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Teachers' Self-Efficacy and Their Response to Students' Disruptive Behavior

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Abstract

Disruptive classroom behavior is a frequent topic of concern for teachers who are emotionally exhausted by the profession. The discrepancies in the treatment of students from different demographic groups create the need to research the factors that affect decisions teachers make when managing disruptive behavior. Sending students out of the classroom in response to disruptive behavior results in less time spent engaged in learning, so the practice must be scrutinized to create equitable school experiences for students. The purpose of this study was to examine a potential relationship between teachers' ratings of their self-efficacy for managing disruptive behavior and the beliefs and practices related to sending students out of the classroom. The teachers' years of experience, gender identity, and race were also analyzed in comparison to their ratings of self-efficacy to determine if any relationship exists. Survey responses from 2,841 teachers revealed a statistically significant correlation between teachers with higher self-efficacy ratings and a lower rate of sending students out of the classroom. Teachers with higher self-efficacy were also correlated with the belief that sending students out of the classroom should happen less frequently. As teachers' years of experience increased, their ratings of self-efficacy also increased. There was a significant difference between teachers with a binary gender identity when compared with teachers with a nonbinary gender identity. With regard to racial demographics, there was no conclusive correlation reflected in the data. Because there is a relationship between teachers' self-efficacy and their beliefs, practices, and certain demographics, this study has implications for educational practice. School leaders should prioritize professional development that accelerates teachers' self-efficacy for managing disruptive behavior to reduce the frequency with which students are sent out of the classroom and prevent teacher burnout.

Acknowledgments

To the colleagues who push me to be better every day, thank you for sharing the belief that every student deserves the very best school experience possible, and for inspiring me to contribute to their success in meaningful ways. I am grateful for the educators who allow me the privilege of learning alongside them to find the right solutions to our most important educational challenges. This project represents a collaborative effort to inform our expanding research base and continually improve the practical ways we apply that knowledge in the classroom.

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Chapter I: Introduction

Compulsory education in the United States has a more direct and pervasive impact on society than any other system. Most of the population participates in formal educational systems as they progress through the early years of their life. By the time people transition beyond the education system, their success as members of society is dependent on the skills they developed during their time as students and their capacity for developing new skills as they live, play, work, consume, create, and interact in the world. Positive relationships between teachers and students are commonly discussed as important in the process of educating children well. Marzano (2003) argued that the single most important influence on the success of students in the educational system is the teacher, which includes the daily interactions those teachers have with students in the context of managing classroom behavior.

Documented patterns indicate widespread differences in how students from different racial groups are treated by educators (Tenenbaum & Ruck, 2007). Inequities that are deeply embedded within the education system transcend the sum of the actions of individual educators. Black students are far more likely to be reprimanded and disciplined by teachers for the same behaviors as White students (Minnesota Department of Education, 2018). These systemic racial injustices create inherent advantages for some groups and disadvantages for others, leading to disparate achievement, graduation, and incarceration rates for students of color (Hines, 2008; NCES, 2020; Fowler, 2011). If negative life outcomes for students can be predicted by the way they are treated in the very educational system that is intended to prepare them for a productive and prosperous life, that system must be scrutinized for any perpetual injustices that set some students up to succeed while routinely leaving others behind.

To achieve the advertised vision of American education that strives for both equal access

and educational excellence (U.S. Department of Education, n.d.), research must contribute to a deeper and more nuanced understanding of the inequities that persist within specific aspects of the system. The practices used by school personnel to maintain a safe and productive learning environment represent a critical area of study because the interactions between the staff and students influence long-term outcomes (Tenenbaum & Ruck, 2007). Discipline and behavioral management are common sources of negative interactions in schools (Hagenour, Hascher, & Volet, 2015); therefore, studying the factors related to teachers' responses to disruptive behaviors could provide insights that lead to increased success, especially for students of color who are often marginalized in the current system.

Statement of the Problem

The Minnesota Department of Education reported the number of Black students who received exclusionary discipline was much higher than should be expected given the percentage of the student population they represented when compared to their White counterparts (Minnesota Department of Education, 2018). Of the almost 50,000 disciplinary consequences reported to the state in 2018, 38% were received by Black students though they only represented 11.3% of the total student population that year. In contrast, 64.8% of the total student population is White, and as a group they received 36% of the disciplinary consequences (Minnesota Department of Education, 2018).

A similar disparity happens at the national level. During the 2013-2014 school year, 5% of the total student population was suspended from school one or more times, but 13.7% of those suspensions were received by Black students, which is higher than any other race/ethnicity (Digest of Education Statistics, 2018). Leaders in the education system should examine discipline practices to determine the variables that relate to discrepant patterns to create a more

equitable system. Not only do Black students face a disproportionately high rate of disciplinary consequences, but they also receive consequences for less severe behaviors than White students (Fowler, 2011).

The injustice of disparate discipline creates a need for immediate change in teachers' and schools' discipline practices. It is important to examine the longer-term byproducts of these trends, including the academic achievement gap between Black and White students (Hines, 2008) and the lower rate at which Black students are expected to graduate as compared to peers from other racial groups (NCES, 2020). A related concern is the way exclusionary discipline practices, especially when applied disproportionately to Black students, contribute to decreased time engaged in meaningful learning and serve as early predictors of those students being incarcerated later in life (Fowler, 2011).

The examination of discipline inequities must begin by looking for the causes of the disparities between student groups, especially the widespread trend that Black students are disciplined more often and for less disruptive behaviors than their White counterparts (Delale-O'Connor et al., 2017). Because teachers spend the most direct time with students in school, it is important to examine factors surrounding their interactions with students. Self-efficacy is the belief a person holds about their capability to successfully influence outcomes. Delale-O'Connor et al. (2017) argued that a teacher's sense of self-efficacy is a primary factor impacting the strategies they use to manage behavior in the classroom, which is related to their decisions about removing students from the classroom as a response to disruptive behavior. Self-efficacy also contributes to a teacher's resilience when it comes to ensuring students achieve academic goals (Hines, 2008), which makes it an important area to examine, especially because the academic achievement gap is a concern related to the disparities in the use of discipline practices that

exclude students from time in the classroom. To create a more equitable education system, we must examine any connections that may exist between teachers' self-efficacy and the subjective decisions they make about sending students out of the classroom in response to disruptive behavior.

Purpose of the Study

Teachers' self-efficacy in relation to managing disruptive student behavior directly impacts how they interact with students (Delale-O'Connor et al., 2017). Disruptive behavior is defined as an action that impairs the flow of learning in the classroom (Aloe et al., 2014). The purpose of this study was to determine the relationship between teachers' self-efficacy beliefs for managing disruptive behavior and sending students out of the classroom. In particular, the focus was to examine the decisions teachers make to send students out instead of managing the situation themselves. For this study, sending the student out could include time out in the hallway, a referral to another staff member, or time in another space instead of the student's primary learning space.

Research Questions

RQ1: Do teachers' ratings of self-efficacy correlate with the rate at which students are sent out of the classroom for disruptive behavior?

H_o1: There is no significant correlation between teachers' ratings of self-efficacy and the rate at which students are sent out of the classroom for disruptive behavior.

H_a1: There is a significant correlation between teachers' ratings of self-efficacy and the rate at which students are sent out of the room for disruptive behavior.

RQ2: Do teachers' ratings of self-efficacy correlate with their beliefs about sending students out of the classroom for disruptive behavior?

H_o2: There is no significant correlation between teachers' ratings of self-efficacy and their beliefs about sending students out of the classroom for disruptive behavior.

H_a2: There is a significant correlation between teachers' ratings of self-efficacy and their beliefs about sending students out of the classroom for disruptive behavior.

RQ3: Are there significant differences in teachers' ratings of self-efficacy by their gender, experience, and racial identity?

H_o3: There are no significant differences between demographic factors of gender, experience, or racial identity and teachers' ratings of self-efficacy.

H_a3: There are significant differences between demographic factors of gender, experience, gender, or racial identity and teachers' ratings of self-efficacy.

Significance of the Study

Teachers' self-efficacy impacts the actions they take in the course of facilitating students' learning (Klassen et al., 2011), which includes decisions about how to manage disruptive behavior students may display (Delale-O'Connor et al., 2017). Because there are well-established trends of inequities in the discipline practices used to manage students from different demographic groups (Delale-O'Connor et al., 2017), it was important to examine the relationship between teachers' self-efficacy and the practice of sending students out of the classroom in response to disruptive behavior.

Existing research provided a historical perspective of the trends in the exclusionary discipline practices of suspension and expulsion, including the higher rate at which Black students experience these consequences (Delale-O'Connor et al., 2017; Fowler, 2011; Tenenbaum & Ruck, 2007). Because not all disruptive behavior incidents lead to exclusionary discipline consequences, more research was needed to understand what contributes to teachers'

subjective decisions to remove students from the classroom as a response to disruptive behavior. To better understand the source of inequities, it was important to understand why some disruptive behavior is addressed without sending students out of the classroom and why individual teachers might respond differently to the same behavior. The consequence of lost time in the learning environment was a primary concern regardless of other disciplinary outcomes because it inherently limits students' potential to achieve academically (Fowler, 2011).

Teachers' self-efficacy beliefs have been extensively researched for a variety of purposes, including the impact of teachers' self-efficacy on students' learning (Hines, 2008). Previous self-efficacy surveys included questions related to variables outside of the teachers' control when asking about their self-efficacy beliefs (e.g., the influence of parental influences), which is arguably disconnected from the construct of self-efficacy as defined by the set of factors over which the teachers have control (Klassen et al., 2011).

By examining a potential relationship between teachers' self-efficacy as it specifically related to decisions about students' disruptive behavior, the educational community could better understand teachers' decisions about sending students out of the classroom in response to disruptive behavior. Reed (2018) determined that as teachers' skills increase, their self-efficacy also increases. By studying the link between self-efficacy and the way that teachers manage disruptive behavior, providing professional development with classroom management strategies that increase teachers' self-efficacy in this area could decrease the frequency with which students are sent out of the classroom.

Definition of Terms

Self-efficacy is a person's own judgment about their potential to be successful (Bandura, 1997). The focus is on capability rather than current ability because capability reflects the opportunity to

develop skills beyond the current level.

Disruptive behavior includes actions that diminish physical or emotional safety in the classroom, impair the productivity of the student or the rest of the class, the teacher or other students consider inappropriate, or that violate classroom, school, or district policies.

Disparity is an unfair difference in outcome across groups.

Exclusionary discipline is a practice that removes a student from their primary learning environment for a temporary or prolonged period of time as a consequence of disruptive behavior.

Send-out is used to describe the action of an adult choosing to separate a student from the learning space and their peers as a result of disruptive behavior.

Organization of the Study

The study included the development of an original survey instrument to capture the specific construct of teachers' self-efficacy for managing disruptive behavior. Initial brainstorming led to a drafted set of questions, followed by a review by several experts with knowledge and experience in classroom and educational leadership contexts. Their feedback led to a revised set of questions to achieve agreement that construct validity existed. Because the primary study focused on Minnesota teachers, a pilot group of licensed teachers from outside of Minnesota completed the survey to provide further feedback about clarity and the time it took to respond. After a final review, the survey was distributed to every teacher in Minnesota with a currently active license on file. Their responses were collected through Qualtrics software and a series of Analysis of Variance (ANOVA) tests were used to determine answers to each research question.

Chapter II: Literature Review

Teachers' Self-Efficacy

There is a long history of studying the impact of a person's beliefs about their own abilities on their behavior, which is known as self-efficacy (Bandura, 1997). In the field of education, studying the more specific phenomenon of teachers' self-efficacy contributed to a deeper understanding of how teachers' beliefs impact their actions, and in turn, student learning outcomes (Klassen et al., 2011). While early measures of teachers' self-efficacy were broad, methods have evolved over time and there are now many tools to measure teachers' self-efficacy beliefs within specific contexts, such as delivering specific content (Klassen et al., 2011), offering inclusive education (Metsala & Harkins, 2020), and working with students with Autism (Ruble et al., 2011), among others. There is also a distinction between the idea of individual teachers' self-efficacy beliefs and a sense of collective efficacy, which is the belief that a larger community of teachers will impact students (Klassen et al., 2011). The current study remained focused on individual teachers' self-efficacy because it attempts to understand individual decision-making related to disruptive behavior.

