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FACTORS INFLUENCING TEACHER EFFICACY IN A PENNSYLVANIA JUVENILE DETENTION CENTER EDUCATION PROGRAM

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Dissertation submitted to the Faculty of the College of Education in partial fulfillment of the requirements for the degree of Doctor of Education in

Teacher Leadership

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Abstract

This dissertation describes the factors influencing teacher efficacy among teachers currently or recently working in a juvenile detention center education program in southeastern Pennsylvania. The single-case study examined the barriers and facilitators to high teacher efficacy in that school setting, since these factors were previously unknown. The research population for the study consisted of all teachers who are working or who have worked within the past five years at the juvenile detention center education program (n = 9). Research was conducted using the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), a questionnaire, and inperson interviews. The following were found to be barriers to high teacher efficacy at the juvenile detention center: student misbehavior, classroom distractions, student groupings of mixed ability levels, limited assessment options, negative student attitudes, and limited background information about students. The following were found to be facilitators of high teacher efficacy at the juvenile detention center: positive learning climate, presence of detention officers, classroom rules and expectations, differentiated instruction, relevant lessons, educational activities, and rapport with students.

Keywords: teacher efficacy, juvenile justice education, juvenile corrections education, juvenile detention education, adjudicated youth education, incarcerated youth education, alternative education

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To my grandfather, whose belief in the value of education inspired me to pursue my dreams

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Chapter 1: Introduction

Introduction to the Problem

Teaching in a juvenile detention center education program presents unique challenges. More than half of incarcerated youth have reading and math skills significantly below their grade level (Council of State Governments, 2015), and a large portion of incarcerated youth is functionally illiterate (Feinstein, 2002). The rate of incarcerated youth requiring special education services is four times higher than the rate in a traditional school setting (Council of State Governments, 2015). In a 2006 survey, one-fourth of incarcerated youth had severe mental health illnesses, a rate two to four times higher than the national rate (Gottesman & Schwarz, 2011). Thirty percent of incarcerated youth reported a history of either physical or sexual abuse, and many had histories of alcohol or substance abuse (Gottesman & Schwarz, 2011). For teachers working in a juvenile detention center education program, addressing these issues on a daily basis can significantly impact teacher efficacy, which is a teacher's belief in his ability to impact student learning (Tschannen-Moran , Hoy, & Hoy, 1998).

Teacher efficacy has a substantial impact on the classroom environment, including influencing student attitudes toward learning, affecting classroom management, and contributing to job stress and burnout (Brouwers & Tomic, 1999; Dicke, Parker, Marsh, Kunter, Schmeck, & Leutner, 2014; Gibson & Dembo, 1984; Holzberger, Philipp, & Kunter, 2013; Hoy, Hoy, & Davis, 2009; Korevaar, 1990; Martin, Sass, & Schmitt, 2012; Nie, Tan, Liau, Lau, & Chua, 2013; Skaalvik & Skaalvik, 2007; Tsouloupas, Carson, & MacGregor, 2014). Teachers with low teacher efficacy are more likely to experience job stress and burnout (Dicke et al., 2014; Schwarzer & Hallum, 2008). However, teachers with high teacher efficacy are more likely to set higher standards for student behavior and to use class time more effectively (Hoy et al., 2009).

For teachers working in a juvenile detention center education program, a variety of factors can influence teacher efficacy. This study attempts to identify factors that influence teacher efficacy among teachers currently or recently working in a juvenile detention center education program in Pennsylvania. This chapter is divided into the following sections:

Introduction to the Problem, Conceptual Framework for the Problem, Statement of the Problem, Purpose of the Study, Research Questions, Significance of the Study, Definition of Terms,

Limitations and Delimitations, and Chapter 1 Summary.

Conceptual Framework for the Problem

Teacher efficacy is a malleable, multidimensional construct (Gibson & Dembo, 1984; Guskey & Passaro, 1994; Skaalvik & Skaalvik, 2007). A teacher's sense of efficacy is influenced by internal and external factors (Guskey & Passaro, 1994; Ross, 1994; Yeo, Ang, Chong, Huan, & Quek, 2008). Teacher efficacy affects instructional quality, classroom management, and teacher burnout (Brouwers & Tomic, 1999; Dicke et al., 2014; Gibson & Dembo, 1984; Holzberger et al., 2013; Hoy et al., 2009; Korevaar, 1990; Martin et al., 2012; Nie et al., 2013; Skaalvik & Skaalvik, 2007; Tsouloupas et al., 2014). Social cognitive theory, which includes the concepts of triadic reciprocality and self-efficacy, provide a framework for examining the concept of teacher efficacy (Bandura, 1997).

Social cognitive theory states an individual acquires knowledge by observing others in social situations (Bandura, 1997). When an individual repeatedly experiences or observes others experiencing success after overcoming obstacles, self-efficacy and ultimately behavior are influenced (Bandura, 1997). Therefore, self-efficacy is situation-specific and impacted by environment (Bandura, 1997; Schwarzer & Hallum, 2008). Research conducted by Houchins, Puckett-Patterson, Crosby, Shippen, and Jolivette (2009), Cox, Visker, and Hartman (2011), and

Cate (2014) are among the few studies that targeted teachers in juvenile detention center education programs. The findings of these studies indicated that teachers in these settings encounter unique challenges that can impact teacher efficacy (Cate, 2014; Cox et al., 2011; Houchins et al., 2009). Teacher efficacy beliefs can have a significant effect on a teacher's sense of helplessness when working with specific student populations (Stipek, 2012; Yeo et al., 2008); however, teacher efficacy can also positively influence instructional quality and the learning environment (Cox et al., 2011).

According to the concept of triadic reciprocality, self-efficacy is both a cause and an effect of an individual's external environment and internal personal factors (Bandura, 1997). A variety of variables, including internal and external influences, impact teacher efficacy (Houchins et al., 2006; Shaukat & Iqbal, 2012; Skaalvik & Skaalvik, 2014; Stipek, 2012). Instructional quality and student attitudes toward learning are affected by teacher efficacy (Gibson & Dembo, 1984; Holzberger et al., 2013; Nie et al., 2013). In addition, teacher efficacy influences a teacher's use of classroom management techniques (Brouwers & Tomic, 1999; Hoy et al., 2009; Korevaar, 1990; Tsouloupas et al., 2014). Teacher efficacy and classroom management have a cyclical relationship, in which teacher efficacy influences classroom management, which in turn influences teacher efficacy (Brouwers & Tomic, 1999). Teachers with high teacher efficacy experience higher cognitive activation, better classroom management, and more learning support for students (Holzberger et al., 2013). Teacher efficacy can have both positive and negative effects on classroom management.

Self-efficacy, which refers to an individual's beliefs about his capability to learn or complete a task, differs from other concepts of personal competence, such as self-esteem and self-concept (Bandura, 1997). Individuals have a general sense of self-efficacy, which is their

coping ability across a wide range of situations (Schwarzer & Hallum, 2008). Similarly, teacher efficacy affects the level of teachers' emotional exhaustion and feelings of job stress (Brouwers & Tomic, 1999; Dicke et al., 2014; Martin et al, 2012; Skaalvik & Skaalvik, 2007;). Teachers with low teacher efficacy are more likely to experience emotional exhaustion, job stress, and teacher burnout as a result of classroom disturbances (Brouwers & Tomic, 1999; Dicke et al, 2014). As a professional variable, teacher efficacy has a wide-reaching impact on the classroom environment, affecting instructional quality, classroom management, and teacher burnout.

Statement of the Problem

Teacher efficacy can be influenced by a variety of factors (Guskey & Passaro, 1994; Ross, 1994; Yeo et al., 2008). Some factors can lead to high teacher efficacy and high quality instructional practices (Cox et al., 2011; Holzberger et al., 2013), while other factors can lead to low teacher efficacy and job stress (Brouwers & Tomic, 1999; Dicke et al, 2014). A review of existing teacher efficacy studies identified two significant gaps. Previous research has excluded qualitative research methods (Klassen et al., 2011). Also, few studies have examined teacher efficacy among teachers in non-traditional school settings, such as juvenile detention centers (Cate, 2014; Cox et al., 2011; Houchins et al., 2009). Teachers working in a juvenile detention center education program encounter challenges specific to their teaching environment. Therefore, this study sought to examine the factors that contribute to or impede high teacher efficacy in this unique environment using qualitative research methods.

Purpose of Study

The purpose of this single-case study was to describe factors influencing teacher efficacy in instructional strategies, student engagement, and classroom management among teachers currently or recently working in a juvenile detention center education program in southeastern

Pennsylvania. Identifying factors that influence teacher efficacy can lead to the development of strategies that support high teacher efficacy. Highly efficacious teachers perform well in juvenile justice education environments (Cate, 2014; Cox et al., 2011; Houchins et al., 2009).

Research Questions

Research question 1. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards being able to manage a classroom?

Research question 2. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards utilizing classroom instructional strategies?

Research question 3. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards being able to engage students in the classroom?

Significance of the Study

Two deficiencies exist among education research in the field of teacher efficacy. First, the vast majority of teacher efficacy studies have been conducted using quantitative methods (Klassen, Tze, Betts, & Gordon, 2011). This study used a qualitative method, involving a teacher efficacy scale, a questionnaire, and interviews. Second, teacher efficacy studies have focused primarily on teachers in traditional school settings, which has excluded the population of teachers working in non-traditional education settings. Since teacher efficacy is domain-specific (Schwarzer & Hallum, 2008), different teaching environments can impact teacher efficacy in unique ways. For teachers in juvenile detention center education programs, the distinctiveness of their environment can impact their beliefs about the teaching profession and their role as teacher.

Understanding the factors that teachers perceive to be influencing their self-efficacy in a particular environment can have long-term, positive outcomes. Program administrators may be able to develop strategies to support high teacher efficacy in their facilities. The data resulting from this study may be used by school-based leaders and district-level leaders may be able to develop hiring practices, induction programs, and structural supports that address the factors identified in this study. The results of this study may also be used to create professional development opportunities for teachers that examine strategies for addressing barriers and facilitators of high teacher efficacy. Ultimately, understanding and addressing the factors that foster high teacher efficacy may promote student learning.

Definition of Terms

Self-efficacy. Self-efficacy refers to an individual's beliefs about his capability to learn or complete a task (Bandura, 1997).

Teacher efficacy. Teacher efficacy refers to a teacher's belief in his or her ability to promote student learning (Tschannen-Moran et al., 1998).

General teaching efficacy. General teaching efficacy refers to a teacher's assessment of the ability of teachers as a profession to influence student learning (Gibson & Dembo, 1984).

Limitations and Delimitations

Limitations. This study had several limitations. First, the sample size was small (n = 9), which resulted in limited findings. Second, all study participants were from one juvenile detention center, so the findings cannot be generalized to teachers in other facilities. Third, study participants included both current and former teachers of the juvenile detention center. Therefore, teachers who no longer work at the juvenile detention center had to rely on their memories of teaching at the facility. Also, depending on their reasons for leaving the juvenile

detention center, some former teachers might have had negative feelings about their experiences at the facility, which could have affected their responses. Fourth, teachers were self-reporting data, which could have resulted in answers that were influenced by social desirability bias (Fowler, 2009).

Delimitations. This study was delimited to teachers who are working or who have worked within the past five years at a specific juvenile detention center in Pennsylvania.

Chapter 1 Summary

Teacher efficacy impacts the classroom environment in many ways, including instructional quality, classroom management, and teacher burnout (Brouwers & Tomic, 1999; Dicke et al., 2014; Gibson & Dembo, 1984; Holzberger et al., 2013; Hoy et al., 2009; Korevaar, 1990; Martin et al., 2012; Nie et al., 2013; Skaalvik & Skaalvik, 2007; Tsouloupas et al., 2014). For teachers in all academic settings, a variety of internal and external factors influence teacher efficacy (Houchins, Shippen, & Jolivette, 2006; Shaukat & Iqbal, 2012; Skaalvik & Skaalvik, 2014; Stipek, 2012). However, for teachers in juvenile detention center education programs, those factors are more pronounced (Houchins et al., 2009). In addition, teachers in juvenile detention centers face additional barriers to high teacher efficacy, such as teaching heterogeneous classes of mixed age and mixed ability students and dealing with a highly transient and often short-stay student population (Houchins et al., 2009). Using a single-case study methodology, this study sought to identify and describe factors that influence teacher efficacy in a juvenile detention center education program in southeastern Pennsylvania.

This study is organized into five sections. The previous section is Chapter 1, which introduces the study. Chapter 2 covers the literature review, which provides a background about the existing research in the area of teacher efficacy. Chapter 3 describes the research

methodology utilized in this study. Chapter 4 outlines the study's data analysis and results.

Chapter 5 closes the study with conclusions based on the results of the study, implications for practitioners in the field, and recommendations for future research.

Chapter 2: Literature Review

Introduction

Educational programs for youth in juvenile detention centers require comprehensive oversight and exhaustive attention to detail. The Juvenile Residential Facility Census conducted in 2012 identified 57,190 offenders younger than 21 years old housed in 1,985 facilities across the United States (Hockenberry, Sickmund, & Sladky, 2015). For the first time since 2000, more juvenile offenders were housed in local facilities than in state-operated facilities (Hockenberry et al., 2015).

Structure of Pennsylvania programs. Pennsylvania guidelines specifically for juvenile detention center education programs are ambiguous. In Pennsylvania, juvenile detention centers are categorized as non-educational residential placements, which also covers private residential institutions, drug and alcohol treatment centers, and mental health placements. In the bulletin titled Educational Portions of "Non-Educational" Residential Placement (2010), the Commonwealth of Pennsylvania Department of Public Welfare stated, "The procedures that are followed and the systems involved in placements of school age Pennsylvanians are so diverse that we do not attempt in this bulletin to articulate the legal requirements that would apply to each situation" (p. 3). Though some flexibility is allowed, juvenile detention center education programs typically design a structure based on the guidelines for Alternative Education for Disruptive Youth as set forth by the Pennsylvania Department of Education (Pennsylvania Department of Education, 2013). Designed to serve a variety of program types and designs, Alternative Education for Disruptive Youth guidelines require programs to provide students with academics that meet or exceed Pennsylvania state standards and allow students to make normal academic progress toward graduation (Pennsylvania Department of Education, 2013). In

addition, these programs must provide behavioral supports and counseling aimed at modifying disruptive behavior (Pennsylvania Department of Education, 2013).

The Pennsylvania guidelines for Alternative Education for Disruptive Youth provide a platform on which teachers in juvenile detention facilities can develop strategies for success. In addition, these guidelines acknowledge the challenges facing teachers in correctional facilities, while recognizing the potential impact these teachers can have on their students' lives. To avoid burnout, teachers need to focus on finding a level of momentum that they can sustain over time (Gehring & Hollingsworth, 2002). Gehring and Hollingsworth (2002) state that teachers in correctional facilities should assess their self-efficacy and develop the skills and coping mechanisms to withstand the harsh environment of a correctional education setting.

In Pennsylvania, 22 secure juvenile facilities accept temporary custody of approximately twenty thousand juveniles per year, with an average stay of 10 days (Juvenile Court Judges' Commission, n.d.). As described in one of the Pennsylvania Department of Education Basic Education Circulars, BEC 24 P.S. Section 13-1306, the host school district is responsible for insuring that students in children's institutions within their borders receive appropriate academic services, regardless of whether their parents are residents of that school district ("Nonresident Students in Institutions," 1999). The host school district may seek approval from the Pennsylvania Department of Education to conduct an alternative education program at the institution and may contract with another education entity, such as an intermediate unit, to provide the alternative education program ("Nonresident Students in Institutions," 1999). Pennsylvania's 29 intermediate units were established in 1971 by the Pennsylvania General Assembly to provide cost-effective programs and services to Pennsylvania school districts (Pennsylvania Association of Intermediate Units [PAIU], 2016).

Addressing education services for incarcerated students, BEC 24 P.S. Section 13-1306.2 states that local host school districts are responsible for the education programs offered at juvenile detention centers and county prisons (Pennsylvania Training and Technical Assistance Network [PaTTAN], 2010). The Pennsylvania Department of Education provides guidelines for alternative education for disruptive youth that apply to the education programs of these facilities ("Education Services for Students Incarcerated," 1999). Although BEC 24 P.S. Section 13-1306.2(b) provides some flexibility in the specific requirements for these programs, students must make normal academic progress and be working toward the graduation requirements of their home school district or host school district ("Education Services for Students Incarcerated," 1999).

Alternative education programs for disruptive youth must offer at least 20 hours per week of academic instruction that satisfies the State Board of Education's academic standards based on individual students' grade levels (Pennsylvania Department of Education, 2013). Students must receive instruction in at least four of the following curricular areas: language arts, math, science, social studies, health or life skills ("Education Services for Students Incarcerated," 1999). Programs must operate five days per week and at least 180 days per year (Pennsylvania Department of Education, 2013). Teachers working in these programs must be highly qualified and possess a Pennsylvania Professional Teaching Certificate in the area of instructional assignment (Pennsylvania Department of Education, 2013). While Pennsylvania's approach to juvenile justice has some weaknesses, the system is widely recognized as a leader and was the first state selected for the John D. and Catherine T. MacArthur Foundation's Model for Change initiative to create effective, replicable juvenile justice system reform (Juvenile Court Judges' Commission, n.d.).

Context of specific study. This study will focus on a juvenile detention center in southeastern Pennsylvania. The detention center is a 66-bed secure residential facility that houses youth ages 10 to 21 years old. In 2014, the detention center admitted 875 children for 13,040 total days of care. According to the Delaware County, PA Court of Common Pleas (n.d.), the majority of these youth have exhibited behavior that has endangered or might endanger members of the community and/or their property. The detention center provides secure custody, which increases the likelihood that youth will be available for court appearances when they have failed to appear in the past or when there is a lack of parental responsibility for the youth's appearance. In addition, placement at the detention center ensures that youth will be available if psychological, psychiatric, and/or educational diagnostic testing is required. Within the detention center, residents are assigned to one of five single-sex residential units, with varying restrictions and privileges. To remain in compliance with Pennsylvania state requirements, one detention officer is assigned to a maximum of six residents at all times.

The host school district has contracted with the local intermediate unit, a regional educational service agency, to administer the education program in the juvenile detention center. Residents of the detention center are required to attend on-site classes in English, math, science, social skills, health, and physical education. Classes typically range from eight to 12 students. These classes are taught by three full-time teachers, who each focus on multiple subject areas and who have each taught at the facility for over six years. All teachers are state-certified in their subject area and in special education. This study will include two of the current teachers, excluding me, and also seven teachers who taught at the juvenile detention center within the past five years.

Study topic. According to the U.S. Departments of Education and Justice (2014), identifying and hiring individuals equipped to teach in juvenile justice secure care facilities is often problematic. "To truly meet their students' needs, juvenile justice agencies and schools need strategic, deliberate plans and budgets to recruit, employ, and retain effective and qualified education staff capable of engaging and supporting this unique student population" (U.S. Departments of Education and Justice, 2014, p. 14). Often, teachers who are considering working in juvenile detention center education programs have preconceived ideas about working in a secure juvenile facility. Those preconceived ideas can impact their decision to accept a position in this type of education program and, if they accept the position, can impact the quality of their teaching (U.S. Departments of Education and Justice, 2014).

In addition to engaging in effective hiring practices, juvenile detention center education programs must commit to providing ongoing support and training to teachers. The lack of professional development opportunities specifically designed for teachers in secure juvenile facilities might be "a barrier to retaining quality educational staff who may struggle to address the behavioral and academic needs of their students in an environment that is initially foreign to them – or at least very different from previous teaching settings" (U.S. Departments of Education and Justice, 2014, p. 14). Teachers in juvenile detention center education programs face challenges that are specific to their environment and can impact their beliefs about the teaching profession and their role as teacher. Therefore, program administrators need to identify the factors that influence self-efficacy among teachers currently or recently working in a juvenile detention center education program.

Significance of study. Of more than 60,000 youth who are currently incarcerated in the United States of America, approximately eighteen thousand are living in locally run detention

facilities, usually for less than 60 days (Council of State Governments, 2015). Educational programs in these facilities face unique challenges. Students in secure facilities often have academic deficits and present with a high incidence of disabilities (U.S. Departments of Education and Justice, 2014). In a 2006 survey, 27% of incarcerated youth had severe mental health illness, a rate two to four times higher than the national rate (Gottesman & Schwarz, 2011). Thirty percent of incarcerated youth reported a history of either physical or sexual abuse, and many had histories of alcohol or substance abuse (Gottesman & Schwarz, 2011).

At least one in three incarcerated youth is identified as needing or already receiving special education services (Council of State Governments, 2015). That rate is four times higher than youth attending school in the community. More than half of incarcerated youth have reading and math skills significantly below their grade level (Council of State Governments, 2015). A large portion of incarcerated youth is functionally illiterate (Feinstein, 2002). Approximately 60% of incarcerated youth have repeated a grade (Council of State Governments, 2015). The majority of incarcerated youth have been suspended or expelled from school or dropped out of school before being incarcerated (Council of State Governments, 2015). For many incarcerated youth, "the education provided by the correctional facility is their last bastion. It is their final opportunity to gain academic knowledge and skills" (Feinstein, 2002, p. 9). Addressing the individual needs of each student in a timely manner presents a formidable task for educators working with this population.

In order to persevere in unusually challenging working conditions, teachers in juvenile detention center education programs must have high teacher efficacy. "Teacher efficacy is the teacher's belief in her and his ability to organize and execute the courses of action required to successfully accomplish a specific teaching task in a particular context" (Tschannen-Moran et

al., 1998, p. 233). As a professional variable, teacher efficacy impacts many aspects of the classroom environment (Hoy et al., 2009). Student attitudes toward learning are influenced by the teacher's level of self-efficacy (Midgley, Feldlaufer, & Eccles, 1989). A teacher's sense of efficacy also influences how the teacher handles incidents of student misbehavior (Woolfolk, Rosoff, & Hoy, 1990). Low teacher efficacy can lead to job stress and burnout (Schwarzer & Hallum, 2008). As a result of these consequences, teacher efficacy can have wide-reaching implications, both positive and negative.

For teachers in juvenile detention centers, daily struggles of trying to address students' behavioral issues and learning gaps can result in low teacher efficacy. However, for some teachers, the satisfaction that accompanies successful student interactions and the sense of community and collaboration among the faculty can be overwhelmingly rewarding and lead to greater teacher efficacy. Understanding the factors that influence teacher efficacy in positive and negative ways in the juvenile detention center may allow program administrators to develop environments that support high teacher efficacy and are conducive to teaching and learning.

Problem statement. For teachers working in a juvenile detention center education program, teacher efficacy can be influenced by a variety of factors. Some factors that influence teacher efficacy can lead to high teacher efficacy and high quality instructional practices, while other factors can lead to low teacher efficacy and job stress. Since the student population can change on a daily basis in juvenile detention centers, teachers may experience frequent shifts in teacher efficacy, as they are confronted with an ever-changing work environment. However, the factors influencing teacher efficacy may be consistent over time and uniformly experienced by teachers in both traditional and non-traditional schools.

This study attempted to identify factors that influence teacher efficacy in instructional strategies, student engagement, and classroom management among teachers currently or recently working in a juvenile detention center education program in southeastern Pennsylvania. After understanding these factors, juvenile detention center administrators may be able to develop strategies to support high teacher efficacy in their facilities, which will benefit teachers and students. Also, teacher hiring practices and teacher induction programs can be designed to address these factors, to better prepare future juvenile detention center education program teachers, and aid teacher retention. In addition, some of the factors that influence teacher efficacy in non-traditional school settings, such as a juvenile detention center, may also be applicable to traditional school environments. As a result, the findings of this study may benefit the education community at-large by enabling all school administrators to develop hiring practices, induction programs, and structural supports that address the factors identified in this study and create academic environments that promote high teacher efficacy and foster student learning.

Organization. This literature review will identify articles published in peer-reviewed journals, educational periodicals, bulletins, reports, dissertations, print books, and other seminal works written by recognized experts in field of efficacy. The parameters of the literature search included seeking texts with key words such as juvenile corrections, juvenile detention, juvenile justice, alternative education, adjudicated youth education, incarcerated youth education, self-efficacy, teacher efficacy, and collective efficacy. The literature search was conducted using Concordia University databases such as EBSCOhost, ProQuest, JSTOR, and Sage; Google Scholar; and the interlibrary loan services of the University of Wisconsin and John Jay College of Criminal Justice. Though this search produced vast amounts of literature concerning efficacy,

limited amounts of literature were found regarding teacher efficacy relating specifically to juvenile detention center education programs. This literature review is divided into the following sections: Introduction, Conceptual Framework, Review of Research Literature and Methodological Literature, Review of Methodological Issues, Synthesis of Research Findings, Critique of Previous Research, and Chapter 2 Summary.

Conceptual Framework

Introduction. Social cognitive theory, which includes the concepts of triadic reciprocality and self-efficacy, formed the framework for this study. According to social cognitive theory, an individual learns behaviors by observing others (Bandura, 1997). Repeatedly overcoming challenges to achieve success or witnessing someone successfully overcoming challenges can influence self-efficacy (Bandura, 1997). According to Bandura (1997), an individual's self-efficacy beliefs affect their actions, efforts, perseverance, resiliency, thought patterns, and coping mechanisms. Teacher efficacy has an equally powerful impact in the classroom, affecting a teacher's orientation toward the educational process (Bandura, 1997).

Self-efficacy. Self-efficacy refers to an individual's beliefs about his capability to learn or complete a task (Bandura, 1997). People can gauge their self-efficacy by the emotional state they feel when they think about an action (Schunk & Pajares, 2009). Self-efficacy is situation-specific and based on personal judgment about a future task (Schwarzer & Hallum, 2008). While self-efficacy is domain-specific, meaning self-efficacy can vary based on the domain or situation, Schwarzer and Hallum (2008) noted that individuals have a general sense of self-efficacy, which is their coping ability across a wide range of situations.

Human behavior is influenced by expectations of personal efficacy (Bandura, 1977).

Bandura (1977) classified these expectations as outcome expectations and efficacy expectations.

"Expectations of personal mastery affect both initiation and persistence of coping behavior. The strength of people's convictions in their own effectiveness is likely to affect whether they will even try to cope with given situations" (Bandura, 1977, p. 193). An outcome expectation is an individual's belief that a given behavior will lead to specific outcomes (Bandura, 1977). An efficacy expectation is the belief that one can successfully perform the behavior required to produce the outcome (Bandura, 1977).

Social cognitive theory, including the concepts of triadic reciprocality and self-efficacy, underlie the entire foundation of human agency (Bandura, 1997). Social cognitive theory supports the idea that humans are proactively engaged in their own development and can impact the outcomes of their actions (Schunk & Pajares, 2009). According to Bandura's (1997) model of triadic reciprocality, self-efficacy can be affected by one's behaviors and environment. As a result, factors that influence efficacy vary based on the environment. Therefore, understanding the factors that teachers perceive to be influencing their teacher efficacy in a particular environment, such as a juvenile detention center, can have long-term, positive outcomes.

Teacher efficacy. Teachers' efficacy beliefs affect their general orientation toward the educational process, as well as their specific instructional activities (Bandura, 1997). Applying Bandura's (1977) concept of personal efficacy expectations to one example of teacher efficacy, Coladarci (1992) described a teacher who believed that skillful instruction can overcome the negative impact of a student's impoverished home environment. In that example of an outcome expectation, the teacher's expectations were based on his belief in the ability of the teaching community at-large, rather than simply his own personal ability (Coladarci, 1992). In contrast, an efficacy expectation would reflect a teacher's belief in his personal capability to engage in a level of instruction that can counteract the negative effects of living in poverty (Coladarci, 1992).

For teachers in juvenile detention center education programs, efficacy expectations and outcome expectations can be sources of internal, professional conflict or motivating factors to engage in creative problem solving.

Teacher efficacy researchers have labeled Bandura's (1977) two classes of self-efficacy expectations as sense of teaching efficacy and sense of personal teaching efficacy (Ashton & Webb, 1986; Gibson & Dembo, 1984). These two independent dimensions form the construct of teachers' sense of efficacy (Ashton & Webb, 1986). Sense of teaching efficacy refers to teachers' expectations that teaching can influence student learning, which is similar to Bandura's (1977) outcome expectation. Sense of personal teaching efficacy refers to teachers' assessments of their own individual teaching competence, which is similar to Bandura's (1977) efficacy expectation.

Teachers with a low sense of teaching efficacy experience universal helplessness (Ashton & Webb, 1986). They do not believe that they, or any teacher, can impact the achievement of low-performing students. As a result, teachers who experience universal helplessness often fail to offer extra assistance to these students (Ashton & Webb, 1986). Teachers with a low sense of personal teaching efficacy experience personal helplessness. Similar to teachers who experience universal helplessness, these teachers doubt their own ability to make a difference with low-achieving students. However, rather than placing the responsibility for student failure solely on the students, these teachers believe they share the responsibility and a more knowledgeable or experienced teacher could have made a positive difference (Ashton & Webb, 1986). Teachers in juvenile detention centers who experience universal helplessness or personal helplessness may fail to recognize the positive impact that teachers in this environment can have on students.

For incarcerated youth, teacher efficacy can have a significant impact on the classroom experience. Bandura (1997) noted that socioeducational transitions for students include different school structures, new teachers, and regrouping of classmates. These transitions create adaptational pressures for students (Bandura, 1997). For students in a correctional facility who are frequently regrouped for school and non-academic events such as hearings, evaluations, and meetings, these transitions probably add to the stress of being incarcerated. "Adaptational problems are likely to be exacerbated if the teachers to whom the students are entrusted doubt they can achieve much success with them" (Bandura, 1997, p. 242). Teachers' perceived efficacy is grounded in more than their ability to transmit subject matter knowledge. Teacher effectiveness involving classroom management, enlisting resources and supports, and counteracting social influences that interfere with student learning can all have a significant impact on teacher efficacy (Bandura, 1997).

