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# Preschool and Kindergarten Teachers' Perspectives on Effective Strategies and Practices for Supporting Self-Regulation

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# Walden University

College of Education

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Cheryl Denise Thomas

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#### **Review Committee**

Dr. Beryl Watnick, Committee Chairperson, Education Faculty Dr. Donna Brackin, Committee Member, Education Faculty Dr. Jeanne Sorrell, University Reviewer, Education Faculty

Chief Academic Officer and Provost Sue Subocz, Ph.D.

Walden University 2021

#### Abstract

Preschool and Kindergarten Teachers' Perspectives on Effective Strategies and Practices

for Supporting Self-Regulation

by

Cheryl Denise Thomas

EdS, Brenau University, 2015

MA, University of Phoenix, 2007

BA, Valdosta State University, 1997

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Walden University

September 2021

#### Abstract

Research indicates that young children need to be able to self-regulate their emotions and behaviors to be successful in preschool and later schooling. However, there is no consensus in the education sector regarding what constitutes best strategies and practices when supporting self-regulation in young children. The purpose and guiding research question for this qualitative study were to explore teachers' perspectives on effective strategies and practices used to support self-regulation in preschool and kindergarten classrooms. This study was premised on Bandura's social learning theory, which explains human behavior in terms of continual interaction between cognitive, behavioral, and environmental factors when attempting to self-regulate. Twelve individual semistructured interviews were conducted with nine kindergarten and three preschool-certified teachers who had at least 1 year of classroom experience. The data were analyzed by using a hybrid coding method which consisted of three a priori codes for deductive analysis and eight in vivo codes for inductive analysis. The results of the study indicate that the participants believed in the importance of teachers' ability to coregulate young children's self-regulation by providing direct instruction, modeling, and different opportunities for observation, emulation, and self-control to strengthen or weaken young children's inhibitions. A recommendation is that future researchers consult with preschool and kindergarten teachers about effective learning practices and strategies. This outreach may assist policy makers in gaining additional insight into the types of training resources possibly needed in the educational professional learning environment. Provision of these resources may increase teachers' capacity to support young children's self-regulation development during these early years, which may improve their subsequent learning.

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#### Dedication

I enrolled in the EdD program at Walden University to accomplish several goals. I wanted to challenge myself in earning this well-respected degree and have a sense of personal accomplishment that I knew had already been felt by many friends and colleagues who had earned their doctoral degrees. I also wanted to be an example to my three children, so they would know that whatever they imagine in their hearts to do, it could be accomplished. My children have been my biggest inspiration and supporters during this process. There were many discussions about my dissertation and the overall process between us. During the challenging moments, they would respond with an encouraging word, a smile, or just simply an acknowledgment of my feelings at the time. This was a unique time for all of us as we were experiencing a world pandemic. My daughter was in the Navy stationed across the world defending our country, my oldest son was graduating from college with his degree in chemical engineering, and my youngest son was finishing up his junior year in college majoring in mathematics. My children never stopped encouraging me to move forward in my goal even as they were focused on achieving their goals. They continued to support my decision to obtain this doctoral degree. As a result, I continued to press on and have completed my goal. A big thank you to my children for giving me that unconditional love and support. I dedicate this dissertation and my entire work at Walden University to you. We did this together, so congratulations to all of us! I love you all!

#### Acknowledgments

I am thankful to you Lord Jesus for providing me with the faith and perseverance to continue to the end. Galatians 6:9: "And let us not become weary in well doing: for in due season, we shall reap if we faint not."

I want to acknowledge my late grandparents Walter Harrell and Mary E. Harrell. If it were not for them, I would not be who I am today. They both instilled in me the precious gifts of faith, dedication, and hard work.

My life has been filled with countless blessings from God and with encouragement from so many people. Through this acknowledgment page, I express my gratitude to everyone who joined me on this journey, including these individuals:

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- my dissertation committee: Dr. Beryl Watnick, Dr. Donna Brackin, and Dr.
   Jean Sorrell

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#### Chapter 1: Introduction to the Study

The focus of this study was on teachers' perspectives of effective strategies and practices for supporting self-regulation in preschoolers and kindergartners. Research indicates that young children need self-regulation to be successful in preschool (Bierman et al., 2016) and beyond (Pratt et al., 2016). There is a significant relationship between young children's increased ability to self-regulate and the reduction of future behavior problems (Searle et al., 2015; Williams & Berthelsen, 2017), which may ultimately influence higher academic success in reading and math (Liew et al., 2018). Because teachers play an important role in preschool and kindergarten children's development of self-regulation (Moreno et al., 2017), additional research on the effective strategies and practices teachers can use to assist young children in developing self-regulation is needed. This knowledge may be beneficial in identifying areas of teacher education and training that may enhance young children's overall school readiness (Silkenbeumer et al. 2018). Identifying the possible need for additional educator training in self-regulation pedagogy has the potential to produce positive social change within early childhood classrooms.

Chapter 1 begins with background information from the research literature, the gap that has been identified in practice, and why the study is needed. I then state the problem and purpose of the study. The research question will be identified, the conceptual framework will be developed, and the key concepts that ground the study will be explained. A rationale will also be provided for the chosen design. Definitions for key

concepts, assumptions, delimitations, and limitations will be provided in Chapter 1. Finally, I present the potential contributions of the study to positive social change.

#### **Background**

Self-regulation is defined as the capability to control one's attention, thoughts, emotions, and actions (Kim & Holloway, 2018). When young children can self-regulate, there is a potential for increased academic success in later elementary grades (De La Riva & Ryan, 2015; Timmons et al., 2016). Self-regulatory skills assist in school readiness by becoming a foundation for children to regulate emotions and attention that are conducive to learning and developing positive relationships with peers and teachers (Flook et al., 2015; Pratt et al., 2016). Therefore, experts view self-regulation as important for school readiness and later school success (Cadima et al., 2016).

Some researchers suggest that early intervention is imperative in preventing continued behavior problems and negative long-term academic and social outcomes (Garrity et al., 2017). Despite this awareness, some factors that affect children's readiness for school remain unexamined. Previous researchers who have studied school readiness, for instance, have overlooked children's emotions; rather, the focus was primarily on cognitive and language performance (Russell et al., 2016) or the raising of math and reading scores (Burroughs & Barkauskas, 2017). As a result, important skills such as self-regulatory proficiencies are not taught explicitly in the classroom. The problem is there is no clear consensus on what the best strategies and practices are to use for supporting self-regulation in young children (Dignath & Buttner, 2018; Flook et al., 2015). This lack of consensus on which strategies and practices are considered most effective when

supporting self-regulation in young children is the gap in practice that I addressed in this study.

With the onset of new standards in the United States for kindergarten through 12th grade, the expectations for children to pay attention, get along with peers, focus independently for long periods, and follow routines have increased immensely (Kroll, 2017). These expectations are represented by young children's ability to express social-emotional competence (Ferrier et al., 2018). Emotional competence is accomplished by children acquiring knowledge about emotions, how these emotions are experienced and expressed, and how to regulate these emotions (Ferrier et al., 2018). Children who struggle with self-regulation may be particularly reliant on teachers to obtain self-regulatory skills (McKinnon & Blair, 2019; Pratt et al., 2016).