Impact of Teachers' Self-Efficacy Beliefs

Mojavezi and Tamiz (2012) examined the impact of teachers' self-efficacy beliefs on students' motivation and achievement by comparing students' responses to motivational questions to the responses of their teachers on a self-efficacy survey. The survey for teachers addressed the domains of instructional strategies, classroom management, and student engagement. The survey for students included questions about intrinsic and extrinsic motivation, as well as their perceptions about learning English and their teacher. The data revealed a significant correlation between higher ratings of teachers' self-efficacy and higher student

motivation, except for the specific category of extrinsic motivation, which decreased as the teachers' efficacy increased. In terms of achievement, the students whose teachers had the highest self-efficacy also demonstrated the highest achievement (Mojavezi & Tamiz, 2012).

Not only was there evidence of a tangible relationship between teachers' self-efficacy and learning outcomes for students, but teachers' self-efficacy was also related to the attitudes they held about students' potential to be successful (Tournaki & Podell, 2005). Teachers were presented with case studies describing unknown students in terms of their reading level and responded to a survey predicting a variety of academic and social outcomes for the student. They also completed a survey of teachers' self-efficacy items for comparison. The teachers with higher efficacy made more positive predictions about students' achievement and social potential for success. Conversely, teachers with lower self-efficacy were more likely to focus on a single student characteristic when making predictions about their potential (Tournaki & Podell, 2005).

Teachers' Characteristics and Self-Efficacy

Teachers' personalities represent persistent ways they operate in the world which remain consistent across environments (Bullock et al., 2015). As such, these characteristics play a significant role in shaping the way teachers interact with their students and the relationships that form between them. By examining the relationship between self-efficacy and personality characteristics, Bullock et al. (2015) concluded that extroversion and openness were correlated with higher classroom management efficacy.

Teaching experience also tends to predict teachers' level of self-efficacy. While in general, experience increased self-efficacy (Bullock et al., 2015), it is also helpful to understand the more specific factors that contribute to this pattern. Newer teachers gained self-efficacy by sharing experiences and conversing with other teachers while more experienced teachers directly

experienced success more often, which creates a perpetual cycle of reinforcement through mastery experiences. While it may be easy to assume the positive correlation between experience and self-efficacy is linear, there is a point in teachers' careers at which self-efficacy tends to peak (Klassen & Chiu, 2010). After 23 years of experience, self-efficacy began to decline in all domains at a similar rate to the rate of growth before the peak. As a possible explanation of the source of the decline, Klassen and Chiu (2010) described other research which revealed decreased motivation as teachers continued teaching beyond 24 years.

Sources of Job Satisfaction

Job satisfaction contributed to the motivation that teachers have for performing well on a daily basis as well as their long-term commitment to the profession (Viel-Ruma et al., 2010). By comparing survey responses of job satisfaction indicators to self-efficacy indicators, researchers concluded that as teachers' efficacy ratings increased, so did their level of job satisfaction. They concluded that increasing teachers' self-efficacy would serve to retain a highly qualified workforce of educators who are committed to the profession. Combined with the benefits that teachers' self-efficacy had on students' motivation and achievement (Mojavezi & Tamiz, 2012), there is potential for improvement in the larger educational system by investing in developing teachers' self-efficacy.

Wang et al. (2015) discovered how teachers' self-efficacy serves as a predictor of their well-being, both physically and psychologically, and the connection between health indicators and the likelihood that teachers will remain in the profession. Though teachers' with high efficacy in relation to instructional strategies demonstrated a higher likelihood to quit, researchers noted how self-efficacy with regard to regulating students' behavior seemed to overshadow teaching abilities as a predictor of burnout (Wang et al., 2015). These results

reinforce the need for a deeper examination teachers' self-efficacy within the context of managing students' behavior.

Emotional Exhaustion

By understanding self-efficacy as an internal belief that individuals hold (Klassen et al., 2011), there is a natural link to the idea of emotional exhaustion that leads to teacher burnout (Aloe et al., 2014). Of all the variables they studied in a meta-analysis of teacher burnout research, burnout was most closely correlated with students' misbehavior because it had the largest effect on teachers' level of emotional exhaustion. While there was subjectivity surrounding what teachers considered to be misbehavior, there was widespread agreement about disruption to the flow of learning in the classroom (Aloe et al., 2014). In addition to the connection to burnout, misbehavior was also related to decreased self-efficacy in teachers as well as increased stress.

To further understand the impact of teachers' self-efficacy on emotional exhaustion, Dicke et al. (2014) focused their research on the domain of self-efficacy in classroom management. With a similar conclusion that low self-efficacy predicts higher emotional exhaustion, they noted the predictive value only seemed to be true when self-efficacy was low. They concluded that lower self-efficacy magnified the impact of disruptive behavior on the level of exhaustion teachers experienced. In contrast, teachers with higher self-efficacy tended to report less disruptive behavior and were more able to cope with the potential stress of those disturbances (Dicke et al., 2014). It appears from the research by Heikonen et al. (2017) that low self-efficacy also contributes to a decreased capacity for reflection that is required to perpetuate professional growth. Because teachers' level of exhaustion was connected to self-efficacy (Aloe et al., 2014), and emotional exhaustion was influenced by students' disruptive behavior (Dicke et

al., 2014), it is important to examine the question of whether that exhaustion leads to an increased propensity to send students out of the classroom in response to disruptive behavior.

While it is common for educators to prioritize developing close relationships with students to promote learning, Hopman et al. (2018) noted an unexpected connection between the level of emotional exhaustion experienced by teachers facing disruptive behavior and the closeness of their relationships with students. By measuring levels of disruptive behaviors in students, levels of self-efficacy for classroom management in teachers, and comparing the results, a pattern emerged that suggested the emotional exhaustion component of self-efficacy was impacted by the level of disruptive behavior in the classroom. Consistent with findings from other research, when disruptive behavior was higher and self-efficacy was lower, emotional exhaustion increased. The unique finding from this study was that teachers with close relationships with students experienced an increased sense of exhaustion as a result of disruptive behaviors even when teachers had high ratings of self-efficacy. And in contrast, less connected relationships seemed to allow teachers to experience less emotional exhaustion from managing the demands of disruptive behavior (Hopman et al., 2018).

Self-Efficacy and Teacher Attrition

There is a trend of teachers choosing to leave the profession in favor of alternative career options, especially within their early years of teaching (Klassen & Chiu, 2011). While job satisfaction is influential in the decision to remain in the profession (Viel-Ruma et al., 2010; Wang et al., 2015), researchers were also interested in the causes of teacher attrition. Klassen and Chiu (2011) studied several variables in relation to teachers' intentions to quit and commitment to the profession, which included self-efficacy beliefs. They referenced the theory that self-efficacy ratings are more accurate as a teacher's level of experience increases, which they

believed may have contributed to preservice teachers' inflated views of their own capabilities in their study. Higher classroom management self-efficacy was correlated with lower intentions to quit for preservice teachers while higher self-efficacy in the area of instructional strategies led to a higher commitment to the profession (Klassen & Chiu, 2011).

With the increased stress of teaching in conditions where students face challenges with meeting basic needs (Camacho & Parham, 2019), teachers in urban schools are an important group to study concerning the impact that self-efficacy has on teacher attrition. As the frequency and intensity of unmet needs increased in schools, teachers experienced higher rates of stress when it comes to balancing pressures to meet rigorous academic standards while also meeting the needs of students who are dependent on the school to provide basic needs like food, clothing, and emotional support. The most frequently identified challenge for the urban teachers in the study fit into the category of managing teacher-student interactions, including frustrations about their perceived abilities to solve conflicts in the classroom. Their use of deficit language to describe students led to the recommendation that teacher training should focus on reframing behaviors by taking into consideration the potential factors that contributed toward external manifestations of students' response to the sociocultural challenges they face (Camacho & Parham, 2019).

Teacher-Student Relationships

Previous literature examined the connection between teachers' self-efficacy and their level of emotional exhaustion (Aloe et al., 2014; Dicke et al., 2014). Relationships that exist between teachers and students also played a role in predicting teachers' emotions in the classroom (Hagenaur et al., 2015). Because interactions between teachers and students are a key aspect of the dynamics within classrooms, the relationships that teachers and students develop as

a result of those interactions determine the type and frequency of emotions experienced by teachers. Both positive and negative emotions were closely linked to the positive and negative interactions teachers had with students; positive interactions predicted increased joy while negative interactions predicted higher rates of anger and frustration (Hagenaur et al., 2015).

Hajovsky et al. (2020) examined the predictive value of teachers' self-efficacy beliefs concerning teacher-student relationships. More specifically, they compared the aspects of closeness and conflict within relationships to teachers' ratings of their self-efficacy. Higher ratings of self-efficacy correlated with increased closeness and decreased conflict. Other findings included the fact that students who experienced higher levels of conflict in their earlier school years were more likely to experience decreased closeness to their teachers as they progressed through grades. They also pointed out that self-efficacy beliefs are fluid, which impacts how the results of research about them are interpreted. At the same time, because beliefs are fluid, they are susceptible to efforts to strengthen them through training and support. The long-term results indicated that teachers with higher self-efficacy were able to increase closeness as students move through grades while also decreasing conflict, ultimately leading to higher outcomes in students' academic achievement (Hajovsky et al., 2020).

Hopman et al. (2018) found that lower levels of connection protected teachers from experiencing the same level of emotional exhaustion as teachers with closer relationships with their students when they are responding to disruptive behavior. A cycle of too much emotional investment followed by perceived failure to respond to disruptive behavior effectively actually increased stress. Integrating these findings from Hopman et al. (2018) with Hajovsky et al.'s (2020) argument that self-efficacy is malleable, energy spent developing higher self-efficacy in teachers will lead to decreased conflict between them and students, which could have the

byproduct of also reducing the level of emotional exhaustion that comes from struggling to respond effectively to disruptive behavior.

Zee et al. (2017) studied a similar and more specific aspect of teacher-student relationships by examining how individual students' behavior impacted teachers' self-efficacy as opposed to the general ratings of closeness and conflict between teachers and students. Individual students' disruptive behavior contributed to an increase in teachers' perceptions of conflict and ultimately decreased teachers' self-efficacy beliefs about working with those individuals. This finding suggests there is a cycle of reinforcement at work in which the conflict experiences decreased teachers' self-efficacy, which impacted their success in working with specific individuals, and further increased the frequency and intensity of conflict in their relationships. In conjunction with the disproportionate ways in which Black students were disciplined (Tenenbaum & Ruck, 2007), Zee et al.'s (2017) conclusions suggested that teachers' self-efficacy for managing disruptive behavior may relate to inequities in the discipline practices that perpetuate stereotypes and marginalize Black students.

Classroom Management

Teachers' self-efficacy in the area of classroom management involves their beliefs about being able to handle disturbances that arise as a result of students' behavior (Dicke et al., 2014). Teachers with low self-efficacy in the area of classroom management also experienced higher stress as a result of disruptive behavior, as well as a higher frequency of disturbances. High ratings of self-efficacy correlated with lower stress from classroom disturbances, which may be explained by the lower rate at which those disturbances occurred for those teachers. The perceptions of stress experienced by teachers with different levels of self-efficacy appeared to be related; the lower self-efficacy teachers were less able to cope with the stress of disruptive

behavior while the higher self-efficacy teachers coped differently and thus experienced a lower degree of stress. There was also a connection between what appeared to be the expectation of classroom disturbances as a result of lower self-efficacy beliefs and the higher rate at which those disturbances end up occurring, which aligns with the idea that lower self-efficacy may be a result of low skills. Self-efficacy was concluded to be a source of stress reduction that can protect teachers from experiencing emotional exhaustion from classroom management efforts (Dicke et al., 2014).

Chapter III: Methodology

Research Design

A quantitative approach was used to investigate teachers' self-efficacy specific to managing disruptive behavior and their practices related to sending students out of the learning space in response to disruptive behavior. When looking for a potential relationship between two or more variables, it is recommended to use a correlational design to analyze the data (Orcher, 2014). In the study, teachers were presented with a definition of self-efficacy and disruptive behavior followed by a series of self-efficacy statements for which they indicated their level of agreement. The statements measured the specific construct of self-efficacy in relation to managing disruptive behavior. The remainder of the survey included questions related to teachers' beliefs about the effectiveness, impact, and rate of sending students out of the classroom in response to disruptive behavior. Teachers chose an indicator that best matched the description of the rate at which they send students out of the classroom in response to disruptive behavior. Finally, teachers responded to demographic questions. The responses were analyzed for correlations between the teachers' ratings of self-efficacy and the other questions.