Teachers with higher teaching efficacy and higher personal teaching efficacy are better able to serve the individual needs of the diverse student populations in juvenile detention center education programs. Applying social cognitive theory, including the concepts of triadic reciprocality and self-efficacy, to an examination of the factors that influence teacher efficacy for teachers in juvenile detention center education programs presents a unique perspective for approaching this topic.

Review of Research Literature and Methodological Literature

Introduction. The literature identified for this paper uniformly supports the idea of teacher efficacy as a concept that significantly impacts the learning environment. Studies have examined internal and external variables, such as gender and teacher autonomy, to determine whether these variables affect teacher efficacy (Houchins et al., 2006; Shaukat & Iqbal, 2012;

Skaalvik & Skaalvik, 2014; Stipek, 2012). In addition, instructional quality, classroom management, and teacher burnout have been studied (Brouwers & Tomic, 1999; Dicke et al., 2014; Gibson & Dembo, 1984; Holzberger et al., 2013; Hoy et al., 2009; Korevaar, 1990; Martin et al., 2012; Nie et al., 2013; Skaalvik & Skaalvik, 2007; Tsouloupas et al., 2014). Limited research has been conducted regarding teacher efficacy in juvenile detention center education programs; however, the studies located for this paper show that highly efficacious teachers perform well in that environment (Cate, 2014; Cox et al., 2011; Houchins et al., 2009). This Review of Research Literature and Methodological Literature section is divided into the following subsections: Culture shock adapting to correctional education environment, Variables affecting teacher efficacy, Teacher efficacy influencing instructional quality, Effects of teacher efficacy on classroom management, Teacher burnout affected by teacher efficacy, and Teacher efficacy in juvenile detention center education programs.

Culture shock adapting to correctional education environment. Teachers in a correctional education program, such as a juvenile detention center, must adapt to the environment, which is vastly different than that of a traditional school. Teachers in correctional facilities "feel the heavy weight of prison walls and towers on their bodies and minds, as the silent language of the architecture communicates to them that they are in a different place" (Wright, 2005, p. 20). Wright (2005) identified five stages of culture shock that teachers in correctional education programs experience as they adjust to their environment. These stages describe the social-psychological states of teachers during the acculturation process. In the first stage, the teacher is described as a tourist, who is visiting from afar and does not intend to stay long. Some teachers in correctional facilities remain in this stage and never progress. In the

between the current culture and previous work cultures. During this stage, the teacher may experience anger, anxiety, and withdrawal and may feel nostalgia for previous teaching environments. Some teachers remain in this stage and continue to feel embittered and disgruntled.

Unlike the first two stages, a teacher who reaches the third stage begins to feel better acclimated to the environment (Wright, 2005). In the third stage, the teacher is described as a stranger, who has decided to stay and slowly is able to function in the new culture. However, teachers as strangers still feel indifferent or ambivalent about their new work place. In the fourth stage, the teacher is described as a settler, who begins to recognize the positive and negative aspects of the current culture, as well as previous work cultures. The teacher begins to feel less isolated as he gradually adjusts to the new environment. In the fifth and final stage, the teacher is described as a translator, who is able to skillfully navigate his role in the current work culture and in the world outside of work. The teacher recognizes the reciprocal interdependence of these two environments and is able to identify as a multicultural translator. The teacher as translator is able to bring the outside world into the classroom for his students and is also able to explain the internal culture to outsiders (Wright, 2005). Along with other variables, confronting the harsh work environment of a juvenile detention center education program can influence teacher efficacy.

Variables affecting teacher efficacy. Teacher efficacy can be affected by a variety of variables, including internal and external factors. Studies by Stipek (2012), Skaalvik and Skaalvik (2014), Houchins et al. (2006), and Shaukat and Iqbal (2012) examined a variety of possible factors. While some of the variables analyzed in these studies were found to have no

effect on teacher efficacy, the overall findings of these studies indicate that teacher efficacy can be affected by certain factors.

Stipek (2012) examined two possible variables affecting teacher efficacy: parental/administrative support and student characteristics, such as ethnicity, family income, and overall academic achievement. The researcher surveyed 473 third and fifth grade teachers. The findings of the study did not support the researcher's hypothesis that ethnicity, family income, or grade level performance would negatively impact teacher efficacy. For example, Stipek (2012) hypothesized that teacher efficacy would be lower in classrooms with higher proportions of African American and Latino students, compared to classrooms with higher proportions of Caucasian students. However, when other variables were held constant, teacher efficacy was actually higher in classrooms with higher proportions of African American and Latino students. These findings suggest that student race might be a variable that positively influences teacher efficacy. Stipek (2012) cited two possible reasons for the findings of this study. First, teachers may have adjusted the way they defined success based on the population of students with whom they were working. Second, teachers may have believed that they were working well with a particular student population based on the teacher's perceptions of the limitations of those students.

While Stipek (2012) studied external variables affecting teacher efficacy, Skaalvik and Skaalvik (2014) examined the impact of internal variables, such as teacher autonomy, on teacher efficacy. The study consisted of 2,569 teachers from 127 Norwegian elementary and middle schools. To measure teacher efficacy, the researchers used the 24-item Norwegian Teacher Self-Efficacy Scale (Skaalvik & Skaalvik, 2007) consisting of six dimensions, and responses were given on a seven-item rating scale. To measure teacher autonomy, the researchers used the

three-item Teacher Autonomy Scale, in which responses were given on a six-item rating scale. The four-item Teacher Job Satisfaction Scale, in which responses are given on a six-item scale, was used to measure job satisfaction.

The findings of the study by Skaalvik and Skaalvik (2014) showed that teacher self-efficacy and perceived autonomy positively predicted engagement and job satisfaction; however, teacher self-efficacy and perceived autonomy were found to negatively predict emotional exhaustion. In other words, when a less efficacious teacher was given greater autonomy, the teacher was likely to feel overwhelmed by the lack of support and guidance. In fact, the researchers found that the correlation between autonomy and engagement was higher for teachers with low efficacy than for teachers with high efficacy, perhaps because teachers with strong mastery expectations appreciated the freedom of autonomous opportunities to experiment with new teaching practices (Skaalvik & Skaalvik, 2014).

In one of the few studies conducted involving teachers in juvenile detention centers, Houchins et al. (2006) collected data from teachers in 32 juvenile justice facilities in Georgia to examine job satisfaction five years after system-wide reform. The study measured teacher attrition and retention variables using a survey of questions that addressed the impact of reform on teacher job satisfaction. Houchins et al. (2006) used an adapted form of the Working in Special Education Survey. The researchers modified the six sections of the original survey into three sections: satisfaction, role, and experience (Houchins et al., 2006). The findings indicated that "reform has the potential to have a positive effect on teacher satisfaction" (Houchins et al., 2006, p. 134). Based on the study by Houchins et al. (2006), administrators and policymakers can develop comprehensive reform efforts that support teacher retention, and teacher preparation

leaders can develop teacher training that prepares teachers to work in juvenile justice facilities in order to reduce teacher attrition.

Using the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), Shaukat and Iqbal (2012) assessed teacher efficacy in relation to gender, age, professional qualifications, school status, and nature of job. The scale was completed by 108 male teachers and 90 female teachers representing four schools in Lahore, Pakistan. The results of this study indicated no differences between male and female teachers for the Student Engagement and Instructional Strategies subscales; however, male teachers reported greater efficacy than female teachers in regards to the Classroom Management subscale. In terms of professional qualifications, teachers with a bachelor's degree and teachers with a master's degree did not indicate a difference in efficacy for Student Engagement and Instructional Strategies, but teachers with a master's degree reported significantly higher efficacy on the Classroom Management subscale. Elementary school teachers reported higher efficacy in Classroom Management than secondary teachers. Younger teachers, aged 20 to 30 years old, indicated higher efficacy in Student Engagement and Classroom Management than older teachers, aged 31 to 50 years old. However, the results of the Instructional Strategies subscale indicated no significant differences based on the age of the teacher (Shaukat & Iqbal, 2012). Though few differences were found in the efficacy levels for each subpopulation in this study on the Instructional Strategies subscale, differences in efficacy levels were often noted in the Classroom Management and Student Engagement subscales. Higher teacher efficacy can result in the use of more effective classroom management techniques, and effective classroom management can increase student engagement, which can increase teacher efficacy. The studies reviewed in this section confirm that teacher efficacy can be affected by and can be an influence on multiple variables.

Teacher efficacy influencing instructional quality. In subtle, but meaningful ways, student attitudes toward learning are influenced by teacher efficacy. In a seminal study, Gibson and Dembo (1984) created an instrument to measure teacher efficacy and examined the relationship between teacher efficacy and teacher behaviors. Nie et al. (2013) conducted a study to explore how teacher efficacy impacts instructional innovation. In a longitudinal study, Holzberger et al. (2013) examined the connection between teacher efficacy and student achievement. These studies confirm that instructional quality can be affected by a teacher's sense of efficacy.

Using the Teacher Efficacy Scale, Gibson and Dembo (1984) conducted a study to develop a tool to measure teacher efficacy, to validate teacher efficacy as a construct, and to examine the relationship between teacher efficacy and teacher behaviors. The study involved three phases: factor analysis, multitrait-multimethod analysis, and classroom observation.

During factor analysis, the results of the 30-item Teacher Efficacy Scale given to 208 elementary school teachers were analyzed. During multitrait-multimethod analysis, 55 teachers enrolled in graduate education courses selected 10 variables from a list of 20 they felt contributed most to a student's success or failure in school. In addition, those study participants completed the Verbal Facility Test in which the subject was asked to select from five options the word that best completed a sentence in order to measure verbal reasoning. During the classroom observation phase, four high efficacy teachers and four low efficacy teachers, as determined during the factor analysis phase, were selected as study participants to examine the relationship between teacher efficacy and teacher classroom behaviors. This phase relied on observational instruments to track teacher use of time and teacher use of a question-answer-feedback sequence with students.

The results of the factor analysis phase of Gibson and Dembo's (1984) study indicated that teacher efficacy is multidimensional and is comprised primarily of two factors. The first factor, which accounted for 18.2% of the total variance, was a teacher's sense of personal teaching efficacy. The second factor, which accounted for 10.6% of the total variance, was a teacher's sense of teaching efficacy. Each of the other factors accounted for less than 6% of the total variance. The use of a multitrait-multimethod approach to analyzing the results verified the distinction between teacher efficacy, verbal ability, and flexibility as three separate constructs.

Though the sample size for the classroom observation phase of Gibson and Dembo's (1984) study was only eight teachers, the findings indicated that teacher efficacy impacts teacher behaviors. The study found that highly efficacious teachers spent more time on paperwork and preparation. Teachers with low efficacy spent about half of their observed time in small group instruction, which was almost twice as much as highly efficacious teachers. Teachers who were more efficacious also provided a greater academic focus in the classroom. While teachers with high efficacy spent less time in small group instruction, they also spent more time monitoring and checking seat-work and more time engaged in academic instruction.

Gibson and Dembo's (1984) study also found significant differences in teacher criticism of incorrect student responses based on teacher efficacy. "Teachers who in general expect students to learn and who have confidence in their ability to teach may communicate higher expectations by providing less criticism to students and persisting with students until they respond correctly" (Gibson & Dembo, 1984, p. 579). While highly efficacious teachers were more likely to repeat the question, provide a clue, or ask a new question, teachers with low efficacy lacked persistence in interacting with students who gave incorrect initial responses. Those teachers were more likely to give the correct answer or allow another student to answer.

In addition, teachers with low efficacy were more likely to criticize students for incorrect answers. The results of the study by Gibson and Dembo (1984) supported Bandura's (1977) premise that behavior is determined by general outcome expectation and sense of efficacy. Believing that a particular behavior would lead to a certain outcome, highly efficacious teachers were more persistent in their questioning techniques with students.

Modern classrooms focus on student-centered learning and a constructivist approach to instruction (Nie et al., 2013). As teachers are challenged to adopt new instructional strategies that center on real-world scenarios, teacher efficacy beliefs can be affected. Nie et al. (2013) conducted a study to examine teacher efficacy in relation to instructional innovation. The sample consisted of 2,139 teachers from 40 primary schools in Singapore. Study participants completed an online survey, which consisted of an 11-item teacher efficacy scale adapted from the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), an 11-item constructivist instruction scale measuring concepts such as teachers' use of higher order thinking, and a five-item didactic instruction scale measuring teaching approaches such as memorization and drills. The findings of this study indicated that teachers used didactic instruction more often than constructivist instruction (Nie et al., 2013). In Singapore, as in the United States, the education system places an emphasis on standardized tests, which often requires students to memorize and recite facts rather than apply them. This testing structure lends itself to didactic teaching approaches. However, this study found that teacher efficacy can influence a teacher's instructional practices. Nie et al. (2013) found that teachers with high efficacy used constructivist instruction more often than teachers with low efficacy. When teachers have a greater sense of efficacy, they are more likely to experiment with instructional innovations. As schools strive to move toward constructivist approaches, they must also focus

on strategies to improve teacher efficacy. Doing so will ultimately lead to greater teacher acceptance of innovative teaching practices.

Many previous studies explored how teacher efficacy has a positive causal influence on outcome variables, such as student outcomes. However, in their research, Holzberger et al. (2013) used a longitudinal study of 155 secondary teachers and 3,483 ninth grade students in Germany to examine teacher efficacy not just as a determining variable, but also as an outcome of other variables. For example, this study examined whether student achievement affects teacher efficacy. The study examined measures of teacher self-efficacy in relation to student and teacher ratings of instructional quality. The researchers suggested that, in order to influence efficacy beliefs, the diagnostic information teachers receive in the classroom must be processed and applied. To gather data about teacher efficacy, the researchers created a four-item teacher efficacy scale that teachers used to self-report on a four-item response scale. To measure instructional quality, teachers and students completed a multifaceted scale that examined cognitive activation, classroom management, and individual learning support on a four-item response scale (Holzberger et al., 2013).

The findings of this study indicated that self-efficacy beliefs can be "both a cause and an effect of the educational process" (Holzberger et al., 2013, p. 782). Teachers with higher teacher efficacy reported higher cognitive activation, better classroom management, and more learning support for students. This study also found that teachers, regardless of years of experience, modified their teacher efficacy beliefs over the course of the school year, and teacher efficacy had no significant long-term effect on students or teachers beyond the end of the school year. "The larger the time lag, the more the long-term relationship between teacher self-efficacy and instructional quality is likely to decrease" (Holzberger et al., 2013, p. 782). In fact, the findings

suggest the relationship between teacher efficacy and instructional quality actually decreases over time (Holzberger et al., 2013).

Teachers with a high level of self-efficacy believe that all students are teachable, whereas teachers with low efficacy believe there is little they can do to influence unmotivated students (Bandura, 1997). Hoy et al. (2009) identified three possible categories of consequences of teacher efficacy on students. First, teacher efficacy can have direct consequences, such as instructional decisions. Second, teacher efficacy can have indirect consequences, such as verbal and nonverbal communication about expectations. Third, teacher efficacy can have relational consequences, such as interpersonal dynamics that affect the relationships of participants. Since teachers are the primary classroom leader and their beliefs are expressed through verbal and nonverbal cues, students are likely to be influenced by the level of self-efficacy possessed by their teachers.

Effects of teacher efficacy on classroom management. Several studies suggested a direct correlation between teacher efficacy and classroom management techniques (Brouwers & Tomic, 1999; Hoy et al., 2009; Korevaar, 1990; Tsouloupas et al., 2014). A study by Brouwers and Tomic (1999) found that teacher efficacy and classroom management have a cyclical relationship, in which teacher efficacy influences classroom management, which in turn influences teacher efficacy. Korevaar (1990) examined the reactions of both teachers and preservice teachers to challenging classroom situations. In a study of teacher efficacy in handling student misbehavior, Tsouloupas et al. (2014) found that training and support can aide teachers in increasing their self-efficacy in classroom management. The findings of these studies indicated that teacher efficacy can have both positive and negative effects on classroom management.

In a study focusing on classroom management and discipline, Brouwers and Tomic (1999) used the Dutch version of the Maslach Burnout Inventory, which is a 20-item questionnaire divided into three subscales: Emotional Exhaustion, Depersonalization, and Personal Accomplishment. The items were measured with a seven-item Likert scale ranging from 1-never to 7-every day. The study participants were 441 teachers working in 15 secondary schools in the province of Limburg in the Netherlands. The purpose of the study was to identify the relationship between student disruptive behavior, perceived self-efficacy in classroom management, and teacher burnout. The findings of the study by Brouwers and Tomic (1999) indicated the cyclical effects of teacher efficacy and classroom management. Less efficacious teachers experienced more incidents of student misbehavior. As those teachers repeatedly observed that their strategies and actions were not reducing disruptive behavior, their selfefficacy in classroom management decreased. The researchers concluded that people prefer to avoid tasks in which their perceived self-efficacy is low (Brouwers & Tomic, 1999). When people cannot avoid these tasks, they experience greater stress. Teachers who experience high stress often are less tolerant of student misbehavior and less likely to be sympathetic toward their students, which can result in a greater incidence of disruptive behavior (Brouwers & Tomic, 1999).

Understanding the relationship between teacher efficacy and classroom management is particularly important for novice teachers. Korevaar (1990) studied 439 teachers and preservice teachers using questionnaires with descriptions of problematic situations, which required teachers to reflect. The findings showed that teachers with high teacher efficacy produced more confronting, postponed, or social organizing reactions, whereas teachers with low teacher efficacy produced more friendly directive and understanding permissive reactions. "When

expert teachers are faced with students' disruptive behavior, they consider a smaller number of reactions than novice teachers" (Korevaar, 1990, p. 3). This study found teachers, regardless of high or low efficacy, produced only a limited amount of avoidant reactions. The researcher suggests that the limited number of avoidance reactions might be the result of teachers who did not believe that those situations were highly problematic and therefore might not have felt the need to avoid them. The results of this study indicated the orientation of novice teachers was more teacher-centered and focused on making a good impression on students.

The findings of a study by Tsouloupas et al. (2014) supported Korevaar's (1990) findings that teacher efficacy in classroom management develops over time. Tsouloupas et al. (2014) conducted a study of 24 randomly selected public high school teachers to evaluate teacher efficacy in handling student misbehavior. Each teacher was individually interviewed by the primary researcher. Following the initial in-depth interview, follow-up interviews were conducted for clarification, when necessary. The findings of the study by Tsouloupas et al. (2014) indicated three themes among all study participants. First, teachers identified a need for adequate professional training for preservice through in-service years. Second, teachers acknowledged that teacher efficacy in managing student misbehavior was a learning process that started once they had their own classrooms. Third, the ability to handle student misbehavior was aided by various support systems, including personal sources of support such as family and school sources of support such as administrators and colleagues (Tsouloupas et al., 2014). With sufficient training and support, teachers can increase their self-efficacy in classroom management over time, which can have a positive effect on both the teacher and the students.

Hoy et al. (2009) posited high efficacy teachers set high expectations for their students, including behavioral expectations. By focusing class time on instructional activities, highly

efficacious teachers left less class time for students to engage in disruptive behavior. Teachers who were more efficacious were more likely to set learning goals rather than performance goals. High efficacy teachers believed that they could reach even the most difficult students and worked longer with struggling students, which can alleviate student misbehavior that results from frustration. "When teachers set higher goals and are persistent and resilient in moving toward them, students may be more willing to cooperate in class activities and value learning" (Hoy et al., 2009, p. 637). This statement is supported by the findings of the studies described earlier which indicated fewer classroom disturbances in classes taught by high efficacy teachers.

Teacher burnout affected by teacher efficacy. Low teacher efficacy can lead to emotional exhaustion, job stress, and teacher burnout. In their study of the relationship between teacher efficacy and classroom management, Brouwers and Tomic (1999) found that low teacher efficacy in classroom management can lead to feelings of job stress. This finding was corroborated by the results a study by Dicke et al. (2014), which found that teachers with low efficacy were more likely to experience emotional exhaustion as a result of classroom disturbances. A study by Skaalvik and Skaalvik (2007) also established a connection between low teacher efficacy and teacher burnout. Martin et al. (2012) found that teacher burnout can occur regardless of grade level assignment. Teacher efficacy plays a crucial role in the level of teachers' emotional exhaustion and feelings of job stress.

Using the Dutch version of the Maslach Burnout Inventory, Brouwers and Tomic (1999) conducted a study involving 441 teachers working in 15 secondary schools in the Netherlands. The study was designed to model relations between student disruptive behavior, perceived self-efficacy in classroom management, and teacher burnout. Brouwers and Tomic (1999) found that teachers who perceive their level of efficacy in classroom management as low experienced

increased levels of stress and burnout because teachers cannot easily quit their jobs. Therefore, they must continue to deal with issues of student discipline, which they do not feel able to manage effectively. The result can have negative consequences in the classroom.

The results of a study by Dicke et al. (2014) support the Brouwers and Tomic (1999) findings. Dicke et al. (2014) conducted two complementary studies using a sample of 1,227 preservice teachers in Germany. In the first study, the researchers examined the relationship between emotional exhaustion and teacher self-efficacy in classroom management. Emotional exhaustion was measured using a short, adapted version of the emotional exhaustion subscale of the German version of the Maslach Burnout Inventory using a four-item Likert scale. Self-efficacy in classroom management was measured using the Efficacy in Classroom Management subscale of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001). The second study used a random longitudinal sample of the first study to measure self-efficacy in classroom management at the first event and classroom disturbances and emotional exhaustion at the second event one year later (Dicke et al., 2014).

The study by Dicke et al. (2014) found that, when teachers had low self-efficacy in classroom management, they were more likely to experience emotional exhaustion as a result of classroom disturbances. In addition, Dicke et al. (2014) noted that teachers were less likely to act toward resolving a classroom disturbance if they did not believe they were capable of managing the situation. Low efficacy teachers were more likely to find the classroom more threatening than high efficacy teachers. Teachers who were more efficacious were more likely to implement better classroom management strategies and reported more positive classroom experiences and fewer disturbances.

Skaalvik and Skaalvik (2007) examined how teacher efficacy related to teacher burnout. The Norwegian Teacher Self-Efficacy Scale was administered to 246 elementary and middle school teachers in urban and rural regions of Norway. The study was also designed to test whether individual teacher efficacy could be distinguished from collective efficacy and general teaching efficacy. The study by Skaalvik and Skaalvik (2007) found that general teaching efficacy was not a predictor of teacher self-efficacy and that teacher self-efficacy and collective efficacy were separate constructs, though they were positively and strongly related. The findings also indicated a particularly strong correlation between teacher self-efficacy and teacher burnout.

According to the study by Skaalvik and Skaalvik (2007), low mastery expectations were stressful for teachers, which led to emotional exhaustion, reduced accomplishments, and lower self-efficacy. The strongest relationships between teacher self-efficacy and strain factors were for conflicts with parents and having to organize teaching in ways the teacher did not believe were the best. Teachers who were less efficacious often experienced disciplinary problems, lower student performance, and conflict with parents and administrators. As a result, teachers might become more defensive, which can heighten feelings of stress. This depersonalization and emotional exhaustion may, in turn, negatively affect teacher efficacy. As a result of the stress experienced by teachers with low self-efficacy, teacher burnout is likely to occur.

Recognizing that teacher attrition is a critical issue, Martin et al. (2012) conducted a study that examined the relationship between teacher efficacy in student engagement and teachers' intent-to-leave. Data were collected from 631 teachers working in elementary schools, middle schools, and high schools in three public school districts. The researchers used the Efficacy in Student Engagement subscale of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) to measure teacher efficacy. Other instruments included the Behavior and

Instructional Management Scale, the Teacher Stressor Scale, a four-item job satisfaction scale, and a three-item measure of teachers' intent-to-leave (Martin et al., 2012).

The findings of the study by Martin et al. (2012) indicated that elementary school teachers tended to have higher job satisfaction and were less likely to consider leaving the profession due to teaching-related stressors than teachers in middle school and high school. The researchers found that, compared to elementary school teachers, middle school and high school teachers used more controlling management techniques, were more likely to depersonalize their students, reported lower efficacy in student engagement, and displayed less job satisfaction (Martin et al., 2012). Although some differences across grade levels were identified in certain areas, Martin et al. (2012) noted that stressors from student behaviors and emotional exhaustion were consistent across grade levels. While class size, duration of class periods, and number of students taught per day can vary based on grade level, the results of the study by Martin et al. (2012) suggest that job burnout can occur for all teachers regardless of grade level.

Teacher efficacy in juvenile detention center education programs. Though research is limited, teacher efficacy in juvenile detention center education programs can be a key factor in establishing a positive learning environment for students. "Learning climate is especially important in the educational setting for confined youth. . . . Education programs in this setting add much-needed structure to the lives of the confined students" (Cox et al., 2011, p. 2). Studies by Houchins et al. (2009), Cox et al. (2011), and Cate (2014) are among the few studies focused specifically on teachers in juvenile detention centers. The findings of these studies indicate teachers in these settings face unique challenges, but high teacher efficacy can lead to a positive learning environment.

A study conducted by Houchins et al. (2009) examined the barriers and facilitators that juvenile justice teachers face in providing quality educational opportunities to incarcerated youth. The sample included 78 juvenile justice teachers from three facilities in Louisiana. The study participants completed a multi-part survey containing multiple choice questions. In the qualitative section of the survey, which was addressed in the article by Houchins et al. (2009), the participants listed the top three barriers to providing quality educational services to adjudicated youth. Participants also listed at least one facilitator for overcoming each of the barriers. Using a constant comparative method to analyze the data, Houchins et al. (2009) developed nine themes: personnel concerns, academics, student concerns, discipline, materials and supplies, parental involvement, funding, communication, and facilities.

Houchins et al. (2009) found that many issues faced by educators in traditional schools were also present in juvenile justice education programs. For example, poor student motivation, student mental health issues, and behavior management problems were identified as major barriers to education. However, the study also found that those barriers were more pronounced in programs serving incarcerated youth (Houchins et al., 2009). Teachers in juvenile justice education were also faced with additional challenges, such as security concerns, heterogeneous classes of mixed age and mixed ability students, issues with contraband, and dealing with a highly transient and often short-stay student population (Houchins et al., 2009). While this study did not specifically address the topic of teacher efficacy, Houchins et al. (2009) identified factors, such as student misbehavior, that were found in other studies to affect teacher efficacy.

Cox et al., (2011) examined teacher perceptions of the learning climate in a juvenile detention center in a rural area in Missouri. During a faculty meeting, a survey was completed by 22 faculty members of the facility to assess faculty perceptions of the learning climate. The

86-question survey was divided into three sections: Demographics, Facility's Learning Climate, and Support for Learning. For the second and third sections of the survey, participants were asked to indicate how much they agreed or disagreed with the list of statements in those sections using a five-item scale ranging from 1-strongly disagree to 5-strongly agree.

The majority of the participants in this descriptive study by Cox et al. (2011) reported positive perceptions of safety and discipline, leadership and collegiality, and teacher efficacy. However, most of the respondents also reported negative perceptions of professional development opportunities, student conduct and motivation, and shared decision-making (Cox et al., 2011). The majority of the respondents indicated that they felt their work was relevant and that they could make a positive difference in their students' lives. The respondents who indicated high self-efficacy reported that they possessed adequate instructional resources to meet student needs, which could be the result of highly efficacious teachers believing they can teach successfully regardless of the available resources (Cox et al., 2011).

In another study of teacher efficacy among faculty teaching in residential juvenile facilities, Cate (2014) examined the relationship between teacher efficacy and motivational goals of teachers working in juvenile corrections and residential settings. Approximately nine thousand teachers from 1,315 facilities in the United States completed online the Norwegian Teacher Self-Efficacy Scale (Skaalvik & Skaalvik, 2007), as well as a survey to measure teacher motivation and a survey to measure burnout (Cate, 2014). Cate (2014) compared the results for teachers with less than two years and two or more years of teaching experience in residential juvenile facilities.

Cate's (2014) study found that teacher efficacy was only significantly different based on years teaching in residential juvenile facilities for the domain of Keeping Discipline, according

to the responses to the Norwegian Teacher Self-Efficacy Scale. For that domain, teachers with less than two years of experience scored significantly lower on self-efficacy ratings than teachers with two or more years of experience. The results of the teacher motivation survey indicated that years of teaching experience did not correlate with significant differences in mastery-based versus ability-based motivation among teachers. The findings of the studies by Cox et al. (2011) and Cate (2014) suggest that teachers in juvenile detention center education programs often believe they can create a positive learning environment even under unique circumstances.

Review of Methodological Issues

Introduction. The Review of Research Literature and Methodological Literature section of this paper detailed 16 studies focusing on teacher efficacy. Of those studies, only two involved qualitative research methods (Houchins et al., 2009; Tsouloupas et al., 2014). The other 14 studies primarily employed some form of a teacher efficacy scale. While quantitative studies provide concrete data that can assist researchers in identifying patterns, future research that involves qualitative studies can expand the knowledge base in this field.

Strengths of research methods. Quantitative measures of teacher efficacy provide a clear indicator of teacher efficacy beliefs among a large number of teachers at a specific time (Tschannen-Moran et al, 1998). Hoy et al. (2009) were able to identify possible consequences of teacher efficacy on students. Skaalvik and Skaalvik (2007) found a relationship between teacher efficacy and strain factors, such as conflicts with parents. However, while discrete quantitative data collection contributes to the field of teacher efficacy research, longitudinal studies are able to provide a broader understanding of the concept. Holzberger et al. (2013) employed a longitudinal quantitative study, which found that teacher efficacy beliefs are modified over the course of the school year. Also, Dicke et al. (2014) identified changes in teacher efficacy in

classroom management from one year to the next. Since teacher efficacy is malleable, longitudinal studies that use qualitative measures are able to provide educational researchers a more comprehensive understanding of when, why, and how teacher efficacy beliefs are adapted. Midgley et al. (1989) engaged in a two-year longitudinal study that examined how teacher efficacy affected student perceptions of task difficulty and academic performance. By using a multi-year design, the researchers were able to analyze the collected data for changes over time. Unlike more easily observable teacher beliefs and behaviors, such as fairness and ability grouping practices, teacher efficacy is communicated in more subtle ways and likely has a cumulative effect on student attitudes toward learning (Midgley et al., 1989).

