4 5(Very
Frequently)

11. Manipulating antecedents to prevent the occurrence of inappropriate behavior (e.g., pre-correction, reducing/altering demands, providing choice in order of completing assignments).

How knowledgeable are you about these strategies?

1 (No Knowledge) 2 3(Somewhat Knowledgeable) 4
5(Very Knowledgeable)

To what extent do you actually implement these strategies?

1(Not at All) 2 3(Somewhat Frequently) 4 5(Very
Frequently)

12. Explicitly and systematically teaching desired replacement behaviors

How knowledgeable are you about these strategies?

1 (No Knowledge) 2 3(Somewhat Knowledgeable) 4
5(Very Knowledgeable)

To what extent do you actually implement these strategies?

1(Not at All) 2 3(Somewhat Frequently) 4 5(Very
Frequently)

13. Requesting the student be removed from the classroom for longer periods of time due to inappropriate classroom behavior (e.g. in-school/after-school detention/suspension, expulsion, change in teacher's).

How knowledgeable are you about these strategies?

1 (No Knowledge) 2 3(Somewhat Knowledgeable) 4
5(Very Knowledgeable)

To what extent do you actually implement these strategies?

1(Not at All) 2 3(Somewhat Frequently) 4 5(Very
Frequently)

14. Observing student behavior or analyzing behavioral data for designing, implementing, and evaluating interventions (e.g., determine the frequency of problem behavior, and to monitor student progress and response to interventions).

How knowledgeable are you about these strategies?

1 (No Knowledge) 2 3(Somewhat Knowledgeable) 4
5(Very Knowledgeable)

To what extent do you actually implement these strategies?

1(Not at All) 2 3(Somewhat Frequently) 4 5(Very
Frequently)

15. I feel I have adequate training in behavior and classroom management

1	2	3	4	5	6	7	8	9
None at All		Very Little		To Some Degree		Quite a Bit		A Great Deal

16. Did you have any courses exclusively devoted to behavior and classroom management in your education program?

No

Yes

If Yes, how many courses?

17. Have you completed any professional workshops in behavior and classroom management?

No

Yes

If Yes, how many workshops?

Appendix J: Debriefing

Thank you again for your participation.

The purpose of this study was to see what factors (class size, stress, self-efficacy, teaching experience, classroom management knowledge) contribute to a teacher's response to different student behavior. It was also to see whether the type of response (referring the student to other school resources, requesting the student be immediately removed from the classroom, requesting longer-term classroom removal, requesting classroom support, 'other', and 'none') depends on the type of behavior.

If you have questions about this study, or would like to know the results, you may contact Davina Huntwork, the principal investigator, at davina.huntwork16@stjohns.edu

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