Sample

During the 2017-2018 school year, when the Minnesota Professional Educator Licensing and Standards Board last reported data on the number of active teachers in Minnesota, the total was approximately 63,000 (Wilder Research & PELSB, 2019). For the study, the Minnesota Department of Education provided publicly available contact information of all licensees in the state, regardless of current job assignment. The total number of unique individuals at the time of the data request was 123,329 who received the invitation to participate in the study. The single-stage sampling resulted in a total of 3,959 respondents who chose to participate. The total sample

size used in the data analysis was 2,841 people because some people did not complete enough of the survey for their responses to be included. The final sample included only people who answered at least 12 of the 15 self-efficacy statements on the survey.

Instrumentation/Protocol

The trends in measuring teachers' self-efficacy beliefs have evolved and criticisms of previous measurement tools led to guidelines for designing new tools to better capture the elusive construct of self-efficacy (Klassen & Chiu, 2011). Self-efficacy surveys should ask teachers to examine their capabilities instead of abilities. Because capability reflects the potential to be successful (or not), it is a more concrete conclusion for individuals to draw than if they are asked about their abilities; people often think of their abilities along a continuum that may lead to less reliable responses. Klassen and Chiu (2011) also recommended measuring narrow categories of self-efficacy rather than a more general sense of self-efficacy to make use of the results in specific contexts (Klassen & Chiu, 2011). For this study, the survey instrument specifically examined the construct of teachers' self-efficacy for managing disruptive behavior.

While existing surveys related to teachers' self-efficacy (both in general and for other specific constructs within the broad topic of self-efficacy) have already been tested for validity and reliability, it is appropriate to create a new survey tool to better meet the research goals (Orcher, 2014). The Teachers' Sense of Efficacy Scale is a commonly used instrument for studying self-efficacy and includes three domains: classroom management, instructional strategies, and student engagement (Klassen & Chiu, 2011). The present study sought to investigate teachers' self-efficacy within the specific construct of managing disruptive student behavior, which is more narrowly focused than the TSES. Focusing on a specific domain of teachers' self-efficacy increased the value of the results for predicting future behavior within that

domain (Klassen et al., 2011), so the investment in utilizing a new tool strengthened the overall conclusions of the study. The new survey included questions related to teachers' beliefs about their capability to regulate their own actions, maintain a physically and emotionally safe learning environment, and reduce and respond to disruptive behavior. The remainder of the survey asked teachers to identify their beliefs and practices regarding sending students out of the classroom in response to disruptive behavior, along with demographic self-identifiers.

Because teachers' self-efficacy in relation to students' disruptive behaviors cannot be directly observed, the survey solicited a self-report from teachers based on questions that reflect the closest indicators in the absence of directly observable evidence in the construct (Orcher, 2014). The Teachers' Self-Efficacy for Managing Disruptive Behavior Survey is comprised of statements in which respondents indicated their level of agreement using a Likert scale, which is a recommended approach for measuring attitudes (Orcher, 2014).

Teachers' Self-Efficacy for Managing Disruptive Behavior Survey

Self-efficacy is your own judgment about your potential to be successful (Bandura, 1997). For each item, indicate your level of agreement with the statement in relation to your self-efficacy for managing students' behavior that disrupts the classroom. "Disruptive" could include:

- Actions that diminish physical or emotional safety in the classroom
- Actions that impair the productivity of the student or the rest of the class
- Actions the teacher or other students consider inappropriate
- Actions that violate classroom, school, or district policies

The following is a set of statements related to managing disruptive behavior in the classroom. Indicate your level of agreement with each statement based on the following scale:

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

[RQ1/2/3: Do teachers' ratings of self-efficacy…]

1. I can establish a predictable classroom environment where students know routines and procedures well.
2. I can establish a classroom environment that is both physically and emotionally safe.
3. Even when individuals display disruptive behavior, I can maintain the other students' engagement.
4. I can keep most students engaged in learning activities most of the time.
5. I can maintain my own sense of calm when students' behaviors are disruptive.
6. My own actions influence students' behavior in the classroom.
7. My attitude toward students helps me have a positive impact on their behavior.
8. I know how to respond when a student's behavior disrupts the rest of the class.
9. I can help students calm down when they are in distress.
10. The more I develop my skills for managing students' behavior, the more successful they are in the classroom.
11. My classroom management increases students' motivation in the classroom.
12. I can prevent most disruptive behavior by managing the classroom effectively.
13. I can support students with chronically disruptive behavior on my own.
14. I can maintain positive relationships with students who display disruptive behaviors.
15. I can help students with disruptive behavior meet academic goals.

[RQ2: …correlate with their beliefs about sending students out of the classroom for disruptive behavior?]

With regard to *sending students out of the classroom for disruptive behavior,* think of situations in which *you choose* for the student to leave the classroom (or other learning space) as

a result of their behavior. These times could be labeled ‘discipline referral’ in which another staff member will problem-solve with the student, a time out in the hallway, or a temporary break in another classroom. When a student is sent out, they are no longer in the same physical location as their peers. For the following questions, do not consider times in which removal from class is required by a school policy or procedure outside of the teacher’s control.

16. In general, which of the following most closely describes your beliefs about the effectiveness of sending students out of the classroom in response to disruptive behavior *for the individual with the disruptive behavior*?
    a. Sending the student out of the classroom never results in improved future behavior
    b. Sending the student out of the classroom rarely results in improved future behavior
    c. Sending the student out of the classroom has neither a positive nor negative impact on that individual’s future behavior
    d. Sending the student out of the classroom often results in improved future behavior
    e. Sending the student out of the classroom always results in improved future behavior
17. In general, which of the following most closely describes your beliefs about the impact of sending students out of the classroom in response to disruptive behavior *on the academic achievement of the individual with the disruptive behavior?*
    a. It has a significantly negative impact on their achievement.
    b. It has a somewhat negative impact on their achievement.
    c. It has neither a positive nor negative impact on their achievement.

d. It has a somewhat positive impact on their achievement.

e. It has a significantly positive impact on their achievement.

18. In general, which of the following most closely describes your beliefs about the impact of sending students out of the classroom in response to disruptive behavior *on the relationship between the teacher and the individual with the disruptive behavior?*

    a. It has a significantly negative impact on the relationship.

    b. It has a somewhat negative impact on the relationship.

    c. It has neither a positive nor negative impact on the relationship.

    d. It has a somewhat positive impact on the relationship.

    e. It has a significantly positive impact on the relationship.

19. In general, which of the following most closely describes your beliefs about the frequency with which teachers should respond to disruptive behavior by sending students out of the classroom?

    a. Students should never be sent out of the classroom for disruptive behavior.

    b. Students should rarely be sent out of the classroom for disruptive behavior.

    c. Students should sometimes be sent out of the classroom for disruptive behavior.

    d. Students should often be sent out of the room for disruptive behavior.

    e. Students should always be sent out of the room for disruptive behavior.

20. Read the following sample list of leveled behavior and determine the frequency with which you believe students should be sent out of class for the behaviors in each level.

Level 1	Level 2	Level 3	Level 4
• Inappropriate language (cursing) • Work refusal • Disrespect, non-compliance	• Persistent Level 1 behaviors • Harassment/ Bullying • Forgery	• Aggressive behavior towards staff • Abusive language (threat of physical	• Arson • Bomb threat, false alarm • Use, possession of alcohol or tobacco

• Misuse of materials • Lying, cheating • Teasing, taunting (physical and/or verbal) • Disruption: excessive talking, making noises or excessive talking out or to peers • Not prepared for class • Stealing small classroom items such as pencils, crayons, or paper • Scuffling/Mild physical aggression (pushing and shoving that does not require a visit to the nurse)	• Theft • Property damage • Vandalism (irreversible destruction of school property) • Violation of district technology guidelines • Refusal to take a break	harm, offensive racial/sexual comments) • Fighting (defined as actions that require a visit to the nurse) or Physical Aggression • Sexual touch • Missing/unaware of location • Preventing the learning of the rest of the class	• Use, possession of unauthorized prescription or non-prescription drugs • Use, possession of weapons

a. How frequently should students be sent out of class in response to Level 1 behaviors?

    a. Never

    b. Rarely

    c. Sometimes

    d. Often

    e. Always

b. How frequently should students be sent out of class in response to Level 2 behaviors?

    a. Never

    b. Rarely

    c. Sometimes

    d. Often

    e. Always

c. How frequently should students be sent out of class in response to Level 3 behaviors?
    a. Never
    b. Rarely
    c. Sometimes
    d. Often
    e. Always
d. How frequently should students be sent out of class in response to Level 4 behaviors?
    a. Never
    b. Rarely
    c. Sometimes
    d. Often
    e. Always

[RQ1: …correlate with the rate at which students are sent out of the classroom for disruptive behavior?]

21. During an average school year, which of the following most closely describes your actual practice regarding the frequency with which you send students out of the classroom for disruptive behavior?
    a. Never
    b. Rarely
    c. Sometimes
    d. Often
    e. Always

[RQ3: Are there significant differences in teachers' ratings of self-efficacy by their gender,

experience, and racial identity?]

22. For each of the classroom management programs listed below, indicate your level of implementation.

    22a. Positive Behavior Interventions and Supports (PBIS)

    22b. Love and Logic

    22c. The Catalyst Approach

    22d. Responsive Classroom

    22e. Assertive Discipline

23. In your current position, how old are the students you work with?

    a. Pre-K
    b. Elementary
    c. Middle School or Junior High
    d. High School
    e. More than one age across multiple grade band
    f. Not currently working directly with students—*will only recruit currently practicing teachers, but this will clean up results if others take the survey anyway*

24. Which of the following best describes your current teaching context?

    g. General education teaching all subjects (e.g., elementary grade 3, Kindergarten, etc.)
    h. General education content specialist (e.g., Secondary Science, K-12 Art, Elementary Math/Science, etc.)
    i. Special education
    j. English as a Second Language

k. Supplemental academic support (e.g., Title I, etc.)

l. Virtual or remote

25. How many full years of teaching have you completed?

m. 0-5 years

n. 6-10 years

o. 11-15 years

p. 15-20 years

q. 21-25 years

r. More than 25 years

26. Which of the following describes your gender identity?

s. Female

t. Male

u. Transgender

v. Nonbinary

w. Prefer not to answer

27. Which of the following describes your racial identity (check all that apply)?

- Hispanic/Latino of any race
- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Prefer not to answer

Pilot Test

The drafted Teachers' Self-Efficacy for Managing Disruptive Behavior Survey items were reviewed by five experts in the field of education who have expertise in the area of teachers' self-efficacy and delivering feedback to teachers to ensure the full scope of the construct is reflected in the survey (Orcher, 2014). A list of their names and titles is included in Table 1.

Table 1

Teachers' Self-Efficacy for Managing Disruptive Behavior Survey Reviewers

Name	Role
Becky Brodeur	Associate Superintendent for Middle Schools
Bernadeia Johnson, Ed.D.	Assistant Professor
Nate Manaen	Director of Student Services
Amy Reed, Ed.D.	Elementary Principal
C. Bennice Young	Elementary Principal (retired) and Educational Consultant

Their feedback included recommendations to clarify language usage and provide definitions, and the current draft of the survey reflects their input. The recommendations from the experts included clarifications about items that fell outside of the construct in question and the kind of language to use to solicit accurate information without confusing respondents.

After revisions, a pilot study was conducted to solicit input about the respondents' reactions and interpretations of each item so that another round of revisions could increase the clarity before use in the primary study (Orcher, 2014). The pilot group of respondents were licensed teachers outside of Minnesota so that they would not also be the same people asked to take the finalized survey.

Data Collection

The potential respondents were invited to participate in the Teachers' Self-Efficacy for Managing Disruptive Behavior Survey by choice and without incentive other than to contribute to the education community by increasing collective knowledge about the topic. No personally identifiable information was collected in conjunction with survey responses to ensure anonymity for respondents. Answers to each survey question were collected using Qualtrics software and the data was organized to allow each question to be studied in relation to other questions answered by individual respondents.

Data Analysis

Survey data were analyzed to determine whether there was a relationship between teachers' ratings of self-efficacy for managing disruptive behavior and their beliefs about sending students out of the classroom, their actual practice when it comes to sending students out of the classroom, and the demographic characteristics of the teachers.