Weaknesses of research methods. While longitudinal studies contribute greatly to researchers' understanding of teacher efficacy, these studies should be expanded to include teacher preparation programs and to span several years (Tschannen-Moran et al., 1998). The findings of such studies can assist researchers in pinpointing when teacher efficacy beliefs begin and how they develop. In addition, since teacher efficacy is situation-specific, teaching environment must be an important component of teacher efficacy studies. However, a review of the existing literature shows a lack of studies involving teachers in alternative education settings.

Most of the studies located for this literature review included teachers in traditional school settings. While those studies provide valuable insight into teacher efficacy beliefs from one perspective, multiple perspectives should be explored in order to fully understand teacher efficacy as a variable impacted by work environment and unique to each domain. In one of the few studies conducted in a non-traditional school setting, Woolfolk et al. (1990) noted that "researchers should not assume that the Teacher Efficacy Scale can be scored identically for all samples" (p. 146). When measuring teacher efficacy beliefs, no teacher efficacy scale suits all

situations (Skaalvik & Skaalvik, 2007). In addition, teacher efficacy scales should not be the only means of data collection for studies about teacher efficacy. Though their study relied on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), Shaukat and Iqbal (2012) suggested that future studies of teacher efficacy utilize teacher interviews and experimental designs that manipulate parameters.

Limitations of quantitative design. Though a multi-dimensional construct, teacher efficacy has primarily been studied using purely quantitative methods, such as teacher efficacy scales. In fact, several studies were designed specifically to test modified versions of teacher efficacy scales (Gibson & Dembo, 1984; Skaalvik & Skaalvik, 2007; Tschannen-Moran & Hoy, 2001). After examining 218 articles about teacher efficacy research from 1998 to 2009, Klassen et al. (2011) found that 76.7% of the studies used purely quantitative approaches, with only 14.7% using mixed methods approaches and 8.7% using exclusively qualitative methods.

Well-designed quantitative research methods provide concrete, reliable measures of data that can be useful in establishing baselines and identifying patterns. However, purely quantitative studies fail to provide thick, rich description that can enhance the educational research community's understanding of a topic, particularly a complex topic such as self-efficacy which is situation-specific and involves individuals' beliefs. "From a measurement perspective, the teacher efficacy literature would be enriched by more qualitative studies, such as those employing a think aloud methodology, in which teachers' thoughts are probed as they respond to teacher efficacy items" (Coladarci, 1992, p. 335). Teacher efficacy research has been stifled by the limited use of methodological approaches that involve interviews, observations, and questionnaires.

Quantitative studies contribute to the greater understanding of the research community by providing data-driven evidence about a particular population at a particular time. However, educational researchers propose that future teacher efficacy studies explore more diverse methodologies, such as qualitative designs and case studies (Coladarci, 1992; Klassen et al, 2011; Tschannen-Moran et al., 1998). Understanding how teacher efficacy is influenced by cultural or environmental factors can provide insight into the complexity of the construct.

Teacher efficacy research has primarily focused on the experiences of North American teachers. However, teachers in different regions of the world have different daily experiences that are likely to influence their efficacy beliefs (Klassen et al., 2011). For example, Yeo et al. (2008) applied the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) to teachers in Singapore. Using a baseline scale to compare two sets of teachers in different geographic regions would allow researchers to identify similarities and differences among test populations.

On the other hand, Skaalvik and Skaalvik (2007) developed a teacher efficacy scale based on the role expectations of Norwegian teachers. In fact, a study by Cate (2014) applied the Norwegian Teacher Efficacy Scale to American teachers. A comparison of Norwegian scale to a North American teacher efficacy instrument might present findings that could enable researchers to develop a globally-relevant teacher efficacy scale. Mixed methods studies and qualitative research, including geographic, cultural, and situational diversity of study participants, could increase the depth and breadth of knowledge about teacher efficacy.

Structure of teacher efficacy scales. Of the studies identified in this paper that relied on teacher efficacy scales to measure teacher efficacy beliefs, many researchers used the Teachers' Sense of Efficacy Scale developed by Tschannen-Moran and Hoy (2001). While this scale

measures teacher efficacy beliefs across three domains, some researchers focused exclusively on one domain or used the scale in conjunction with other scales or surveys. The benefit of having one primary instrument, such as the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), that is used consistently throughout the educational research community is that the findings of different studies are more easily compared.

The 30-item Teacher Efficacy Scale developed by Gibson and Dembo (1984) was one of the original instruments that examined teacher efficacy as a measurable variable. However, early versions of teacher efficacy scales, including the Teacher Efficacy Scale (Gibson & Dembo, 1984), focused heavily on dealing with student difficulties and challenging environments, but "lacked assessments of teaching in support of student thinking, effectiveness with capable students, creativity in teaching, and the flexible application of alternative assessment and teaching strategies" (Tschannen-Moran & Hoy, 2001, p. 801). In 2001, Tschannen-Moran and Hoy developed the Teachers' Sense of Efficacy Scale, also called the Ohio State Teacher Efficacy Scale. After multiple studies to ensure the reliability, validity, and appropriateness of the new instrument, two versions were created. The long form of the scale has 24 items, and the short form has 12 items. The scale uses a nine-item rating for each item, ranging from 1-nothing to 9-a great deal. This measurement tool examines three dimensions of teacher efficacy: Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management. This scale was designed to be used with preservice teachers, as well as novice and experienced teachers.

Skaalvik and Skaalvik (2007) developed the Norwegian Teacher Self-Efficacy Scale based on role expectations in Norwegian schools. The Norwegian Teacher Self-Efficacy Scale was based on six subscales: Instruction, Adapting Education to Individual Students' Needs,

Motivating Students, Keeping Discipline, Cooperating with Colleagues and Parents, and Coping with Changes and Challenges (Skaalvik & Skaalvik, 2007). The 24-item scale includes four items for each of the six subscales.

After comparing 218 empirical articles about teacher efficacy research from 1998 to 2009 with research published in 1986 to 1997, Klassen et al., (2011) determined that effective teacher efficacy measurement instruments were closely based on the concept of self-efficacy and, therefore, were focused on teachers' forward-looking capabilities. Tschannen-Moran and Hoy's (2001) Teachers' Sense of Efficacy Scale was well composed and widely used in the United States and abroad (Klassen et al., 2011). Fives and Buehl (2010) examined the factor structure of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) and confirmed that practicing teachers clearly identified efficacy beliefs associated with the three separate dimensions in the scale. However, the findings of the study by Fives and Buehl (2010) also indicated that the three factors were not theoretically meaningful when applied to preservice teachers. As teachers gain classroom experience, they are more likely to distinguish between teacher efficacy beliefs related to each of the three factors.

Synthesis of Research Findings

Introduction. Teacher efficacy is a multidimensional, malleable construct that can have a significant impact on the classroom environment. The relationship between teacher efficacy and classroom management is cyclical, and low teacher efficacy can lead to job stress and burnout. Teacher efficacy is related to collective efficacy, a faculty's shared beliefs about their ability as a group to engage in a behavior that will generate a certain outcome, which can unify and motivate teachers. For teachers in juvenile detention center education programs, high

teacher efficacy and high collective efficacy can counteract the negative effects of a challenging, harsh work environment and student misbehavior.

Teacher efficacy: A multidimensional concept. Self-efficacy is a multidimensional concept that differs from other constructs, such as self-concept, self-esteem, and locus of control (Gibson & Dembo, 1984; Guskey & Passaro, 1994; Schwarzer & Hallum, 2008, Skaalvik & Skaalvik, 2007). Beliefs about self-concept refer to beliefs about current ability, and beliefs about self-esteem reflect self-worth (Klassen et al., 2011). Locus of control describes the degree to which a person believes internal or external factors control their life events (Rotter, 1990). However, beliefs about self-efficacy refer to judgments about capability. Schwarzer and Hallum (2008) found that self-efficacy is an internal attribute that refers to future behaviors and is a good predictor of actual behavior. Self-efficacy is similar to the construct need for competence, or mastering work tasks, as defined in self-determination theory, which focuses on different types of motivation (Holzberger, Philipp, & Kunter, 2014).

Though a consensus has not been reached about which dimensions are involved in teacher efficacy, researchers agree that teacher efficacy is multi-faceted. Gibson and Dembo (1984) identified sense of teacher efficacy and sense of personal teaching efficacy as two dimensions of teacher efficacy based on Bandura's (1977) outcome expectation and efficacy expectation. Unlike Gibson and Dembo's (1984) two dimensions, Guskey and Passaro (1994) instead chose to classify teacher efficacy as based on internal and external distinctions.

Tschannen-Moran and Hoy (2001) and Yeo et al. (2008) focused their research on three dimensions: student engagement, instructional practices, and classroom management. Skaalvik and Skaalvik (2007) identified seven separate dimensions of teacher efficacy: instruction, adapting education to individual students' needs, motivating students, keeping discipline,

cooperating with colleagues and parents, and coping with changes and challenges. As a result of the multiple facets involved in teacher efficacy, educational researchers must determine which dimensions they will study and choose an instrument that measures those dimensions.

In addition, teacher efficacy is a cyclical process (Hoy et al., 2009; Tschannen-Moran et al., 1998). "Greater efficacy leads to greater effort and persistence, which leads to better performance, which, in turn, leads to greater efficacy" (Hoy et al., 2009, p. 629). Unfortunately, the same cycle is also present for lower teacher efficacy. When teachers blame negative outcomes on the difficulties of teaching a certain group of students, they are more likely to generate similar outcome results if confronted with another similar group of students in the future (Guskey, 1982). Guskey (1987) found that teachers expressed less personal responsibility for the poor performance of single students, possibly because teachers believe they have less influence over the individual learning problems of some students. As a result, students who need additional instructional support are actually less likely to receive it and will continue to perform poorly.

On the other hand, Holzberger et al. (2014) found that the "teacher-student relationship is rated most highly when teachers indicate they are highly self-efficacious and at the same time experience high need satisfaction from their work environment" (p. 107). Within the cycle of teacher efficacy, when the teacher-student relationship is positive, teachers are more likely to feel more efficacious and more satisfied professionally. Having multiple dimensions that interact in a cyclical nature, teacher efficacy is a challenging, but worthwhile topic for educational research.

Teacher efficacy: A malleable construct. A teacher's perceived sense of efficacy is influenced by internal and external factors, including mastery experience, subject knowledge,

and assigned grade level (Guskey & Passaro, 1994; Ross, 1994). Yeo et al. (2008) found that more years of experience usually results in higher teacher efficacy; however, that study also found that teachers who work with low-achieving students and who are older with more professional experience reported a progressively diminished view of themselves as a source of instrumental help to their students. Holzberger et al. (2013) found that teachers, regardless of years of experience, modified their teacher efficacy beliefs over the course of the school year. Understanding how teacher efficacy develops and evolves within a single school year and also over time is essential for the educational research community. Studies suggest that efficacy beliefs are shaped early and might be malleable early in learning or a career in teaching, but are stable once established (Holzberger et al., 2013; Skaalvik & Skaalvik, 2007; Yeo et al, 2008). Since teacher efficacy is malleable, educational researchers must identify trends or patterns in order to develop strategies to support teacher efficacy.

Impact of teacher efficacy in the classroom. As the leader of a classroom, a teacher's beliefs and behaviors impact all aspects of a classroom environment, including student engagement and classroom management (Holzberger et al., 2013; Ross, 1994; Yeo et al., 2008). "Feelings of positive self-efficacy cannot guarantee effective teaching. . . . But low feelings of self-efficacy almost certainly work against effective teaching" (Raudenbush, Rowan, & Cheong, 1992, p. 151). Teachers who are more efficacious promote student autonomy (Ross, 1994). Teachers with higher teacher efficacy report higher cognitive activation, more learning support for students, and better classroom management (Holzberger et al., 2013; Yeo et al., 2008). Teacher efficacy is a powerful professional variable that can have direct and indirect consequences for teachers and students (Hoy et al., 2009).

Teacher efficacy also affects student attitudes toward learning. In a study by Midgley et al. (1989), students whose teachers were more efficacious believed they were performing better in math and expected to do better in the future, whereas students whose teachers were less efficacious became more negative as the year progressed. Teachers and administrators must be aware of the role of teacher efficacy in instruction and engagement and must work to improve and support teacher efficacy. Failing to do so can have long-term, negative consequences for students.

As classroom leaders, teachers' sense of efficacy can have a significant impact on classroom management (Dicke et al., 2014; Holzberger et al., 2013; Tsouloupas, Carson, Matthews, Grawitch, & Barber, 2010; Yeo et al., 2008). Woolfolk et al. (1990) found that higher personal efficacy is related to more humanistic attitudes about classroom control. The results of a study by Brouwers and Tomic (1999) confirm that teacher efficacy in classroom management is a mediating construct in the positive effect of student disruptive behavior. In a similar study, Tsouloupas et al. (2010) noted that perceived teacher efficacy in handling student misbehavior is critical in establishing effective classroom management techniques. High efficacy teachers are more adaptive and more responsive when dealing with student misbehavior. Tsouloupas et al. (2010) found that teacher efficacy in handling student misbehavior was found to mediate the relationship between perceived student misbehavior and emotional exhaustion. Preservice teachers who feel better able to manage classroom disturbances also report fewer disturbances (Dicke et al., 2014). The cyclical nature of teacher efficacy suggests that fewer classroom disturbances would lead to greater teacher efficacy, which would lead to more effective classroom management.

Role of teacher efficacy on teacher retention. Understanding teacher efficacy can have a significant impact on teacher retention. Low teacher efficacy can lead to job stress and burnout (Dicke et al., 2014; Schwarzer & Hallum, 2008; Skaalvik & Skaalvik, 2007). In fact, self-efficacy is both a predictor of stress (Schwarzer & Hallum, 2008) and a moderator of stress (Dicke et al., 2014). Since teacher perceptions of student misbehavior can be a significant stressor (Tsouloupas et al., 2010) and since teachers who are less efficacious often experience more student disturbances (Dicke et al., 2014), low efficacy teachers are more likely to experience job-related stress.

Teachers who feel stressed or burnt out are less tolerant of disruptions, less sympathetic, and more emotionally distant from their students, which can affect student behavior (Brouwers & Tomic, 1999). "Those who persist in subjectively threatening activities will eventually eliminate their inhibitions through corrective experience, whereas those who avoid what they fear, or who cease their coping efforts prematurely, will retain their self-debilitating expectations and defensive behavior" (Bandura & Adams, 1977, p. 288). Individuals with low self-efficacy tend to dwell on their coping deficiencies and magnify the severity of possible threats (Bandura & Adams, 1977; Skaalvik & Skaalvik, 2007).

High teacher efficacy in classroom management serves as a resource that diminishes stress and lowers emotional exhaustion (Dicke et al., 2014). Teachers experience less stress when they have confidence in their abilities and believe they and teachers in general can make a difference (Greenwood, Olejnik, & Parkay, 1990). Coladarci (1992) found that general efficacy was a significantly stronger predictor of commitment to teaching than personal efficacy. In other words, a teacher is likely to be committed to the teaching profession if they believe that teachers in general can influence student learning, even if they rate their own teaching competence lower.

Examining factors that influence teacher efficacy can provide opportunities to develop strategies to strengthen teacher efficacy.

Collective efficacy: Unifying and motivating teachers. Teachers do not work in isolation. They serve as members of a faculty and a school organization. Collectively, they share common beliefs, responsibilities, and concerns. According to Bandura (1977), perceived collective efficacy is "the groups' shared beliefs in its conjoint capabilities to organize and execute courses of action required to produce given levels of attainments" (p. 477). Collective efficacy includes an individual's beliefs about the group's capabilities and an individual's beliefs about their own capabilities (Bandura, 2000). Collective efficacy is a component of the "social system as a whole" (Bandura, 1997, p. 469), with each teacher bringing to the group a different level of self-efficacy and teacher efficacy.

Skaalvik and Skaalvik (2007) found that teacher efficacy and collective efficacy are strongly and positively related. "Just as individual teacher efficacy may partially explain the effect of teachers on student achievement, from an organizational perspective, collective teacher efficacy may help to explain the differential effect that schools have on student achievement" (Goddard, Hoy, & Hoy, 2000, p. 483). According to reciprocal causation, efficacy is cyclical (Bandura, 1997). In other words, collective efficacy has the potential to improve organization performance, which can strengthen collective efficacy. Therefore, collective efficacy has the potential for self-sustaining growth.

Teachers in juvenile detention centers often interact with students who have learning deficits, behavioral and mental health issues, and negative attitudes toward classrooms and authority figures (U.S. Departments of Education and Justice, 2014). Most students are in these facilities for short periods of time, which can limit a teacher's ability to build rapport and gain

trust with students. Student achievement is often measured in small, daily accomplishments that are not always academically-oriented, such as sitting in a seat for a full class period or refraining from using curse words for an entire day. "Even though accomplishments may fall short of aspirations, there is victory in the incremental changes people do achieve. Evidence of progress sustains their efforts" (Bandura, 1977, p. 524). Collective efficacy can motivate teachers to continue their work because they are a part of a team that is making positive, though small changes. The study by Cox et al. (2011) found that shared leadership and collegiality were perceived to be associated with a positive learning climate by teachers at a juvenile justice facility. For teachers in juvenile detention center education programs, a sense of collective efficacy can be a driving force in their commitment to improving the school experience for their colleagues, as well as their students.

Challenges of teaching in a juvenile detention center. Teachers in juvenile detention center education programs are confronted with unique challenges that might influence teacher efficacy. Teachers in correctional education programs are confronted with a harsh environment that can feel isolating and intimidating (Wright, 2005). In addition, students in juvenile correctional facilities often perform below grade level (Hockenberry et al., 2015; Read & O'Cummings, 2011; U.S. Departments of Education and Justice, 2014). Helpless students expend less effort after a failure, while mastery students increase their efforts in order to improve. "Failure attributed to internal/stable ability is one of the most difficult motivational problems to remedy. And for the helpless student, simply experiencing success is not enough to ensure motivation" (Alderman, 1990, p. 27). Teacher efficacy might be lower when teachers work with students who are stereotyped as low-achieving because teachers might believe they do not have the capacity to overcome those challenges, especially for students who are below grade

level already (Stipek, 2012). The experiences faced by teachers in juvenile detention center education programs differ considerably from the experiences of teachers in traditional school settings. As a result, the factors that influence teacher efficacy in these facilities are likely to differ significantly, as well.

Critique of Previous Research

Introduction. Flaws identified in early versions of teacher efficacy scales and lack of consistency in the application of teacher efficacy scales limit the usefulness of some research studies. Comparisons of data gathered with flawed or inconsistent tools might be ineffective. In addition, teacher efficacy research has focused primarily on traditional school settings, while neglecting to examine teacher efficacy in non-traditional classrooms.

Inconsistencies with teacher efficacy scales. Prior to the development of Tschannen-Moran and Hoy's (2001) Teachers' Sense of Efficacy Scale, the primary instrument for measuring teacher efficacy was Gibson and Dembo's (1984) Teacher Efficacy Scale. Several flaws have been identified with the Teacher Efficacy Scale (Gibson & Dembo, 1984). The 30 items included in Gibson and Dembo's (1984) scale were designed to measure two factors: personal teaching efficacy and general teaching efficacy. Educational researchers are in agreement that studies using a variety of teacher efficacy scales confirm the existence of those two factors of teacher efficacy (Gibson & Dembo, 1984; Guskey & Passaro, 1994; Tschannen-Moran & Hoy, 2001). However, factor analysis of the Gibson and Dembo (1984) scale showed several items correlated to both factors (Tschannen-Moran & Hoy, 2001).

The Teachers' Sense of Efficacy Scale developed by Tschannen-Moran and Hoy (2001) was designed to eliminate those inconsistencies and to measures three dimensions: Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom

Management. While the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) is considered valid and reliable and is currently the primary tool for measuring teacher efficacy (Fives and Buehl, 2010; Klassen et al., 2011), educational researchers do not always use the tool in its entirety. Several studies identified in this paper used modified versions of the Tschannen-Moran and Hoy (2001) scale. Researchers must be cautious when using adapted or piecemeal versions of well-tested scales. For example, part of the study by Nie et al. (2013) used an 11-item scale adapted from the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001). Also, Dicke et al. (2014) and Martin et al. (2012) each used only one subscale of the Teachers' Sense of Efficacy Scale. Selectively using only certain portions of widely-accepted and verified tools can result in inconsistent results, and it is difficult to identify patterns across studies when the scales are not applied in a standardized format. Teacher efficacy is multi-faceted, and researchers must be aware of different dimensions of teacher efficacy when using modified versions of existing scales.

Limitations of samples. Many of the studies identified for this paper used a variety of sample sizes and grade levels. As a result, data have been collected across a wide range, which allows researchers to compare the results of studies of similar populations. However, one sample population that is relatively untouched by teacher efficacy studies is teachers in non-traditional school settings. Since teacher efficacy is domain-specific and context-specific, standard instruments that measure teacher efficacy might fail to assess the nuances that exist for teachers in non-traditional classroom environments.

In one of the few studies of non-traditional classrooms identified for this paper, Woolfolk et al. (1990) applied the Teacher Efficacy Scale (Gibson & Dembo, 1984) to teachers in a religiously-affiliated school. The researchers found that, due to the difference in samples

between a traditional school and the non-traditional school in their study, the items comprising the two factors of teacher efficacy were slightly different. The challenges of assessing teacher efficacy in non-traditional schools are substantial. For example, in alternative education settings, such as juvenile detention centers, teachers might be working in mixed-age, mixed-ability classrooms. Educational researchers must recognize the distinctions that exist in certain teaching settings and choose the tool that best suits the environment. The use of qualitative research methods might be best suited to studies in non-traditional settings in which many unique variables may be unknown to the researcher prior to the commencement of the study.

Chapter 2 Summary

Self-efficacy, which is an individual's beliefs about his capability to learn or complete a task, is situation-specific (Bandura, 1997). According to the concept of triadic reciprocality, self-efficacy is both a cause and an effect of an individual's external environment and internal personal factors (Bandura, 1997). Teacher efficacy, which is a teacher's beliefs about his ability to influence student learning, is a malleable, multidimensional construct (Gibson & Dembo, 1984; Guskey & Passaro, 1994; Skaalvik & Skaalvik, 2007). Educational researchers have identified two independent dimensions of teacher efficacy: personal teaching efficacy and general teaching efficacy (Ashton & Webb, 1986; Gibson & Dembo, 1984). Personal teaching efficacy refers to a teacher's beliefs about his own individual teaching competence, whereas general teaching efficacy refers to a teacher's beliefs about the ability of teachers as a profession to influence student learning. Teaching efficacy beliefs can have a significant effect on a teacher's sense of helplessness when working with specific student populations (Stipek, 2012; Yeo et al., 2008); however, teacher efficacy can also positively influence the learning environment as teachers recognize that they are making a difference (Cox et al., 2011).

As a professional variable, teacher efficacy has a wide-reaching impact on the classroom environment, including influencing student attitudes toward learning, affecting classroom management, and contributing to job stress and burnout. Teachers with low efficacy are more likely to feel stressed by and be less tolerant of student misbehavior, which can result in more classroom disturbances (Brouwers & Tomic, 1999; Dicke et al., 2014). Emotional exhaustion and job stress can lead to teacher burnout (Martin et al., 2012). On the other hand, teachers who are more efficacious are more likely to set higher standards for student behavior and to use class time more effectively, which can result in fewer classroom disturbances (Hoy et al., 2009).

Since levels of teacher efficacy might change throughout a teacher's career (Holzberger et al., 2013; Skaalvik & Skaalvik, 2007; Yeo et al, 2008), research that identifies trends in teacher efficacy beliefs could lead to the development of strategies to improve or support teacher efficacy. Longitudinal studies, such as Midgley et al. (1989), Holzberger et al. (2013), and Dicke et al. (2014), identify patterns and changes in teacher efficacy over time. In addition, although teacher efficacy scales provide an effective means of measuring teacher efficacy, every scale cannot be uniformly applied to all teaching environments (Skaalvik & Skaalvik, 2007; Woolfolk et al, 1990). Although most teacher efficacy studies to-date have involved quantitative methodologies, educational researchers suggest that future research involving qualitative research methods would contribute greatly to the field (Coladarci, 1992; Klassen et al, 2011; Tschannen-Moran et al., 1998).

Teachers in juvenile detention center education programs are confronted daily with the challenges of working in a non-traditional, confining environment (Wright, 2005) and teaching students who often have significant behavioral, mental health, and learning issues (Council of State Governments, 2015; Gottesman & Schwarz, 2011). For students in juvenile detention

centers, being in a classroom with a teacher who has low teacher efficacy can add to the stress of being incarcerated (Bandura, 1997). However, in juvenile detention centers, high teacher efficacy correlates with a positive learning climate (Cox et al., 2011). Teacher effectiveness in classroom management, using available resources, and limiting the negative effects of social influences on student learning can impact teacher efficacy. Teachers with high general teaching efficacy and high personal teaching efficacy are better able to address the needs of each student, particularly in diverse classroom settings like juvenile detention center education programs.

Based on this review of literatures, which developed a unique conceptual framework using self-efficacy, personal teaching efficacy, and general teaching efficacy to understand teacher efficacy in juvenile detention center education programs, there was sufficient reason for thinking that an investigation examining the impact of teaching in a juvenile detention center would yield socially significant findings. This literature review provided strong support for pursuing a research project to answer the following three research questions. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards being able to manage a classroom? How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their selfefficacy towards utilizing classroom instructional strategies? How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards being able to engage students in the classroom? The following chapter outlines a qualitative research methodology which sought to identify the factors affecting teacher efficacy in a juvenile detention center education program in southeastern Pennsylvania. At a specific juvenile detention center education program site, an

investigation involving the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), a six-question questionnaire, and interviews with each participant evaluated the factors teachers perceived to be influencing teacher efficacy.

Chapter 3: Methodology

Introduction

Teacher efficacy, which refers to a teacher's belief in his or her ability to promote student learning, can have wide-reaching implications in the classroom environment (Bandura, 1997; Tschannen-Moran & Hoy, 2001). Teacher efficacy can influence instructional practices, student engagement, learning, classroom management, and teacher burnout (Brouwers & Tomic, 1999; Dicke et al., 2014; Gibson & Dembo, 1984; Holzberger et al., 2013; Hoy et al., 2009; Korevaar, 1990; Martin et al., 2012; Nie et al., 2013; Skaalvik & Skaalvik, 2007; Tsouloupas et al., 2014). Teachers in juvenile detention center education programs encounter unique challenges that can impact teacher efficacy (Cate, 2014; Cox et al., 2011; Houchins et al., 2009). For example, in a 2006 survey, more than one-fourth of incarcerated youth had severe mental health illnesses, a rate considerably higher than the national average (Gottesman & Schwarz, 2011). In addition, at least one-third of incarcerated youth, more than four times the rate for students in traditional schools, need or already receive special education services (Council of State Governments, 2015). Even when faced with challenges such as those previously mentioned, teachers with high teacher efficacy can create a positive learning climate (Cate, 2014; Cox et al., 2011; Houchins et al., 2009). To date, limited teacher efficacy research has been conducted using qualitative methods, and even less research has examined teacher efficacy in the area of juvenile detention center education programs.

The scope of knowledge about a topic is broadened when different methodologies are applied to new studies (Coladarci, 1992; Klassen et al, 2011; Tschannen-Moran et al., 1998).

The perspective of qualitative research is that an individual's actions are based on their perceptions, not necessarily the reality, of the world around them (Hatch, 2002). By applying an

inductive, qualitative methodology, researchers seek to explore a topic and discover insights using a flexible structure for the data collection process, whereas researchers who apply a deductive, quantitative methodology seek to quantify data in concrete measurements using a highly structured data collection method. Both methodologies provide valuable information, though they employ different strategies.

In qualitative studies, the researcher is the data collection instrument, which makes the study interpretive (Stake, 2010). Interviews, such as those used in this study, are researcher-constructed and researcher-conducted data collection tools. Also, in qualitative studies, the focus is on understanding the meaning that people attribute to a phenomenon (Yin, 2014). In this study, teachers identified factors that influence teacher efficacy in a juvenile detention center education program in southeastern Pennsylvania. By gathering data directly from teachers who have taught in a juvenile detention center education program, this study examined the reality that was constructed by individuals directly involved in the phenomenon.

The goal of qualitative research is to gain a deep understanding of a phenomenon by exploring how study participants make sense of their experiences and by identifying patterns of meaning within the resulting data. During interviews, the researcher must hear the actual spoken words, capture the mood, understand the context, and infer the meaning intended by the interviewee (Yin, 2014). In qualitative studies, the context is described in detail, and the researcher is aware that each time and place is unique (Stake, 2010). In this study, the context of the work environment at the juvenile detention center education program was described in order to bring awareness to the orientation of the study, which was from the perspective of the teachers at that particular facility. Educational researchers recommend future teacher efficacy research be conducted using qualitative studies, which can provide thick, rich description that would increase

and refine the understanding of teacher efficacy as a multidimensional construct (Coladarci, 1992; Klassen et al., 2011; Tschannen-Moran et al., 1998).

Social cognitive theory, which includes the concepts of self-efficacy and triadic reciprocality, provides a framework for examining the concept of teacher efficacy (Bandura, 1997). Self-efficacy refers to an individual's beliefs about his capability to learn or complete a task (Bandura, 1997). Social cognitive theory states that self-efficacy is situation-specific and based on personal judgment about a future task (Schwarzer & Hallum, 2008). According to Bandura (1997), an individual's self-efficacy beliefs affect their actions, efforts, perseverance, resiliency, thought patterns, and coping mechanisms. Teacher efficacy has an equally powerful impact in the classroom, affecting a teacher's orientation toward the educational process (Bandura, 1997).