Because self-regulation in early childhood is a complex process that requires children to control their behaviors based on the nature of constructs and strategies implemented in the classroom during teaching and learning (Kinkead-Clark, 2017), the quality of teacher-child relationships and the overall classroom climate play an important part in children's self-regulatory development (Gozde Erturk Kara et al., 2017). When desiring to enhance children's self-regulation, there are several factors in relation to teacher quality that must be considered. For example, the quality of teachers' education and training; teacher-child interactions and instructional approaches; and characteristics such as beliefs, attitudes, and perspectives are all important factors (Hur et al., 2015; Gozde et al., 2017). This link between classroom quality and children's development of self-regulation has been overlooked (Cadima et al., 2016). In this study, I addressed the

gap in practice by obtaining teachers' perspectives on the strategies and practices that they believe to be effective in supporting self-regulatory development in preschoolers and kindergarteners (seeFayez et al., 2016; Pratt et al., 2016).

#### **Problem Statement**

There is a lack of consensus regarding what are the best strategies and practices to support self-regulation in young children (Dignath & Buttner, 2018; Flook et al., 2015). Given the recent progress in understanding self-regulation, teacher practices that support regulatory development should be an integral part of teacher-child interactions in preschool (Moreno et al., 2017). Recent studies have demonstrated that children with poor self-regulation might benefit more from high-quality, classroom-based interventions as compared to self-regulated peers (Pratt et al., 2016). Gender and race disparities in preschool suspensions and expulsions may be related to several factors such as poor access to these high-quality learning environments and supports and uneven use of selfreflective strategies and practices that could assist in recognizing potential biases in perception and practice (Gilliam et al., 2016). It may be helpful for preschool and kindergarten teachers to consider the differences in children's strengths and abilities based on subcultures, parenting practices, ethnicity, and so forth when employing strategies and practices to support self-regulation (Kinkead-Clark, 2017; Korinek & deFur, 2016; McKinnon & Blair, 2019). By understanding these differences, teachers may be able to provide a more equitable learning environment that supports the development of self-regulation (Kroll, 2017). The problem is that teachers' perspectives on effective practices and strategies used to support self-regulatory development in young children are unknown (Pratt et al., 2016). Research needs to be conducted on preschool and kindergarten teachers' perspectives on effective strategies for promoting self-regulation (Hur et al., 2015; Kinkead-Clark, 2017).

Researchers have also indicated a significant relationship between children's increased ability to self-regulate and school readiness (Russell et al., 2016) and the reduction of future behavior problems (Searle et al., 2015; Williams & Berthelsen, 2017). However, the social-emotional guidelines created by organizations such as Head Start Child Development and Early Learning Framework do not provide any guidance for instructional practices in support of self-regulation (Moreno et al., 2017). Professional development efforts may be enhanced by the knowledge gained from teachers' perspectives on effective practices and strategies that are currently used to support regulatory development (Pratt et al., 2016). In the current study, I built upon previous research by focusing specifically on teachers' perspective of effective strategies and practices found to support self-regulation in young children. The additional information gained from the study may be useful in closing the gap in practice by adding to the body of literature.

#### **Purpose of the Study**

The purpose of this study was to explore teachers' perspectives on effective strategies and practices used to support self-regulation in preschool and kindergarten classrooms. Obtaining teachers' perspectives may provide additional knowledge needed to address the lack of a clear consensus about the best strategies and practices used to support self-regulation in young children. Educators use various teaching strategies and

practices in the classroom to assist students with self-regulation, but there is no clear consensus on the best methods for increasing these skills in young children (Dignath & Buttner, 2018; Flook et al., 2015). Because young children have different needs based on economic, cognitive, behavioral, cultural, and emotional characteristics (Kroll, 2017), teachers should reflect on instructional practices that are used with their young students (Korinek & deFur, 2016). To address the research problem, I used a basic qualitative study paradigm to explore preschool and kindergarten teachers' perspectives on effective strategies and practices used to support self-regulatory development. Interviews were used to develop an understanding of preschool and kindergarten teachers' perspectives to answer the research question.

#### **Research Question**

I used the following question to guide the study: Based on the perspectives of preschool and kindergarten teachers, what strategies or practices have been effective in supporting students' self-regulation? I obtained a deeper understanding of teachers' perspectives through personal interviews. A description of the process will be provided in Chapter 3.

#### **Conceptual Framework**

I based the conceptual framework for this study on Bandura's (1993) social learning theory (see also Boone & Reilly, 1977). This theory explains human behavior regarding the continual interaction between cognitive, behavioral, and environmental factors. The theory also provides insight about how behavior is not solely based on the environment but an individual's ability to self-regulate by using cognitive processes. I

grounded the study's conceptual framework in the relevant constructs of the social learning theory, which include components such as observational learning through modeling, learning through conceptualization, and learning by employing self-regulatory processes (Boone & Riley, 1977). For the purpose of this study, self-regulation was defined as having the capability to use cognitive processes such as self-observation, self-judgment, and self-reaction to control attention and inhibit undesired responses in an effort to respond adaptively to changing environments (Cadima et al., 2016; Searle et al., 2015).

I designed the research question to explore strategies and practices that preschool and kindergarten teachers perceive as effective for supporting self-regulation in young children. The purpose of the current study is framed by the idea that best strategies and practices should include elements of the social learning theory. The social learning theory, also referred to as the social cognitive theory, includes a modeling process that may serve in three different functions (Schunk & Zimmerman, 1997) As applied to this study, the three roles include the teacher providing inhibition/disinhibition by assisting young children with opportunities that will either strengthen or weaken inhibitions, providing opportunities for direct modeling so students can learn how to perform expected rules and routines, and providing the students with explanations and demonstrations while verbalizing the reasoning and thought process behind the actions.

Modeling usually precedes children's ability to self-regulate because it has a direct impact on their behavioral and cognitive capabilities. Therefore, self-regulation is based on modeling and direct instruction (Grusec, 1992). Not providing students with

teacher guidance may lead to substantial deficits in students' ability to self-regulate (Schunk & Zimmerman, 1997). Silkenbeumer et al. (2018) asserted that before children can self-regulate, teachers must coregulate with them. There are three levels of coregulation, which may help support self-regulation. Reflective emotion is the first level; in this level, teachers assist in helping children identify an internal feeling. The second level is specified by the teacher providing specific prompts that assist students in using specific behavioral strategies. The final level is where the teacher provides more meta-cognitive prompts so that children may explore and evaluate alternative regulation strategies and then choose an appropriate one for a given situation.