To answer RQ1, the data was processed using an ANOVA test to determine if a correlation existed between teachers' ratings of self-efficacy and the rate at which they sent students out of the classroom in response to disruptive behavior. Another series of ANOVA analyses were used to determine if a correlation existed between teachers' ratings of self-efficacy and their beliefs about sending students out of the classroom to answer RQ2. Another set of ANOVAs were used to answer RQ3 to determine how demographic variables were connected to teachers' ratings of self-efficacy.

Limitations/Delimitations

All methods used to conduct research investigations have limitations. The most important goal is to select a method that produces reliable results so that the information can be applied to

the context of the situation (Pyrczak, 2014). The construct of teachers' self-efficacy has been extensively studied using surveys in which teachers responded to prompts related to their beliefs about their own abilities (Klassen et al., 2011). Self-reporting is based on perceptions that may or may not fully represent reality, though a large enough sample size increases confidence that the self-reports are accurate.

Previous researchers have made a distinction between teachers' self-efficacy as their beliefs about their individual abilities and collective efficacy as their beliefs about the aggregate ability of the larger group of which they are a member (Klassen et al., 2011). While collective efficacy does have a relationship to various teaching and learning outcomes, this particular study focused on determining a relationship between teachers' individual self-efficacy and responses to disruptive student behavior. All items on the Teachers' Disruptive Behavior Self-Efficacy Survey solicited responses based on teachers' perceptions about themselves rather than their perspective as a member of the larger education community.

Survey Validity and Reliability

New survey instruments have unknown levels of validity and reliability until they are used to collect data. Before use in the primary study, the survey was reviewed by education professionals who frequently support teachers in their professional development. They provided feedback to ensure that the survey contained proper language and terminology (face validity) and would produce an accurate representation of teachers' self-efficacy for the specific context of managing disruptive behavior (content validity). The wording of a few questions was revised as a result of their feedback to increase clarity for respondents. There were no suggestions to add questions except for questions that went beyond the purpose of this study. None of the reviewers suggested removing any questions.

The survey was pilot tested with a group of licensed teachers who were not going to be part of the primary study sample (i.e. they were licensed teachers outside of the state in which the primary study was focused). Five teachers were personally invited to provide feedback about the clarity of the questions, the alignment between the questions and the research questions, and the logistics of responding. Their feedback did not include any suggested changes to the content of the questions or the length of the survey. It took each individual between six and 10 minutes to complete the survey. Their anecdotal comments were mostly elaborations about why they selected specific responses to the questions. None of the pilot test participants suggested any changes to the content or organization of the survey before use in the primary study.

After distributing the survey to the primary study participants and receiving their responses, an analysis was conducted to determine the internal consistency of the survey instrument. As shown in Table 2, the Teachers' Self-Efficacy for Managing Disruptive Behavior survey returned strong internal reliability with a Cronbach Alpha score of 0.889, which means it consistently measured the construct.

Table 2

Frequentist Scale Reliability Statistics

Estimate	McDonald's ω	Cronbach's α
Point estimate	0.892	0.889
95% CI lower bound	0.886	0.883
95% CI upper bound	0.897	0.895

Note. Of the observations, pairwise complete cases were used.

Table 3 shows the survey's Cronbach Alpha score if each question is removed. No matter which question was excluded in the analysis, the Cronbach Alpha score remained no lower than 0.879 which means that all of the items served to measure the particular construct of managing disruptive behavior in a similar manner. When each item's value was compared to the total score

of the scale, a value of .30 or higher was an indicator of strong reliability, and in this case, each item scored between .492 and .620. Strong internal reliability confirms that the survey is highly likely to produce consistent results when used with teachers.

Table 3

Frequentist Individual Item Reliability Statistics

Item	If item dropped	
	Cronbach's α	**Item-rest correlation**
1. I can establish a predictable classroom environment where students know routines and procedures well._29	0.885	0.492
2. I can establish a classroom environment that is both physically and emotionally safe._30	0.882	0.566
3. Even when individuals display disruptive behavior, I can maintain the other students' engagement._31	0.880	0.611
4. I can keep most students engaged in meaningful learning activities most of the time._32	0.883	0.547
5. I can maintain my own sense of calm when students' behaviors are disruptive._33	0.884	0.510
6. My own actions influence students' behavior in the classroom._34	0.886	0.456
7. My attitude toward students helps me have a positive impact on their behavior._35	0.882	0.582
8. I know how to respond when a student's behavior disrupts the rest of the class._36	0.880	0.610
9. I can help students calm down when they are in distress._37	0.880	0.603
10. The more I develop my skills for managing students' behavior, the more successful they are in the classroom._38	0.881	0.570
11. My classroom management increases students' motivation in the classroom._39	0.882	0.571
12. I can prevent most disruptive behavior by managing the classroom effectively._40	0.879	0.620
13. I can support students with chronically disruptive behavior on my own._41	0.886	0.513
14. I can maintain positive relationships with students who display disruptive behaviors._42	0.881	0.579
15. I can help students with disruptive behavior meet academic goals._43	0.881	0.588

Ethical Issues

The Belmont Report contains key guiding principles for ethical research practices to ensure researchers have a set of standards to test their decisions as studies are designed (National Commission for the Protection of Human Subjects in Biomedical and Behavioral Research, 1979). As guiding principles, they represent a standard for high ethics while also allowing for flexibility with the specific ways in which each goal is met. The Institutional Review Board process ensured that other experts in the field critically analyzed how the study could impact human subjects and made recommendations accordingly.

Protection of human participants

As researchers design any study of human subjects, beneficence includes both reducing the potential for harm and creating conditions for maximum benefit to occur (Collaborative Institutional Training Initiative, n.d.). Because researchers can gain valuable insights from studying human subjects, it is important to maintain an awareness of the possible ways in which studying them could be harmful, which may include invasion of privacy, emotional or physical distress, or other exploitation. As part of protecting human subjects, the researcher must think critically about each step in the design of the study to maintain respect for individuals' autonomy.

The ethical study of human subjects must be accompanied by the mitigation of potential physical and psychological harm to those subjects (Orcher, 2014; Patten, 2018). The topic of teachers' self-efficacy in the scope of their work with students, especially in relation to disruptive behavior, is sensitive because it may be a source of stress and emotional exhaustion (Aloe, Shisler, Norris, Nickerson, & Rinker, 2014). As recommended by research design experts (Creswell & Creswell, 2018; Orcher, 2014; Patton, 2018), before administering the survey, the

participants were notified about the purpose and scope of the research, along with the potential benefits of participating. Respondents were invited to participate voluntarily and were assured of the confidentiality of their responses.

To protect participants, the study was reviewed and approved by the Bethel University Institutional Review Board. There was no personally identifiable information collected during the survey. Respondents were encouraged to discontinue the survey and seek counseling if the process became overwhelming or made them too emotional to continue.

Chapter IV: Results

The Teachers' Self-Efficacy for Managing Disruptive Behavior survey was distributed on February 3, 2023. One reminder message was sent on February 12, 2023, to encourage any additional participants to respond before the survey closed. A total of 3,961 people responded to the survey but the analysis was based on 2,841 respondents who completed at least 12 of the 15 self-efficacy statements. The rest of this chapter documents the results from the survey to answer each research question.

Research Question One

RQ1: Do teachers' ratings of self-efficacy correlate with the rate at which students are sent out of the classroom for disruptive behavior?

H_o1: There is no significant correlation between teachers' ratings of self-efficacy and the rate at which students are sent out of the classroom for disruptive behavior.

H_a1: There is a significant correlation between teachers' ratings of self-efficacy and the rate at which students are sent out of the room for disruptive behavior.

Findings for Research Question One

To answer the first research question, the data was filtered to only include individuals who answered at least 12 out of the 15 self-efficacy statements by responding on a scale that included Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. The responses were assigned a value of five points for Strongly Agree, four for Agree, three for Neutral, two for Disagree, and one for Strongly Disagree. Their response to each question was averaged to determine a single self-efficacy rating for each person. Each individual self-efficacy rating was compared to their response to the question: During an average school year, which of the following most closely describes your actual practice regarding the frequency with which you

send students out of the classroom for disruptive behavior? Respondents selected from five choices: Always, Often, Sometimes, Rarely, or Never. An analysis of variance (ANOVA) revealed a strong linear trend as shown in Table 4.

Table 4

Teachers' Self-Efficacy Ratings and Disruptive Behavior Response--ANOVA

During an average school year, which of the following most closely describes your actual practice regarding the frequency with which you send students out of the classroom for disruptive behavior?	N	Mean	SD	SE	Coefficient of variation
Never	229	4.298	0.455	0.030	0.106
Rarely	1416	4.049	0.476	0.013	0.118
Sometimes	679	3.804	0.488	0.019	0.128
Often or Always	128	3.514	0.631	0.056	0.179

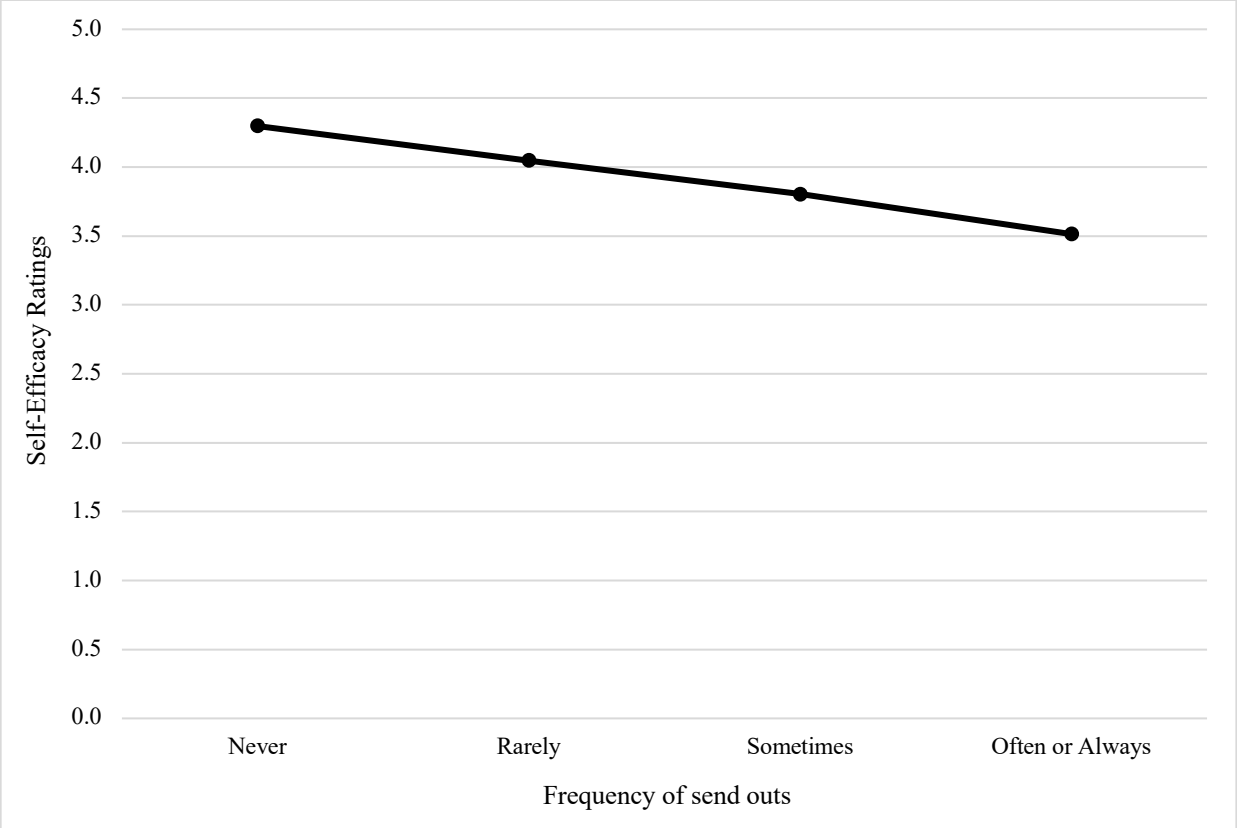
The number of respondents who selected each answer to the question is indicated in the N column. To identify correlations between their answers and their self-efficacy ratings, the average of each group's self-efficacy scores is provided in the Mean column. The Standard Deviation (SD) column shows statistically small values for each choice, which increases the chances of the results being accurate. The small values of Standard Error (SE) were another measure that confirmed the results of this sample were likely to be true for the whole population of teachers. The Coefficient of Variance for each choice was also significantly low, which means that responses in this sample were consistently close to the mean and increased the confidence that the results were accurate.