Bandura's (1997) concept of triadic reciprocality identifies three interdependent factors that influence an individual's view of self and society. The three factors are behavior, external environment, and internal personal factors, including cognitive, affective, and biological events (Bandura, 1997). All three factors are an influence on and are influenced by each other (Bandura, 1997). The concept of triadic reciprocality indicates that self-efficacy can be affected by and can have an effect on an individual's behaviors and environment (Bandura, 1997). Therefore, factors that influence efficacy vary based on the environment. By examining the factors that teachers perceive to be influencing their self-efficacy in a particular environment, such as a juvenile detention center, researchers can identify patterns and trends that can be used to develop strategies to support high teacher efficacy.

The Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) identified three dimensions of teacher efficacy, including instructional strategies, student engagement, and

classroom management. Fives and Buehl (2010) confirmed that practicing teachers identified efficacy beliefs associated with the three separate dimensions in the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001). Based on social cognitive theory, which includes the concepts of triadic reciprocality and self-efficacy, this qualitative study used a single-case study methodology to examine factors that influence teacher efficacy in instructional strategies, student engagement, and classroom management in a juvenile detention center education program in southeastern Pennsylvania. A single-case study design investigates and analyzes a single case within a single context, whereas a multiple-case study design investigates and analyzes multiple cases in multiple contexts (Yin, 2014).

During the first component of data collection for this study, participants completed the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) online using Qualtrics.

Then, using an online questionnaire in Qualtrics, teachers were asked to describe barriers to high teacher efficacy and facilitators of high teacher efficacy in their work environment. After completing the Teachers' Sense of Efficacy Scale and questionnaire, each teacher was individually interviewed using a consistent set of questions to further examine the factors influencing teacher efficacy in the juvenile detention center education program. Interviews were recorded, transcribed, and reviewed. Data were then coded to focus on specific characteristics, such as factors that influence teacher efficacy (Richards & Morse, 2013). This chapter is divided into the following sections: Introduction, Research Questions, Purpose of Study, Design of Study, Research Population, Sampling Method, Instrumentation, Data Collection, Identification of Attributes, Data Analysis Procedures, Limitations of Research Design, Validation, Expected Findings, Ethical Issues, and Chapter 3 Summary.

Research Questions

Research question 1. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards being able to manage a classroom?

Research question 2. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards utilizing classroom instructional strategies?

Research question 3. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards being able to engage students in the classroom?

Purpose of Study

The purpose of this single-case study was to describe factors influencing teacher efficacy in instructional strategies, student engagement, and classroom management among teachers currently or recently working in a juvenile detention center education program in southeastern Pennsylvania. According to Tschannen-Moran and Hoy (2001) who identified those three dimensions of teacher efficacy, instructional strategies, student engagement, and classroom management represent the depth and breadth of the work of educators. Self-efficacy can be affected by an individual's environment (Bandura, 1997; Schwarzer & Hallum, 2008). For teachers in juvenile detention center education programs, the uniqueness of their environment can impact their beliefs about the teaching profession and their role as teacher. Previous studies have found that highly efficacious teachers perform well in a juvenile justice education environment (Cate, 2014; Cox et al., 2011; Houchins et al., 2009). The findings of studies by Cox et al. (2011) and Cate (2014) suggested that teachers in juvenile detention center education

programs often believe they can create a positive learning environment even under unique circumstances. In fact, the majority of participants in the study by Cox et al. (2011) stated that they feel their work is relevant.

To date, educational studies about teacher efficacy have primarily used quantitative measures (Klassen et al., 2011). Klassen et al. (2011) found that more than three-fourths of the 218 empirical articles included in their research used purely quantitative approaches and less than 10% used exclusively qualitative methods. In addition, minimal research has been conducted about teacher efficacy in juvenile detention center education programs (Cate, 2014; Cox et al., 2011; Houchins et al., 2009). This study sought to fill the gap by examining teacher efficacy in a juvenile detention center education program using a single-case study methodology based on a teacher efficacy scale, a questionnaire, and interviews to determine the barriers and facilitators of high teacher efficacy.

Teacher efficacy is a professional variable impacting many aspects of the classroom environment, including student attitudes toward learning, teacher responses to student misbehavior, and levels of job stress and burnout among teachers (Hoy et al., 2009; Midgley et al., 1989; Schwarzer & Hallum, 2008; Woolfolk et al., 1990). Identifying factors that influence teacher efficacy can provide opportunities to examine how to strengthen teacher efficacy.

According to social cognitive theory, self-efficacy is domain-specific (Schwarzer & Hallum, 2008). Therefore, understanding the factors that teachers perceive to be influencing their self-efficacy in a particular environment can have long-term, positive outcomes, since program administrators will be able to develop strategies to support high teacher efficacy in their facilities. The data resulting from this study may be used by school administrators and district-level leaders to develop induction programs and structural supports that address the factors

identified in this study. Administrators in juvenile detention center education programs may also be able to use the data from this study to design situation-based interview questions that explore the concept of teacher efficacy in potentially challenging situations. In addition, the results of this study can be used to create professional development opportunities for teachers that examine strategies for addressing barriers to high teacher efficacy. As a result, an academic environment can be created that promotes high teacher efficacy and fosters student learning.

Design of Study

This study used a single-case study design in which current and former teachers at a juvenile detention center in southeastern Pennsylvania completed the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), a questionnaire, and an individual interview. Yin (2014) identified three conditions that researchers can use to determine the ideal research method. Based on Yin's (2010) first condition for case study research, the form of the research questions for this study were designed to answer how or why a phenomenon occurs. Three research questions focused this study. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards being able to manage a classroom? How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards utilizing classroom instructional strategies? How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards being able to engage students in the classroom? Multiple sources of evidence, including the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), an online questionnaire, and interviews were used for triangulation.

According to the second condition for case study research identified by Yin (2014), the extent of control a researcher has over actual behavioral events should also determine the research method. This study did not require control of behavioral events, since the context of the situation and the phenomenon were connected. For this study, the factors influencing teacher efficacy occurred within the context of the juvenile detention center.

Yin's (2014) third condition for case study research is that the study focuses on a contemporary event, rather than historical events. This study examined teacher efficacy, which is a malleable construct that is situation-specific (Schwarzer & Hallum, 2008). As a result, teacher efficacy is a contemporary event. Therefore, all three conditions indicated that this research was best suited for a case study design.

To address potential errors in the process of collecting data from a sample, this study included a target population comprised of all teachers who are working or who have worked within the past five years at a specific juvenile detention center in Pennsylvania. Excluding me, all teachers who met these criteria (n = 9) were invited to participate in the study. The sample for this study was those teachers who participated in the study.

Sample sizes for qualitative research studies are often much smaller than for quantitative research studies (Jeanfreau & Jack, 2010; Mason, 2010). According to Crouch and McKenzie (2006), conducting qualitative research involving sample sizes of fewer than 20 participants is advantageous for inductive and analytic studies. With a small sample size, the researcher is able to establish a relationship with study participants, seek depth of data, and generate relevant, unique results upon which future studies can build (Crouch & McKenzie, 2006). Qualitative research is focused on making meaning and using examples to reach conclusions (Mason, 2010). As a result, even studies with small sample sizes can contribute to the understanding of a

research topic (Crouch & McKenzie, 2006). In qualitative research, frequencies are less important than in quantitative research because one occurrence of data is as useful as many, since all data becomes part of the analysis framework (Mason, 2010). Therefore, a smaller sample size, such as the nine teachers invited to participate in this single-case study, can still generate meaningful results.

To address potential errors in the quality of questions as measures, this study consisted of three parts. First, participants completed the long form of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), which is a quantitative tool that measures teacher efficacy in three dimensions: Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management (Tschannen-Moran & Hoy, 2001). Second, teachers answered six questions modeled after the questions used in a qualitative study by Houchins et al. (2009) in which data was collected from questionnaires of teachers of incarcerated youth. Permission was obtained from Houchins et al. (2009) to use or modify the questionnaire questions. For this study, the six-question online questionnaire was designed to generate data about barriers and facilitators of high teacher efficacy in a juvenile detention center education program. Unlike the Teacher's Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), every question on the online questionnaire allowed free-form responses. In addition, unlike the interview, the online questionnaire allowed participants two weeks to read, reflect on, and complete the questionnaire.

The third component of data collection for this case study was individual interviews, which were critical sources of evidence for case studies (Yin, 2014). For this study, interviews were the primary data collection instrument. Each study participant was interviewed in a short interview lasting approximately one hour (Yin, 2014). The interview was open-ended and

conversational in manner, but the main purpose of the interview was to corroborate certain findings that resulted from the online questionnaire data (Yin, 2014). With permission from each study participant, the interviews were recorded, so the contents of the electronic record could be reviewed as needed (Yin, 2014).

To ensure the quality of data collection, the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) and the questionnaire were available online, so teachers were able to complete them at home or away from home by accessing an email link. Since the sample size was small (n = 9), the collection of demographic data could have eliminated the anonymity of the questionnaire. Though a question may seem innocent to the researcher, the answer may be embarrassing or uncomfortable for the study participant (Fowler, 2009). In order to ensure the questionnaire was anonymous, no demographic data was collected.

Research Population

The research population consisted of all teachers who are working or who have worked within the past five years at a juvenile detention center education program in southeastern Pennsylvania (n = 9). The number of full-time teachers at the juvenile detention center for the 2016–2017 school year, the year in which this study occurred, was three, including me. Therefore, to increase the sample size, the research population was expanded to include seven additional teachers who have worked at the juvenile detention center in the past five years, but were no longer teaching at the facility at the time of this study. Excluding me, all teachers who met these criteria (n = 9) were invited to participate in the study. Saturation occurs sooner in studies in which participants have shared experiences related to the research topic (Guest, Bunce, & Johnson, 2006). Invited participants included three men and six women. Seven of the invited participants had more than 10 years of teaching experience, while the other invited participants

had three years and six years of teaching experience. All invited participants were Caucasian.

All invited participants were also state-certified in their respective disciplines.

Sampling Method

This study used a convenience sampling strategy, a nonprobability sample consisting of those who were available, fit the parameters of the study, and were willing to provide data (Adams & Lawrence, 2015). Qualitative studies often involve much smaller sample sizes than quantitative studies due to the inherent characteristics of this research method (Jeanfreau & Jack, 2010). For this study, convenience sampling ensured that data was collected from as many teachers as possible who met the research population criteria. In qualitative studies, the quality and amount of the resulting data are more useful than the number of participants for determining the adequacy of a sample size (Jeanfreau & Jack, 2010). Since the number of teachers in this research population was small (n = 9), the convenience sampling method was feasible and also valuable for collecting an adequate amount of data to answer the research questions for this study.

Instrumentation

This single-case study was comprised of three components: Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), an online questionnaire, and an individual interview with each study participant. Study participants completed the long form of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001). They also answered a six-question online questionnaire. Finally, they were individually interviewed. Since teacher efficacy is a multi-dimensional concept (Gibson & Dembo, 1984; Guskey & Passaro, 1994; Schwarzer & Hallum, 2008, Skaalvik & Skaalvik, 2007), using multiple instruments to collect data provided multiple sources of evidence for data triangulation (Yin, 2014).

Teachers' Sense of Efficacy Scale. Assessing a broader range of teaching tasks than previous scales, the Teachers' Sense of Efficacy Scale is a measurement tool that examines three dimensions of teacher efficacy: Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management (Tschannen-Moran & Hoy, 2001).

Tschannen-Moran and Hoy (2001) tested the original 52-item scale in three separate studies and finally reduced the number of items to create two final versions. The long form of the scale has 24 items, and the short form has 12 items. The scale uses a nine-item, Likert-type rating for each item, ranging from 1-nothing to 9-a great deal.

Using samples of practicing teachers (n = 255) and preservice teachers (n = 111), Tschannen-Moran and Hoy (2001) assessed the factor structure, reliability, and validity of the scale. For practicing teachers, teacher efficacy subscale scores for each of the three dimensions proved a reliable measure. The reliability for the long form was 0.94, and the reliability for the short form was 0.90. However, for preservice teachers, the three factors were not a reliable measure. For preservice teachers, total score proved to be a more accurate measure of teacher efficacy. To examine the construct validity of the long form and the short form, Tschannen-Moran and Hoy (2001) assessed the correlation between the Teachers' Sense of Efficacy Scale and other existing measures of teacher efficacy. For both the long and short forms, the results indicated that the Teachers' Sense of Efficacy Scale is a valid and reliable measure of personal teaching efficacy (Tschannen-Moran & Hoy, 2001).

Klassen et al. (2011) determined that effective teacher efficacy measurement tools were closely based on the concept of self-efficacy and, therefore, were focused on teachers' forward-looking capabilities. According to Klassen et al. (2011), the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) was well composed and widely used in the United States and

abroad. Fives and Buehl (2010) examined the factor structure of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) and confirmed that practicing teachers clearly identified efficacy beliefs associated with the three separate dimensions in the scale. For this study, participants completed the long form of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) online using Qualtrics (see Appendix A for the list of questions included on the Teachers' Sense of Efficacy Scale).

Questionnaire. For the second component of this study, participants completed a six-question online questionnaire designed to identify barriers and facilitators of high teacher efficacy in a juvenile detention center education program. The questionnaire questions for this study were modeled after the questions used in a qualitative study by Houchins et al. (2009). The study conducted by Houchins et al. (2009) examined the barriers and facilitators that juvenile justice teachers face in providing quality educational opportunities to incarcerated youth. The study participants (n = 78) were juvenile justice teachers from three facilities in Louisiana, who completed a multi-part survey containing multiple choice questions. In the qualitative section of the survey, participants listed the top three barriers to providing quality educational services to incarcerated youth. Participants also listed at least one facilitator for overcoming each of the barriers. Using a constant comparative method to analyze the data, Houchins et al. (2009) developed nine themes: personnel concerns, academics, student concerns, discipline, materials and supplies, parental involvement, funding, communication, and facilities.

Some of the issues identified in the study by Houchins et al. (2009), such as poor student motivation, were similar to issues faced by teachers in traditional schools. However, the study found that those barriers were more pronounced in programs serving incarcerated youth (Houchins et al., 2009). In addition, teachers in juvenile justice education programs dealt with

other challenges, such as teaching heterogeneous classes of mixed age, mixed ability students and dealing with a highly transient and often short-stay student population (Houchins et al., 2009). While this study did not specifically address the topic of teacher efficacy, Houchins et al. (2009) identified factors, such as student misbehavior, that were found in other studies to affect teacher efficacy (Brouwers & Tomic, 1999; Greenwood et al., 1990; Ross, 1994; Tsouloupas et al., 2010).

Permission has been obtained from Houchins et al. (2009) to use or modify the questionnaire questions. For this study, the questionnaire was created in Qualtrics and consisted of six questions (see Appendix B for a list of the questionnaire questions). First, teachers described at least one classroom management factor that served as a barrier to their teacher efficacy. Second, teachers described at least one classroom management factor that served as a facilitator of their teacher efficacy. Third, teachers described at least one classroom instructional factor that served as a barrier to their teacher efficacy. Fourth, teachers described at least one classroom instructional factor that served as a facilitator of their teacher efficacy. Fifth, teachers described at least one student engagement factor that served as a barrier to their teacher efficacy. Sixth, teachers described at least one student engagement factor that served as a facilitator of their teacher efficacy.

Interviews. For the third and final data collection component of this study, participants were individually interviewed. The supervisor for the juvenile detention center education program was part of an expert panel who reviewed the interview questions to establish validity. A practice interview was conducted with an individual who was not a participant in this study, but was familiar with the juvenile detention center education program.

During the interview, the primary line of inquiry was semi-structured using a set list of interview questions designed to further explore the study topic (Yin, 2014). The interview questions were created after reviewing questions and findings from several previous studies of teacher efficacy (Bennett, 2007; Cate, 2014; Cox et al., 2011; Houchins et al., 2009; Lewandowski, 2005; Norton, 2013; Richardson, 2011; Tschannen-Moran & Hoy, 2001). Of the 20 interview questions, 11 questions were designed to elicit answers that generate data about the study topic as a whole. The nine additional questions consisted of three sets of three questions, with each set designed to probe one of the three research questions (see Appendix C for a list of the interview questions).

The interviews were conversational in nature, allowing for open-ended responses that gently guided the interview. To create a friendly, non-threatening interview environment, questions were posed using "how" rather than "why", which can create a defensive response (Yin, 2014). Questions focused on gathering specific examples of barriers and facilitators of high teacher efficacy in the juvenile detention center education program. In addition, participants were asked to share suggestions for overcoming or reducing the effects of the barriers and suggestions for promoting the facilitators of high teacher efficacy. Interviews consisted of 20 questions. Interviews were recorded, which ensured greater accuracy than writing notes during an interview (Yin, 2014). A digital audio recorder was used to record interviews; however, a cell phone was available as a back-up recording device if the digital audio recorder had failed. The recordings were transcribed into Word documents, and the interviewer typed notes after each interview to record non-verbal cues and additional information.

Interviews were scheduled around the availability of study participants and were conducted inperson.

Data Collection

Site approval to collect data was obtained from the supervisor for the juvenile detention center education program, and IRB approval for this study was received. The supervisor was aware of the purpose of the study and participation requirements. The supervisor was also informed about the methods for establishing contact with study participants, obtaining informed consent for study participants, sending the link for the online study components, and scheduling interviews. After receiving IRB permission, the study participants were contacted in-person or by phone to inform them of the purpose of the study and the participation requirements. In addition, the informed consent process was explained to study participants. To protect participants' identities, demographic data was not collected. In addition, study participants were assigned a participant number. Throughout the study, all references to participants and their data only identified the participant number, not participant names.

In Qualtrics, the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) and the online questionnaire included an initial screen that briefly described this study, explained that participation is voluntary, and described the benefits, risks, and confidentiality associated with the study. In addition, the initial screen provided contact information for the principal investigator and the Concordia University-Portland Institutional Review Board Director. In order to proceed in Qualtrics to the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) and the questionnaire, study participants were required to indicate that they consented to the terms stated on the initial screen. Before beginning each interview, study participants were required to sign an informed consent form explaining information similar to the information on the initial Qualtrics screen.

The three modes of data collection involved the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), a six-question questionnaire, and an individual interview. One list containing the names of study participants along with their assigned participant number was stored on a USB drive. Throughout the study, all references to participants and their data only identified the participant number, not participant names. While participants remained anonymous to the reader, I had access to the participant name and participant number list.

The Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) and the questionnaire were created and distributed through Qualtrics. Online questionnaires present some challenges similar to those of mail questionnaires (Fowler, 2009). For example, the researcher needs to encourage people to respond to the questionnaire without the interviewer being present at the time the questionnaire is administered (Fowler, 2009). One way to overcome this problem is to engage in repeated contacts for those who do not respond to the initial request (Fowler, 2009). To reduce the effect of nonresponse on the questionnaire results, the invited participants received an email informing them this study would be taking place and their participation was sought.

Prior to this study, each invited participant was contacted in-person or by phone to ask for their preferred, non-work email address. Then an email was sent to each teacher inviting them to participate in the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) and questionnaire by accessing a link to Qualtrics. Once the email was sent, each invited participant was contacted in-person or by phone to tell them to expect the link in their inboxes. Since the teachers had two weeks to respond, invited participants were contacted through reminder emails on the sixth and twelfth days through the Qualtrics site if they had not yet completed the online data collection components. The scale and questionnaire was designed to allow teachers to opt

out of participating by clicking a link to unsubscribe from the study. The Qualtrics site was designed to notify me if that occurred.

Teachers' Sense of Efficacy Scale and online questionnaire. The link to the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) and six-question questionnaire was emailed to study participants. Study participants had two weeks to complete the two online components of the study in order to allow sufficient time to read, reflect on, and complete the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) and questionnaire. I reviewed the status of questionnaire responses daily on the Qualtrics site. The Qualtrics site allowed teachers to opt out of the study or to save and return to their editable work at any time before their final submission. For this study in which I am a colleague or former colleague of all the teachers in the sample, the use of a self-administered data collection procedure during the first two components of the study and the assurance of anonymity throughout the study reduced the effects of social desirability bias and embarrassment for respondents' answers (Fowler, 2009).

The decision to use a computer-based data collection method for the first two components of this study was based on the sample population, which included individuals who had strong reading and writing skills, as well as access to the internet. Since the teachers who were invited to participate in this study had two weeks to complete the Teachers' Sense of Efficacy Scale and the questionnaire, an online design ensured that teachers had access to the two components at home or away from home. Online qualitative data collection allows participants increased time to reflect without being forced to respond spontaneously (Merriam, 2009). However, some ethical concerns with online data collection exist, including participants' privacy protection and ownership of the data (Merriam, 2009). To address those concerns, the

participants in this study were not asked to disclose any personal identifying information and, prior to their participation in the online components and the interview component, were informed about how the data would be used.

Interviews. After the completion of the online Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) and questionnaire, study participants received a follow-up email to set up an interview. If a participant had not responded to the email within one week, a follow-up phone call was placed. In-person interviews were conducted using a loosely framed interview format including 20 questions that were asked of all participants. Interviews were digitally recorded on a digital audio recorder. Audio recordings were saved on digital memory cards. I maintained possession of the digital memory cards and have stored them in a desk drawer in my house. If the digital audio recorder had failed to function properly, interviews would have been recorded on my cell phone. The recordings were transcribed into Word documents, and the transcripts were saved on a USB drive that has been stored with the digital memory cards. In addition, at the conclusion of each interview, the interviewer typed notes to record non-verbal cues and other information. Those notes were saved on the USB drive that also contains the transcripts.

Identification of Attributes

The experiences of teachers working in juvenile detention center education programs differ significantly from the experiences of teachers in traditional school settings. Many students in locally run juvenile detention centers are in the facility for less than 60 days (Council of State Governments, 2015), resulting in frequent shifts in student populations. The need for special education services for incarcerated youth far exceeds the rate for youth in the community at-large (Council of State Governments, 2015). The rate of severe mental health illness among

incarcerated youth is significantly higher than the national rate (Gottesman & Schwarz, 2011). The majority of incarcerated youth have been suspended or expelled from school or dropped out of school before being incarcerated (Council of State Governments, 2015).

When confronted with the harsh environment of a juvenile detention center education program, some teachers can feel isolated and intimidated (Wright, 2005). However, several studies have found that highly efficacious teachers perform well in the challenging environment of a juvenile detention center education program (Cate, 2014; Cox et al., 2011; Houchins et al., 2009). As a result of encountering unique situations, the factors that influence teacher efficacy in juvenile detention center education programs likely differ considerably from the factors that influence teacher efficacy in traditional school settings. The three components of this study were designed to generate data about the factors influencing teacher efficacy in instructional strategies, student engagement, and classroom management for teachers with experience working in a juvenile detention center education program.

In self-administered, computer-based questionnaires, the researcher speaks to the respondent through a written questionnaire; therefore, the researcher must avoid inadequate wording (Fowler, 2009). The questionnaire that was used in this study included terminology that might not be universally understood. In order to ensure consistent meaning for all participants, the questionnaire included an introduction that defined teacher efficacy and explained the meaning of classroom management factors, classroom instructional factors, and student engagement factors. To ensure consistent measurement, each participant in the sample for this study was asked the same set of questions in the Teachers' Sense of Efficacy Scale, the online questionnaire, and the interview (Fowler, 2009).

In the introduction of the questionnaire for this study, teacher efficacy was defined as a teacher's beliefs in his or her ability to promote students' learning (Tschannen-Moran et al., 1998). The meanings of the three dimensions of teacher efficacy evaluated in the questionnaire were explained, as well. When answering the questionnaire questions about classroom management factors, study participants were instructed to reflect on establishing a classroom rules, and responding to defiant students. When answering the questionnaire questions about classroom instructional factors, study participants were instructed to reflect on implementing innovative instructional practices in the classroom, modifying lessons to meet the needs of individual students, gauging student comprehension of the lesson, and using a variety of assessment strategies. When answering the questionnaire questions about student engagement factors, study participants were instructed to reflect on fostering student creativity, engaging students who lack motivation, helping students value learning, and getting through to the most difficult students.

Data Analysis Procedures

The responses to the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) and the questionnaire were maintained on the Qualtrics site. For the Teachers' Sense of Efficacy Scale, Tschannen-Moran and Hoy (n.d.) recommended computing the subscale scores. To determine the subscale scores for Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management, Microsoft Excel was used to compute unweighted means of the items that load on each factor by grouping the responses according to the recommendations of Tschannen-Moran and Hoy (n.d.). For the long form of the Teachers' Sense of Efficacy Scale, eight questions are categorized within each of the three subscales.

Unweighted means for the three subscales were computed for each participant. Also, unweighted means for each question and for each subscale were computed for the group as a whole.

After recording data, a researcher must engage in data analysis. Analyzing data involves searching for meaning using an organized approach and then processing and communicating the findings in a way that is accessible to the audience (Hatch, 2002). Coding is used to identify characteristics within the collected data, and data is then analyzed for meanings, stories, themes, and patterns. When themes or patterns are identified across the data, the researcher can attach meaning to them (Richards & Morse, 2013). When a qualitative researcher locates multiple sources of evidence that support the same finding, the convergence of evidence triangulates the data (Yin, 2014).

This study used coding to identify patterns among responses to each questionnaire question and each interview question. The online questionnaire responses were coded to search for themes that connected ideas. The interviews were transcribed into Word documents and then coded. For this study, the coding strategy was based on recommendations from Hatch (2002). Questionnaire responses and interview transcripts were read multiple times. Key words and phrases were highlighted in order develop codes to group data based on identified relationships (Hatch, 2002). Codes were combined into categories and analyzed to identify themes across the codes and categories (Hatch, 2002). For this study, Qualtrics and Microsoft Excel were used to numerically analyze the data.

Quality control techniques were utilized for coding questionnaire responses and interview transcripts. I did all coding of the data. Each answer was assigned to only one code. Categories were created that grouped answers that were similar, while differentiating between answers that

were noticeably different (Fowler, 2009). A separate code was used for answers that did not clearly fit into the categories.

Limitations of the Research Design

This study had some limitations. First, the sample size was extremely small (n = 9). While the response rate was quite high, the small sample size resulted in limited findings. Second, all study participants were from one juvenile detention center. Therefore, the findings of this study cannot be generalized to teachers in other facilities. Third, in an attempt to increase the sample size, study participants included both current and former teachers of the juvenile detention center. All teachers who had worked at the facility in the past five years were invited to participate in the study. Detention center education program policies had not changed significantly in the five years prior to this study; however, teachers who no longer worked at the juvenile detention center had to rely on their memories of their experiences while teaching at the facility. In addition, former teachers included in this study left the juvenile detention center for various reasons. Therefore, some might have had negative feelings about their experiences at the facility, which could have affected their responses. Fourth, teachers were self-reporting data, which could have resulted in answers that were influenced by social desirability bias (Fowler, 2009).

Validation

Credibility. The credibility of the study is essential, which means the researcher must pay careful attention to presenting accurate and trustworthy data, data analysis, and conclusions (McMillian, 2012, p. 302). In order to maintain trustworthiness of the data for this study, interviews were recorded with consent from participants. Also, the findings of this study

included in-depth accounts that provided rich, thick description. Using these precautions increased the credibility of this study's findings.

Dependability. To increase the reliability of the data, this study sought to achieve triangulation by collecting data using multiple sources of evidence. By analyzing the data from multiple sources in an attempt to identify corroborating findings, a researcher is able to triangulate the data (Yin, 2014). Case study findings that are based on the convergence of data collected from various research instruments are more accurate (Yin, 2014). This study examined data from the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), an online questionnaire, and interviews. In addition to triangulation, researcher reflection and reflexivity were used throughout this study. The dependability of the data was increased by engaging in ongoing reflection, recognizing preconceptions, and being alert to the interview dynamics as the study unfolded (Yin, 2014).

Expected Findings

As a teacher in the juvenile detention center that was the setting for this study, I expected that several of the factors identified by study participants would appear as both barriers and facilitators of high teacher efficacy in different dimensions of teacher efficacy. For example, detention officers are present in every classroom whenever students are present. Detention officers can be a facilitator to efficacy in classroom management, since they are able to reinforce classroom rules and handle extreme situations of disruptive behavior. However, detention officers can also be a barrier to efficacy in student engagement, since officers sometimes engage students in discussions unrelated to the classroom lesson during class time. Also, for the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), I expected the means of the three domains to vary considerably. Efficacy in student engagement was expected to be the

lowest score for the group as a whole, since the questions in that subscale included fostering student creativity and helping students think critically. When dealing with incarcerated youth, those areas of teaching are particularly challenging.

Ethical Issues

Conflict of interest. Paradigms, which are frameworks that guide scientific research, are sometimes embedded in an individual's subconscious assumptions about their surroundings (Glesne, 2011). To conduct qualitative research that is both personally rewarding and publicly well-regarded, researchers must explore their own paradigms (Glesne, 2011). As a teacher at the juvenile detention center involved in this study, I had a personal interest in the research topic. I was aware of and sensitive to my bias.

Coercion was another potential ethical concern. I was cautious about inviting colleagues to participate in the study. All invited study participants were fully informed that participation was voluntary and that they could opt out of the study at any time. Special effort was made to ensure participants did not feel compelled to participate due to their professional relationship and sometimes personal relationship with me. In addition, interviews were conducted in a manner that minimized, as much as possible, any influence between the interviewer and the interviewee (Yin, 2014).

While certain ethical issues existed as a result of my professional background, I believe that my professional experience as a teacher in a juvenile detention center education program predisposed me to certain advantages over researchers who are unfamiliar with the culture of a juvenile detention center. For example, I understood the nuances of the study participants' daily experiences. As educational researchers know, "the research is labor intensive and the costs are high. For many studies, these are labors of love more than the work of science" (Stake, 2010, p.