When children can inhibit inappropriate responses and express an effect that is appropriate, two types of important regulation are implemented; behavioral and emotional regulation (Cadima et al., 2016). However, it is not sufficient for teachers to only provide behavioral and emotional regulatory support. Cognitive self-regulation is also important to school readiness (Moreno et al., 2017). Cognitive self-regulation is also known as executive function, which includes components such as working memory, inhibition, and cognitive flexibility. Research has suggested that there is a link between cognitive self-regulation and children's ability to express better emotional control (Ferrier et al., 2018). I will explain the logical connections between observational learning through modeling, learning through conceptualization, and learning through employing self-regulatory processes more thoroughly in Chapter 2. The framework relates to the study approach and provides a lens for evaluating effective strategies and practices for supporting self-regulation in young children, as determined by teachers' perspectives.

I used interview questions to explore preschool and kindergarten teachers' perspectives on effective strategies and practices used to support self-regulation in young children. The interview protocol was structured to include the relevant constructs derived from the conceptual framework. Data analysis was grounded in the conceptual framework by using *a priori* codes that included the relevant constructs of the social learning theory, as well as the use of open codes. The a priori codes included teacher support, which is defined as teachers providing opportunities to strengthen or weaken young children's inhibitions; direct instruction, which is defined as teachers providing explicit examples of expected rules and routines in the classroom; and modeling, which is defined as teachers providing young children with clear explanations and demonstrations of self-regulatory behaviors while verbalizing the reasoning and thoughts behind the actions.

#### **Nature of the Study**

This was a basic qualitative study. I interviewed six preschool and eight kindergarten teachers regarding their perspectives about effective practices for supporting self-regulation in preschoolers and kindergarteners. I used semistructured interviews to gain insight into the perspectives of the participants, therefore becoming a participant in the research study. I designed the interviews so that I would be immersed in the environment while creating rapport with participants; additionally, I sought to behave in such a way that did not interfere with the validity of the study (see Ravitch & Carl, 2016).

After the interviews were completed, I coded the data based on the conceptual framework of the social learning theory. This theory was used as the lens by which I

interpreted and understood the participants' perspectives on effective practices for supporting self-regulation in preschoolers and kindergartners. Researchers use words and phrases from an interview, which may be repetitious, to determine emergent themes (Saldana, 2016).

After using a priori codes to categorize the interview data, I used open coding to analyze the data. In vivo coding was used when analyzing the data to capture the actual language of the preschool and kindergarten teachers. Capturing the participants' precise wording provides a researcher with a more emotional component of the interview (Saldana, 2016). Employing the in vivo method also provided me with a more graphic analytical description of the participants' perceptions of effective strategies and practices used to support self-regulation in young children.

#### **Definitions**

Behavioral self-regulation: The ability to control cognition, such as attention and memory, to inhibit behaviors when confronted with distractions (Salisch et al., 2017; Sawyer et al., 2015).

Cognitive self-regulation: The capability to control attention and inhibit undesired responses to respond adaptively to changing environments (Searle et al., 2015; Lipsey et al., 2017).

*Emotion self-regulation:* The ability to regulate emotional reactivity and emotional expressions (Lincoln et al., 2017).

*Emotional competence*: A set of skills that are gained through the development of emotionality, emotion knowledge, and emotion regulation (Ferrier et al., 2018).

Executive function: Also known as "cognitive self-regulation" which consists of children's ability to demonstrate working memory, inhibition, and cognitive flexibility (Moreno et al., 2017).

*School-readiness*: A child's ability to display self-regulatory skills that encompass social, emotional, behavioral, and cognitive domains (Russell et al., 2016).

*Self-efficacy:* The belief in one's own ability to perform a task through successful performance and by watching others perform the task successfully (Muenks et al, 2018).

#### **Assumptions**

I had several assumptions when conducting this research study. The first assumption was that the participants would answer the interview questions honestly and candidly. If the participants were not honest with their answers, then it could have affected the true outcome of the research study. The inclusion criteria for the sample were crafted so that all the participants had experienced the same or similar phenomenon of the study. Also, it was assumed that the participants had a sincere interest in participating in my research and did not have any alternative motives, such as impressing their job supervisors because they agreed to participate in the study. Because the gap in practice was not having a clear consensus on what are considered best strategies and practices for supporting self-regulation in young children, it was important that the information provided by the participating teachers was based on real experiences only and not based on impressing the school leadership, which could have possibly influenced the information the teachers provided.

In addition, I assumed that the 12 preschool and kindergarten teachers would be available throughout the entire interview process. Because the participating teachers were available throughout the entire process, I was able to obtain complete interview responses to answer my research question. One other assumption was that the 12 participants would provide total cooperation, as well as contribute sufficient information that would be helpful to this research study. Gaining sufficient information from the participants helped me analyze the data in a more in-depth manner. It was assumed that all participating teachers would have at least 1 year of prior knowledge and experience with supporting self-regulation in young children. If participants had less than 1 year of full experience in supporting self-regulation in young children, there would have been a risk of them having trouble providing information because of the limited amount of experience. If the participants had at least 1 full year in the classroom, they would have at least experienced the children's self-regulatory skills from the beginning, middle, and end of that school year.

#### **Scope and Delimitations**

The scope of this research study was determined by the research question and the focus on eliciting the perspectives of a combined total of 12 preschool and kindergarten teachers. Researchers have not provided a definitive number of required participants for each type of qualitative design, outside of the fact that qualitative designs typically involve a smaller number of participants (Creswell & Creswell, 2018). I originally based the scope of the research study upon interviews with only four preschool teachers and eight kindergarten teachers. The rationale for not using an even number of preschool and

kindergarten teachers was due to the number of preschool and kindergarten classrooms available where the research was conducted. Each of the originally planned two sites only had two preschool classrooms compared to at least four kindergarten classrooms.

Therefore, the number of participants was directly proportioned to the number of classrooms available at each site. The sample population of this basic qualitative study was chosen from a small suburban area in the Southeastern part of the United States.

Therefore, some or all experiences may be distinctive to this population only; thus, findings may not be transferable to a more generalized population.

I did not include other grade-level teachers because the research indicates that preschool and kindergarten school readiness sets the stage for upper elementary and middle school (Bierman et al., 2017). Self-regulation during preschool is the foundation of school readiness because ensuring preschool children's ability to self-regulate equips them for the heightened demands of primary grades (Russell et al., 2016). However, it is also documented in research that children who are unable to meet behavioral demands at the beginning of kindergarten are usually seen as being disruptive by their teachers, which could lead to negative academic repercussions (Ferrier et al., 2018). Therefore, early childhood classroom teachers are especially important in helping children develop self-regulatory skills that will help them succeed in their later years of schooling (Kroll, 2017).

To assist in transferability, I used rich and thick descriptions to relay the findings of this study. Using thick descriptions allows an avenue where readers may clearly understand the contextual setting, thereby permitting them to gain a shared experience of

the participants (Creswell & Creswell, 2018). Providing clear and concise details of the setting and the teachers' perceptions in context provides the reader with a more realistic result, which will increase the validity of the findings. The readers may transfer certain facets of the findings, based on the contextual components, into future designs and findings instead of aiming to replicate the exact findings (Ravitch & Carl, 2016).