The respondents who reported that they never send students out of the classroom had the highest self-efficacy ratings. As answer choices represented an increasing likelihood to send

students out, the mean self-efficacy rating decreased. The respondents who indicated the highest likelihood to send students out of the classroom as a result of their behavior had the lowest self-efficacy ratings. Figure 1 represents the linear correlation between the variables of self-efficacy ratings and the teachers' report of how often they send students out. The responses that reflected increasing rates of sending students included Never, Rarely, Sometimes, and Often or Always (combined as one group because the Always group was so small, and it did not change the trend). Graphing the responses shows a strong linear correlation.

Figure 1

Teachers' Self-Efficacy Ratings and Rate of Student Send-Outs



The standard deviation of the responses is relatively similar across responses except for the Often or Always group, which was .631. As a result, the Welch Homogeneity Correction indicates a high F ratio of 99.022 and a p-value of < .001 as shown in Table 5.

Table 5

Self-Efficacy Scale--ANOVA

Homogeneity Correction	Cases	Sum of Squares	df	Mean Square	F	p	η^2
None	During an average school year, which of the following most closely describes your actual practice regarding the frequency with which you send students out of the classroom for disruptive behavior?	78.675	3.000	26.225	110.742	< .001	0.119
	Residuals	579.713	2448.000	0.237			
Welch	During an average school year, which of the following most closely describes your actual practice regarding the frequency with which you send students out of the classroom for disruptive behavior?	78.675	3.000	26.225	99.022	< .001	0.119
	Residuals	579.713	423.217	1.370			

Note. Type III Sum of Squares

A post hoc test compared the means of each response in relation to the other responses as shown in Table 6. In every case, the differences between the means were significant because the p-value remained < .001, which means the results have a .1% probability of occurring by chance. Any p-value below .05 was considered significant for this study.

Table 6

Comparison of Responses—Frequency of Send-Outs

Post Hoc Comparisons - During an average school year, which of the following most closely describes your actual practice regarding the frequency with which you send students out of the classroom for disruptive behavior?

		Mean Difference	SE	t	p_{tukey}
Never	Rarely	0.249	0.035	7.179	< .001
	Sometimes	0.494	0.037	13.279	< .001
	Often/Always	0.784	0.054	14.597	< .001
Rarely	Sometimes	0.245	0.023	10.784	< .001
	Often/Always	0.535	0.045	11.913	< .001
Sometimes	Often/Always	0.290	0.047	6.187	< .001

Note. P-value adjusted for comparing a family of 4

The outcome of research question one was to reject the null hypothesis because the results indicated a statistically significant difference between the rates at which teachers reported sending students out when analyzed in relation to their ratings of self-efficacy. By comparing the difference between the self-efficacy ratings for each of the send-out frequency responses, there was a statistically significant difference in every case. The findings confirmed that as teachers' ratings of self-efficacy increased, they were less likely to send students out of the classroom as a result of disruptive behavior.

Research Question Two

RQ2: Do teachers' ratings of self-efficacy correlate with their beliefs about sending students out of the classroom for disruptive behavior?

H_o2: There is no significant correlation between teachers' ratings of self-efficacy and

their beliefs about sending students out of the classroom for disruptive behavior.

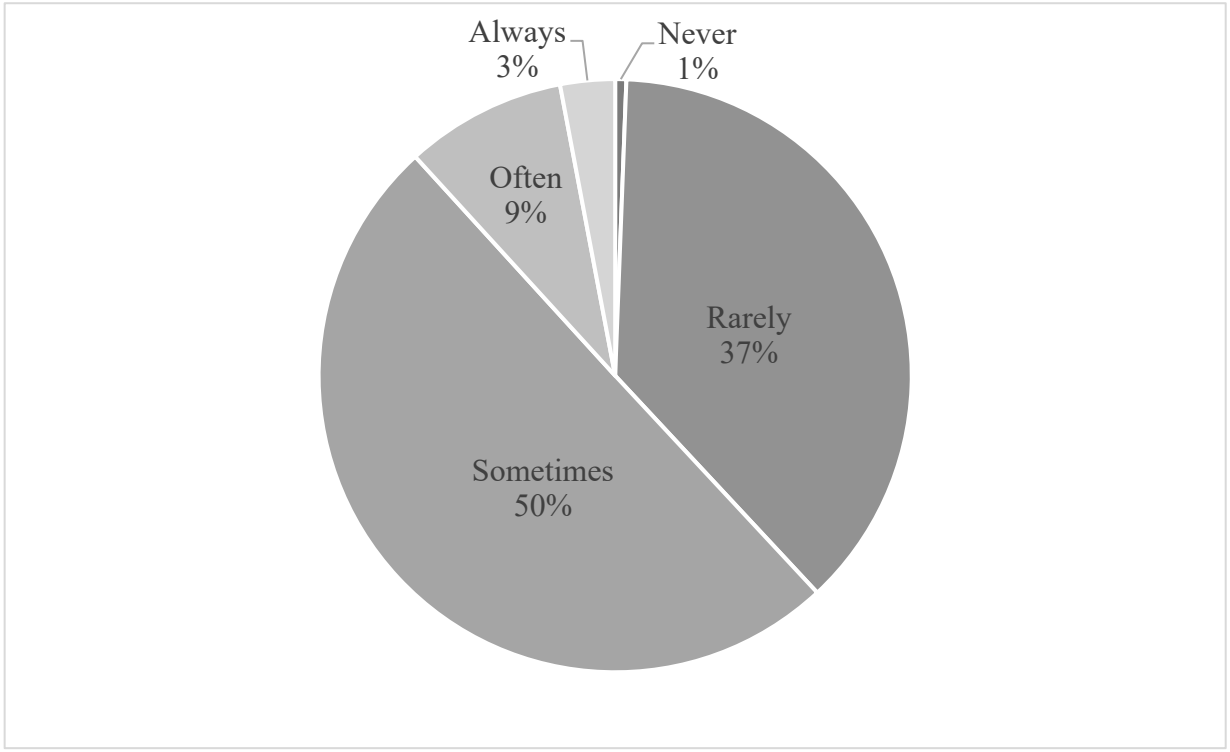
H_a2: There is a significant correlation between teachers' ratings of self-efficacy and their beliefs about sending students out of the classroom for disruptive behavior.

Findings for Research Question Two

The same set of responses to the self-efficacy scale were analyzed in relation to teachers' answers to the questions designed to collect information about teachers' beliefs related to the practice of sending students out of the classroom. The first question about beliefs from the survey was: In general, which of the following most closely describes your beliefs about the frequency with which teachers should respond to disruptive behavior by sending students out of the classroom? Respondents selected from a six-option Likert scale that included Never, Rarely, Sometimes, Often, and Always as shown in Figure 2.

Figure 2

Teachers' Beliefs About How Frequently Students Should be Sent Out for Disruptive Behavior



There were 38% of respondents who believed that send-outs should either never or rarely happen while half the respondents believed send-outs should happen sometimes. There were 12% of the respondents who believed send-outs should often or always happen. Table 7 provides the ANOVA results for comparison between the answer choices and the respondents' ratings of self-efficacy.

Table 7

Teachers' Beliefs About How Frequently Students Should be Sent Out for Disruptive Behavior

19. In general, which of the following most closely describes your beliefs about the frequency with which teachers should respond to disruptive behavior by sending students out of the classroom?	**N**	**Mean**	**SD**	**SE**	**Coefficient of variation**
Never	15	3.969	0.738	0.191	0.186
Rarely	929	4.154	0.465	0.015	0.112
Sometimes	1244	3.921	0.485	0.014	0.124
Often	218	3.677	0.541	0.037	0.147
Always	74	3.490	0.703	0.082	0.201

There was a somewhat linear trend when comparing self-efficacy ratings to the frequency with which teachers believed the practice of sending students out should be used in response to disruptive behavior. When teachers believed the practice should never or rarely be used, their ratings of self-efficacy were higher. When teachers believed the practice should often or always be used, their self-efficacy ratings decreased. Table 8 shows the more specific analysis of each response in relation to the other responses and which cases had significant differences between groups.

Table 8

Comparison of Responses—Beliefs About Frequency of Send Outs

Post Hoc Comparisons - In general, which of the following most closely describes your beliefs about the frequency with which teachers should respond to disruptive behavior by sending students out of the classroom?

		Mean Difference	SE	t	p_{tukey}
always be sent out of the room for disruptive behavior.	never be sent out of the classroom for disruptive behavior.	-0.479	0.139	-3.435	0.005
	often be sent out of the room for disruptive behavior.	-0.187	0.066	-2.822	0.039
	rarely be sent out of the classroom for disruptive behavior.	-0.664	0.059	-11.168	< .001
	sometimes be sent out of the classroom for disruptive behavior.	-0.431	0.059	-7.323	< .001
never be sent out of the classroom for disruptive behavior.	often be sent out of the room for disruptive behavior.	0.292	0.131	2.222	0.172
	rarely be sent out of the classroom for disruptive behavior.	-0.185	0.128	-1.445	0.598
	sometimes be sent out of the classroom for disruptive behavior.	0.048	0.128	0.372	0.996
often be sent out of the room for disruptive behavior.	rarely be sent out of the classroom for disruptive behavior.	-0.477	0.037	-12.879	< .001
	sometimes be sent out of the classroom for disruptive behavior.	-0.244	0.036	-6.763	< .001

Post Hoc Comparisons - In general, which of the following most closely describes your beliefs about the frequency with which teachers should respond to disruptive behavior by sending students out of the classroom?

		Mean Difference	SE	t	p_{tukey}
rarely be sent out of the classroom for disruptive behavior.	sometimes be sent out of the classroom for disruptive behavior.	0.233	0.021	10.901	< .001

Note. P-value adjusted for comparing a family of 5

There were significant differences in self-efficacy ratings between the group that responded Always when compared to the groups that selected every other response. The group that responded Never did not have any significant differences from other groups except for the group that selected Always. The group that responded Often was significantly different from the groups that selected Rarely and Sometimes, and the group that selected Rarely was significantly different from the group that selected Sometimes.

The next question related to beliefs about sending students out of the classroom was: In general, which of the following most closely describes your beliefs about the impact of sending students out of the classroom in response to disruptive behavior on the relationship between the teacher and the individual with the disruptive behavior? Respondents selected from a Likert scale of options that included Significantly Negative, Somewhat Negative, Neither Positive nor Negative, Somewhat Positive, or Significantly Positive, as shown in Table 9.

Table 9

Teachers' Beliefs About the Impact of Send Outs on the Teacher and Student Relationship

18. In general, which of the following most closely describes your beliefs about the impact of sending students out of the classroom in response to disruptive behavior on the relationship between the teacher and the individual with the disruptive behavior?	N	Mean	SD	SE	Coefficient of variation
significantly negative impact on the relationship.	337	4.130	0.569	0.031	0.138
somewhat negative impact on the relationship.	953	3.972	0.494	0.016	0.124
It has neither a positive nor negative impact on the relationship.	844	3.901	0.519	0.018	0.133
somewhat positive impact on the relationship.	315	3.994	0.481	0.027	0.120
significantly positive impact on the relationship.	30	4.142	0.704	0.129	0.170

When listed in the order of the Likert scale response, with Significantly Negative representing the extreme low end of the response options and Significantly Positive on the extreme high end, there was not a strong linear relationship between the two variables of self-efficacy ratings and the beliefs about the impact of sending students out on the teacher and student relationship. Either extreme end of the response continuum had the highest ratings of self-efficacy with the lowest being the group that believed there is Neither a positive nor negative impact on the relationship. Table 10 shows the differences between each response option and the other responses to identify where statistically significant differences existed.

Table 10

Comparison of Responses—Beliefs About Impact on Relationships

Post Hoc Comparisons - 18. In general, which of the following most closely describes your beliefs about the impact of sending students out of the classroom in response to disruptive behavior on the relationship between the teacher and the individual with the disruptive behavior?