29). After engaging in reflection and self-examination, I believe this study accounted for and minimized existing paradigms and researcher bias.

Researcher's position. Understanding the factors that influence teacher efficacy in different teaching environments can have an impact on teacher selection and teacher retention, which can ultimately affect a student's learning experience. Teaching in a juvenile detention center education program is not ideal for all educators and can negatively impact teacher efficacy even for highly experienced and well-trained teachers. Many students have learning disabilities, mental health issues, behavioral issues, and significant learning gaps. All students have experienced traumatic events, even if only their current situation in the juvenile justice system. At all times, teachers must be acutely aware of classroom materials that can be used as weapons. Verbal and physical altercations between students are not uncommon. Teachers must employ a variety of classroom management tactics that ensure the safety of all children and adults in the room, including themselves. The frustrations and challenges faced by teachers working with youth in the juvenile justice system are unique and omnipresent.

Some factors of teaching in this environment can negatively impact teacher efficacy, yet the rewards of teaching youth in juvenile detention centers can also be significant and positive. Teachers in these environments alter their definition of student learning. Rather than employing a series of objective, standardized assessments, teachers in juvenile detention centers often use subjective assessments based on their knowledge of each student's current situation. While a juvenile detention center is often a place of harsh rules and limited options for both students and teachers, teaching in this type of facility can also produce creative problem solving and tremendous satisfaction for teachers, as well as students. As a result, teacher efficacy can be positively affected.

Ethical issues in study. This study fully adhered to the protocols of the Concordia University-Portland Institutional Review Board. Permission was requested and obtained from the Concordia University-Portland Institutional Review Board prior to beginning any data collection. The privacy of study participants was protected, and data were collected without any personal identifying information. All study participants were sent study notifications, including the link to the online study components, via their preferred email address.

Prior to sending the link to the questionnaire, I notified all participants of the study's goal, as well as the data collection and analysis methods. Study participants were able to save and return to incomplete scales and questionnaires; however, each study participant was only allowed to submit the scale and questionnaire once. All study participants were informed that participation was voluntary and that they had the right to withdraw from the study anytime.

Chapter 3 Summary

A thorough examination of the research literature revealed two gaps in teacher efficacy studies. First, of the 16 teacher efficacy studies referenced in this paper, only two involved qualitative research methods (Houchins et al., 2009; Tsouloupas et al., 2014). Second, teacher efficacy studies have focused primarily on teachers in traditional school settings, which has excluded the population of teachers working in non-traditional education settings. Since teacher efficacy is domain-specific (Schwarzer & Hallum, 2008), educational research in this field should consider the effects of different teaching environments on teacher efficacy. While not a study specifically on teacher efficacy, Houchins et al. (2009) found that many of the issues faced by educators in traditional schools were even more prominent in programs serving incarcerated youth. Also, the study by Houchins et al. (2009) found that teachers in juvenile justice education programs dealt with additional challenges that were not prevalent in traditional school settings.

This study was designed to generate data that could begin to fill the gaps in educational research studies of teacher efficacy by engaging in a qualitative study of teachers in a non-traditional school setting.

Teaching incarcerated youth presents a variety of challenges. More than half of incarcerated youth have reading and math skills significantly below their grade level (Council of State Governments, 2015). The rate of severe mental health issues among incarcerated youth is more than double the national average (Gottesman & Schwarz, 2011). In addition, incarcerated youth often have negative attitudes toward classrooms and authority figures (U.S. Departments of Education and Justice, 2014). According to Bandura's (1997) model of triadic reciprocality, self-efficacy can be an influence on and also be affected by one's behaviors and environment. As a result, factors that influence teacher efficacy in a juvenile detention center education program are unique to that teaching environment. Since teachers are classroom leaders, teacher efficacy can have a significant impact on the classroom environment.

Chapter 4: Data Analysis and Results

Introduction

This single-case study was designed to describe factors influencing teacher efficacy in instructional strategies, student engagement, and classroom management among teachers currently or recently working in a juvenile detention center education program in southeastern Pennsylvania. According to social cognitive theory, self-efficacy is domain-specific, meaning self-efficacy can vary based on the domain or situation (Schwarzer & Hallum, 2008). Therefore, understanding the factors teachers perceive to be influencing their self-efficacy in a particular environment, such as a juvenile detention center, can be useful in developing strategies to support high teacher efficacy in a specific school setting.

The data resulting from this study may be used by school-based leaders and district-level leaders to develop induction programs and structural supports that address the factors identified in this study and to create professional development opportunities that examine strategies for supporting high teacher efficacy. The findings of this study can ultimately contribute to creating an academic environment that promotes high teacher efficacy and fosters student learning. The research questions that guided this study are listed below.

Research question 1. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards being able to manage a classroom?

Research question 2. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards utilizing classroom instructional strategies?

Research question 3. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards being able to engage students in the classroom?

Data collection. Data collection for this study involved three components, the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), a six-question questionnaire, and an in-person interview. First, study participants completed the 24-question long form of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) online using Qualtrics. The Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) is a measurement tool that examines three dimensions of teacher efficacy: Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management. Then, using an online questionnaire in Qualtrics, teachers were asked to describe barriers to high teacher efficacy and facilitators of high teacher efficacy in their work environment. After completing the Teachers' Sense of Efficacy Scale and questionnaire, each participant was individually interviewed using a consistent set of questions to further examine the factors influencing teacher efficacy in the juvenile detention center education program. The interview was recorded, transcribed, and reviewed by me as the principal investigator. After data were collected from the nine participants for the three components, data analysis procedures were used to identify themes or patterns in the collected data.

Data analysis procedures. The responses to the Teachers' Sense of Efficacy Scale and the questionnaire were maintained on the Qualtrics site. The Teachers' Sense of Efficacy Scale was analyzed using the scoring guide provided by Tschannen-Moran and Hoy (2001), the developers of the scale. For the long form of the Teachers' Sense of Efficacy Scale, eight questions were categorized within each of three subscales, including Efficacy in Student

Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management. Tschannen-Moran and Hoy (2001) assessed the factor structure, reliability, and validity of the scale using samples of practicing teachers (n = 255) and preservice teachers (n = 111). For practicing teachers, teacher efficacy subscale scores for each of the three dimensions proved a reliable measure. Examining the factor structure of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), Fives and Buehl (2010) confirmed that practicing teachers clearly identified efficacy beliefs associated with the three separate dimensions in the scale. The reliability for the long form was 0.94. However, for preservice teachers, the three dimensions were not a reliable measure. For preservice teachers, total score proved to be a more accurate measure of teacher efficacy. To examine the construct validity of the long form and the short form, Tschannen-Moran and Hoy (2001) assessed the correlation between the Teachers' Sense of Efficacy Scale and other existing measures of teacher efficacy. For both the long and short forms, the results indicated that the Teachers' Sense of Efficacy Scale is a valid and reliable measure of personal teaching efficacy (Tschannen-Moran & Hoy, 2001). Based on the scoring guide provided by Tschannen-Moran and Hoy (2001), the unweighted means for the three subscales were computed for each participant in this study. In other words, each answer contributed equally to the final average, with no answer contributing more or less than any of the other answers. Also, unweighted means for each question and for each subscale were computed for the group as a whole.

The data collected from the questionnaire and the interview with each participant were analyzed and manually coded using the coding strategies recommended by Hatch (2002). I transcribed each interview into a Word document. I read the questionnaire responses and interview transcripts multiple times. On printed copies of the questionnaire responses and

interview transcripts, key words and phrases were highlighted. The entries were read again to determine if any key words and phrases had been missed initially. Highlighted words and phrases were typed into a Microsoft Excel spreadsheet to provide a visual display of the color coding in a more condensed format. After reviewing the key words and phrases, a set of codes emerged which grouped data based on identified relationships (Hatch, 2002). Each entry was assigned to only one code in order to summarize the data. Categories were created that grouped codes that were similar, while differentiating between codes that were noticeably different (Fowler, 2009). A separate code was used for answers that did not clearly fit into the categories. The codes and categories were then analyzed to identify themes (Hatch, 2002).

Quality control techniques were utilized for coding questionnaire responses and interview transcripts. As the principal researcher, I conducted all coding of the data. The coding strategy was based on recommendations from Hatch (2002). Questionnaire responses and interview transcripts were read multiple times. Key words and phrases were highlighted in order develop codes to group data based on identified relationships (Hatch, 2002). Codes were combined into categories and analyzed to identify themes across the codes and categories (Hatch, 2002). Throughout this study, the protocol stated in Chapter 3 was adhered to in its entirety. For additional information about the data analysis protocol and procedures, refer to the Data Analysis Procedures section of Chapter 3: Methodology.

Results. After responses were collected using the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), the questionnaire, and the interview, the data were analyzed. Based on the data analysis, factors were identified that influence teacher efficacy in the juvenile detention center. The results are described below.

Teachers' efficacy scale results. When analyzed for the group as a whole, the results of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) revealed the participants in this study felt most efficacious in instructional strategies (6.83 out of 9) and least efficacious in student engagement (5.86 out of 9). The Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) data were also analyzed based on individual respondents. Consistently across the subscales, the responses of Participants 1, 3, 6, 8, and 9 indicated they had some influence in each of the three dimensions of teacher efficacy. No respondents indicated they felt very little or no influence in any of the three dimensions.

Questionnaire results. The results of the questionnaire revealed some commonalities among the responses for both the barriers and the facilitators of high teacher efficacy. Overall, there was some consensus regarding the barriers to high teacher efficacy in the juvenile detention center. The main barriers to teacher efficacy identified by the questionnaire data from this study include: frequent turnover in student population, mandatory school attendance, classroom distractions, and mixed ability student groupings. In fact, school groupings that resulted in mixed age, mixed ability classrooms was cited by 67% of respondents as the most significant barrier to high teacher efficacy in instructional strategies. The questionnaire data also indicated the main facilitators of teacher efficacy at the juvenile detention center include: the presence of detention officers in the classroom, high interest lesson topics, positive learning climate, building rapport with students, differentiated instruction, and consistent classroom rules. Differentiated instruction was actually identified by 78% of questionnaire respondents as a facilitator of high teacher efficacy in instructional strategies.

Interview results. The interview transcripts were analyzed to identify key words and phrases, codes, categories, and themes. Themes were then further analyzed to determine which

research question they addressed. Finally, within each research question, themes were identified as either a barrier or a facilitator of high teacher efficacy.

Initial codes. After reviewing the key words and phrases from the interview transcripts, a set of codes emerged. These codes included: administrators, student negativity, limited background information, distractions, establish a connection, encourage students, be positive, violent behavior, detention officers, safety, teacher learning curve, set expectations, collaboration, frequent turnover, professional development, facility rules, mixed age and mixed ability classrooms, differentiated instruction, lessons related to real-world experiences, flexibility, and instructional risks. The codes were then categorized based on similarity of answers, and a separate code called Other was created for answers that did not clearly fit the categories.

Themes. After analyzing the codes and categories, themes were identified. The themes were examined to determine which research question they addressed and were classified as either a barrier or a facilitator of high teacher efficacy at the juvenile detention center. Based on the interview data, the themes regarding barriers and facilitators of high teacher efficacy for each research question are described below.

Themes aligned to research question 1. As identified by the interview data, the themes regarding teacher efficacy towards being able to manage a classroom included barriers and facilitators. The theme of barriers to teacher efficacy in classroom management included several codes, such as presence of detention officers in classrooms, violent student behavior, safety concerns, student groupings, learning curves for new teachers, administrators who do not understand the student population, unknown student triggers, student mental health issues, low faculty morale, and lack of empathy from students. The presence of detention officers in the

classroom was cited in 20.69% of responses. Participant 7 stated, "Detention officers have a valuable job, but they have stuff going on in their personal lives that they bring into the classroom, just like we do and just like the students do." The theme of facilitators of teacher efficacy in classroom management included several codes, such as consistent classroom routine, starting each day with a fresh perspective, presence of detention officers in classrooms, positive classroom climate, empathy toward students, classroom leadership, seeking input from colleagues, and using preventive measures to ensure safety. Consistent classroom routine and starting each day with a fresh perspective each accounted for 20.51% of interview responses regarding facilitators of teacher efficacy in classroom management. Participant 1 said, "I outline what we are going to do at the beginning of the class period. When they know what is ahead of them for the class period, they are able to focus a little bit more."

Themes aligned to research question 2. As identified by the interview data, the themes regarding teacher efficacy towards being able to utilize classroom instructional strategies included barriers and facilitators. The theme of barriers to teacher efficacy in classroom instructional strategies included several codes, such as frequent turnover in student population, limited options for student assessment, mixed ability student groupings, lack of relevant professional development, intrusive administrators, limitations imposed by safety rules, and classroom distractions. Frequent turnover in student population was cited in 24.24% of interview responses about barriers to teacher efficacy in instructional strategies. Participant 6 stated, "Students stay at Detention for short periods of time. There's very little you can do in 10 days." The theme of facilitators of teacher efficacy in instructional strategies included several codes, such as relevant lessons, differentiated instruction, flexibility, collaboration, educational activities, teacher self-reflection, teacher-selected professional development, and taking

instructional risks. Relevant lessons was identified by 30.23% of interview responses as the most significant facilitator of teacher efficacy in instructional strategies. Participant 5 said, "This is kind of a practice place for the students to work on any skill, behavior, social skill, emotion, or reaction that might occur, and so you focus on those."

Themes aligned to research question 3. As identified by the interview data, the themes regarding teacher efficacy towards being able to engage students in the classroom included barriers and facilitators. The theme of barriers to teacher efficacy in student engagement included several codes, such as negative student attitudes, classroom distractions, and limited background information about students. Negative student attitudes and classroom distractions were each cited by 31.25% of interview responses about barriers to teacher efficacy in student engagement. Participant 4 said, "The students are often so distracted that all they can think about is going to court, going before the judge. They can't even focus." The theme of facilitators of teacher efficacy in student engagement included several codes, such as building rapport with students, creating opportunities for student success, and mandatory school attendance. In fact, building rapport with students was cited by more than half (52.63%) of responses about facilitators of teacher efficacy in student engagement. Participant 3 stated, "It proves how good of a teacher you are if you can motivate students who don't want to be there and don't want to learn."

Findings. After comparing the results of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), the questionnaire, and the interview transcripts, several universal themes were found. Based on the convergence of data from each of the three methods of data collection used in this study, the barriers to high teacher efficacy in classroom

management include: student misbehavior, classroom distractions, and student groupings of mixed ability levels.

Role of principal researcher. In my role as principal researcher for this study, I was aware of and sensitive to the ethical issues that could result from my professional and sometimes personal relationship with the study participants. As a teacher in the juvenile detention center, I have worked as a colleague with all the study participants over the past 5 years.

In order to conduct this qualitative research study in a manner that reduced the potential for bias or conflict of interest, I adhered to uniform data collection and data analysis procedures throughout the study. To ensure participants did not feel compelled to participate due to their professional and/or personal relationship with me, the invitation to participate in the study was sent via email, and each study participant acknowledged their informed consent before participating. Prior to beginning each component of the data collection, study participants were informed participation was voluntary and they could opt out of the study at any time. The Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) and the questionnaire were conducted online in an effort to remove as much as possible any influence between the participants and me.

After completing the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) and the questionnaire, each participant was individually interviewed. Each interview lasted approximately one hour and was conducted according to a specific interview protocol, including a preset list of interview questions. In addition, each interview was conducted at a non-work location that was mutually agreed upon by the interviewer and interviewee to remove the possible effect of the professional relationship between the participant and me. Since my preconceptions and personal bias could have influenced the data gathered during these

interviews, I engaged in bracketing before beginning the interviews. In qualitative research, bracketing is a method used to diminish the harmful effects that a researcher's preconceptions could have on the research process (Tufford & Newman, 2010). Prior to conducting interviews for this study, I engaged in dialogue with individuals who were not study participants about my personal experiences and biases regarding the research topic. I outlined those preconceptions and addressed them in Chapter 3. Using reflexivity and bracketing, I was able to understand the statements of the participants within their own viewpoints, rather than imposing my biases or preconceptions onto their statements.

To maintain objectivity in data analysis, I followed a consistent procedure for analyzing the data collected from study participants. The teacher efficacy scale was analyzed using the scoring guide provided by Tschannen-Moran and Hoy (2001), the designers of the Teachers' Sense of Efficacy Scale used in this study. The data collected from the questionnaire and the interview were analyzed using predetermined coding strategies. Each answer was assigned to only one code. A separate code was used for answers that did not clearly fit into the categories. Categories were created that grouped similar answers. Qualtrics and Microsoft Excel were used to numerically analyze the data. By strictly adhering to this conflict of interest management plan during data collection and data analysis, I reduced the potential for conflict of interest created by my relationships with the study participants.

I believe my personal interest in the research topic and my professional experience as a teacher in a juvenile detention center education program predisposed me to certain advantages over researchers who were unfamiliar with the culture of the juvenile detention center. I understood the nuances of the study participants' daily experiences, and I was familiar with the acronyms and colloquial language commonly used in the juvenile detention center. By adhering

to uniform data collection and data analysis procedures, I was able to reduce as much as possible the potential conflict of interest created by my relationships with the study participants.

Organization. The data analysis and results of this study are presented in this chapter. In addition, demographic information about the participant sample and a description of the methodological approach are included. This chapter is divided into the following sections: Introduction, Description of the Sample, Research Methodology and Analysis, Summary of the Findings, Presentation of the Data and Results, and Chapter 4 Summary.

Description of the Sample

Research population. The research population for this study consisted of all teachers who are working or who have worked within the past five years at a juvenile detention center education program in Pennsylvania (n = 9). The number of full-time teachers at the juvenile detention center for the 2016–2017 school year, the year this study took place, was three, including me. For this study, I served as the principal researcher, but excluded myself from serving as a participant. Therefore, to increase the sample size, the research population was expanded to include seven additional teachers who have worked at the juvenile detention center in the past five years, but are no longer teaching at the facility. Excluding me, all teachers who met these criteria (n = 9) were invited to participate in the study. Invited participants included three men and six women. Seven of the invited participants had more than 10 years of teaching experience, while the other invited participants had three years and six years of teaching experience. All participants were Caucasian. All participants were also state-certified in their respective disciplines.

Response rate. All participants chose to take part in the three methods of data collection, including the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), an

online questionnaire, and an in-person interview. As the principal researcher and a colleague or former colleague of all nine participants, I was acutely aware of the need to reduce the effect of coercion throughout the study. Invited participants were reminded prior to joining the study and prior to each stage of data collection that participation was voluntary and they could opt out of the study at any time. To ensure participants did not feel compelled to participate due to their professional relationship and sometimes personal relationship with me, I used an online, self-administered data collection procedure during the first two components of the study. In addition, the informed consent process was fully explained, and participants were required to acknowledge their consent prior to completing the online components and the interview stage of the study.

To reduce the potential effects of social desirability bias and embarrassment for respondents' answers, participants were assured of their anonymity throughout the study (Fowler, 2009). To protect participants' identities, no demographic data were collected. Study participants were assigned a participant number. References to participants and their data identified only the participant numbers, not participant names, throughout the study.

A small sample size allows the researcher to establish a relationship with study participants, seek depth of data, and generate relevant, unique results upon which future studies can build (Crouch & McKenzie, 2006). Although the sample size for this study was small (n = 9), the response rate was 100% for all three components of data collection. In qualitative research, one occurrence of datum is as useful as many because all data become part of the analysis framework (Mason, 2010). Therefore, the data collected for this single-case study can generate meaningful results.

Research Methodology

Background. Teacher efficacy, which is a teacher's beliefs about his ability to influence student learning, is a multidimensional construct (Gibson & Dembo, 1984; Guskey & Passaro, 1994; Skaalvik & Skaalvik, 2007). The Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) identified three dimensions of teacher efficacy, including instructional strategies, student engagement, and classroom management. Fives and Buehl (2010) confirmed practicing teachers identified efficacy beliefs associated with the three dimensions in the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001).

Social cognitive theory, which includes the concepts of triadic reciprocality and self-efficacy, provide a framework for examining the concept of teacher efficacy (Bandura, 1997). Social cognitive theory states an individual acquires knowledge by observing others in social situations (Bandura, 1997). When an individual repeatedly experiences or observes others experiencing success after overcoming obstacles, self-efficacy and ultimately behavior are influenced (Bandura, 1997). Therefore, self-efficacy is situation-specific and impacted by environment (Bandura, 1997; Schwarzer & Hallum, 2008). According to the concept of triadic reciprocality, self-efficacy is both a cause and an effect of an individual's external environment and internal personal factors (Bandura, 1997). Since teacher efficacy is a malleable construct that is situation-specific (Schwarzer & Hallum, 2008), understanding the factors that impact teacher efficacy in different environments can be useful in developing strategies to support high teacher efficacy.

Single-case study. The strategy used for this study was a single-case study methodology to examine factors that influence teacher efficacy in instructional strategies, student engagement, and classroom management in a juvenile detention center education program in southeastern

Pennsylvania. A single-case study design investigates and analyzes a single case within a single context (Yin, 2014). For this study, the single case represented an unusual case, since previous teacher efficacy studies focused primarily on teachers in traditional school settings. The findings of studies of unusual cases may reveal insights about normal processes, which can ultimately benefit more people than just those individuals involved in the single case (Yin, 2014).

Summary of the Findings

Teachers' Sense of Efficacy Scale. The first component of data collection was the Teachers' Sense of Efficacy Scale, which is a measurement tool that examines three dimensions of teacher efficacy: Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management (Tschannen-Moran & Hoy, 2001). The scale uses a nine-item, Likert-type rating for each item. The scale ratings are labeled as follows: 1-nothing, 3-very little, 5-some influence, 7-quite a bit, and 9-a great deal. For this study, participants completed the 24-question long form of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) online using Qualtrics. Then data were transferred into Microsoft Excel for analysis.

Below are three tables summarizing the data collected from the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001). Table 1 displays the unweighted means for each participant for the subscale scores evaluated by the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), which include teacher efficacy in student engagement, teacher efficacy in instructional strategies, and teacher efficacy in classroom management. According to the data listed in Table 1, the responses of Participants 2, 4, and 5 indicated they feel highly efficacious in the area of creating and supporting student engagement. On the nine-item, Likert-type rating scale participants used to respond to the questions on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), a response of 7, 8, or 9 indicates a respondent feels they

can do quite a bit to a great deal to influence student learning in a specific area. Participants 2, 4, 5, and 7 expressed high teacher efficacy in instructional strategies. In fact, the responses of Participants 4 and 5 reflect high teacher efficacy in all three dimensions of teacher efficacy. Consistently across the subscales, the responses of Participants 1, 3, 6, 8, and 9 indicated those teachers felt they have some influence in each of the three dimensions of teacher efficacy. No respondents indicated they felt very little or no influence in any of the three dimensions.

Unweighted Means by Participant for Teachers' Sense of Efficacy Scale Subscales

Table 1

	•	,	•
Participant	Student Engagement	Instructional Strategies	Classroom Management
1	4.75	6.00	5.38
2	7.38	8.25	6.13
3	5.50	6.38	6.75
4	7.0	8.25	7.25
5	7.50	7.25	8.00
6	5.75	6.50	6.75
7	4.88	7.13	6.00
8	4.75	6.50	5.50
9	5.25	5.25	6.63

While Table 1 shows the data by participant, Table 2 reflects the unweighted means for each question on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) for the group of respondents as a whole. By far, the lowest score was Question 22, which asked how much a teacher felt they could do to assist a student's family in helping with the student's education. The unweighted mean for that question indicated a response of nothing to very little,

according to the nine-item, Likert-type rating scale. Teachers at the juvenile detention center have limited contact with students' families for a variety of reasons. Sometimes court-ordered directives prohibit communication between a student and their family or about a student to their family. Identifying a student's legal guardian is often complicated by unique family situations. Also, teacher interaction with students' families is discouraged for the safety of the teachers. Since teachers often have no contact with students' families, they may feel helpless in creating a school-home partnership, which could explain the low score for Question 22.

Table 2

Unweighted Means of Group for Teachers' Sense of Efficacy Scale Questions

Question	Unweighted Means
1. How much can you do to get through to the most difficult students?	6.22
2. How much can you do to help your students think critically?	6.67
3. How much can you do to control disruptive behavior in the classroom?	6.67
4. How much can you do to motivate students who show low interest in school work?	6.44
5. To what extent can you make your expectations clear about student behavior?	7.67
6. How much can you do to get students to believe they can do well in school work?	7.56
7. How well can you respond to difficult questions from your students?	7.00
8. How well can you establish routines to keep activities running smoothly?	6.67
9. How much can you do to help your students value learning?	6.22
10. How much can you gauge student comprehension of what you have taught?	6.78

Table 2 Continued

Question	Unweighted Means
11. To what extent can you craft good questions for your students?	7.44
12. How much can you do to foster student creativity?	6.89
13. How much can you do to get children to follow classroom rules?	6.67
14. How much can you do to improve the understanding of a student who is failing?	5.22
15. How much can you do to calm a student who is disruptive or noisy?	5.78
16. How well can you establish a classroom management system with each group of students?	6.78
17. How much can you do to adjust your lessons to the proper level for individual students?	6.67
18. How much can you use a variety of assessment strategies?	5.89
19. How well can you keep a few problem students form ruining an entire lesson?	5.78
20. To what extent can you provide an alternative explanation or example when students are confused?	7.67
21. How well can you respond to defiant students?	5.89
22. How much can you assist families in helping their children do well in school?	1.67
23. How well can you implement alternative strategies in your classroom?	6.67
24. How well can you provide appropriate challenges for very capable students?	6.56

The highest unweighted means for the questions indicated the group of respondents felt they had quite a bit of influence in five areas. The participants as a whole believed they could clearly communicate their expectations about student behavior. Participants also indicated they

were able to get their students to believe they could succeed in their school work. The respondents felt they could respond well to difficult questions from students and they could create high-quality questions for their students. Also, when students were confused, the group of respondents indicated they could provide an alternative explanation or example that would clarify the information. With the exception of the responses to Question 22 likely stemming from a lack of interaction with students' families, the responses for the group as a whole indicated an overall sense of efficacy in which these teachers believed they had at least some and often quite a bit of influence in their ability to impact student learning.

Table 3

Unweighted Means of Group for Teachers' Sense of Efficacy Scale Subscales

5.86
6.83
6.49

While Table 1 displays the unweighted means for each participant for the subscale scores, Table 3 above indicates the unweighted means for each subscale score for the group of respondents as a whole. The data in Table 3 show the group felt most efficacious in developing and implementing instructional strategies to impact student learning at the juvenile detention center. This finding is supported by the data in Table 2, which shows the respondents as a whole believed they were able to impact student learning by responding well to difficult questions from students, developing high-quality questions for their students, and providing an alternative explanation when a student was confused.

The data displayed in Table 3 show the group as a whole felt least efficacious in student engagement, though the unweighted means indicated they felt they had some influence in that area. Student engagement involves fostering student creativity, engaging students who lack motivation, helping students value learning, and getting through to the most difficult students. While the results listed in Table 2 show the group as a whole felt they were able to get their students to believe they could succeed in their school work, the data in Table 3 indicate there are other areas of student engagement for which this group of teachers did not feel they had as much influence.

Summary of Teachers' Sense of Efficacy Scale. The findings of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) present an overview of the levels of teacher efficacy among the teachers who are working or who have recently worked at this juvenile detention center. No individual teachers responded they had low teacher efficacy across all three dimensions. In fact, two of the nine participants expressed high efficacy in all three dimensions. When the responses to each question were examined for the group as a whole, the results indicated an overall sense of efficacy in which these teachers believe they have at least some and often quite a bit of influence in their ability to impact student learning, although a lack of interaction with students' families seemed to create a skewed response to one question. The group as a whole felt most efficacious in developing and implementing instructional strategies to impact student learning in the juvenile detention center. They felt least efficacious in influencing student engagement. The analysis of the data gathered from the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) indicates there are factors impacting teacher efficacy in each of the three dimensions for individual teachers and for the group as a whole.

Questionnaire. For the second component of data collection, participants completed a six-question online questionnaire designed to identify barriers and facilitators of high teacher efficacy in a juvenile detention center education program. All nine invited participants completed the questionnaire providing answers to the six questions. The questionnaire questions were specifically designed to examine barriers and facilitators within the three dimensions of teacher efficacy identified by Tschannen-Moran and Hoy (2001) in the Teachers' Sense of Efficacy Scale. The six questionnaire questions were modeled after the questions used in a qualitative study by Houchins et al. (2009), in which data were collected from questionnaires of teachers of incarcerated youth. For the study involved in this dissertation, participants completed the questionnaire using Qualtrics. The questionnaire data were examined for the group of participants as a whole. The results of the coding of the questionnaire data were also examined in conjunction with the coding of the interview data.

Below are two tables (Table 4 and Table 5) summarizing the data collected from the online questionnaire. Table 4 displays the results of the three questions focused on identifying the barriers to high teacher efficacy in classroom management, instructional strategies, and student engagement. Table 5 displays the results of the three questions focused on identifying the facilitators of high teacher efficacy in classroom management, instructional strategies, and student engagement.

Table 4 below shows the results of the online questionnaire responses regarding barriers to high teacher efficacy in student engagement, instructional strategies, and classroom management at the juvenile detention center. While questionnaire responses varied regarding some of the barriers, several patterns were quickly noted. For example, classroom distractions were identified as a barrier for all three dimensions of teacher efficacy. Also, the majority of

respondents clearly identified one significant barrier in each of the three dimensions of teacher efficacy.