#### Limitations

The findings from this study were based on the perspectives provided by three preschool and nine kindergarten teachers. This relatively small number of participants poses a limitation due to the difficulty in generalizing the results to a larger group of individuals. For the location of the research, I chose a school from a suburban setting. Therefore the context of the research study may be affected by factors such as the location, the small number of participants, and their unique cultural experiences. To address these limitations, I provide a rich and detailed description of the results to realistically represent the findings. Providing readers with a realistic description may help to increase the validity of the results and offer enough contextual knowledge for the reader to transfer certain aspects of the findings to future research.

The selected qualitative research design may also be a limitation. I used a single set of interview questions to collect data from the participants. There were no other data collection tools used that might have created triangulation. To ensure that my research had dependability, I ensured that the interview questions were relevant to answering my research question. Member checking was also used as a way to ensure that my findings were aligned with the information the participants provided. Finally, personal biases

could have affected the interview process by the way questions were asked and perceived by the participants. To help eliminate potential biases during the interview process, I took journal notes to reflect upon any biased thinking on my part during interviewing. I was also mindful of the type of language used during the interview process.

#### **Significance**

I addressed the gap in research by focusing specifically on preschool and kindergarten teachers' perspectives on effective strategies and practices used in the classroom to support self-regulatory development. This study is unique because it addresses specific strategies and practices currently used by preschool and kindergarten teachers to support self-regulatory development. This type of knowledge may provide additional insight into the type of support teachers may need to improve the level of direct self-regulatory instruction in the classroom. Supporting children who express difficulties in the areas of self-regulation may not be equitable among all teachers (Silkenbeumer et al., 2018). This study may help promote positive social change by informing future early childhood education research and professional development efforts about strategies and practices that may be useful in supporting self-regulatory development in young children (Pratt et al., 2016), while also adding to the body of literature.

#### Summary

Over the years, several researchers have examined ways to support self-regulation in young children. Several topics have been studied--for example, self-regulation as it relates to the teacher-child relationship, the effects of self-regulation on pro-social

behavior, and self-regulatory-based curriculums (Cadima et al., 2016; Flook et al., 2015; Sezgin & Demiriz, 2019). In this research study, I examined teachers' perspectives on effective strategies and practices used to support self-regulation in young children. By exploring the perspective of the teachers, I contributed to the body of literature about effective strategies and practices used to support self-regulation in young children. This information may provide professional development committees with greater insight on how to assist preschool and kindergarten teachers in using effective strategies and practices to support self-regulation.

This chapter included the background, problem statement, and purpose of the study. The research question and conceptual framework revealed the foundation upon which the study was grounded. The assumptions, scope and delimitations, and limitations also provide information about the research study. I also highlighted the gap in the literature in this chapter to justify the need for this study. In Chapter 2, the literature review that supports the need for this study will be shared in greater detail.

#### Chapter 2: Literature Review

Despite evidence that supports the need for young children to acquire self-regulation as a prerequisite for school readiness, organizations that create the guidelines for social-emotional learning have not provided practical guidance for teachers to support self-regulation (Moreno et al., 2017). Preschool and kindergarten teachers are an important part of young children's self-regulatory development (Silkenbeumer et al., 2018); however, their perspective on effective practices and strategies used to support self-regulation is unknown (Pratt et al., 2016). Research needs to be conducted on preschool and kindergarten teachers' perspectives of effective strategies and practices for promoting self-regulation and how these self-regulatory skills influence students' behavior (Hur et al., 2015; Weyns et al. 2017). The purpose of this qualitative research study was to explore preschool and kindergarten teachers' perspectives on effective strategies and practices that support self-regulation skills.

I begin this chapter by reviewing the literature search strategy and conceptual framework of Bandura's social learning theory and how it relates to the concept of self-regulation. Next, I will synthesize research that is related to the conceptual framework and the topic of self-regulation. Some concepts that will be examined include executive function skills (cognitive self-regulation), behavioral self-regulation, emotional self-regulation, and coregulation. Last, I will summarize the major themes found in the literature and how the current study fills a gap in the literature.

#### **Literature Search Strategy**

I searched for peer-reviewed articles using the Education Source database available from the Walden University Library. I searched for articles that were published within the past 5 years and were relevant to my topic. The keywords and phrases that I used in my database search included *self-regulation*, *self-regulation* and young children, kindergarten and self-regulation, preschool and self-regulation, teacher perspectives and self-regulation, self-regulation in elementary, self-regulation in the early years, self-regulation and behavior and young children, self-regulation and executive function, and young children, self-regulation and young children, and self-regulation and emotion and young children. The keywords and phrases that were searched are related to the conceptual framework that grounded this research study. Although there was little current research on teacher perspectives concerning effective strategies and practices to support self-regulation, a general overview of school readiness from the perspective of teachers located in different parts of the world has been included.

#### **Conceptual Framework**

Researchers have extensively examined the various factors that impact the success of young children's ability to transition from preschool to primary school (Kinkead-Clark, 2017). Although many young children successfully transition in and out of prekindergarten into primary school, others face more challenges when adjusting to new environments, experiences, and demands (Kinkead-Clark, 2017). Due to the development of new standards for kindergarten through 12<sup>th</sup> grade in the United States, there is an increased expectation for young children to acquire self-regulation skills. Self-regulatory

skills help young children to stay focused, pay attention, get along with peers, follow the rules, and persevere by maintaining a strong energy level (Kroll, 2017). When students demonstrate these types of self-regulatory skills, they are more likely to succeed academically and socially in early and subsequent school years (Neitzel et al., 2016).

#### **Social Learning Theory and Self-Regulation**

When operationalizing self-regulation, it is important to understand that compliance and cooperation are overt behaviors that are influenced by underlying factors such as cognitive and emotional processes (Pratt et al., 2016). According to Schunk and Zimmerman (1997), the social learning theory is based on the belief that human performance is a flow of reciprocal interactions that include behavioral, personal, and environmental variables. The personal variables consist of the cognition and emotional aspects, and the environmental variables include external factors such as the classroom environment and instructional strategies. However, McCelland et al. (2017) articulate the social learning theory as focusing primarily on how children decipher social cues and respond to social issues.

Both explanations are in alignment with Bandura's social cognitive theory, which postulates that self-regulation encompasses three subprocesses: self-observation, self-judgment, and self-reaction. These subprocesses allow children the opportunity to recognize their behavior, compare their performance against a set of standards that are modeled by others, and evaluate their progress based on the judgment of their performance. If a young child feels they have made progress toward their goal, there may be an increase in self-efficacy and a maintaining of motivation. Self-efficacy and

motivation are based upon the cognitive and emotional aspects of the flow in reciprocal interactions. Even if children feel they did not make adequate progress, it will not have a negative impact when the children believe it is possible to make the goal (Schunk & Zimmerman, 1997). Teachers can be influential in helping to increase young children's belief in their ability to meet goals.

#### **Social Learning Theory and Teacher Support**

Because teachers are considered to play an important role in the development of children's social and emotional skills by supporting children in acquiring and maintaining positive social skills with teachers and peers, they are considered instrumental in helping young children to develop self-regulation (Broekhuizen et al., 2017). Teachers' support of self-regulation for young children encompasses the flow of reciprocal interactions as posited by the social learning theory. This flow of reciprocal interactions allows young children to acquire self-regulation in the personal domain through a process called *coregulation*. Coregulation is the process by which a teacher would construct a repertoire of emotional regulation strategies to help young children develop self-regulation (Silkenbeumer et al., 2018).