		Mean Difference	SE	t	p_{tukey}
It has neither a positive nor negative impact on the relationship.	significantly negative impact on the relationship.	-0.229	0.033	-6.903	< .001
	significantly positive impact on the relationship.	-0.241	0.096	-2.518	0.087
	somewhat negative impact on the relationship.	-0.072	0.024	-2.941	0.027
	somewhat positive impact on the relationship.	-0.093	0.034	-2.734	0.049
significantly negative impact on the relationship.	significantly positive impact on the relationship.	-0.012	0.098	-0.121	1.000
	somewhat negative impact on the relationship.	0.157	0.033	4.825	< .001
	somewhat positive impact on the relationship.	0.136	0.040	3.372	0.007
significantly positive impact on the relationship.	somewhat negative impact on the relationship.	0.169	0.095	1.774	0.389
	somewhat positive impact on the relationship.	0.148	0.098	1.504	0.560
somewhat negative impact on the relationship.	somewhat positive impact on the relationship.	-0.021	0.033	-0.639	0.969

Note. P-value adjusted for comparing a family of 5

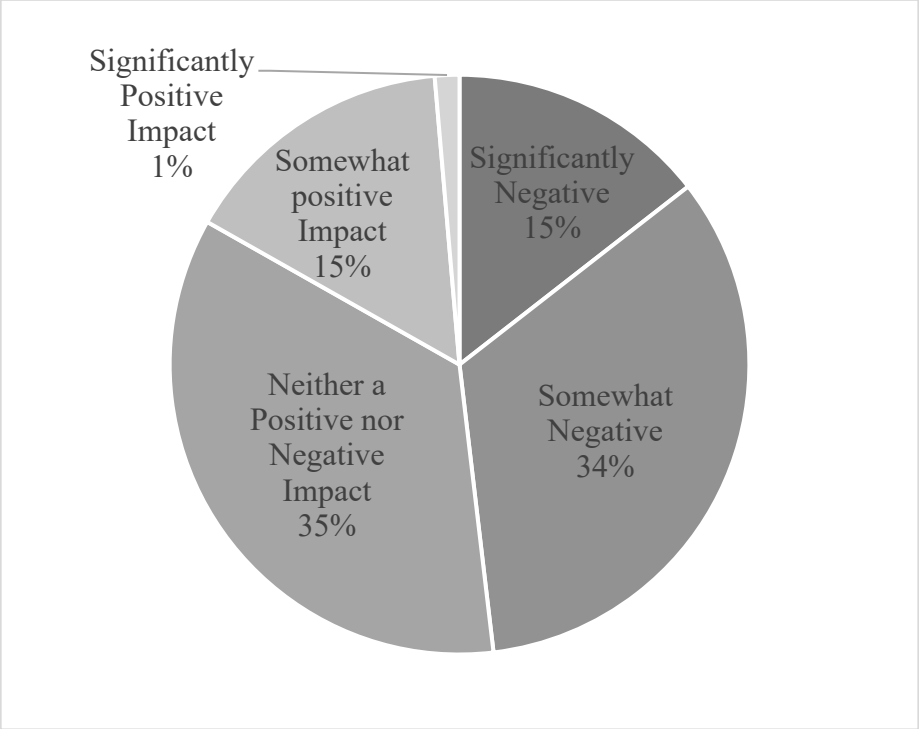
The group that believed sending students out had a significantly negative impact on the

relationship had statistically higher self-efficacy than the group that indicated there was no positive or negative impact of sending the students out of the classroom. The group that believed send-outs resulted in a somewhat positive impact was also significantly higher than the group that believed there was no positive nor negative impact. The group that believed there was a significantly negative impact had statistically higher self-efficacy when compared with the groups that believed there was only a somewhat negative impact and a somewhat positive impact. None of the other comparisons were statistically significant.

The third question related to teachers' beliefs about sending students out was: In general, which of the following most closely describes your beliefs about the impact of sending students out of the classroom in response to disruptive behavior on the academic achievement of the individual with disruptive behavior? The response options were the same Likert scale ranging from Significantly negative to Significantly positive as the previous question, as shown in Figure 3.

Figure 3

Teachers' Beliefs About the Impact of Send-Outs on Students' Achievement



There were 49% of respondents who believed that send-outs had a negative impact while 16% believed send-outs had a positive impact on academic achievement for the student who is sent out. Approximately one-third (35%) of respondents did not believe there was any positive or negative impact of send-outs on academic achievement. Table 11 provides the ANOVA test results to analyze the responses in relation to the self-efficacy ratings.

Table 11

Teachers' Beliefs About the Impact of Send Outs on Students' Achievement

17. In general, which of the following most closely describes your beliefs about the impact of sending students out of the classroom in response to disruptive behavior on the academic achievement of the individual with the disruptive behavior?	**N**	**Mean**	**SD**	**SE**	**Coefficient of variation**
significantly negative impact on their achievement.	359	4.102	0.578	0.030	0.141

Table 11

Teachers' Beliefs About the Impact of Send Outs on Students' Achievement

17. In general, which of the following most closely describes your beliefs about the impact of sending students out of the classroom in response to disruptive behavior on the academic achievement of the individual with the disruptive behavior?	N	Mean	SD	SE	Coefficient of variation
somewhat negative impact on their achievement.	835	4.001	0.499	0.017	0.125
It has neither a positive nor negative impact on their achievement.	870	3.876	0.516	0.018	0.133
somewhat positive impact on their achievement.	383	4.014	0.461	0.024	0.115
significantly positive impact on their achievement.	34	4.094	0.652	0.112	0.159

When each response option was analyzed in relation to the other response options, a few notable differences emerged as shown in Table 12.

Table 12

Comparison of Responses—Beliefs About Impact on Academic Achievement

Post Hoc Comparisons - 17. In general, which of the following most closely describes your beliefs about the impact of sending students out of the classroom in response to disruptive behavior on the academic achievement of the individual with the disruptive behavior?

		Mean Difference	SE	t	p_{tukey}
It has neither a positive nor negative impact on their achievement.	significantly negative impact on their achievement.	-0.226	0.032	-7.003	< .001
	significantly positive impact on their achievement.	-0.218	0.090	-2.427	0.108
	somewhat negative impact on their achievement.	-0.125	0.025	-5.037	< .001

Post Hoc Comparisons - 17. In general, which of the following most closely describes your beliefs about the impact of sending students out of the classroom in response to disruptive behavior on the academic achievement of the individual with the disruptive behavior?

		Mean Difference	SE	t	p_{tukey}
	somewhat positive impact on their achievement.	-0.138	0.032	-4.368	< .001
significantly negative impact on their achievement.	significantly positive impact on their achievement.	0.008	0.092	0.084	1.000
	somewhat negative impact on their achievement.	0.100	0.032	3.094	0.017
	somewhat positive impact on their achievement.	0.088	0.038	2.334	0.135
significantly positive impact on their achievement.	somewhat negative impact on their achievement.	0.093	0.090	1.030	0.841
	somewhat positive impact on their achievement.	0.080	0.092	0.874	0.906
somewhat negative impact on their achievement.	somewhat positive impact on their achievement.	-0.012	0.032	-0.386	0.995

Note. P-value adjusted for comparing a family of 5

The group that believed there was neither a positive nor negative impact had significantly different self-efficacy ratings when compared to the groups that believed there was a significantly negative impact, somewhat negative impact, and somewhat positive impact. There was also a significant difference between the groups that selected significantly negative impact and somewhat negative impact.

Another question related to beliefs about sending students out of the classroom was: In general, which of the following most closely describes your beliefs about the effectiveness of sending students out of the classroom in response to disruptive behavior for the individual with the disruptive behavior? Table 13 shows the response options compared to the teachers' self-

efficacy ratings in each group.

Table 13

Teachers' Beliefs About the Impact on Future Behavior

16. In general, which of the following most closely describes your beliefs about the effectiveness of sending students out of the classroom in response to disruptive behavior for the individual with the disruptive behavior?	N	Mean	SD	SE	Coefficient of variation
never results in improved future behavior	103	4.006	0.709	0.070	0.177
rarely results in improved future behavior	915	3.986	0.540	0.018	0.135
has neither a positive nor negative impact on that individual's future behavior	658	3.908	0.479	0.019	0.123
often results in improved future behavior	786	4.010	0.491	0.018	0.122
always results in improved future behavior	22	4.021	0.593	0.126	0.148

Respondents in the group that indicated send-outs had neither a positive nor negative impact on future behavior had the lowest self-efficacy ratings when compared to the other groups. Table 14 shows how that group had the only significant differences to note.

Table 14

Comparison of Responses—Impact on Future Behavior

Post Hoc Comparisons - 16. In general, which of the following most closely describes your beliefs about the effectiveness of sending students out of the classroom in response to disruptive behavior for the individual with the disruptive behavior?

		Mean Difference	SE	t	p_{tukey}
always results in improved future behavior	has neither a positive nor negative impact on that individual's future behavior	0.113	0.112	1.010	0.851
	never results in improved future behavior	0.015	0.122	0.125	1.000

Comparison of Responses—Impact on Future Behavior

Post Hoc Comparisons - 16. In general, which of the following most closely describes your beliefs about the effectiveness of sending students out of the classroom in response to disruptive behavior for the individual with the disruptive behavior?

		Mean Difference	SE	t	p_{tukey}
	often results in improved future behavior	0.011	0.112	0.097	1.000
	rarely results in improved future behavior	0.035	0.112	0.311	0.998
has neither a positive nor negative impact on that individual's future behavior	never results in improved future behavior	-0.098	0.055	-1.790	0.380
	often results in improved future behavior	-0.103	0.027	-3.748	0.002
	rarely results in improved future behavior	-0.079	0.026	-2.970	0.025
never results in improved future behavior	often results in improved future behavior	-0.004	0.054	-0.080	1.000
	rarely results in improved future behavior	0.020	0.054	0.364	0.996
often results in improved future behavior	rarely results in improved future behavior	0.024	0.025	0.951	0.877

Note. P-value adjusted for comparing a family of 5

The only comparison with a p-value of less than .05 is the group that indicated there was neither a positive nor negative impact compared to the groups that indicated that send-outs often or rarely resulted in improved future behavior. The group that believed there was neither a positive nor negative impact had significantly lower self-efficacy scores.

There were several different beliefs measured in relation to the practice of sending students out of the classroom. Respondents were asked about beliefs about the frequency with which students should be sent out, the impact the practice has on relationships between the

teacher and students, the impact on students' academic achievement, and the impact on students' future behavior. While not every belief was strongly correlated with self-efficacy ratings, the outcome of research question two was to reject the null hypothesis because there were statistically significant relationships between teachers' self-efficacy and their beliefs about the frequency with which students should be sent out of the classroom in response to disruptive behavior. Teachers with high ratings of self-efficacy were more likely to hold the belief that students should be sent out less frequently while teachers with lower self-efficacy were more likely to believe that students should be sent out more frequently. Teachers with lower self-efficacy ratings were more likely to believe that send-outs had no impact on the relationship, academic achievement, or students' future behavior, but teachers with higher self-efficacy did not have a consistent view of the impact send-outs have.

Research Question Three

RQ3: Are there significant differences in teachers' ratings of self-efficacy by their gender, experience, and racial identity?

H_o3: There are no significant differences between demographic factors of gender, experience, or racial identity and teachers' ratings of self-efficacy.

H_a3: There are significant differences between demographic factors of gender, experience, gender, or racial identity and teachers' ratings of self-efficacy.

Findings for Research Question Three

The purpose of research question three was to discover patterns in teachers' self-efficacy ratings and demographic variables including gender, years of experience, and racial identity. When testing for differences by years of experience, respondents were asked to identify the range represented within their completed years of teaching. The self-efficacy ratings were then

analyzed using an ANOVA which is shown in Table 15.

Table 15

Teachers' Self-Efficacy and Years of Experience

25. How many full years of teaching have you completed?	N	Mean	SD	SE	Coefficient of variation
a. 0-5 years	444	3.820	0.531	0.025	0.139
b. 6-10 years	330	3.913	0.513	0.028	0.131
c. 11-15 years	334	3.981	0.510	0.028	0.128
d. 16-20 years	389	3.997	0.491	0.025	0.123
e. 21-25 years	315	4.038	0.529	0.030	0.131
f. more than 25 years	603	4.090	0.497	0.020	0.121

As shown in Figure 4, there is a linear trend that as the years of teaching experience increased, the teachers rated themselves higher on the self-efficacy scale.

Figure 4

Teachers' Self-Efficacy and Years of Experience

To further decipher the significance of the difference between groups, a post hoc comparison of

the differences between each response option and each other option was completed. Table 16 shows the mean difference in each case and a corresponding P value that indicates whether the difference is significant. Each of the P values that are less than .05 were considered significant.

Table 16

Comparison of Responses—Years of Experience

Post Hoc Comparisons - 25. How many full years of teaching have you completed?