Table 4

Barriers to Teacher Efficacy based on Number of Questionnaire Responses

Dimension of Teacher Efficacy	Student Turnover	-	Classroom Distractions	Student Groupings	Other
Student Engagement	1	2	5	0	1
Instructional Strategies	0	0	2	6	1
Classroom Management	2	2	4	0	1

Serving as the most noted barrier to high teacher efficacy in classroom management, classroom distractions were identified as a barrier by 44% of the participants. Participant 6 wrote, "Often detention center staff cause disruptions during a lesson by talking with each other, having the volume on their walkie-talkies turned too high, leaving the room, or inviting others into the room to carry on conversations." Classroom distractions were also cited as the most significant barrier to high teacher efficacy in student engagement, with 56% of participants identifying this barrier. Participant 2 wrote, "Our students' academics efforts are often thwarted. This can be seen when we get them into an assignment and working, and they get called out of the classroom and are unable to complete the assigned work when they return." The most frequently identified barrier to high teacher efficacy in instructional strategies was school groupings that resulted in mixed age, mixed ability classrooms, according to 67% of the respondents. Participant 9 wrote, "It is extremely difficult to design a lesson that meets the needs of a 10 year old student sitting in class next to a 20 year old. . . . The goal often becomes meeting the needs of the students in the middle." As a result, teacher efficacy is negatively impacted.

The questionnaire data collected about barriers to high teacher efficacy in each of the three dimensions resulted in one piece of data for each dimension that was coded as Other, meaning it did not fit into any of the other codes. Since the sample size for this study is small (n = 9), those data are worth noting. For teacher efficacy in student engagement, one respondent noted that limited background information about students serves a barrier. For teacher efficacy in instructional strategies, one respondent wrote that lack of classroom technology is a barrier. Another participant noted that the rules required to maintain a safe environment serve as a barrier to high teacher efficacy in classroom management.

Table 5

Facilitators of Teacher Efficacy based on Number of Questionnaire Responses

Dimension of Teacher Efficacy	Officer Presence	Learning Climate	Differentiated Instruction	Relevant Topics	Classroom Rules	Build Rapport
Student Engagement	0	2	0	5	2	0
Instructional Strategies	1	1	7	0	0	0
Classroom Management	4	2	0	1	0	2

Table 5 above shows the results of the online questionnaire responses regarding facilitators of high teacher efficacy in student engagement, instructional strategies, and classroom management at the juvenile detention center. As with barriers, several facilitators of high teacher efficacy were quickly noticeable when reviewing the findings. Creating a positive learning climate served as a facilitator of high teacher efficacy for all three dimensions.

Participant 2 wrote, "We have an opportunity to show a student who had past negative school experiences that school can be a positive learning environment. . . . Sometimes all it takes is one positive experience to help a student start moving in a positive direction." The questionnaire responses repeatedly indicated teachers at the juvenile detention center believe that encouraging

students to experience academic success, even in the smallest way, is a significant accomplishment for students who may not have previously experienced academic success. Participant 9 wrote, "Many students have repeatedly failed in school, had teachers tell them they are incapable, suffer from extremely low self-esteem, and see little purpose in learning. These students respond amazingly well to instruction and assessment that promote success." Creating a positive learning climate and encouraging student success positively impact teacher efficacy at the juvenile detention center.

Also similar to the responses about barriers to high teacher efficacy, the majority of respondents clearly identified one significant facilitator in each of the three dimensions of teacher efficacy. The presence of detention officers in the classroom was identified most often as a facilitator of high teacher efficacy in classroom management, with 44% of respondents noting this on the questionnaire. Participant 7 wrote, "The extent that officers are willing to help students, join in a discussion, or, at the very least, not disrupt lessons themselves and help keep students from doing the same facilitates my teaching efficacy." Fifty-six percent of participants indicated the use of high interest topics was the most important facilitator to high teacher efficacy in student engagement. Participant 8 wrote, "I attempt to use topics that are interesting and relevant for students. I encourage students to participate in discussions. I include technology when appropriate. I use short videos to build background knowledge." The most commonly identified facilitator of high teacher efficacy in instructional strategies was the use of differentiated instruction, which was indicated by 78% of the questionnaire respondents. Participant 9 wrote, "The uniqueness of the detention setting allows a teacher to design and implement their own curriculum. A teacher can easily adapt or change methodology to better

instruct students and employ numerous strategies to deliver instruction in the best manner possible."

Summary of questionnaire. The results of the online questionnaire identified trends in the data regarding barriers and facilitators to high teacher efficacy in classroom management, instructional strategies, and student engagement. In addition to individual barriers and facilitators, the questionnaire data also identified some interesting relationships between the responses for both the barriers and the facilitators of high teacher efficacy. For example, teaching in a mixed age, mixed ability classroom was noted as the most significant barrier to high teacher efficacy in instructional strategies. Therefore, it is worth noting that the most commonly identified facilitator of high teacher efficacy in instructional strategies was the use of differentiated instruction in the classroom, which might be out of necessity from teaching students of mixed ages and ability levels.

While there is consensus regarding the barriers to high teacher efficacy in the juvenile detention center, the outliers can be significant as well. Since the sample size was small for this study, every response to each question can contribute to the greater understanding of the research topic (Mason, 2010). Barriers to high teacher efficacy identified by only one respondent each include limited background information about each student, the lack of technology in the classroom, and the limitations imposed by detention rules for maintaining a safe environment.

The data indicate greater consensus among the facilitators for high teacher efficacy at the juvenile detention center. All responses regarding facilitators were identified by at least two respondents, although not always for the same dimension of teacher efficacy. For example, one participant noted that using high interest topics was a facilitator for high teacher efficacy in classroom management. Five participants agreed that using high interest topics was definitely a

facilitator of high teacher efficacy; however, they indicated that it was a facilitator for student engagement, rather than classroom management.

Interviews. The third and final component of data collection involved an in-person interview with each participant. Of the 20 interview questions, 11 questions were designed to elicit answers that generated data about the study topic as a whole. The nine additional questions consisted of three sets of three questions, with each set designed to probe one of the three specific research questions. Each interview was recorded using a digital audio recorder. I transcribed the recordings into Word documents.

Examination of interview data involved manual coding of printed copies of the interview transcripts. The initial codes included: administrators, student negativity, limited background information, distractions, establish a connection, encourage students, be positive, violent behavior, detention officers, safety, teacher learning curve, set expectations, collaboration, frequent turnover, professional development, facility rules, mixed age and mixed ability classrooms, differentiated instruction, lessons related to real-world experiences, flexibility, and instructional risks. The codes were then categorized based on similarity of answers, and a separate code called Other was created for answers that did not clearly fit the categories. After analyzing the codes and categories, several themes were identified. The themes were then examined to determine which research question they addressed. Within each research question, the themes were further classified as either a barrier or a facilitator of high teacher efficacy at the juvenile detention center.

Interview data about barriers to teacher efficacy in student engagement. The interview data indicated three main themes that serve as barriers to high teacher efficacy in student engagement at the juvenile detention center. Based on the interview data from this study, the

three main themes that serve as barriers to teacher efficacy in student engagement are: negative student attitudes, classroom distractions, and limited background information about students.

Table 6 below displays the themes identified as barriers based on the interview data. Further information about each theme regarding barriers to teacher efficacy in student engagement is explained following Table 6.

Table 6

Barriers to Teacher Efficacy in Student Engagement Based on Interview Responses

Barrier	Percent of Interview Responses
Negative Student Attitudes	31.25
Classroom Distractions	31.25
Limited Student Background Information	25.00
Other	12.50

Negative student attitudes. Table 6 above shows the results of the interview responses regarding barriers to high teacher efficacy in student engagement at the juvenile detention center. Negative student attitudes was noted in 31.25% of interview responses about barriers to high teacher teacher efficacy in student engagement. Several teachers stated that students at the juvenile detention center can have negative attitudes in the classroom for a variety of reasons. Participant 3 said, "You might think they don't like your subject, but maybe they just found out they're going to be here two more weeks or something bad happened in their family. You don't know why and you may never know why." Another participant identified other factors that can negatively impact student attitudes. Participant 4 said, "Some of them have had such bad experiences. They hate teachers. They hate school. Their whole lives revolve around detention centers or families that they couldn't count on or that kicked them out because of drug

addiction." These negative student attitudes serve as a barrier to teacher efficacy in student engagement.

Classroom distractions. An additional 31.25% of answers about barriers to teacher efficacy in student engagement identified classroom distractions. Participant 5 stated, "Because we have so many kids who have trauma, they're always distracted by something. So they remember one step, but they don't remember the other four steps." More concrete class distractions were mentioned in other interviews. For example, Participant 2 said, "You just get them pulled into your lesson, and then suddenly they have to go see the nurse or the dentist or their probation officer. When they come back, their mindsets are different. Their stress levels are changed." Classroom distractions, whether internal distractions or external distractions, were identified as a barrier to teacher efficacy in student engagement.

Limited student background information. Having limited background information about students was identified in 25% of interview responses as a significant barrier to teacher efficacy in student engagement. Participant 7 said, "All of our students come to us with different backgrounds, which we typically don't know about unless you do a little bit of investigation and ask questions, which we're not supposed to do." Similarly, Participant 4 said, "They come in, and we have no idea where they come from, how they're feeling, if they're drug addicted, or if they have psychiatric problems." Other interview answers about barriers to high teacher efficacy in student engagement included administrators who do not understand the student population at the juvenile detention center (6.25% of responses) and teacher negativity that builds over time (6.25% of responses).

Interview data about facilitators of teacher efficacy in student engagement. Interview responses regarding facilitators of high teacher efficacy in student engagement indicated three

main facilitators. Based on the interviews for this study, the three main facilitators of teacher efficacy in student engagement are: building rapport with students, creating opportunities for student success, and mandatory school attendance. Table 7 below displays the facilitators identified during the interview phase of data collection. Further information about each facilitator to teacher efficacy in student engagement is explained following Table 7.

Table 7

Facilitators of Teacher Efficacy in Student Engagement Based on Interview Responses

Barrier	Percent of Interview Responses
Rapport with Students	52.63
Opportunities for Student Success	26.33
Mandatory School Attendance	10.52
Other	10.52

Rapport with students. Table 7 shows the results of the interview responses regarding facilitators of high teacher efficacy in student engagement at the juvenile detention center. More than half (52.63%) of the answers about these facilitators indicated that developing a rapport with the students at the juvenile detention center was the single most influential factor in high teacher efficacy in student engagement. Participant 6 stated, "They don't want to talk to anyone in authority. . . . If you don't share something about you personally, you're not going to make any kind of connection." Participant 5 said, "We have to look at them as individuals, get to know their names as quickly as possible, and find something positive about them. . . . We have to identify who they are and who they are going to be." Developing and maintaining rapport with students was found to be a facilitator to high teacher efficacy in student engagement.

Opportunities for student success. Giving students opportunities to experience success was the second most frequently noted facilitator of teacher efficacy in student engagement in 26.3% of the interview answers about this topic. Participant 7 said, "Kids who have had success before are low-hanging fruit. It's much more difficult with kids who haven't. You want them to feel like they succeeded, so they don't look at education as a waste of their time." Participant 4 stated, "If my students try their best, then that's great. I praise as much as I can, so it will make them feel like they are worthy because some of them just have such low self-esteem." Study participants involved in the interviews identified giving students opportunities to be successful as a facilitator of high teacher efficacy.

Mandatory school attendance. In 10.52% of interview responses, participants noted that a facilitator to high teacher efficacy in student engagement was the requirement of mandatory school attendance while residing at the juvenile detention center. Participant 2 said, "I have a captive audience, and if I can get them to just buy-in for a couple of minutes, usually at the end they'll actually like class. . . . They're here, so they might as well use their time productively." Two additional factors were noted as facilitators of teacher efficacy in student engagement. These facilitators include being able to show samples of previous student work (5.26% of responses) and allowing options for student work, such as academic games (5.26% of responses).

Interview data about barriers to teacher efficacy in instructional strategies. Several barriers to high teacher efficacy in instructional strategies at the juvenile detention center were identified from the interview data. Based on the interviews for this study, the seven main barriers to teacher efficacy in instructional strategies are: frequent turnover in student population, limited options for student assessment, mixed ability student groupings, lack of relevant professional development, intrusive administrators, limitations imposed by safety rules, and

classroom distractions. Table 8 below displays the barriers identified during the interview phase of data collection. Further information about each barrier to teacher efficacy in instructional strategies is explained following Table 8.

Table 8

Barriers to Teacher Efficacy in Instructional Strategies Based on Interview Responses

Barrier	Percent of Interview Responses
Turnover in Student Population	24.24
Limited Assessment Options	15.15
Student Groupings	15.15
Lack of Relevant Professional Development	15.15
Administrators	12.12
Limitations Imposed by Safety Rules	9.09
Classroom Distractions	6.07
Other	3.03

Turnover in student population. Table 8 shows the results of the interview responses regarding barriers to high teacher efficacy in instructional strategies at the juvenile detention center. Frequent turnover in student population was the most frequently noted barrier to teacher efficacy in instructional strategies, accounting for 24.2% of the responses about this topic. Participant 8 said, "It's kind of a tricky area because at Detention there's no long-term learning objective, no time to build." Participant 9 stated, "You have really small snippets of time to get them interested." Frequent turnover in student population was identified as the most common barrier to teacher efficacy in instructional strategies.

Limited assessment options. Limited options for student assessment was identified in 15.15% of interview answers as a barrier. Participant 7 said, "The best assessment is when they're able to sit down with you one-on-one and tell you about the lesson, but we usually don't get that kind of luxury." Similarly, Participant 4 stated, "They aren't there long, and I have to give them daily assignments. If they score well and I haven't helped them too much, then I believe they have mastered the standards."

Student groupings. Another 15.15% of responses about barriers to teacher efficacy in instructional strategies noted that teaching mixed age, mixed ability classes was a barrier. Participant 9 said, "Having a 10 year old next to a 20 year old is just bizarre. It totally limits what you can do on either end." Participant 8 agreed, stating, "Some kids might tune out because it's too easy, but you have teach lower because you don't ever want kids to tune out because it's too hard. . . . and a lot of the older students needed the review." Mixed age, mixed ability student groupings for classes serves as a barrier, according to the interview data.

Lack of relevant professional development. Another barrier identified in 15.15% of the responses was the lack of professional development related to the student population at the juvenile detention center. Participant 1 said, "When I go to in-services, chances are they have nothing to do with me. They relate to everyone else in the room, and I'm not getting much from it." Participant 7 stated, "We have reluctant learners. Professional development needs to help us engage these students. They need to tell us what the research shows, best practices for dealing with kids who aren't ready to learn. I haven't seen that." The lack of relevant, applicable professional development serves a barrier to teacher efficacy, according to the interview data.

Administrators. Intrusive administrators were also noted as a barrier to high teacher efficacy in instructional strategies in 12.12% of the interview responses. Participant 5 stated,

"Administrators need to trust what you know, what you know of the students, what would be safe for them. When you know something's not going to work, they need to trust that." Participant 2 said, "At times, school leaders are intrusive. If it's your classroom, you're in charge. We all need to treat each other with dignity and respect." Based on interview results, intrusive administrators are another barrier to teacher efficacy in instructional strategies.

Limitations imposed by safety rules. Of the interview responses about barriers to teacher efficacy in instructional strategies, 9.09% of the responses identified the classroom limitations created by maintaining a safe environment. Participant 8 said, "There are certain things we have to do because of Detention requirements, and they're not always the best things for the students or for the education program." Participant 5 stated, "The control that Detention has limits the learning instruments you can provide. . . . If a student is on unit restriction, they do not have access to a teacher. They've missed out, and we've missed an opportunity to help them." Rules imposed by the detention center to ensure the safety of individuals in the building serve as a barrier to high teacher efficacy.

Classroom distractions. Additionally, 6.07% of interview responses indicated that classroom distractions serve as a barrier to teacher efficacy in instructional strategies. Participant 7 said, "Your class, every class, every day is going to be interrupted for one reason or another. . . . It's tough enough getting their attention to begin with, and now you have to start all over again." One additional barrier, students who mislead teachers about their academic ability, was noted in 3.03% of interview answers.

Interview data about facilitators to teacher efficacy in instructional strategies. The interview data identified a variety of facilitators of high teacher efficacy in instructional strategies at the juvenile detention center. Based on the interviews for this study, the eight main

facilitators to teacher efficacy in instructional strategies are: relevant lessons, differentiated instruction, flexibility, collaboration, educational activities, teacher self-reflection, teacher-selected professional development, taking instructional risks. Table 9 below displays the facilitators identified during the interview phase of data collection. Further information about each facilitator of teacher efficacy in instructional strategies is explained following Table 9.

Table 9

Facilitators of Teacher Efficacy in Instructional Strategies Based on Interview Responses

Facilitator	Percent of Interview Responses
Relevant Lessons	30.23
Differentiated Instruction	16.28
Flexibility	13.95
Collaboration	11.63
Educational Activities	11.63
Self-Reflection	4.65
Teacher-Selected Training	4.65
Taking Instructional Risks	4.65
Other	2.33

Relevant lessons. Table 9 above shows the results of the interview responses regarding facilitators of high teacher efficacy in instructional strategies at the juvenile detention center.

Nearly one-third (30.23%) of the interview responses about this topic noted that using relevant lessons related to real-world issues was a significant facilitator of teacher efficacy. Participant 1 said, "A particular lesson might not necessarily do anything for the student later in life, but being able to realize that this is how they go through the steps to solve something would." Participant

7 stated, "We impact our students' lives when we are able to help them improve their skills in navigating whatever it is, being a better parent, a better wage earner, examining the world around them, their relationships with people." Choosing relevant lesson topics related to real-world situations is a facilitator of teacher efficacy in instructional strategies, according to the interview data collected for this study.

Differentiated instruction. Using differentiated instruction was identified as a facilitator of teacher efficacy in instructional strategies in 16.28% of responses. Participant 4 said, "You have to use all the learning strategies, auditory, kinesthetic, verbal. If they can't hear it, they can see it. Put an example on the board in front of them. Cover all the learning styles." In addition, Participant 1 said, "This is probably the most differentiated learning they will ever receive in their lives. . . . At the detention center, everyone's in a different grade, so you're working on a different thing." Differentiated instruction is a facilitator of teacher efficacy based on the interview data from this study.

Flexibility. Flexibility in lesson planning was noted as a facilitator of high teacher efficacy in instructional strategies in 13.95% of interview responses about this topic. In terms of flexibility, Participant 6 said, "I have a book full of lesson plans, but I never know from one period to the next if I can use that lesson plan with a specific group. In six different classes, I could use six different lessons." The interview data collected during this study indicates that flexibility in lesson planning is a facilitator of teacher efficacy in instructional strategies.

Collaboration. Collaboration with other teacher was noted in 11.63% of interview answers as a facilitator of high teacher efficacy in instructional strategies. Participant 7 said, "We're all colleagues in this. We all want to see our students succeed." Participant 4 stated, "It's just amazing when people are getting along and you're all collaborating." According to the

interview data about instructional strategies, collaboration among teachers at the detention center serves as a facilitator of high teacher efficacy.

Educational activities. An additional 11.63% of answers noted the use of educational activities as a facilitator. Participant 5 stated, "Things I have done that have been hands-on have been the most successful." Participant 1 said, "When I use games in my classroom, every now and then, you get everyone fully paying attention. That's nice because you can see them all working together, and they don't realize it." Educational activities, such as games or hands-on activities, were identified from the interview data from this study as a facilitator of teacher efficacy.

Self-reflection, teacher-selected training, and taking instructional risks. Three additional facilitators of teacher efficacy in instructional strategies were each identified in 4.65% of the interview responses. Those facilitators include engaging in self-reflection, attending teacher-selected professional development, and taking instructional risks. Participant 5 engages in self-reflection, saying, "All the errors and positives and negatives, I use them to make my classroom the best it can possibly be in my content area." Regarding professional development, Participant 8 said, "The professional development you can pick turn out to be the better ones because those are the ones you are interested in." Discussing taking instructional risks in the classroom, Participant 5 said, "I would be willing to risk something or try something new. You just try it. If it doesn't work, it doesn't work. It's how willing we are and how much of our passion is into teaching." One additional facilitator, using open-ended questions, was identified in 2.33% of interview responses.

Interview data about barriers to teacher efficacy in classroom management. Regarding barriers to high teacher efficacy in classroom management, the interview responses were diverse.

Ten main barriers to teacher efficacy in classroom management were identified. Based on the interviews for this study, the main barriers to high teacher efficacy in classroom management are: presence of detention officers in the classrooms, violent student behavior, safety concerns, student groupings, learning curves for new teachers, administrators who do not understand the student population, unknown student triggers, student mental health issues, low faculty morale, and lack of empathy from students. Table 10 below displays the barriers identified during the interview phase of data collection. Further information about each barrier to teacher efficacy in classroom management is explained following Table 10.

Table 10

Barriers to Teacher Efficacy in Classroom Management Based on Interview Responses

Barrier	Percent of Interview Responses
Officer Presence	20.69
Violent Student Behavior	17.24
Safety Concerns	17.24
Student Groupings	13.79
Learning Curve	10.34
Administrators	6.90
Unknown Student Triggers	3.45
Student Mental Health Issues	3.45
Low Faculty Morale	3.45
Students' Lack of Empathy	3.45

Officer presence. Table 10 above shows the results of the interview responses regarding barriers to high teacher efficacy in classroom management at the juvenile detention center.

Detention officers disrupting the learning environment was identified most frequently (20.69%) as a barrier to teacher efficacy. Participant 9 stated, "The detention officers don't always behave appropriately when you're trying to teach the kids how to behave appropriately." Participant 6 said, "Some detention officers just want to sit in the back of the classroom and chit-chat, and most of the chit-chat is negative stuff and loud enough that the kids can hear it." Classroom disruptions caused by the presence of detention officers is a barrier, according to the interview responses.

Violent student behavior. Violent student behavior was noted in 17.24% of the interview responses about barriers to teacher efficacy in classroom management. Participant 2 said, "Fights in my room come in from the hallway. If there is a fight in the hallway, they come in fighting." Participant 4 stated, "When they get disruptive, they are extremely violent sometimes. . . . The first thing you do is look at your students and read how they're feeling that day."

According to the interview data, violent behavior by students serves as a barrier to classroom management.

Safety concerns. An additional 17.24% of answers identified safety concerns as the most significant barrier to teacher efficacy in classroom management. Participant 8 remembered, "I was trying to get a kid to pay attention, and he was having a bad day. He stood up and threatened me, and the detention officers had to intervene. That was pretty scary for me." Participant 3 said, "My worst experiences at Detention are when I feel threatened by a student and uncomfortable for my personal safety, feeling very uncomfortable that a student might be thinking of doing something." Concerns about personal safety and the safety of others in the classroom serves as a barrier to teacher efficacy in classroom management, based on the data from the interviews conducted for this study.

Student groupings. Student groupings for school was noted in 13.79% of interview answers about barriers to teacher efficacy in classroom management. Interviewees noted several issues with student groupings that served as barriers to high teacher efficacy in classroom management. Participant1 said, "You get so many different ages in one class that while it might work for the detention center, it doesn't necessarily work for the classroom setting." Participant 6 stated, "That constant feeling of the unexpected is stressful. Every group could be a new group for weeks on end. Should I expect this kid to be on seclusion or that kid to be on unit restriction?" The interview data about teacher efficacy in classroom management indicates student groupings for classes serves as a barrier.

Learning curve. The learning curve for new detention center teachers was identified as a barrier in 10.34% of responses. Participant 7 stated, "The learning curve was hellacious the first couple of years. I wondered if I was making any difference at all. . . . Once that learning curve started to ease up, it got easier and smoother." Participant 9 said, "The first day I was there, I had an issue with a student. I remember questioning what I had gotten myself into. Now, it wouldn't even faze me." The interview data indicate the learning curve for new teachers at the juvenile detention center serves as a barrier.

Administrators. School administrators who do not understand the uniqueness of the juvenile detention center environment were noted as a barrier in 6.90% of interview responses. Interviewees noted a couple of concerns about school administrators who do not have experience in this type of school setting, such as a lack of suggestions about dealing with difficult students and making poor hiring decisions. Participant 6 said, "Administrators need to better assess who they put in here because we've had people here who really don't belong here. . . . Not everybody can take this type of environment."

Unknown student triggers, student mental health issues, low faculty morale, and students' lack of empathy. Four additional barriers to high teacher efficacy in classroom management were identified, each by 3.45% of interview answers. These barriers include unknown student triggers, student mental health issues, low faculty morale, and student lack of empathy. Though not the most prominent barriers identified by this study, these four factors are worth noting.

Table 11

Facilitators of Teacher Efficacy in Classroom Management Based on Interview Responses

Facilitators	Percent of Interview Responses
Classroom Routine	20.51
Start Over Each Day	20.51
Officer Presence	10.27
Classroom Climate	10.27
Preventive Efforts	10.27
Empathy Toward Students	7.69
Classroom Leadership	7.69
Input from Colleagues	7.69
Other	5.10

Interview data about facilitators to teacher efficacy in classroom management. The interview responses concerning facilitators of high teacher efficacy in classroom management at the juvenile detention center were as diverse as the barriers. Eight main barriers to teacher efficacy in classroom management were identified. Based on the interviews for this study, the eight main barriers to teacher efficacy in classroom management are: consistent classroom routine, starting each day with a fresh perspective, presence of detention officers in the

classroom, positive classroom climate, empathy toward students, classroom leadership, seeking input from colleagues, and using preventive measures to ensure safety. Table 11 above displays the facilitators of teacher efficacy in classroom management identified during the interview phase of data collection. Further information about each facilitator of teacher efficacy in classroom management is explained following Table 11.

Classroom routine. Table 11 above shows the results of the interview responses regarding facilitators of high teacher efficacy in classroom management at the juvenile detention center. One of the most frequently noted facilitators was establishing a classroom routine (20.51%). In terms of establishing a classroom routine, Participant 1 said, "At the beginning of the class period, I outline what we are going to do. When they know what is ahead of them, they are able to focus a little bit more." Also about classroom routine, Participant 3 stated, "I think routine is key. On the board, you have the date, your name, and what you want them to do. The kids who are new can see what the other kids are doing and can read the board." Establishing a consistent classroom routine serves as a facilitator of teacher efficacy, according to the interview data.

Start over each day. Cited as frequently as establishing a classroom routine, starting over each day with a fresh outlook was identified as a facilitator of teacher efficacy in classroom management in 20.51% of answers. Participant 9 said, "You have to start every day as a new day. You just can't go in remembering what happened yesterday and being stressed about it." Participant 8 stated, "It's a processing thing that lets you be able to come back the next day with a positive attitude. This was an isolated incident, and as soon as you have a positive experience, it kind of erases that." Being able to start each day with a fresh perspective was identified in interviews as a facilitator of teacher efficacy in classroom management.

Officer presence. While the presence of detention officers was noted as a barrier to teacher efficacy in classroom management because they can sometimes cause classroom distractions, the presence of detention officers was also noted in 10.27% of responses about facilitators of high teacher efficacy in classroom management because they assist with student misbehavior. Participant 3 said, "I know detention officers are in the classroom. So even though generally I am uncomfortable seeing violent behavior, at Detention I feel comfortable knowing the detention officers are there." Participant 8 said, "We have the added security of having detention officers there if things really get out of hand." According to the interview data, the presence of detention officers in the classroom serves as both a barrier and a facilitator of teacher efficacy in classroom management.

Classroom climate. Creating a positive classroom environment was noted as a facilitator in 10.27% of interview answers. Participant 3 stated, "You need to have a positive feeling in that setting because those students have seen a lot of negative in their life. Being positive helps make it pleasant for the students, as pleasant as it can be." Participant 4 said, "I give rewards if everyone does their assignment. It works for me." The interview data indicate maintaining a positive classroom climate is a facilitator of teacher efficacy in classroom management.

Preventive efforts. Using preventive measures to avoid classroom disruptions was also cited in 10.27% of interview responses about facilitators of high teacher efficacy in classroom management. Participant 5 said, "In terms of behavior, it's a matter of trying to control the environment a little, so it's not as disruptive, and definitely try to be preventive, so that it's not disruptive." Participant 6 stated, "You just kind of choose the path of least resistance." For example, Participant 9 said, "A lot of times if you give a kid five or ten minutes to get himself or herself together, the problem goes away." Using preventive measures in the classroom can be

useful in avoiding situations involving disruptive behavior and serves as a facilitator of efficacy in classroom management.

Empathy toward students, classroom leadership, and input from colleagues. Three responses each were identified in 7.69% of responses about facilitators of high teacher efficacy in classroom management. These facilitators include being empathetic toward students, establishing leadership in the classroom, and seeking input from colleagues. Empathy for students was identified as a facilitator by Participant 7 who said, "I need to understand where the student is coming from. . . . Maybe he got bad news from home. Maybe he isn't feeling well. You've got to get to the cause of what's wrong." Participant 9 discussed establishing yourself as the classroom leader, saying "You want to be confident, especially with that population. You need to have authority in the classroom. I know that if I am nervous, I will not be seen as an authority." Seeking input about students from other teachers was identified as a facilitator because, as Participant 1 said, "If the kids can demonstrate learning in other subjects, then I feel that I will be able to reach them." Showing empathy toward students, establishing leadership in the classroom, and seeking input from colleagues are three facilitators to teacher efficacy. Two additional facilitators were noted, including administrators who support teachers' personal needs (2.55%) and professional development that focuses on the student population at the juvenile detention center (2.55%).

Summary of interview data. The data gathered and analyzed in this study present an indepth understanding of the factors influencing teacher efficacy in the juvenile detention center.

Several patterns within the interview data are interesting to note. For example, the presence of detention officers was noted as both a barrier and a facilitator to high teacher efficacy in classroom management. Interviewees noted that detention officers can sometimes cause

classroom distractions; however, they also stated the presence of detention officers was helpful in dealing with student misbehavior, particularly violent student behavior.

Also, some factors were identified as barriers or facilitators in multiple dimensions of teacher efficacy. For example, student groupings, such as mixed age and mixed ability groupings, was identified as a barrier to teacher efficacy in both classroom management and instructional strategies. Also, the use of educational games in the classroom was frequently identified as a facilitator of teacher efficacy in instructional strategies, but it was also identified by a small percentage of interview responses about facilitators of efficacy in student engagement.