Teachers support the personal aspect of the flow of reciprocal interactions by influencing young children's emotional and cognitive self-regulation, yet they also support the environmental aspect by ensuring that young children have opportunities to engage and explore within the classroom environment (McKinnon & Blair, 2019). When teachers provide young children with coregulation and environmental support, there is a greater opportunity for behavioral self-regulation to be developed. Also, to help young

children who may be more susceptible to high-risk environments, teachers can provide various coregulatory and positive environmental experiences to negate undesired behavior. The development of behavioral self-regulation is a key component for countering any negative sociodemographic situations that young children may experience (Sohn et al., 2019). When young children are supported in the development of self-regulatory skills by teachers, they show improvement in behavioral and academic performance in subsequent school years (Sezgin & Demiriz, 2019).

#### **Social Learning Theory and Previous Research**

The social learning theory has been applied to previous research in various ways. Warren and Robinson (2018) drew from the social learning theory when inquiring about how teachers respond to various classroom situations. The researchers wanted to explore the teachers' emotions, thoughts, and actions that were modeled to children as a response to various situations. The type of research method used was qualitative. The study involved the participation of 21 elementary school teachers who taught a grade ranging from kindergarten through fifth grade. Four of the participating teachers taught in an alternative setting like special education. Th researcher found that teachers retained thoughts that were not helpful to positive learning environments. These thoughts led to teachers' actions becoming affected and misguided.

Another point that derived from Warren and Robinson's (2018) study was that the participating teachers did not model much empathy or compassion for the children's emotions, personal experiences, or cultural context. Although Warren and Robison mentioned the importance of teachers having the ability to consider students' cultural and

experiential backgrounds when interacting with children, they noted that the participating teachers failed to reach out to any type of support personnel for additional assistance or training in this area. As revealed in the findings, teachers sometimes respond to classroom situations in ways that are counterproductive to the success of the classroom environment. The researchers encouraged the school administration to offer services that would support teachers' instructional practices that would foster a more positive classroom climate.

Regan and Howe (2017) took a different approach when applying the social learning theory. The researchers focused primarily on promoting self-efficacy among young children. The application of Bandura's social learning theory is based on the use of video interactive guidance. This intervention required the children to watch a video of a person engaged in the desired skill or behavior. Because the social learning theory promotes the idea that learning happens when it is reinforced by observing someone else who models the behavior, video self-modeling (VSM) was used to promote desired behavioral changes in children. The VSM intervention has been recognized for managing very aggressive types of behavior as well as academic skill attainment (Regan & Howe, 2017). This intervention not only helped young children obtain a skill but helped them gain self-efficacy as well.

Regan and Howe (2017) discovered that certain off-tasks behaviors were decreased after the intervention was implemented. The method that was chosen was purposive sampling with a single-case design. The single participant had demonstrated social, emotional, and behavioral difficulties, which were identified and reported by the

special education team at his school. As revealed in the results, the VSM intervention was effective in meeting the target goals set for behavior improvement. The two most significant changes were in the goal areas of the student completing his work and sitting nicely in his chair.

Although there was a positive change in the off-task behaviors of Regan and Howe's (2017) participant, there were still limitations to consider as it relates to the study. The long-term effectiveness of the intervention is unknown for this study. Also, because it was the same researcher who collected the pre- and postintervention observations, the demand effect could have played a part in the participant displaying behaviors that were discussed. Nevertheless, the study provides experimental evidence that the implementation of VSM for behavioral intervention may be helpful.

White (2017) conducted a study that provided an in-depth overview of Zimmerman's self-regulation of learning (SRL) integrated framework that was based on the social learning theory. White conducted the study to provide readers with a better understanding of the three cyclical phases of SRL and four levels of competence of SRL as they relate to observational learning through modeling in support of young children obtaining self-regulation skills. Knowledge of the three SRL cyclical phases and levels of competence may provide educators and policy makers with additional information about how to provide direct instruction by modeling self-regulatory for young children.

#### **Social Learning Theory and Benefits of Present Research**

The social learning theory was beneficial for this present study because it provides a lens through which to consider the effectiveness of various strategies and

practices currently implemented by teachers when supporting self-regulation in young children. In the social learning theory, Bandura (1986) postulated three major processes comprised of self-observation, self-judgment, and self-reaction (as cited in Schunk & Zimmerman, 1997). Schunk and Zimmerman (1997) asserted that the modeling of self-regulatory behavior consists of three main functions. These functions are inhibition/disinhibition, response facilitation, and observational learning.

The inhibition/disinhibition of modeling involved the teacher modeling classroom behavior to strengthen or weaken a particular behavior. The response facilitation was the stage where the teachers could socially prompt students to perform a specific action through modeling that desired behavior. Observational learning happened when the students could display new behaviors for which they previously did not demonstrate (Schunk & Zimmerman, 1997). Using knowledge based on the three main functions of self-regulated behavior may provide another avenue from which to determine strategies and practices that are effective in supporting self-regulation in young children.

# Literature Review Related to Key Variables and/or Concepts Delays in Self-Regulation in Early Childhood

After the U.S. Department of Education's Office for Civil Rights reported on preschool suspensions for the 2011-2012 school term, many U.S. educators became deeply concerned as the report revealed more than 8,000 preschool students under the age of 5 were suspended from public preschools at least once during the school year (Jones & Leven, 2016). To further exacerbate the situation, approximately 31% of the preschool students were suspended more than once (Jones & Levin, 2016). Although African

American children made up only 18 % of the preschool population, they accounted for 48% of the preschoolers suspended more than once (Jones & Levin, 2016). Preschool boys were also three times more likely to be suspended than preschool girls (Gilliam et al., 2016). Delays in self-regulation have contributed to the growth rates of preschool suspensions and expulsion (Bierman et al., 2016). This problem s heightened by the fact that children who grow up in poverty are more likely to show delays in self-regulation, which is essential for school success.

A consequence of these suspensions is that the national and state school-readiness initiatives could be negatively affected (Garrity et al., 2017). Due to nearly half of U.S. preschool children living in low-income households, there is a need to support self-regulation in preschool (Bierman et al., 2016). Although other research has revealed that not all young children who come from low-income homes exhibit low academic achievement (McLear et al., 2016), kindergarten teachers continue to report that children in high-poverty schools have more problems with following directions, getting along with peers, and maintaining high academic performance (Mckinnon & Blair, 2019). These complaints support the views of Seale et al. (2015) and Neitzel et al. (2016). They asserted that preschool and kindergarten children's levels of self-regulation have a direct impact on their ability to adjust, engage, and learn in future educational settings.

McClelland et al. (2017) and policy makers have also agreed that young children need self-regulation to be successful in school ("Social-Emotional Learning in Preschool Essential for Student Success," 2017).