		Mean Difference	SE	t	Cohen's d	p_{tukey}
(a. 0-5 years)	(b. 6-10 years)	-0.094	0.037	-2.525	-0.184	0.117
	(c. 11-15 years)	-0.161	0.037	-4.363	-0.316	< .001
	(d. 16-20 years)	-0.177	0.035	-4.988	-0.346	< .001
	(e. 21-25 years)	-0.218	0.038	-5.792	-0.427	< .001
	f. more than 25 years	-0.270	0.032	-8.450	-0.528	< .001
(b. 6-10 years)	(c. 11-15 years)	-0.068	0.040	-1.708	-0.133	0.527
	(d. 16-20 years)	-0.083	0.038	-2.176	-0.163	0.249
	(e. 21-25 years)	-0.124	0.040	-3.087	-0.243	0.025
	f. more than 25 years	-0.176	0.035	-5.037	-0.345	< .001
(c. 11-15 years)	(d. 16-20 years)	-0.015	0.038	-0.407	-0.030	0.999
	(e. 21-25 years)	-0.056	0.040	-1.408	-0.111	0.722
	f. more than 25 years	-0.108	0.035	-3.114	-0.212	0.023
(d. 16-20 years)	(e. 21-25 years)	-0.041	0.039	-1.059	-0.080	0.898
	f. more than 25 years	-0.093	0.033	-2.799	-0.182	0.058
(e. 21-25 years)	f. more than 25 years	-0.052	0.036	-1.464	-0.102	0.687

Note. P-value adjusted for comparing a family of 6

There was no significant difference between respondents with zero to five years of experience (new teachers) and those with the next highest range of experience of six to 10 years. When new teachers' responses were compared to each of the higher range of experience bands beyond six to

10 years, there was a significant difference between their self-efficacy ratings. The rest of the differences were insignificant except for three situations: 1) the six to 10 years of experience group compared with the 21-25 years of experience group, 2) the six to 10 years of experience group compared with the more than 25 years group, and 3) the 11-15 years of experience group compared with the more than 25 years group. In each significant case, the range bands were at least 10 years away from each other. In other words, the impact of years of experience on self-efficacy was significant when the number of completed teaching years was at least 10 years different than the group being analyzed. In every case where there was a significant difference by experience level, there was a linear trend in which respondents had higher ratings of self-efficacy as their number of completed teaching years increased.

When testing differences by gender identity, Table 17 shows that 1,814 respondents identified as female (75.4%), 484 identified as male (20%), and 107 people identified a gender other than male or female (4.4%). While respondents had more than three gender response options and an open-ended space on the survey, the answers were combined for ease of analysis because there weren't large enough groups beyond Male, Female, or Other that would have changed the results.

Table 17

Gender Identity - Self-Efficacy Scale

Gender	N	Mean	SD	SE	Coefficient of variation
Female	1814	4.002	0.504	0.012	0.126
Male	484	3.947	0.533	0.024	0.135
Other	107	3.739	0.630	0.061	0.169

To make the comparison more accurate with such varied group sizes, Table 18 shows the

homogeneity correction for this set of data.

Table 18

ANOVA - Self-Efficacy Scale

Homogeneity Correction	Cases	Sum of Squares	df	Mean Square	F	p	η²
None	Gender	7.657	2.000	3.828	14.354	< .001	0.012
	Residuals	640.616	2402.000	0.267			
Welch	Gender	7.657	2.000	3.828	10.438	< .001	0.012
	Residuals	640.616	259.474	2.469			

Note. Type III Sum of Squares

Comparing the difference between the mean of each group revealed which differences were statistically significant. Table 10 shows that there was not a significant difference between the Female and Male group but there was a significant difference between self-efficacy ratings for people who selected Female compared to Other and between people who selected Male compared to Other.

Another demographic variable was the racial background of the respondents. Table 19 shows the largest group identified as White and each of the categories of American Indian, Asian, Black or African American, and Hispanic/Latino were relatively small in comparison.

Table 19

Racial Identity and Self-Efficacy Scale

Racial Identity	N	Mean	SD	SE	Coefficient of variation
American Indian	29	4.087	0.520	0.097	0.127
Asian	42	3.930	0.484	0.075	0.123
Black or African American	58	4.095	0.655	0.086	0.160
Hispanic/Latino	47	3.979	0.556	0.081	0.140

Racial Identity and Self-Efficacy Scale

Racial Identity	N	Mean	SD	SE	Coefficient of variation
White	2059	3.989	0.503	0.011	0.126

Because the group sizes were so discrepant, there was no statistically significant difference between racial groups when it comes to self-efficacy ratings.

There were several demographic categories analyzed in order to answer research question three including years of experience, gender, and race. There was a correlation between teachers' self-efficacy ratings and their years of experience. The higher their years of experience, the higher they rated themselves in terms of self-efficacy. There was only a correlation between teachers' gender identity when comparing either Male or Female to people who identified outside of the binary gender labels. In those cases, there was significantly higher self-efficacy in both the Male and Female group when compared to the ratings of self-efficacy in the Other group. There were no significant differences between racial groups.

Table 20 shows the summary of hypotheses test outcomes for each of the research questions related to the relationship between teachers' self-efficacy for managing disruptive behavior and their beliefs, practices, and demographic variables.

Table 20

Summary of Hypotheses Testing Outcomes for Teachers' Self-Efficacy and Their Response to Disruptive Behavior

Null Hypothesis	Outcome
H_o1: There is no significant correlation between teachers' ratings of self-efficacy and the rate at which students are sent out of the classroom for disruptive behavior.	Reject the Null Hypothesis
H_o2: There is no significant correlation between teachers' ratings of self-efficacy and their beliefs about sending students out of the classroom for disruptive behavior.	Reject the Null Hypothesis
H_o3: There are no significant differences between demographic factors of gender, experience, or racial identity and teachers' ratings of self-efficacy.	Reject the Null Hypothesis

Chapter V: Discussion, Implications, Recommendations

Final Analysis

This chapter summarizes the results from the primary study and provides additional commentary about how the data from Chapter Four should be both interpreted and applied to educational settings. A discussion about the implications for extending the research base even further is also included.

Purpose of the Study

The goal of the study was to determine if any relationship existed between teachers' ratings of their self-efficacy for managing disruptive behavior and their beliefs about sending students out of the classroom, the frequency with which they do so, and several demographic variables. Any relationships between these variables would provide insight into how to improve the education system for both teachers and students. While teachers' self-efficacy has been extensively studied in general and specific contexts, the context of managing disruptive behavior required an original survey instrument. The creation of the Teachers' Self-Efficacy for Managing Disruptive Behavior scale provides a tool for ongoing measurement as schools work to improve the system. By analyzing a large sample of teachers' ratings of their self-efficacy in relation to their responses to questions about beliefs, practices, and demographics, education leaders will be better equipped to support and retain the teachers in the workforce while improving conditions for students who might otherwise be subject to higher rates of exclusionary discipline. The results of the self-efficacy survey and corresponding questions about beliefs, practices, and demographics were examined using a series of Analysis of Variance (ANOVA) tests in order to form statistically validated conclusions.

Research Questions

RQ1: Do teachers' ratings of self-efficacy correlate with the rate at which students are sent out of the classroom for disruptive behavior?

RQ2: Do teachers' ratings of self-efficacy correlate with their beliefs about sending students out of the classroom for disruptive behavior?

RQ3: Are there significant differences in teachers' ratings of self-efficacy by their gender, experience, and racial identity?

Table 21 provides a concise summary of the answers to each research question in relation to the hypotheses and as verified by the ANOVA statistical tests.

Table 21

Summary of Hypotheses Testing Outcomes for Identifying Relationships Between Teachers' Self-Efficacy and Their Response to Disruptive Behavior

Research Question	Null Hypothesis	Reject Null Hypothesis	Fail to Reject Null Hypothesis
RQ1: Do teachers' ratings of self-efficacy correlate with the rate at which students are sent out of the classroom for disruptive behavior?	H_o1: There is no significant correlation between teachers' ratings of self-efficacy and the rate at which students are sent out of the classroom for disruptive behavior.	X	
RQ2: Do teachers' ratings of self-efficacy correlate with their beliefs about sending students out of the classroom for disruptive behavior?	H_o2: There is no significant correlation between teachers' ratings of self-efficacy and their beliefs about sending students out of the classroom for disruptive behavior.	X	
RQ3: Are there significant differences in teachers' ratings of self-efficacy by their gender, experience, and racial identity?	H_o3: There are no significant differences between demographic factors of gender, experience, or racial identity and teachers' ratings of self-efficacy.	X	

Summary of Findings

The summary of findings in this section aligns with each research question.

RQ1: Do teachers' ratings of self-efficacy correlate with the rate at which students are sent out of the classroom for disruptive behavior?

The ANOVA test compared respondents' ratings of self-efficacy to the rate at which they reported sending students out of the classroom in response to disruptive behavior. The analysis produced the following results:

- There was a statistically significant correlation between teachers' ratings of self-efficacy and the rate at which they reported sending students out of the classroom. The correlation was a strong linear trend.
    - Teachers who reported never sending students out of the classroom for disruptive behavior had a mean self-efficacy rating of 4.298
    - Teachers who reported rarely sending students out of the classroom had a mean self-efficacy rating of 4.049
    - Teachers who reported sometimes sending students out of the classroom had a mean self-efficacy rating of 3.804, and
    - Teachers who reported often or always sending students out of the classroom for disruptive behavior had a mean self-efficacy rating of 3.514.
- There was a statistically significant difference between every group with each p-value being $< .001$.

There was enough evidence to reject the null hypothesis because there was a statistically significant correlation between teachers' ratings of self-efficacy and the frequency with which they send students out of the classroom for disruptive behavior. When teachers rated themselves higher in self-efficacy, they reported sending students out of the room for disruptive behavior less frequently.

RQ2: Do teachers' ratings of self-efficacy correlate with their beliefs about sending students out of the classroom for disruptive behavior?

The ANOVA test compared respondents' ratings of self-efficacy to their responses to the questions about their beliefs related to sending students out of the classroom. The questions in that section asked about how often students should be sent out of the classroom for disruptive behavior, the perceived impact it has on the relationship with the teacher, the perceived impact on their academic achievement, and the perceived impact it has on their future behavior. The analysis led to the following results:

- There was a statistically significant correlation between teachers' ratings of self-efficacy and their beliefs about how often students should be sent out of the classroom for disruptive behavior.
    - When teachers indicated that the practice of sending students out should never or rarely happen, their self-efficacy ratings were higher than the groups that indicated the practice should be often or always used.
    - The group that believed students should always be sent out for disruptive behavior had a significant difference in self-efficacy ratings when compared to every other group.
- There was not a strong linear relationship when comparing some beliefs about the impact on the teacher and student relationship to each other.
    - The teachers who believed there was a significantly negative impact had higher self-efficacy ratings than the group that believed there was neither a positive nor negative impact.

  - The group that believed there was a somewhat positive impact had higher self-efficacy ratings than the group that believed there was neither a positive nor negative impact and lower ratings than the group that believed there was a significantly negative impact.
  - The group that believed there was a significantly negative impact had higher self-efficacy ratings than the group that believed there was a somewhat negative impact.
- There was not a strong linear trend in the ratings of self-efficacy when compared to the beliefs about the impact of sending students out on their academic achievement.
  - Teachers who believed that there was neither a positive nor negative impact on achievement had lower self-efficacy ratings than the groups who believed there was a significantly negative impact, somewhat negative impact, and somewhat positive impact.
  - The teachers who believed there was a significantly negative impact had higher self-efficacy ratings than the group that believed there was a somewhat negative impact.
- There was not a strong correlation between ratings of self-efficacy and beliefs about the impact of sending students out on their future behavior.
  - Teachers who believed there was neither a positive nor negative impact on future behavior had lower self-efficacy ratings than teachers who believed that sending students out rarely improves future behavior.

- Teachers who believed there was neither a positive nor negative impact on future behavior had lower self-efficacy ratings than teachers who believed that sending students out often improved future behavior.

There was evidence to reject the null hypothesis for research question two because there was a relationship between teachers' beliefs about sending students out of the classroom and their self-efficacy ratings. Teachers with higher self-efficacy believed that sending students out should happen less frequently. Teachers with lower self-efficacy were correlated with the belief that send-outs have no positive or negative impact on the relationship, academic achievement, or students' future behavior.