Another significant finding is that certain categories, such as professional development, were identified in both positive and negative ways. Participants noted that when they are allowed to select their own in-service trainings, they often find professional development useful, which was identified as a facilitator of teacher efficacy in instructional strategies. However, the interviewees also noted a barrier to teacher efficacy in instructional strategies was the lack of professional development dealing specifically with the student population these teachers serve.

Presentation of the Data and Results

Research question 1. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards being able to manage a classroom?

Barriers to teacher efficacy in classroom management. The findings of the three sources of data collection indicate several factors at the juvenile detention center serve as barriers to high teacher efficacy in classroom management. After comparing the results of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), the questionnaire, and the interview

transcripts, several patterns were found. The barriers to high teacher efficacy in classroom management identified by this study include:

- Student misbehavior
- Classroom distractions
- Student groupings of mixed ability levels

Of the five questions rated lowest on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) by the study participants, two questions related to student misbehavior. The group of respondents indicated they felt least efficacious responding to defiant students and keeping a few problem students from ruining an entire lesson. These results were confirmed by the barriers identified during the interview phase of this study. Almost 35% of responses about barriers to classroom management indicated violent student behavior and safety concerns were significant factors. The interview responses indicated student misbehavior may begin in places other than the classroom. For example, student misbehavior in the classroom may be the result of fights in the hallway or on the unit that are brought into the classroom when students enter the room. Study participants indicated student misbehavior was a barrier for multiple reasons, including fear for their personal safety, fear for the safety of other students and adults in the room, and hindering the learning of other students.

Classroom distractions that affect classroom management at the juvenile detention center seem to be caused by two main sources, including students and detention officers. One of the lowest rated questions on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) by study participants related to calming a student who is disruptive or noisy. In addition, the results of the questionnaire revealed that detention officers who are present in the classroom sometimes have opinions of classroom management that differ from the teachers and can

sometimes be disrespectful of the learning environment. This finding was confirmed by the interview results, which indicated disruptions caused by detention officers was the most significant factor serving as a barrier to high teacher efficacy in classroom management.

While student groupings have varied in the past, currently at the juvenile detention center, students are grouped according to their residential placement, not their academic ability levels. On the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), the second lowest rated question was about teacher efficacy in improving the understanding of a student who is failing. In the juvenile detention center, residents are required to attend school. As a result, students who have dropped out, have no interest in education, or have significant learning gaps are grouped into classes alongside students who want to learn and are actively working toward a diploma. The questionnaire responses revealed 22% of participants believe one barrier to efficacy in classroom management is student groupings that do not take into account a student's ability level or interest in schooling. The interview results confirm this finding, with 13.79% of interview responses about barriers to efficacy in classroom management indicating student groupings as a factor. The interview responses indicated several reasons for this barrier, including mixed age and mixed ability groupings, frequent shifts in groupings, and new students being sent to class immediately upon arrival. Regardless of the cause, student groupings is clearly a barrier to high teacher efficacy in classroom management.

Facilitators of teacher efficacy in classroom management. The subscale score for the group as a whole for teacher efficacy in classroom management on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) reveals respondents felt they had quite a bit of efficacy in classroom management, possibly as a result of several facilitators identified in this study. After reviewing the data collected from the Teachers' Sense of Efficacy Scale

(Tschannen-Moran & Hoy, 2001), the questionnaire, and the interview transcripts, several patterns were found throughout the data. The facilitators of high teacher efficacy in classroom management identified by this study include:

- Positive learning climate
- Presence of detention officers
- Classroom rules and expectations

Creating a positive learning climate at the juvenile detention center was identified as a facilitator of teacher efficacy in classroom management by all three sources of data collection. One of the highest rated questions on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) indicated the study participants felt highly efficacious in being able to get students to believe they can succeed in their school work. The questionnaire responses indicated 22% of the participants believe a positive learning environment is a facilitator of teacher efficacy in classroom management. This facilitator was further confirmed by interview responses that revealed 10.27% of interview answers about facilitators of efficacy in classroom management specifically noted a positive learning climate. An additional 20.51% of interview responses noted the ability of a teacher to start over each day with a fresh, positive outlook was another facilitator.

While the presence of detention officers was identified as a factor leading to classroom distractions, the presence of detention officers was also found to serve as a facilitator of high teacher efficacy in classroom management. Both the questionnaire results and the interview transcripts confirmed this finding. In fact, both data sources identified two main reasons the presence of detention officers in the classroom serves as a facilitator. First, the detention officers are able to address issues of student violence, which made teachers feel safe and able to focus on

instruction. Second, some detention officers actually participate in the lesson by engaging positively in class discussions and encouraging students to complete their assignments.

The use of consistent classroom rules was found to be a facilitator of high teacher efficacy in classroom management by all three sources of data collection. The Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) revealed respondents felt highly efficacious in communicating expectations about student behavior. In fact, that question was tied with one other question for the highest rating for the group as a whole (7.67 out of 9). The use of consistent rules and expectations was also noted by 22% of questionnaire participants as a facilitator of efficacy in classroom management. One of the questionnaire responses noted the consistency of rules between the juvenile detention center and the education program as a factor in supporting teacher efficacy. Within the results of the interview data analysis, three factors support this finding, as well. Of the interview responses about facilitators of teacher efficacy in classroom management, 20.51% of responses indicated establishing a classroom routine was a significant facilitator. An additional 10.27% of interview responses indicated using preventive measures to avoid classroom disruptions was another facilitator. Another 7.69% of interview answers revealed teachers establishing themselves as the classroom leader was a facilitator of efficacy in classroom management. The pattern among these three interview responses, the questionnaire results, and the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) indicated a classroom with established, consistent rules and expectations is a significant facilitator of high teacher efficacy in classroom management.

Research question 2. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards utilizing classroom instructional strategies?

Barriers to teacher efficacy in classroom instructional strategies. While the subscale score for efficacy in instructional strategies for the group as a whole on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) was the highest subscale score (6.83 out of 9), barriers to high teacher efficacy exist, as found by this study. Several patterns were identified among the data collected from various sources. The most significant barriers to high teacher efficacy in classroom instructional strategies as identified by this study include:

- Student groupings of mixed ability levels
- Classroom distractions
- Limited assessment options

Also serving as a barrier to high teacher efficacy in classroom management, school groupings of students of mixed ages and mixed ability levels has been identified by this study as a barrier to teacher efficacy in instructional strategies. As mentioned earlier, on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), the second lowest rated question was about teacher efficacy in improving the understanding of a student who is failing. Two-thirds of the questionnaire respondents indicated mixed ability groupings was the most significant barrier to teacher efficacy in instructional strategies. As Participant 4 noted on the questionnaire, "Even for an excellent teacher, when you have students from 10 to 21 years old and reading levels from below second grade to post graduate, it is difficult to find materials." The interview results confirm the challenge to teacher efficacy presented by mixed ability student groupings. As mentioned earlier, 13.79% of interview responses about barriers to efficacy in classroom management indicated mixed ability student groupings as a factor. Several interview responses about this topic noted that previous student groupings were more effective. For example, Participant 9 said, "We used to break up students by educational functioning level, and that went

so much better because I would tailor the lesson to the group." The current method of using residential groupings for the education program now serves as a barrier to teacher efficacy.

Classroom distractions at the juvenile detention center can occur in a variety of forms, such as external distractions, student behavior issues, other adults in the room, and turnover in student population during a class period. As mentioned earlier, the results for the group of study participants on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) revealed one of the lowest areas of teacher efficacy was in keeping a few students from ruining an entire lesson (5.78 out of 9). During the interview phase, Participant 6 said, "To be successful at the detention center is to not let somebody ruin somebody else's education." The questionnaire responses indicated 22% of respondents feel classroom distractions are a significant barrier. As Participant 2 noted on the questionnaire, "Students in detention centers are frequently called out of classes to see medical doctors, psychiatrists, psychologists, mental health workers, dentists, probation officers, lawyers, special visits, drug testing, etc., which can break up the continuity of a lesson." The findings of the interview data confirmed classroom distractions are a barrier to teacher efficacy in instructional strategies. Classroom distractions were identified in 6.07% of interview responses about barriers to efficacy in instructional strategies. Participant 7 said, "You finally get the kids on task, starting to work. Then all of a sudden, somebody comes to the door and takes half your kids to the dentist." There are a variety of classroom distractions at the juvenile detention center, and the findings of this study identify these distractions as a significant barrier to high teacher efficacy.

Teachers at the juvenile detention center who participated in this study indicated they have limited options for student assessments. This barrier was identified by the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001). When participants were asked to rate how

much they could use a variety of assessment strategies, they responded 5.89 out of 9. The interview results confirm this finding. Of the interview responses about barriers to high teacher efficacy in instructional strategies, 15.15% of responses indicated limited assessment options served as a barrier. Participant 3 said, "At Detention, we don't give assessments that are test-based or quiz-based, so knowing if they mastered the skills is really difficult." Participant 4 tried using a weekly test at one point, but noted "most of the students left before the test." As a result, most interview participants stated they focused on daily, discrete assessments, such as exit slips or a worksheet.

Facilitators of teacher efficacy in classroom instructional strategies. According to the subscale scores for the group as a whole on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), teacher efficacy at the juvenile detention was highest in instructional strategies (6.83 out of 9). After analyzing the data collected from three sources, this study identified several factors that support high teacher efficacy in instructional strategies. The facilitators of high teacher efficacy in classroom instructional strategies identified by this study include:

- Differentiated instruction
- Relevant lessons
- Educational activities

The most significant facilitator of teacher efficacy in classroom instructional strategies identified by this study is the use of differentiated instruction that matches the needs, skills, and learning styles of individual students. The Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) addressed differentiated instruction by asking teachers how much they can do to adjust their lessons to the proper levels for individual students. For that question, the group of

study participants as a whole rated it 6.67 out of 9, indicating they feel efficacious in differentiating their lessons. The Teachers' Sense of Efficacy Scale also asked teachers to what extent they can provide an alternative explanation or example when students are confused. The group as a whole rated this question at the top of the list of areas in which they feel the most efficacious (7.67 out of 9), tied with communicating expectations about student behavior. In addition, 77.78% of questionnaire participants indicated differentiated instruction was the most significant facilitator of high teacher efficacy in instructional strategies. On the questionnaire, Participant 9 wrote, "The detention population is very dynamic which allows for the employment of numerous strategies to deliver instruction in the best manner possible." During the interview phase of data collection, differentiated instruction was identified in 16.28% of interview responses about facilitators of teacher efficacy in instructional strategies. In fact, differentiated instruction was the second most common interview response regarding facilitators of efficacy in instructional strategies.

Creating relevant lessons based on real-world issues was also noted by this study as a facilitator of high teacher efficacy in instructional strategies. The Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) asks teachers to rate how much they can do to help their students think critically. For this study, the mean score for that question for the group as a whole was 6.67 out of 9, indicating they feel they can do quite a bit to build their students' critical thinking skills. During the questionnaire phase of data collection, Participant 5 wrote, "At Detention, we have flexibility, which promotes lessons to be creative, interesting, individual or group specific while following the standards set by the state and federal government." During the interviews, creating relevant lessons was identified in 30.23% of interview answers about facilitating high teacher efficacy in instructional strategies. Study participants noted there are

several ways to create relevant lessons at the detention center, including asking students for topics that interest them, engaging in problem solving strategies, and relating lessons to real-world issues.

The use of educational activities, including student choice of work and academic-based games, was identified by this study as another facilitator of teacher efficacy in instructional strategies. The Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) asks teachers to rate how much they can do to foster student creativity. For the group as a whole, the mean rating for this question was 6.67 out of 9, indicating the study participants believe they can do quite a bit to encourage creativity among their students. The use of educational, hands-on activities is one way to foster student creativity at the juvenile detention center. During the questionnaire phase of data collection, Participant 3 wrote, "It is important to have a variety of different activities for all age groups, such as puzzles, games, and books to promote an interest in learning." After analyzing the interview transcripts, 11.63% of interview responses concerning facilitators of teacher efficacy in instructional strategies noted the use of educational activities is a significant facilitator. Participant 1 stated, "We do activities that are disguised as games, so they won't know they are working." Using educational games at the detention center can encourage students to work and learn together. Participant 8 said, "We played a game on the computer where the class competed against other classes. Kids were really motivated to do as well as they could. There was a lot of tension and enthusiasm." Therefore, the use of a variety of classroom activities that are academically-based is another facilitator of high teacher efficacy in instructional strategies, as identified by this study.

Research question 3. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards being able to engage students in the classroom?

Barriers to teacher efficacy in student engagement. The subscale score for teacher efficacy in student engagement for the group of study participants as a whole on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) was the lowest subscale score (5.86 out of 9). Barriers to high teacher efficacy in student engagement exist at the juvenile detention center. This study identified several patterns among the data collected from various sources. The most significant barriers to high teacher efficacy in student engagement as identified by this study include:

- Classroom distractions
- Negative student attitudes
- Limited background information about students

Classroom distractions are a significant barrier to high teacher efficacy in student engagement. Engaging students in learning is particularly challenging at the juvenile detention center because of classroom distractions. Some of the disturbances are caused by student misbehavior, classroom interruptions, or disruptions caused by other individuals in the room. However, at the detention center, some of the classroom distractions are intangible, as noted by this study. As mentioned earlier, two of the lowest scoring questions on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) for the group of participants as a whole were how efficacious a teacher felt calming a student who is disruptive or noisy and keeping a few problem students from ruining an entire lesson (both 5.78 out of 9).

Engaging a classroom of students when one or a few students are disruptive presents barriers to teacher efficacy. On the questionnaire, more than half of the respondents indicated classroom distractions are a major barrier to teacher efficacy in student engagement. Participant 2 wrote, "Our students' academics efforts are often thwarted. . . . They get called out of the classroom, and their whole mindset can be changed by the time they return, as can their stress level." In addition to classroom interruptions, Participant 9 wrote, "The detention student is distracted by their legal situation, an uncertainty of what will happen in court, visits from probation officers, being permitted to call home, etc." These findings are confirmed by the interview data. Of the interview responses about barriers to teacher efficacy in student engagement, 31.25% of responses indicated classroom distractions were a barrier.

Another barrier to high teacher efficacy in student engagement, as found by this study, is negative student attitudes. As mentioned earlier, one of the lowest mean scores on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) for the group of study participants as a whole was the question about teacher efficacy when responding to defiant students (5.89 out of 9). The Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) also asked the teachers how much they can do to get through to the most difficult students. For that question, the group mean rating was 6.22 out of 9, a rating in the lowest one-third of the responses given by these study participants as a whole on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001).

The results of the questionnaire also indicated negative student attitudes serve as a barrier. On the questionnaire, 22% of respondents noted negative student attitudes impact teacher efficacy. Participant 7 wrote, "Teachers at Detention need some degree of cooperation and interest from our students, for morale and self-survival reasons for starters. Efficacy takes a

body blow when those factors erode." The interview data also indicated negative student attitudes are a barrier. Of the interview responses about barriers to high teacher efficacy in student engagement, negative student attitudes was tied with classroom distractions as the most significant barrier, at 31.25% of interview responses. Participant 1 said, "If a student comes in and they're having a bad day, they're going to have a bad day regardless of how interesting your lesson is. The teacher can only do so much if the student comes in only half-interested."

According to the data collected for this study, negative student attitudes at the juvenile detention center are a barrier to high teacher efficacy in student engagement.

While the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) does not specifically evaluate a teacher's knowledge about a student's background, it poses two questions that provide some insight. Teachers are asked how much they can do to assist families in helping their children do well in school. For this study, that question was rated the lowest of the 24 questions presented on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001). The mean score for the group of study participants as a whole was 1.67 out of 9, indicating teachers at the juvenile detention center feel least efficacious in this area. For the most part, teachers at the juvenile detention center have no contact with students' families, with the exception of an IEP meeting or a similar situation. The second question presented on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) that relates to student background information asks teachers how much they can do to improve the understanding of a student who is failing. As mentioned earlier, the mean score for the group as a whole for that question was the second lowest score (5.22 out of 9). If teachers do not receive background information about a student, it is difficult to engage a student and understand why a student is failing.

Noting the frequency of student turnover which results in limited time to gather information about students, Participant 3 wrote on the questionnaire, "The limited time to get to know your students, therefore not knowing their engagement or interests in creativity, is a barrier." The interview results confirmed lack of background information about a student serves as a barrier to teacher efficacy. In fact, 25% of interview responses about barriers to teacher efficacy in student engagement indicated lack of student background information is a significant barrier. Participant 6 said, "All we know about a kid when he comes in is from a test that he has to take. . . . We don't really have an accurate assessment before we even begin to work with these kids." Based on this data, limited background information about students is a barrier to high teacher efficacy in student engagement.

Facilitators of teacher efficacy in student engagement. On the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), the mean subscale score the whole group of participants in this study was the lowest in the dimension of student engagement (5.86 out of 9). However, the data collected for this study indicate there are some factors that support high teacher efficacy in student engagement at the juvenile detention center. The facilitators of high teacher efficacy in student engagement identified by this study include:

- Rapport with students
- Positive learning climate
- Educational activities

While the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) does not specifically address the topic of teachers building rapport with students, the data collected from the questionnaire and interview phases of this study confirmed building rapport with students is an important facilitator of high teacher efficacy in student engagement. In addition, one

particular question on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) might give some insight for this study. One of the top five scoring questions on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) for the group of participants as a whole indicated the study participants feel efficacious in responding well to difficult questions from students. The mean score for that question for the group as a whole was 7.00 out of 9. Being able to respond well to difficult student questions might be the result of having good rapport with students. On the questionnaire, 22% of respondents indicated establishing rapport and building relationships between teachers and students is a facilitator of high teacher efficacy. Participant 6 wrote, "Somehow I need to show each student that I care about them as a person more than as a student. Teachers in this setting need to find out what makes these kids want to learn." Similarly, Participant 2 wrote, "Sometimes we get the opportunity to establish a positive teacher-student relationship. I love it when a student comes to me after a weekend and shares how much his family enjoyed hearing about our classroom activities." Building rapport was actually the most frequently cited facilitator of teacher efficacy in student engagement during the interview phase of data collection.

More than half (52.63%) of interview responses related to efficacy in student engagement indicated building rapport with students was the most significant facilitator. Participant 7 said, "You can often get surprising results when you're talking to a kid one-on-one. There's no place for the kid to hide." Based on the data collected from the questionnaires and interviews, building rapport between teachers and students is a facilitator of high teacher efficacy in student engagement.

Another facilitator to high teacher efficacy in student engagement identified by this study is creating a positive learning climate, which was noted earlier in this study as a facilitator of

teacher efficacy in classroom management. As noted earlier, on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), the group of study participants as a whole indicated they felt able to get students to believe they can succeed in their school work (7.56 out of 9). Creating a positive learning climate in which students are given opportunities to experience success is a facilitator of high teacher efficacy, as identified by the other sources of data collection. The questionnaire responses indicated 22% of the participants believe a positive learning environment is a facilitator of teacher efficacy in student engagement. Participant 3 wrote, "For me, a facilitator is to encourage any positive aspect that the student can learn to any capacity no matter how low the level of the student." The interview responses also confirmed this finding, with 10.27% of interview answers about facilitators of efficacy in classroom management specifically noting a positive learning climate. Participant 4 said, "They're used to people lying to them. They have such anger against probation officers, the judge, you name it. So I try to dissipate anger and make things positive." An additional 20.51% of interview responses noted the ability of a teacher to start over each day with a fresh, positive outlook was another facilitator. The data collected during this study indicates that creating a positive learning climate is a facilitator of high teacher efficacy in student engagement.

The use of educational activities, which was identified earlier as a facilitator of teacher efficacy in instructional strategies, also serves as a facilitator of high teacher efficacy in student engagement, based on the analysis of data collected for this study. Educational activities, particularly activities or games based on high-interest topics relevant to the students, can support high teacher efficacy in student engagement. As noted earlier, on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) when study participants were asked to rate how much they can do to foster student creativity, the mean rating for the group as whole for this

question was 6.67 out of 9, indicating the study participants believe they can do quite a bit to encourage creativity among their students.

During the questionnaire phase of data collection, more than half of respondents (55.56%) indicated using high-interest educational activities, such as academic games, artwork, or guest speakers, served as a facilitator to high teacher efficacy in student engagement.

Participant 1 wrote, "I am able to play games with students to elicit conversation and gain participation. I include art to allow the students to be able to express themselves." Participant 5 wrote, "Bringing in a variety of guest speakers and community programs complements what is being taught and exposes students to ideas, concepts and education they may not experience in other environments." Interview responses confirmed educational activities is a facilitator of teacher efficacy in student engagement.

Of the interview answers about facilitators of teacher efficacy in student engagement, 10.53% of responses indicated educational activities were a factor in supporting high teacher efficacy. Participant 2 said, "Some of my best experiences are when I enter kids' work in contests, and they win. They usually tell the rest of the class about it, and I show the class the kids' work. They are be beaming." Based on the data from this study, the use of a variety of educational activities is facilitator of high teacher efficacy in student engagement.

Chapter 4 Summary

By analyzing the data from multiple sources to identify corroborating findings, a researcher is able to triangulate the data (Yin, 2014). The coding of the interview transcripts was examined in conjunction with the questionnaire data and the results from the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) to look for similar patterns throughout the data.

Case study findings based on the convergence of data collected from various research instruments are more accurate (Yin, 2014).

The findings of this single-case study identified several barriers and facilitators of high teacher efficacy in instructional strategies, student engagement, and classroom management as identified by teachers who currently work or recently worked at a juvenile detention center in southeastern Pennsylvania. Overall, the following were found to be barriers to high teacher efficacy at the juvenile detention center: student misbehavior, classroom distractions, student groupings of mixed ability levels, limited assessment options, negative student attitudes, and limited background information about students. In addition, this study found the following to be facilitators of high teacher efficacy at the juvenile detention center: positive learning climate, presence of detention officers, classroom rules and expectations, differentiated instruction, relevant lessons, educational activities, and rapport with students. The following chapter will discuss the results in further detail, including implications for practice and recommendations for further research.

Chapter 5: Conclusions and Discussion

Introduction

Teacher efficacy can be influenced by a variety of factors (Guskey & Passaro, 1994; Ross, 1994; Yeo et al., 2008). Some factors can lead to high teacher efficacy and high quality instructional practices (Cox et al., 2011; Holzberger et al., 2013), while other factors can lead to low teacher efficacy and job stress (Brouwers & Tomic, 1999; Dicke et al, 2014). The purpose of this single-case study was to describe factors influencing teacher efficacy among teachers currently or recently working in a juvenile detention center education program in southeastern Pennsylvania, since these factors were previously unknown. Research was conducted using the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), a questionnaire, and inperson interviews.

This chapter reviews, analyzes, and discusses the findings of this study in relation to existing literature about the research topic. Implications for the findings of this study for school administrators and other members of the education community are also discussed. This chapter is divided into the following sections: Introduction, Summary of the Results, Discussion of the Results, Discussion of the Results in Relation to the Literature, Limitations, Implication of the Results for Practice, Policy, and Theory, Recommendations for Further Research, and Conclusion.

Summary of the Results

Teacher efficacy has a powerful impact in the classroom, affecting a teacher's orientation toward the educational process (Bandura, 1997). Social cognitive theory states that self-efficacy is situation-specific and based on personal judgment about a future task (Schwarzer & Hallum, 2008). Bandura's (1997) theory of triadic reciprocality states that self-efficacy can be affected

by and can have an effect on an individual's behaviors and environment (Bandura, 1997). Therefore, educational research must examine the factors that teachers perceive to be influencing their self-efficacy in a particular school setting. In order to understand the factors influencing teacher efficacy in a juvenile detention center in southeastern Pennsylvania, three fundamental questions framed this research.

Research question 1. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards being able to manage a classroom?

Research question 2. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards utilizing classroom instructional strategies?

Research question 3. How do teachers who have experience teaching in a juvenile detention center education program in Pennsylvania identify and describe the factors that influence their self-efficacy towards being able to engage students in the classroom?

Teacher efficacy is a professional variable impacting many aspects of the classroom environment, including student attitudes toward learning, teacher responses to student misbehavior, and levels of job stress and burnout among teachers (Hoy et al., 2009; Midgley et al., 1989; Schwarzer & Hallum, 2008; Woolfolk et al., 1990). Teachers with low efficacy are more likely to feel stressed by and to be less tolerant of student misbehavior, which can result in more classroom disturbances (Brouwers & Tomic, 1999; Dicke et al., 2014). Teacher efficacy beliefs can have a significant impact on a teacher's sense of helplessness when working with specific student populations (Stipek, 2012; Yeo et al., 2008); however, teacher efficacy can also positively influence instructional quality and the learning environment (Cox et al., 2011).

Teachers who are more efficacious are more likely to set higher standards for student behavior and to use class time more effectively, which can result in fewer classroom disturbances (Hoy et al., 2009).

Of more than 60,000 youth who are currently incarcerated in the United States of America, approximately eighteen thousand are living in locally run detention facilities, usually for less than 60 days (Council of State Governments, 2015). More than half of incarcerated youth have reading and math skills significantly below their grade level (Council of State Governments, 2015). The majority of incarcerated youth have been suspended or expelled from school or dropped out of school before being incarcerated (Council of State Governments, 2015). In a 2006 survey, 27% of incarcerated youth had severe mental health illness, a rate that is two to four times higher than the national rate (Gottesman & Schwarz, 2011). Thirty percent of incarcerated youth reported a history of either physical or sexual abuse, and many had histories of alcohol or substance abuse (Gottesman & Schwarz, 2011).

The factors that influence teacher efficacy in a juvenile detention center can be unique and particularly challenging. A study by Houchins et al. (2009) found that many of the issues faced by educators in traditional schools were even more prominent in programs serving incarcerated youth. Also, the study by Houchins et al. (2009) found that teachers in juvenile justice education programs dealt with additional challenges that were not prevalent in traditional school settings. Limited studies have been conducted regarding teacher efficacy in juvenile detention center education programs; however, the studies located for this paper show that highly efficacious teachers perform well in that environment (Cate, 2014; Cox et al., 2011; Houchins et al., 2009).

Since this study of a juvenile detention center in southeastern Pennsylvania began, several new studies of teacher efficacy have been published. While none have dealt specifically with teacher efficacy in juvenile detention center education programs, several of these recently published studies provide insight into other components of teacher efficacy. In Chapter 2, the parameters of the original literature review included seeking texts with key words such as juvenile corrections, juvenile detention, juvenile justice, alternative education, adjudicated youth education, incarcerated youth education, self-efficacy, teacher efficacy, and collective efficacy. Using the same words, another review of literature was conducted to identify new advancements in the study of teacher efficacy.

In a recent study of 57 primary school teachers in Ireland, Hosford and O'Sullivan (2015) examined school climate and teacher efficacy for inclusion. The study found that teachers who perceive a supportive school climate, including resources and collaboration, felt more efficacious in their ability to manage disruptive behavior (Hosford & O'Sullivan, 2015). When Hosford and O'Sullivan (2015) examined barriers and supports of high teacher efficacy in managing challenging student behaviors within inclusive classrooms, the findings indicated that teachers look for support within their school from sources such as their colleagues and the principal. In fact, support or lack of support from the principal was one of the most frequently cited support or barrier of teacher efficacy in that study (Hosford & O'Sullivan, 2015). Based on the findings of the study by Hosford and O'Sullivan (2015), teaching students with learning deficiencies and challenging behaviors presents obstacles to high teacher efficacy that can be overcome through a collaborative, supportive, positive school climate.

Another recent study examined the impact of online professional development on teacher efficacy using a sample of 148 K-12 teachers (Yoo, 2016). Participants in the study were

administered the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) twice, once before a professional development course and again five weeks later after completing the course. In addition, participants were asked to conduct a self-analysis of their efficacy change by comparing their own responses on the pre- and post-professional development efficacy scales (Yoo, 2016). The findings of the study by Yoo (2016) indicate that online professional development has a positive effect on teacher efficacy. Three themes emerged from Yoo's (2016) study. The first theme, professional enhancement, had to do with the new knowledge that teachers gained as a result of the professional development, which increased their teacher efficacy. The second theme, frame of reference change, had to do with the awareness that learning and teaching change over time. Frame of reference change impacted teacher efficacy positively and negatively (Yoo, 2016). The third theme, learned helplessness, had to do with repeated unsuccessful experiences that negatively impact teacher efficacy. The participants in Yoo's (2016) study indicated that, while they gained valuable knowledge from the professional development, external factors exist that limit their ability to apply the new knowledge in their classroom. For example, respondents indicated that they have no control over curriculum guidelines, student ability levels, and school financial resources (Yoo, 2016).

Steele, Bozick, and Davis (2016) reviewed 18 studies of educational interventions in juvenile correctional facilities. Steele et al. (2016) examined best practices for educating youth in correctional facilities. The researchers did not find statistically significant evidence to support the use of remedial academic interventions; however, computer-assisted instruction can improve reading comprehension for juveniles in correctional facilities (Steele et al., 2016). The findings of this study also found compelling and statistically significant evidence in support of personalized instruction for improving diploma completion and post-release employment,

specifically in an intensive program (Steele et al., 2016). Vocational interventions were not found to have a statistically significant effect on diploma completion; however, obtaining a GED while in a juvenile correctional facility was associated with a post-release recidivism rate 47 percent lower than the rate of juveniles who did not obtain a GED while incarcerated (Steele et al., 2016). While this article did not specifically discuss teacher efficacy, the findings of this study provided insight into the field of juvenile justice education that lend credence to some of the findings of my study, such as differentiated instruction as a facilitator of teacher efficacy.