## **Early Childhood and Self-Regulation**

Early childhood is a period when there is an increasingly high expectation for young children to demonstrate appropriate behavior in the classroom (Ferrier et al., 2018). Researchers have suggested that the development of self-regulation skills begins in the preschool years but may start as early as age 2 (Willis, 2016). Conversely, a large percentage of behavioral and mental health problems are also exhibited by children during early childhood (Graziano & Hart, 2016; Searle et al., 2015). For example, some children entering preschool struggle with following directions, following multistep directives, persevering through difficult tasks, and getting along with peers (Pratt et al., 2016). Bierman et al. (2016) reported that between 10% and 21% of preschool children are demonstrating difficult behavior and lack of social-emotional thinking skills (see also Bierman et al., 2017). Yet, preschool is not the only time during which young children struggle with self-regulation.

In recent years, children's transitions into kindergarten have gained more attention due to its association with later school success (Hart et al., 2019). Researchers indicate that kindergarten is a time when children encounter problems with social-emotional, cognitive, and behavioral skills (Timmons et al., 2016). When young children demonstrate aggressive behavior in preschool and kindergarten, there is a greater likelihood that this behavior will continue throughout elementary school (Garrity et al., 2017; Timmons et al., 2016). Adolescent behavioral problems are also closely linked with having a lack of self-regulation. Intervening behavioral and emotional problems in early childhood is an effective preventive measure to assist in alleviating subsequent

adolescent conduct issues (Sohn et al., 2019; Howard et al., 2019). There is a question as to how early childhood intervention for promoting self-regulation should be implemented. Recently, researchers have indicated that children seem to benefit more from self-regulation instruction that is differentiated so that it is adaptive to their ability to change (Howard et al., 2019).

Yet, Burroughs and Barkauskas (2017) believe that a problem exists in the entire school system when it relates to supporting self-regulation in young children because of the pressure and requirement for teachers to focus more on reading and math achievement. They feel that focusing only on academic achievement causes children not to obtain foundational self-regulatory skills that are needed for life's success and how to live in a democracy. Lipsey et al. (2017) state much research has shown that children's ability to engage in the learning process, despite difficulties, is related to an increase in academic achievement. Self-regulation skills enable children to learn at the highest capacity by providing them with the ability to control negative emotions, impulses, and distractions that hinder the learning process (Palermo et al., 2017).

## Young Children's Emotions and Self-Regulation

Emotion regulation is critical when considering the academic success of young children in both preschool and kindergarten (Ferrier et al., 2018; Graziano & Hart, 2016). Emotional competence is conceptualized as having an occurrence between a person and some stimuli that affect the individual's goals and feelings, eventually causing a multifaceted response to the interaction. Yet there are three interrelated and progressively developing skills: emotional knowledge, emotion regulation, and emotionality. Emotional

knowledge is defined as a child having the ability to understand others' cues and expressions. Emotion regulation is the ability to evaluate and adjust emotions. Finally, emotionality is conceptualized as children's affective or emotional pattern over a specified period (Ferrier et al., 2018).

When young children have a limited amount of knowledge about their emotions, they risk the difficulty of expressing, interpreting, and communicating them in an effective manner (Salisch et al., 2017). In a study completed by Graziano & Hart (2016), there was evidence that young children do benefit from gaining emotional knowledge, emotion regulation, and executive functioning skills. This study also revealed that when young children display signs of externalizing behavior problems (EBP) in preschool, they need interventions that go beyond the normal behavioral modifications and academic assistance that is provided to them during the school day. The results show although behavioral modifications and academic preparation may be beneficial to young children, a more intensive intervention that targets socio-emotional and self-regulation skills during the summer before preschool may be more effective.

Blair et al. (2018) agreed with Salisch et al. (2017) and Graziano & Hart (2016) with the idea that cognitive and social-emotional skills are integrated and interrelated.

Blair et al. (2018) completed a study that resulted in a program called Tools of the Mind displaying effectiveness in decreasing behavior problems and fostering social and emotional skills in kindergarten children. The Tools of the Mind program is more focused on cognitive development, such as executive functioning, but through the use of social-emotional interaction. The proposed outcome is geared toward promoting executive

functioning and higher-order thinking skills when learning academics. Although this study showed positive results with this program, there are some implications to be considered. Kindergarten teachers from 12 districts, which included 29 schools, were aware of the treatment group and could have possibly given the children a higher rating as a result. Also, the aggression and conduct problems were the only parts sustained after implementation of the program when subsequently rated by first-grade teachers, not the social-emotional regulation component.

## Young Children's Cognition and Self-Regulation

When preschoolers and kindergartners are successfully engaged in the learning environment, integrated executive functioning and emotional regulation skills are present factors (Pratt et al., 2016; McKinnon & Blair, 2019; Salisch et al., 2017). Executive functions convey specific cognitive processes such as working memory, inhibitory control, and cognitive flexibility, which govern all areas of functioning (Flook et al., 2015; Lipsey et al., 2017). The three components of executive function have overlapping but distinct functions (Willis, 2016). Inhibitory control specifically allows children the ability to control impulses. The working memory permits children the capability to retain and organize information in the mind, and cognitive flexibility provides children with an opportunity to change their attention and focus on something different (Dias & Seabra, 2017).

Zachariou and Whitehead (2019) also believe cognitive and emotional regulations are important aspects of children's overall self-regulation. Whitehead developed a model that recommends focusing on three areas of self-regulation. One of the three areas is

metacognitive knowledge, which refers to what young children may know about their thinking in terms of their abilities, the task at hand, and the strategies which may affect their cognitive performance. The second area is metacognitive regulation, which is a child's ability to plan, monitor, control, and evaluate when completing an activity. The third area is emotional and motivational regulation, which comprises of monitoring and controlling the emotions and motivational state while completing a task (Zachariou & Whitehead, 2019). Whitehead's model is closely aligned to Bandura's explanation of the three basic self-regulation subprocesses outlined in the Social Cognitive Theory.

#### Young Children's Behavior and Self-Regulation

Ferrier et al. (2018) believe the components of executive function are directly related to emotion regulation, which is the skill set needed for young children to assess and control the expression and experience of emotions. These researchers also believe emotion regulation is related to how children acquire pro-social behavior. The three components of executive function include working memory which can be defined as the ability to remember a thought or rule while applying a concept; inhibitory control which means to suppress an impulse by choosing a more appropriate response; and attention which is the ability to maintain on-task behavior (Willis, 2016). The connection between these inhibitory and behavior skills is highly connected during the preschool years (Oeri et al., 2018). The integration of emotional and behavioral regulation also allows young children to pay attention, stop an inappropriate response, remember and use information, and express appropriate affects when attempting to recover from an unpleasant situation (Cadima et al., 2016).

Liew et al. (2018) also believe in an integrative approach to self-regulation as it relates to young children acquiring executive function and behavioral skills. It is believed that a holistic approach is needed because the process for gaining self-regulatory skills is sophisticated. Although federal and state policies have focused primarily on increased academic and assessment scores in reading and math (Burroughs & Barkauskas, 2017), the success of child development is more complex than the focal point of a single skill domain. Young children who are good at regulating their behavior through various executive function and behavioral methods will eventually accomplish greater academic success in subsequent elementary grades, therefore demonstrating an increase in reading and math scores (Riva & Ryan, 2015; Liew et al., 2018).