RQ3: Are there significant differences in teachers' ratings of self-efficacy by their gender, experience, and racial identity?

The ANOVA test compared respondents' ratings of self-efficacy to their self-reported demographics related to years of teaching experience, gender identity, and racial identity. The data produced the following results:

- There was a statistically significant correlation between years of teaching experience and teachers' ratings of self-efficacy.
  - The longer teachers had been teaching, the higher their ratings of self-efficacy were.
  - There was a significant difference between the self-efficacy ratings of teachers with the least experience (0-5 years) and every other experience level past 11 years.
  - In every other significant case, there were at least 10 years between the groups being compared.

- There was a significant relationship between self-efficacy ratings by gender only when comparing the female and male (binary) gender identities to the group that identified as a gender identity other than male or female.
    - Both male and female identifying teachers rated themselves higher in self-efficacy than teachers who identified with a gender other than male or female.
- There were no significant relationships between racial groups when analyzing their ratings of self-efficacy.

There was sufficient evidence to reject the null hypothesis for research question three because there was a significant correlation between teachers' ratings of self-efficacy and the demographic variable of their experience level and their gender identity when comparing binary gender identities to other gender identities. Teachers with more experience rated themselves higher in self-efficacy for managing disruptive behavior and teachers who identified as a binary gender were more self-efficacious than teachers with other gender identities. There were no significant findings based on racial demographics.

Discussions and Conclusions

The data related to Research Question One revealed a strong relationship between teachers' self-efficacy ratings and the rate at which they reported sending students out of the classroom in response to disruptive behavior. The strong linear trend showed that teachers who less frequently send students out were the same teachers who rated themselves highest on the self-efficacy scale. In contrast, the teachers who reported more frequently sending students out of the classroom for disruptive behavior were the same teachers who rated themselves lower on the self-efficacy scale. With such a large sample size and the corresponding statistical results, it is

unlikely that even self-reported data would produce such a strong trend by chance. The impact of any teachers who might have under or over-reported their frequency of sending students out for disruptive behavior or misrepresented their self-efficacy was moderated by the strength of the linear trend and the large sample size. This data supported the conclusion that when teachers were more self-efficacious in the area of managing disruptive behavior, they were less likely to send students out of the classroom.

Research Question Two resulted in data that showed the relationship between teachers' beliefs about sending students out of the classroom and their self-efficacy for managing disruptive behavior. While not every comparison revealed a clear trend, there was a correlation that teachers with high self-efficacy believed students should be sent out of class less frequently for disruptive behavior. In the groups of teachers who believed students should be sent out more frequently for disruptive behavior, their mean self-efficacy ratings were lower. The evidence revealed that teachers with high self-efficacy did not believe that students should be sent out of the room as often for the disruptive behavior to be managed.

Some questions led to less conclusive results that asked teachers to share their beliefs about the impact of send-outs on the relationship between the teacher and student, the impact on academic achievement, and the impact on students' future behavior. In each of those questions, there was an option to say there was neither a positive nor negative impact (on the relationship, on their academic achievement, and on their future behavior, respectively). The statistically significant differences were between teachers who selected that neutral response when compared to teachers who selected something that was definitively positive or negative. The group that believed there was neither positive nor negative impact had the lowest self-efficacy when compared to the groups that selected something definitively positive or negative. The neutrality

of that answer choice could have skewed the overall results to become less of a clear trend. Teachers with lower self-efficacy may have believed that send-outs have no impact at all, yet they may not see another option.

With respect to teachers' beliefs about the impact of send-outs on the relationship between the student and the teacher, the highest ratings of self-efficacy corresponded with the groups that believed there was either a significantly negative or significantly positive impact. Because those responses produced such opposing viewpoints, it is possible that the question was interpreted very differently among respondents. It is possible that teachers with high self-efficacy believed that send-outs have a significantly negative impact because the students would be disconnected from the teacher while they are out of the room. Teachers with high self-efficacy who believed that send-outs have a significantly positive impact on the relationship (an opposite view compared with the other group with relatively high self-efficacy) may have seen the separation from the teacher and student as an opportunity to protect the student from further negative interaction with the teacher while they get support elsewhere.

When considering the impact on academic achievement, there was not a strong linear trend with respect to self-efficacy ratings. The group that selected the response that send-outs had no impact on academic achievement were lower than groups with beliefs on both sides of neutral. In other words, teachers with the highest self-efficacy had some opposite viewpoints of the impact on academic achievement. The teachers with the lowest self-efficacy may have indicated the neutral response because they saw academic achievement as unrelated to disruptive behavior or as out of their control completely. The fact that some teachers with relatively higher self-efficacy believed there was a positive impact on achievement while others believed there was a negative impact on achievement could be the result of varied interpretations of the

question. The lack of conclusive data contradicted the previous findings that time out of the classroom had a negative impact on achievement (Hines, 2008).

There were conflicting results regarding teachers' beliefs about the impact of sending students out of the classroom on future behavior. The significant differences in self-efficacy ratings occurred when comparing the group that believed send-outs had neither a positive nor negative impact to groups that believed send-outs rarely or often improved future behavior. Because the choices of rarely and often were on opposing sides of the Likert scale, the discrepancy did not provide a conclusive finding. The neutral response may have led to confusion or different interpretations of the question that resulted in inconsistent data.

Research Question Three resulted in a conclusion that there was a relationship between teachers' ratings of self-efficacy and certain demographic variables. The strongest relationship was that as teachers' years of experience increased, their self-efficacy ratings were higher. While it was a linear trend that appeared across experience levels, there was a clear difference between teachers with the least amount of experience (0-5 years) and teachers with 11 or more years. Within the five-year experience range bands provided as answer choices on the survey, the closest bands to each other had the least difference in self-efficacy ratings, which suggests that it takes a significant amount of time (at least 5 years) and experience to increase a teacher's self-efficacy.

With regard to teachers' gender identity, there was only a significant difference between teachers who identity as binary male or female when compared with teachers who identified with another label. There was no significant correlation between male and female teachers' self-efficacy ratings when compared to each other. We can conclude that binary gender identities have higher self-efficacy than other gender identities.

The demographic variable of racial identity was also inconclusive. The extreme difference between the number of respondents who identified as White and the number of respondents who identified as American Indian, Asian, Black or African American, and Hispanic/Latino, explains why there was not a clear relationship demonstrated in this set of data. The discrepancy aligned with the fact that teachers who identified as BIPOC in the U.S. education system are underrepresented overall as well as in this data set.

Implications for Educational Practice

By finding ways to increase teachers' self-efficacy, they will be better equipped to effectively handle disruptive behavior within their classroom. As a result, the resources of time and human capital that are currently needed to support students in school will be more efficiently utilized. School staff who respond to behavior referrals from teachers operate in a similar manner as a medical emergency triage system. In order for them to be available to respond to the most critical situations, schools need a system that maximizes the capacity within the primary classroom teacher to meet students' behavioral needs without having to request help from resources outside of the classroom. When students are sent out to reflect, process, and problem solve their behavior, they also miss academic instructional time that perpetuates inequitable access for those individuals.

Because the analysis revealed a corollary but not a causal relationship between high self-efficacy ratings and less frequent send-outs, it is not clear whether high self-efficacy leads to less frequent send-outs or if less frequent send-outs lead to higher self-efficacy. If educational policy restricts teachers' use of send-outs for disruptive behavior, it may not increase their self-efficacy for managing the disruptive behavior without also providing strategies that increase teachers' ability to prevent disruptive behavior and effectively manage it within their classroom. If

teachers' self-efficacy is increased, it is also possible that they will not reduce their use of send-outs without a change in policy. Because there is a strong relationship between the two variables, one possible course of action may be to encourage teachers to reduce their use of send-out practices while simultaneously building their capacity and self-efficacy in the area of managing disruptive behavior.

Because managing disruptive classroom behavior is one of the areas that is frequently reported as a source of teachers' emotional exhaustion (and in turn burnout from the profession), teachers need strategies for both preventing and reducing disruptive behavior and responding when it happens. Students who are already disproportionately subject to exclusionary discipline have a particularly urgent need for teachers with high self-efficacy to reduce the likelihood they will be sent out as the response to disruptive behavior. Because the data suggested that it takes at least five years to see significant increases in teachers' self-efficacy, we must look for ways to accelerate their professional development in the area of managing disruptive behavior. Without prioritizing teachers' skill growth, the system will continue to perpetuate the inequity that some students are more likely to miss academic instruction than others because of the higher rate at which teachers with relatively lower self-efficacy are likely to send them out of the classroom.

Implications for Further Research

Every unique study has inherent and intentional limitations that provide boundaries within which the results should be interpreted. There are many additional opportunities for further investigation that fall outside of the boundaries of this study. There was no delineation in this data to identify potentially meaningful differences across urban, rural, and suburban settings, so another study could utilize the newly created Teachers' Self-Efficacy for Managing Disruptive Behavior scale to analyze responses across samples from each of those settings.

Because this study did not produce conclusive evidence to suggest there are self-efficacy differences between teachers of different racial identities, another study should investigate an even deeper comparison of how self-efficacy ratings might change for teachers who are working primarily with students whose racial identities match the teacher and for teachers who are working primarily with students whose racial identities are different from theirs. Because many teachers work with student groups that contain diverse racial identities at the same time, future researchers could also ask teachers to report how their self-efficacy may change when the racial identity of the student matches and does not match their own. Gender identity differences could be studied in a similar manner by asking teachers to report their own gender identify and then rate their self-efficacy with respect to each student gender identity group in mind. There may also be a need to study the complex construct of gender identity using a research method that is more qualitative to allow for increased specificity in respondents' input.

Additional research is also needed in order to determine the strategies used by teachers who are less likely to send students out of the classroom for disruptive behavior. It is possible that they encounter less frequent instances of disruptive behavior in the first place, which could be the result of their use of preventative management strategies. It could also be another unknown reason that could be discovered in future studies. It is also important to study the differences in strategies used by teachers who report being more and less likely to send students out of the classroom to determine the extent to which each group utilizes proactive prevention of disruptive behavior and more reactive strategies. Once the strategies are identified, it would also be valuable to determine any possible connections between the use of proactive vs. reactive strategies and burnout risk.

Another extension of this research should seek out ways to accelerate the development of teachers' self-efficacy in order to minimize the time in which any child in any school is subject to unnecessary exclusion from the classroom. Because many teachers are leaving the profession within their first five years and the data from this study confirmed that teachers' self-efficacy is lowest during their first five years, it is important to provide professional development as early as possible, including as part of teacher preparation programs. If there is a way to accelerate their growth, higher self-efficacy could lead to more equitable student discipline outcomes and more teacher retention at the same time. As Reed (2018) reported, there was a significant increase in self-efficacy when teachers achieved either Standard level or Demonstration Teacher certification as part of the professional development model created by Nancy Burns and Jacki Brickman (currently referred to as "The Catalyst Approach"). Now that there is also a documented link between high self-efficacy and a reduction in teachers' propensity to send students out, schools should consider utilizing The Catalyst Approach as a pathway toward increasing teachers' self-efficacy for managing disruptive behavior so that they may also reduce the frequency with which students end up away from the learning environment.

Another important area for future research is to determine any potential relationship between teachers' ratings of self-efficacy and their likelihood to send particular students out of the classroom more or less than others. It could be studied by asking teachers to identify specific student characteristics that cause them to be more or less likely to respond to their disruptive behavior by sending them out.

Conclusion

The significant findings of this study should prompt leaders in the education system to prioritize increasing teachers' self-efficacy for managing disruptive behavior. Too many students

are currently subject to unjust and more frequent removal from the classroom than other students who display the same behavior (Minnesota Department of Education, 2018). It is clear from the data that teachers with higher self-efficacy in this area report being less likely to send a student out along with the belief that students should be sent out for their behavior less frequently than teachers with lower self-efficacy.

At the same time, there is a trend that teachers are leaving the profession in many cases as a result of the exhaustion that comes from managing disruptive behavior. If teachers with high self-efficacy believe in their capacity to maintain a strong connection even with students who have chronically disruptive behavior and who can maintain a sense of calm even in the midst of disruptions, teachers need support to develop these capacities before they burn out of the profession altogether. As educational leaders look to continually improve outcomes for students, their investment in increasing teachers' self-efficacy holds promise to benefit teachers and students at the same time. In a system with historically and perpetually scarce resources, schools need to maximize the impact of every effort to see an impact.

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