My study involved a qualitative, single-case study methodology. In qualitative studies, the researcher is the data collection instrument, which makes the study interpretive (Stake, 2010). Also, in qualitative studies, the focus is on understanding the meaning that people attribute to a phenomenon (Yin, 2014). A single-case study design investigates, and analyzes a single case within a single context (Yin, 2014). For this study, the single case represented an unusual case, since previous teacher efficacy studies have focused primarily on teachers in traditional school settings.

The research questions were answered by themes that emerged from the data collected from the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), the questionnaire, and interviews. The data and resulting themes were reported in Chapter 4. The barriers to high teacher efficacy in classroom management identified by this study include student misbehavior, classroom distractions, and student groupings of mixed ability levels. The facilitators of high teacher efficacy in classroom management identified by this study include a positive learning climate, the presence of detention officers, and consistent classroom rules and expectations. The most significant barriers to high teacher efficacy in classroom instructional strategies as identified by this study include student groupings of mixed ability levels, classroom distractions,

and limited options for student assessments. The most significant facilitators of high teacher efficacy in classroom instructional strategies identified by this study include differentiated instruction, relevant lessons, and educational activities. The most significant barriers to high teacher efficacy in student engagement as identified by this study include classroom distractions, negative student attitudes, and limited background information about students. The most significant facilitators of high teacher efficacy in student engagement that were identified by this study include rapport with students, a positive learning climate, and educational activities.

Discussion of the Results

The three research questions that guided this single-case study sought to describe the factors influencing teacher efficacy in a juvenile detention center in southeastern Pennsylvania. The factors identified by this study were further analyzed as either barriers or facilitators of high teacher efficacy within each of the three dimensions of teacher efficacy identified by Tschannen-Moran and Hoy (2001). The resulting data was used to answer each of the three research questions, as discussed in Chapter 4.

As a teacher in the juvenile detention center that was the setting for this study, I reflected on my personal thoughts about teacher efficacy at the juvenile detention center prior to beginning this study. After analyzing the collected data, several of my anticipated findings were confirmed. While the possibility of researcher bias existed during this study, steps were taken to minimize any possible effects during data collection and data analysis. In addition, the data collected from the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) was quantitative, collected online, and self-reported by the participants. Numerical analysis of the data was completed using the guidelines recommended by Tschannen-Moran and Hoy (2001), thus eliminating the possibility of researcher bias.

The results of the data collected using the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) confirmed one of my anticipated findings that teacher efficacy in student engagement would be the lowest subscale score for the group as a whole. Questions in that subscale evaluated fostering student creativity and helping students think critically. When dealing with incarcerated youth, those areas of teaching are particularly challenging. The subscale score for the whole group was indeed the lowest (5.86 out of 9) for teacher efficacy in student engagement.

I did not anticipate the highest subscale score (6.83 out of 9) for the group, which was teacher efficacy in instructional strategies; however, this result is supported by the data from the questionnaire and interviews. Participants indicated that teachers at the juvenile detention center have the freedom to self-select lessons that are relevant to their students and apply creative instructional strategies in their classrooms. Within the guidelines set by federal and state standards, teachers at the juvenile detention center are able to take instructional risks within a more fluid curriculum than teachers in more traditional school settings who often teach one grade level or ability level per class. In some ways, high teacher efficacy in instructional strategies may be the indirect result of teaching in a school with mixed ages and mixed ability levels, which paradoxically was identified by this study as a barrier to teacher efficacy in instructional strategies.

Also prior to beginning this study, I expected to find that some factors influencing teacher efficacy at the juvenile detention center serve as both barriers and facilitators of high teacher efficacy. The actual results of this study corroborated this anticipated finding. For example, the data collected during the questionnaire and interview components of this study found that the presence of detention officers in the classroom serves as both a barrier and a

facilitator of teacher efficacy in classroom management at the juvenile detention center.

Participants noted that detention officers can cause classroom distractions by engaging in conversation that is outside the scope of the classroom lesson; however, participants also stated that some detention officers positively influence the students by actively participating in the lesson, engaging in class discussions, and encouraging students to work diligently and thoroughly. In addition, participants noted that the presence of detention officers is also helpful when addressing student misbehavior, which was identified as a barrier to high teacher efficacy in classroom management.

Similarly, this study found that some of the rules set forth by the juvenile detention center present obstacles to classroom teaching and learning. Participants noted that there are limitations about instructional aids, such as the use of technology in the classroom. In addition, students who are on unit restriction or seclusion do not attend school and therefore do not have immediate access to instruction. However, while some detention center policies serve as barriers to teacher efficacy in instructional strategies, these same policies help to create a safe environment for teachers, students, and other individuals throughout the facility.

One factor identified by this study served as a facilitator across two dimensions of teacher efficacy. The use of educational activities in the classroom was identified by this study as a facilitator of high teacher efficacy in both instructional strategies and student engagement.

Based on the questions on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) that fall within each of the three dimensions of teacher efficacy, teacher efficacy in instructional strategies includes implementing innovative instructional practices in the classroom, modifying lessons to meet the needs of individual students, gauging student comprehension of the lesson, and using a variety of assessment strategies. This study found that some of the

barriers to teacher efficacy in instructional strategies at the juvenile detention center include teaching classes of mixed ability levels and having limited options for student assessments. However, the use of educational activities, such as hands-on activities and academic games, provides an innovative way to instruct students with varied learning styles, gauge student understanding, and assess student mastery of learning objectives. Thus educational activities serves as a facilitator to high teacher efficacy and assists in overcoming some of the barriers noted in this study.

Based on the questions on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) that fall within each of the three dimensions of teacher efficacy, teacher efficacy in student engagement includes fostering student creativity, engaging students who lack motivation, helping students value learning, and getting through to the most difficult students. This study found that one of the barriers to teacher efficacy in instructional strategies at the juvenile detention center is negative student attitudes. However, the use of educational activities in the classroom is a way to engage all students in the learning process often in a way that allows students to creatively express their understanding of the lesson. One of the findings of this study is that many students at the juvenile detention center have had negative previous school experiences, which manifests as a negative attitude toward school at the detention center. Engaging these students is particularly challenging, but as one participant said, "We do activities that are disguised as games, so they won't know they are working." In that way, educational activities in the classroom serve as a facilitator to teacher efficacy in student engagement and serve as a means of overcoming negative student attitudes, which was identified as a barrier.

Classroom distractions were the only barrier identified by this study across all three dimensions of teacher efficacy, which suggests that this barrier serves as the most significant

obstacle to overall teacher efficacy at the juvenile detention center. Based on the data collected during this study, classroom distractions at the juvenile detention center take various forms.

Some of the external distractions that participants cited include classroom interruptions from detention center staff, other teachers, and administrators. In addition, respondents noted that classes are often disrupted when students are called from class for the doctor, dentist, psychologist, probation officer, evaluations, drug testing, court, video court, phone calls, special visits, and other circumstances. Not only is class disrupted when students are pulled out of class, but several participants indicated that class is also disrupted when students return to class.

Participants noted that the student's stress level has often changed upon their return to class, and it is often difficult to get them and even their classmates to focus on the lesson again.

While external classroom distractions are noticeable, participants also stated that many students are struggling with internal distractions, as well. These internal distractions can include issues of trauma, illness, concern about their current situation, worries about family members, and other highly personal and sometimes deeply rooted issues. These internal distractions can be as disruptive to teaching and learning as external classroom distractions. While no universal solution exists to eliminate classroom distractions at the juvenile detention center, the identification of this issue as a significant barrier to teacher efficacy is a notable finding of this study.

Discussion of the Results in Relation to the Literature

The results of this single-case study of factors influencing teacher efficacy at a juvenile detention center provide insight into the barriers and facilitators of high teacher efficacy at that site. While it is relevant to discuss the findings within the context of this study, it is also important to examine the findings in the wider context of existing educational research literature

and the greater community. The findings of this study may begin to fill gaps in the literature and may provide insight into barriers and facilitators of teacher efficacy beyond the setting of this study, such as other non-traditional school environments.

Prior to this study, two notable deficiencies existed among education research in the field of teacher efficacy. First, the majority of teacher efficacy studies had been conducted using quantitative methods (Klassen et al., 2011). This study used a qualitative method, involving the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), a questionnaire, and interviews. Second, teacher efficacy studies have focused primarily on teachers in traditional school settings, which excluded the population of teachers working in non-traditional education environments. Since teacher efficacy is domain-specific (Schwarzer & Hallum, 2008), different teaching environments can impact teacher efficacy in unique ways. For teachers in non-traditional school settings, the distinctiveness of their environment can impact their beliefs about the teaching profession and their role as teacher. Therefore, this study examined teacher efficacy in a juvenile detention center education program, which is a unique, non-traditional school setting.

The findings of this study are consistent with previous research. Studies conducted by Houchins et al. (2009), Cox et al. (2011), and Cate (2014) are among the few studies that targeted teachers in juvenile detention center education programs. The findings of these studies indicated that teachers in these settings encounter unique challenges that can impact teacher efficacy (Cate, 2014; Cox et al., 2011; Houchins et al., 2009).

Using the Norwegian Teacher Self-Efficacy Scale (Skaalvik & Skaalvik, 2007), as well as a survey to measure teacher motivation and a survey to measure burnout, Cate (2014) studied approximately 9,000 teachers from 1,315 facilities in the United States. The Norwegian Teacher

Self-Efficacy Scale (Skaalvik & Skaalvik, 2007) is based on six subscales: Instruction, Adapting Education to Individual Students' Needs, Motivating Students, Keeping Discipline, Cooperating with Colleagues and Parents, and Coping with Changes and Challenges (Skaalvik & Skaalvik, 2007). The 24-item scale includes four items for each of the six subscales. For the domain of Keeping Discipline, teachers with less than two years of experience scored significantly lower on self-efficacy ratings than teachers with two or more years of experience (Cate, 2014). The data collected during my study supported Cate's (2014) finding. In my study, the learning curve for new detention center teachers was identified as a barrier to teacher efficacy in classroom management. Participant 7 noted that the learning curve was most challenging during the first two years of teaching at the juvenile detention center.

Cox et al. (2011) examined teacher perceptions of the learning climate in a juvenile detention center in a rural area in Missouri. During a faculty meeting, an 86-question survey was completed by 22 faculty members to assess faculty perceptions of the learning climate. Most of the respondents reported negative perceptions of professional development opportunities and student conduct and motivation (Cox et al., 2011). Similarly, in my study, lack of relevant professional development was identified by 15.15% of interview responses as a barrier to teacher efficacy in instructional strategies at the juvenile detention center. In addition, negative student attitudes was cited in 22.22% of questionnaire responses and 31.25% of interview responses as a barrier to teacher efficacy in student engagement.

While the study by Houchins et al. (2009) did not specifically address the topic of teacher efficacy, the study examined the barriers and facilitators that juvenile justice teachers face in providing quality educational opportunities to incarcerated youth. The study involved 78 juvenile justice teachers from three facilities in Louisiana who completed a multi-part survey.

Among the findings of the study by Houchins et al. (2009), teachers in juvenile justice education were confronted by barriers such as teaching heterogeneous classes of mixed age and mixed ability students. That finding was supported by the findings of my study, in which two-thirds of the questionnaire respondents indicated mixed ability groupings was the most significant barrier to teacher efficacy in instructional strategies. Mixed ability student groupings was also identified in interview responses about barriers to efficacy in classroom management.

Another finding of the study by Houchins et al. (2009) was that dealing with a highly transient and often short-stay student population is a barrier for teachers in juvenile justice education in providing quality education to their students. The data from my study support that finding. Both the questionnaire and interview responses indicate that frequently turnover in student population is a barrier to high teacher efficacy at the juvenile detention center.

The findings of the studies by Cox et al. (2011) and Cate (2014) suggest that teachers in juvenile detention center education programs often believe they can create a positive learning environment even under unique circumstances. Consistent with previous research, the interview data from my study indicated that maintaining a positive classroom climate is a facilitator of teacher efficacy in classroom management. One interview participant noted that the students at the juvenile detention center have experienced a lot of negativity in their lives, so creating a positive classroom environment is important. In fact, the questionnaire responses from my study found that creating a positive learning climate serves as a facilitator of high teacher efficacy in all three dimensions.

Since levels of teacher efficacy might change throughout a teacher's career (Holzberger et al., 2013; Skaalvik & Skaalvik, 2007; Yeo et al, 2008), research that identifies trends in teacher efficacy beliefs could lead to the development of strategies to improve or support teacher

efficacy. In describing the five stages of culture shock that teachers in correctional education programs experience as they adjust to their work setting, Wright (2005) stated that teachers in correctional education programs are confronted with a harsh environment that can feel isolating and intimidating. The comments of several interview participants in my study corroborated that statement. Participant 3 said, "My biggest stress was that first day, just seeing the students walk in wearing jumpsuits. I was nervous and that caused me stress because I knew that they could see that I was very nervous." Participant 9 recalled an incident with a student on the first day of school that left the teacher questioning the decision to work at the juvenile detention center.

The findings of the study by Hosford and O'Sullivan (2015) indicated that perceptions of positive student relations and collaborative structures were associated with higher efficacy ratings. The data collected from the questionnaire and interview phases of my study confirmed building rapport with students is a significant facilitator of high teacher efficacy in classroom management and student engagement. Building rapport was actually the most frequently cited facilitator of teacher efficacy in student engagement during the interview phase of data collection. In addition, collaboration was identified by the interview data as a facilitator of high teacher efficacy in instructional strategies. This data is consistent with the findings of Hosford and O'Sullivan (2015).

While Steele et al. (2016) did not specifically discuss teacher efficacy, the findings of that study provided insight into the field of juvenile justice education and complemented some of the results of my study. The study by Steele et al. (2016) found evidence in support of personalized instruction for improving diploma completion and post-release employment (Steele et al., 2016). My study found that differentiated instruction and relevant lessons accounted for almost half of the responses from participants regarding facilitators to high teacher efficacy in instructional

strategies. Based on the findings of the study by Steele et al. (2016) and the findings of my study, personalized learning that focuses on the specific needs and interests of individual students may benefit both student learning and teacher efficacy.

Limitations

This single-case study had several limitations. First, the sample size was small (n = 9), which resulted in limited data. Second, all study participants worked at one juvenile detention center, so the findings could not be generalized to teachers in other facilities. Third, study participants included both current and former teachers of the juvenile detention center. Therefore, teachers who no longer work at the juvenile detention center had to rely on their memories of teaching at the facility. Also, depending on their reasons for leaving the juvenile detention center, some former teachers might have negative feelings about their experiences at the facility, which could have affected their responses. Fourth, teachers self-reported data, which may have resulted in answers that were influenced by social desirability bias (Fowler, 2009).

In addition, although the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) was well composed and widely used in the United States and abroad (Klassen et al., 2011), the scale and scoring recommendations do not account for teachers in unique school settings, such as non-traditional schools. Based on the data collected for the teachers at the juvenile detention center, at least one question, Question 22, was not applicable and resulted in skewed results. Therefore, the data collected from the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) may not be comparable to data collected from studies at traditional school settings.

For this study, the list of 20 interview questions included 11 questions that were designed to elicit answers about the overall research topic and were not specifically related to one of the

three research questions. As a result, coding of the answers to those 11 questions was based on researcher opinion about which research question each response addressed. Coding for those responses was subjective which might explain why some facilitators or barriers overlapped between the dimensions of teacher efficacy. Since coding was completed by only one researcher, the possibility also exists that other coders might have made different decisions and reached different conclusions. In addition, questionnaire data was not reviewed prior to creating interview questions, which might have allowed interview questions to be adjusted to target gaps in the data or to further examine trends in the questionnaire responses.

Implication of the Results for Practice, Policy, and Theory

According to Bandura (1997), an individual's self-efficacy beliefs affect their actions, efforts, perseverance, resiliency, thought patterns, and coping mechanisms. Teacher efficacy has an equally powerful impact in the classroom, affecting a teacher's orientation toward the educational process (Bandura, 1997). For teachers working in a juvenile detention center education program, teacher efficacy can be influenced by a variety of factors. Some factors influencing teacher efficacy can lead to high teacher efficacy and high quality instructional practices, while other factors can lead to low teacher efficacy and job stress. According to social cognitive theory, self-efficacy is based on personal judgment about a future task and is domain-specific (Schwarzer & Hallum, 2008). Therefore, understanding the factors that teachers perceive to be influencing their self-efficacy in a particular environment can have long-term, positive outcomes.

The results of this study inform the educational community as to what factors teachers in a juvenile detention center perceive to be influencing their teacher efficacy. Based on the findings, school-based leaders and district-level leaders can develop teacher hiring practices and

teacher induction programs designed to address the factors identified in this study.

Administrators in juvenile detention center education programs may be able to use the data from this study to design situation-based interview questions that explore the concept of teacher efficacy in potentially challenging situations, such as how to establish yourself as the classroom leader when you feel threatened by a student.

In addition, the findings of this study can be used to better prepare future juvenile detention center education program teachers and aid teacher retention. School and district administrators can develop induction programs and structural supports that address the factors identified in this study. For example, this study found that the learning curve for new detention center teachers begins on the first day, is steep, and lasts a couple of years. School leaders and district leaders can create professional development opportunities that examine strategies for addressing barriers and promoting facilitators of high teacher efficacy. In particular, this study found that professional development is most effective when providing strategies specifically targeted at juvenile detention center teachers.

In addition, some of the factors influencing teacher efficacy in non-traditional school settings, such as a juvenile detention center, may also be applicable to traditional school environments. As a result, the findings of this study may benefit the education community atlarge. School leaders and district leaders in other school environments may be able to develop hiring practices, induction programs, and structural supports that address the factors identified in this study and create academic environments that promote high teacher efficacy and foster student learning.

Recommendations for Further Research

This study addresses gaps in the research literature by applying a qualitative approach in a non-traditional school setting; however, several areas of critical inquiry remain. First, further research should attempt to replicate this study in order to compare the results with other juvenile detention center education programs. The sample size for this study (n = 9) was small; therefore, further research involving a similar research population with a larger sample size is recommended to investigate whether the factors influencing teacher efficacy are consistent with the findings of this study.

Second, further research involving a multiple-case study design is recommended. Even within the setting of juvenile detention center education programs, there are distinctions between specific facilities. For example, the presence of detention officers in the classroom varies by location across the United States based on state regulations and facility-specific policies. The findings of this study indicate that the presence of detention officers in the classroom serves as a barrier and a facilitator to high teacher efficacy in this juvenile detention center. Further research involving a multiple-case study design would generate a better understanding of the barriers and facilitators impacting teacher efficacy that are common among juvenile detention center education programs.

Third, if this study is replicated in the future, the addition of questionnaire questions asking respondents to suggest strategies for overcoming barriers to high teacher efficacy would extend the application of the results of this and future studies. Houchins et al. (2009) used a similar questioning format, which allowed participants to expand their thinking beyond simply identifying barriers to providing high quality education to incarcerated youth. Respondents were asked for suggestions for overcoming the barriers. As the individuals most closely linked to the

research topic of teacher efficacy in a juvenile detention center, teachers of incarcerated youth are the ideal respondents to offer suggestions about how to improve teacher efficacy. Identifying the factors influencing teacher efficacy in a juvenile detention center is only the first step in developing strategies to support high teacher efficacy in that setting.

Fourth, since few studies of teacher efficacy in non-traditional school settings have been conducted, further research studies should examine factors influencing teacher efficacy in other non-traditional environments. The findings of this study could be combined with the findings of those studies to determine whether factors influencing teacher efficacy are consistent among different types of non-traditional schools. In addition, those combined results could be compared to findings of previous research of teacher efficacy in traditional schools to identify factors that are uniformly present or unique to each type of setting.

Fifth, further studies of teacher efficacy in the juvenile detention center should use a variety of teacher efficacy scales to determine the scale that best measures teacher efficacy in a non-traditional school setting. The data gathered from the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) confirmed the expected findings of this study and seemed to confirm that teachers in juvenile detention centers identify efficacy beliefs in the three dimensions of teacher efficacy identified by the scale. However, questions remain about whether that scale is the most effective and most comprehensive tool for assessing teacher efficacy in a juvenile detention center or other non-traditional school environment. Further studies involving different tools for measuring teacher efficacy could lead to the development or refinement of a scale to assess teacher efficacy in non-traditional school settings.

Finally, further research should focus on longitudinal studies of teacher efficacy in this and other juvenile detention centers. This study only gathered data at a single point in time.

Since teacher efficacy is malleable, longitudinal studies that use qualitative measures would provide educational researchers a broader understanding of when, why, and how teacher efficacy beliefs are adapted. In this study, the juvenile detention center experienced significant turnover in faculty in recent years; therefore, a longitudinal case study of this site would generate a better understanding of the changes in teacher efficacy in relation to personnel changes. The results of a longitudinal single-case study of this particular site could be useful for program administrators to determine best practices for staffing this facility in order to ensure high teacher efficacy. This study found that the learning curve for new detention center teachers is challenging.

Longitudinal studies of this and other juvenile detention centers would provide greater insight into the learning curve for new detention center teachers.

Conclusion

This single-case study examined the factors influencing teacher efficacy in instructional strategies, student engagement, and classroom management among teachers currently or recently working in a juvenile detention center education program in southeastern Pennsylvania.

Teaching in a juvenile detention center is a unique experience that presents a variety of challenges. Prior to this study, little was known about the barriers and facilitators of high teacher efficacy in this setting.

Specifically, this study found the group of participants felt least efficacious in student engagement and most efficacious in instructional strategies. The findings of this study indicated that several significant barriers and facilitators of teacher efficacy in each of the three dimensions are present at the juvenile detention center. The following were found to be barriers to high teacher efficacy: student misbehavior, classroom distractions, student groupings of mixed ability levels, limited assessment options, negative student attitudes, and limited background

information about students. In addition, this study found the following to be facilitators of high teacher efficacy at the juvenile detention center: positive learning climate, presence of detention officers, classroom rules and expectations, differentiated instruction, relevant lessons, educational activities, and rapport with students.

The findings of this study inform the broad field of teacher efficacy research and the narrower field of juvenile justice education research. This study provides insight into the barriers and facilitators of high teacher efficacy in a juvenile detention center education program. By using the findings of this study to develop strategies that support teachers in a juvenile detention center, this study can contribute to creating an academic environment that promotes high teacher efficacy and ultimately fosters student learning.

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Appendix A: Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001)

Please indicate your opinion about each of the questions below by selecting any one of the nine responses in the columns on the right side, ranging from (1) "None at all" to (9) "A great deal" as each represents a degree on the continuum. This questionnaire is designed to help us gain a better understanding of the kinds of things that create challenges for teachers. Your answers are confidential. Please respond to each of the questions by considering the combination of your ability, resources, and opportunity to do each of the following while teaching at the juvenile detention center.

	None at all (1)	(2)	Very little (3)	(4)	Some degree (5)	(6)	Quite a bit (7)	(8)	A great deal (9)
How much can you do to get through to the most difficult students? (1)	0	•	0	•	0	O	O	O	0
How much can you do to help your students think critically? (2)	O	0	0	0	O	0	O	0	0
How much can you do to control disruptive behavior in the classroom? (3)	O	O	O	O	O	0	O	0	O

How much can you do to motivate students who show low interest in school work?	•	•	•	•	•	•	•	•	0
To what extent can you make your expectations clear about student behavior? (5)	0	•	•	•	•	•	O	•	O
How much can you do to get students to believe they can do well in school work?	•	•	•	•	•	•	O	•	O
How well can you respond to difficult questions from your students? (7)	•	•	•	•	•	•	•	•	•
How well can you establish routines to keep activities running smoothly? (8)	0	•	•	•	•	•	•	•	•
How much can you do to help your students value learning? (9)	•	•	•	•	•	•	O	O	O

How much can you gauge student comprehension of what you have taught? (10)	O	O	O	O	0	•	•	•	0
To what extent can you craft good questions for your students? (11)	•	0	•	•	•	•	•	•	•
How much can you foster student creativity? (12)	O	•	•	•	•	•	•	•	•
How much can you do to get students to follow classroom rules? (13)	O	O	O	O	O	O	O	O	0
How much can you do to improve the understanding of a student who is failing? (14)	O	O	O	O	O	O	O	O	0
How much can you do to calm a student who is disruptive or noisy? (15)	0	O	O	O	O	0	0	0	0
How well can you establish a classroom management system with each group of students? (16)	O	O	O	O	O	O	O	O	0

How much can you do to adjust your lessons to the proper level for individual students? (17)	O	O	O	0	O	O	O	O	0
How much can you use a variety of assessment strategies? (18)	•	0	O	0	O	O	O	O	0
How well can you keep a few problem students from ruining an entire lesson? (19)	O	0	0	•	O	0	O	0	0
To what extent can you provide an alternative explanation or example when students are confused? (20)	O	Q	Q	Q	O	O	O	O	0
How well can you respond to defiant students? (21)	•	0	0	O	0	•	•	0	0
How much can you assist families in helping their children do well in school? (22)	O	O	•	•	O	O	O	O	•

How well can you implement alternative strategies in your classroom? (23)	O	O	O	O	O	O	O	O	0
How well can you provide challenges for very capable students?	O	O	O	O	O	O	O	O	0

Appendix B: Questionnaire

For the following two questions, please reflect on classroom management factors such as establishing a classroom management system, controlling disruptive behavior in the classroom, getting students to follow classroom rules, and responding to defiant students. Teacher efficacy is a teacher's beliefs in his or her ability to promote students' learning. For the next two questions, please think about classroom management factors that impact your teacher efficacy when teaching in the juvenile detention center.

Question 1. Describe at least one classroom management factor that serves as a barrier to your teacher efficacy.

Question 2. Describe at least one classroom management factor that serves as a facilitator of your teacher efficacy.

For the following two questions, please reflect on classroom instructional factors such as implementing alternative instructional strategies in the classroom, adjusting lessons to the proper level for individual students, gauging student comprehension of the lesson, and using a variety of assessment strategies. Teacher efficacy is a teacher's beliefs in his or her ability to promote students' learning. For the next two questions, please think about classroom instructional factors that impact your teacher efficacy when teaching in the juvenile detention center.

Question 3. Describe at least one classroom instructional factor that serves as a barrier to your teacher efficacy.

Question4. Describe at least one classroom instructional factor that serves as a facilitator of your teacher efficacy.

For the following two questions, please reflect on student engagement factors such as fostering student creativity, motivating students who show low interest in schoolwork, helping

students value learning, and getting through to the most difficult students. Teacher efficacy is a teacher's beliefs in his or her ability to promote students' learning. For the next two questions, please think about student engagement factors that impact your teacher efficacy when teaching in the juvenile detention center.

Question 5. Describe at least one student engagement factor that serves as a barrier to your teacher efficacy.

Question 6. Describe at least one student engagement factor that serves as a facilitator of your teacher efficacy.

Appendix C: Interview Questions

- 1. In your opinion, what does "student success" look like at the juvenile detention center? What does "teacher success" look like at the juvenile detention center? If you believe they are linked, please describe the relationship between "student success" and "teacher success" at the juvenile detention center.
- 2. In your opinion, what makes one student more successful academically over another?
- 3. How much can you do to help your students value learning? Please give an example of a specific incident in which you helped a student value learning. Please give an example of a specific incident when you were unable to help a student value learning.
- 4. What part or parts of your students' lives do you feel you have the most impact on? Why do you think this is so?
- 5. Is it possible to impact student success at the juvenile detention center? Please explain why or why not. Are there ever situations when it feels impossible to impact student success? How do you handle those situations?
- 6. Please describe some of the teaching strategies you use in your classroom, other than direct instruction. Can you describe some of the factors that impede your ability to implement these teaching strategies?
- 7. How do you know when your students have mastered the standards being taught? What assessment strategies do you use? Please provide specific examples, if possible.
- 8. Please give an example of a time when a student was confused with what you were teaching, and describe how you changed your teaching style to adjust to the student's learning needs.

- 9. What strategies do you use to establish classroom rules when teaching a short-stay student population? How have your strategies changed over time?
- 10. Please describe your level of comfort when confronted with disruptive behavior in your classroom.
- 11. What form of discipline have you found most effective in dealing with difficult students in your classroom?
- 12. Please share two or three of the best classroom experiences you have had when teaching at the juvenile detention center. Describe the factors that made those experiences positive.
- 13. Please share two or three of the worst classroom experiences you have had when teaching at the juvenile detention center. Describe the factors that made those experiences difficult.
- 14. When you get home from school after a challenging day, do you do anything in particular to decompress from the stressors of the day? If so, describe how you decompress. Please explain whether or not this impacts your sense of efficacy in the classroom.
- 15. How difficult do you believe it is to increase a teacher's sense of efficacy once it has been developed?
- 16. Describe how professional development throughout your career has influenced your teacher efficacy. In what ways can professional development be used to promote high teacher efficacy?
- 17. What can a school administrator do to increase your teacher efficacy in the juvenile detention center? What characteristics of a school leader negatively impact your teacher efficacy?

- 18. Think about the efficacy of other teachers with whom you have worked at the juvenile detention center. In what ways does this affect your personal feelings of self-efficacy in the classroom?
- 19. What causes the most stress for you as a teacher in the juvenile detention center? What creates the most satisfaction for you as a teacher in the juvenile detention center?
- 20. Is there anything else you want me to know in regard to factors influencing teacher efficacy in the juvenile detention center?

Appendix D: Statement of Original Work

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously-researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

Statement of academic integrity.

As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

Explanations:

What does "fraudulent" mean?

"Fraudulent" work is any material submitted for evaluation that is falsely or improperly presented as one's own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate's final work without full and complete documentation.

What is "unauthorized" assistance?

"Unauthorized assistance" refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

- Use of unauthorized notes or another's work during an online test
- Use of unauthorized notes or personal assistance in an online exam setting
- Inappropriate collaboration in preparation and/or completion of a project
- Unauthorized solicitation of professional resources for the completion of the work.

Statement of Original Work

I attest that:

- 1. I have read, understood, and complied with all aspects of the Concordia University-Portland Academic Integrity Policy during the development and writing of this dissertation.
- 2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the *Publication Manual of The American Psychological Association*

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