Conversely, Sawyer (2015) completed a study to determine if improvement in early childhood self-regulatory skills had a significant effect on the level of behavioral problems in subsequent childhood years. This study was completed over some time because previous studies only provided information about a single moment. The association between young children's self-regulation improvement and their behavioral problems six years later was studied. This longitudinal study that included approximately 500 children showed that children who were originally reported to have higher self-regulation at age four resulted in fewer parent and teacher-reported behavioral problems after six years. This pattern was evident for internalizing and externalizing behavioral problems. Despite the findings in this study, there is a question concerning the use of informant questionnaires to obtain information about young children's self-regulatory

abilities. The use of a performance-based tool may have provided a more precise measurement of the young children's executive function abilities.

#### **School Readiness**

When young children are leaving home to enter school for the very first time, two components are vital, which include the ability to transition well and the ability to gain competencies in a more structured environment (Xie & Li, 2019). Some teachers have complained that young children entering kindergarten have external behavioral issues. For example, children who enter kindergarten experience difficulties with being withdrawn, violent, and other negative behaviors (Kinkead-Clark, 2017). Therefore, attention needs to be given to supporting children who have these EBP needs. When focusing on early interventions for children who have EBPs, there is the need to know the amount of intervention that is needed to be effective in promoting a successful transition into kindergarten (Hart et al., 2019).

There are four types of early intervention efforts that are documented to be effective in addressing the needs of children with EBPs. These four types include parent training to help with behavior, social-emotional training, self-regulation training, and school-based training that include teacher training and behavioral consulting. In recent years, these interventions have been used to prepare preschool children who experience EBPs with transitioning into kindergarten (Hart et al., 2019). Two summer programs that have been implemented to promote transitioning into school include Kids in Transition to School (KITS) and the Summer Treatment Program for PreKindergartners (STP-PreK).

The programs are different from each other based on the dosage and timing of the intervention.

The KITS program is short-lived as it focuses on promoting school readiness for foster care children and children who show developmental delays. This program occurs in two parts. The first part is two months before kindergarten, and the second part occurs during the first two months of kindergarten. However, STP-PreK is a more intensive program. It is generally eight weeks long and involves two components. The first component is child-centered for developing children's behavioral, social-emotional, academic skills, and acquisition of self-regulatory skills. The second component focused on ensuring the parents learn how to promote children's success in school readiness (Hart et al., 2019). The researchers revealed that both programs showed positive results for promoting a successful transition from preschool to kindergarten.

## Global Teacher Perspectives on School Readiness

School readiness can also be seen as a cultural construct that changes in meaning from one population to another based on the characteristics under focus, which may be determined by parents, teachers, or the local community (Fayez et al., 2016). Global research has been conducted about the various factors that impact how well young children transition into primary school. One study provides an overview of how Caribbean teachers view the socio-emotional needs of young children. Because Caribbean children have unique needs and challenges, interventions need to be tailored to their special needs. Young Caribbean children are faced with a unique situation because they may be living in certain environments that are plagued with economic decline,

climate issues, socio-political challenges, and certain geographical issues associated with developing nations (Kinkead-Clark, 2017).

Caribbean children are expected to enter primary school even while having to live under these arduous conditions. Such environments have certainly affected the children's behaviors causing them to have internalizing behaviors such as being withdrawn to externalizing behaviors such as violence and low academic performance. The study revealed that young children's development was directly related to their experiences. The young children's environmental conditions placed them at a disadvantage at transitioning to primary school (Kinkead-Clark, 2017).

Some teachers have reported witnessing children who experienced poor parenting, crime exposure, parental neglect, and abuse. The young children also experienced a lack of homework completion and losing assigned textbooks. Overall, the teacher participants from the Caribbean study revealed their primary concern was young children's ability to control their emotions, behaviors, and overcome the negative situation they encounter. This concern is closely aligned with other research that agrees with the idea that teachers are more concerned with young children's socio-emotional ability over academic knowledge (Kinkead-Clark, 2017).

On the other hand, in Jordan, the concern about children's readiness for school is new. In 2004, the Jordanian National Action Plan identified school readiness to be a national priority. National early childhood standards were developed as a result. These standards defined the skills needed for young children to enter school successfully. Unlike most other countries, the Jordanian nation does not require children to enter

school officially until they are age six. Kindergarten is considered before the primary school stage in Jordan, whereas in the United States, preschool is considered before the primary school stage (Fayez et al., 2016).

Despite government efforts, the views of the teachers who assist the children achieve the standards have not been solicited. There is minimal information about the teachers' perspectives of the skills they believe to be beneficial for young children at the start of school. Therefore, a study was conducted as an attempt to gain knowledge of how Jordanian teachers view school readiness. In a study conducted by Fayez et al. (2016), the results revealed Jordanian teachers did not view socioemotional maturity and self-discipline as important factors for entering school. They believed that academic skills were more important. This belief is different than what the current literature points out as being important for school readiness. Different developing countries must be provided with information that will increase awareness of the recent trends to consider a more holistic approach in child development, specifically the importance of socioemotional development (Fayez et al., 2016).

## **Teaching Strategies and Practices to Support Self-Regulation**

Teachers must be involved in the process of young children's self-regulatory development (Cadima et al., 2016; Silkenbeumer et al., 2018; & Pratt et al., 2016). Yet, teachers should not blindly and aimlessly seek to support students in self-regulation because children have different developmental needs, even in the area of self-regulatory acquisition (Silkenbeumer et al., 2018; Zachariou & Whitehead, 2019). The study by Zachariou and Whitehead (2019) was an exploration of self-regulation development in

young children in the context of musical play. The results of the research indicate there is a quantitative increase in regulatory behaviors with age. Also, there is a significantly greater increase in cognitive and emotional/motivational monitoring as compared to other regulatory behaviors as children age. Shared-regulation skills, which means young children work together to complete a task, had a higher developmental effect on children who were between ages 6 and 8 than co-regulation and self-regulation skills.

Similarly, Silkenbeumer et al. (2018) also completed a study that addressed how preschool teachers changed their emotion coaching and co-regulation behavior as children aged and the children's emotion regulation began to improve. The study also investigated how teachers' co-regulation is linked to children's self-regulation. The results of this study indicated that teachers' co-regulation is modified based on the children's developmental needs, which contributes to their development of emotional self-regulation.

Pratt et al. (2016) stated that for young children to be successful in the classroom, they must be able to integrate executive function and emotional regulation skills, which are helpful to their daily cooperative behaviors. Teacher-child interactions are an intricate part of children's ability to be successful in gaining and using self-regulation skills within the classroom (Gozde et al., 2017).

According to Cadima et al. (2016), there are some disagreements as to which processes in a teacher-child dyadic environment produce better outcomes for increased self-regulation. Some researchers had shown that children demonstrated greater self-regulation skills when teachers provided a higher emotional climate, where the activities

were managed, and teachers asked more open-ended-type questions. But still, in other studies, the results show that organizational support, rather than emotional support, had a stronger effect on increasing self-regulation. A study was conducted to examine the extent to which specific classroom processes contributed to gains in young children's self-regulation during the preschool year for economically disadvantaged children. The researchers used the Head-Toes-Knees-Shoulders (HTKS) to measure self-regulation and the Student-Teacher-Relationship-Scale (STRS) to measure teachers' perceptions of their relationship with a particular child. The quality of the classroom environment was determined by using the Class Assessment Scoring System (CLASS) observational tool (Cadima et al., 2016).

In this study, three main findings were revealed which include children's self-regulation was associated with emotionally close teacher-child relationships, instructional support was associated with increased self-regulation in young children who had trouble at the beginning of preschool, and the results were more pronounced in girls than for boys. Although the researchers from this study indicate an important relationship between process quality and self-regulation, the results are correlational and not to be interpreted as a causal effect. Also, the number of classrooms was smaller, which means a larger number of classrooms should be considered in any future studies. Finally, the child observations were conducted from October to December, so it is possible the children were already gaining self-regulatory skills from the teacher-child interactions (Cadima et al., 2016).

#### **Emotional CoRegulation**

Kroll (2017) believes that in elementary school, good behavior is often an act of compliance rather than self-regulation, which hinders young children from gaining the necessary tools to learn and contribute to the classroom and school environment productively. On the other hand, Pratt et al. (2016) believe that compliance is an early component of self-regulation, and it is defined as having a basic ability to follow directions and cooperate when requested to do so by an adult. A more sophisticated set of behaviors, such as cooperation, which allows children to follow directions and behave appropriately in various learning settings are based on acquiring self-regulatory skills (Pratt et al., 2016).

Before a child can self-regulate, there is a point when they are assisted in the process called co-regulation. Co-regulation is a process by which adults assist young children in gaining a repertoire of effective emotional regulation strategies (Silkenbeumer et al., 2018). Pratt et al. (2016) also agree that external regulation will lead to internal regulation. Although parents play a crucial role in supporting self-regulation development through a series of stages by which children internalize an increasingly set of multifaceted self-regulatory skills (Kim & Holloway, 2018; Lincoln et al., 2017; Russell et al., 2016), some young children enter primary school lacking these self-regulatory skills (Kroll, 2017). Teachers often assume the role of co-regulator for these young children who come lacking self-regulation.

Silkenbeumer et al. (2018) developed a model that consisted of three various levels. Each level allowed a higher aspect of emotional self-regulatory skills to be acquired by young children. The first level involved the teacher choosing all components

of reflective emotion through emotion talk. The teacher employs emotion talk to help young children become sensitized to internal feelings and to understand actions and consequences. At the second level, young children are shown how to develop a simple repertoire of effective behavioral techniques to regulate their emotions. The teachers also provide young children with various prompts to encourage the use of specific behavioral strategies. The third level is where the use of meta-cognitive prompts given by the teacher provides the foundation for more sophisticated self-regulatory skills to be developed by young children. Going through these three levels of co-regulation allows young children the freedom to examine and evaluate alternative regulation strategies.

The Silkenbuemer et al. (2018) model is aligned to the viewpoint of Kroll (2017), who believes that young children's behavior should not only be about compliance but having the ability to internalize regulation, which in essence is self-regulation. There is a difference between external regulation and internal regulation. External regulation is when someone else determines the young child's behavior. This type of regulation is derived from simple compliance (Kroll, 2017). The Silkenbuemer et al. (2018) model not only aligns with Kroll's beliefs about internal regulation, but the third level of the model aligns with the social learning theory as well.

The examination and evaluation components of the model are in direct correlation with the self-judgment and self-reaction processes of the social learning theory. The social learning theory self-judgment process involves young children comparing their behavior with the standard that has been set by the teacher. This process is comparable to the model's examination component. The social learning theory's evaluation process

includes the young children's belief about their performance towards a particular goal (Schunk & Zimmerman, 1997), which is comparable to the evaluation component of the model created by Silkenbuemer and colleagues.

# Modeling Cognitive Self-Regulation

While Silkenbuemer et al. (2018) and Pratt et al. (2016) focus primarily on young children moving from compliance to more self-regulated behavior through co-regulation of emotional processes, White (2017) and Moreno et al. (2017) engage in a more cognitive approach to supporting self-regulation in young children. White's (2017) belief for enhancing self-regulation is based on Zimmerman's integrated SRL model. This model is based on the teacher providing cognitive modeling for self-regulatory skill attainment by young children within the learning environment.

Moreno et al. (2017) found consistent findings where teachers scored average to good in the area of supporting social-emotional competence; however, they scored poorly in teacher-child interactions, which support cognitive development. Therefore, she and her colleagues believe more focus should be given to cognitive support of self-regulation development, and the support should be provided in a more generalized manner. Self-regulation should not be dependent on any type of curriculum or intervention that accentuates the use of children's executive function abilities. Similarly, White (2017) and Moreno et al. (2017) also believe teachers should have access to knowledge that is basic and an integral part of everyday teacher-child interactions that are effective in supporting self-regulatory skills by way of enhancing young children's cognitive abilities.

White's (2017) description of Zimmerman's SRL integrated model includes the four levels of competence and three cyclical phases. The four levels of competence include observation, emulation, self-control, and self-regulation. The three cyclical phases include forethought, performance, and reflection. The researcher's belief of the SRL integrated model is consistent with the beliefs of Mckinnon and Blair (2019) and Dias and Sebra (2017), who believe young children should receive direct instruction by teachers in cognitive development self-regulation to increase academic achievement.

The First Level of Competence: Observation. The observation level is the first level in modeling and involves the children observing the teacher modeling the self-evaluation process posited in Bandura's social learning theory. The first cycle is forethought, where the teacher models goal setting. The second cycle is the performance where the teacher engages students to use various strategies to complete the goal. The third cycle is the performance where the teacher models self-evaluation by encouraging children to check their progress against the goal that was set.

Second Level of Competence: Emulation. Emulation is the level where students are permitted to practice what they observed. The three cyclical processes are applied at this level as well. In the forethought process, the teacher asks children to set goals, and the teacher and children consider the task and then choose strategies that are related to the children's self-efficacy. The selected strategies will be used to accomplish the task. In the performance process, the teacher encourages the students to practice applying their chosen approach and discuss any challenges associated with the application while monitoring progress. The self-reflection process will allow the teacher to help students

evaluate the strategies adopted and to maintain certain behaviors that proved to increase self-efficacy and achievement.

Third Level of Competence: Self-Control. Self-control is the level at which children transition to a more independent way of learning. During the forethought process, the children are guided by the teacher to set attainable goals. The teacher only monitors and provides feedback. In the performance process, the children are allowed to work in collaborative groups or individually on a particular task. The teacher only facilitates by prompting the children to use a specific strategy to accomplish a task. In the self-reflection process, the children use the teacher's feedback to evaluate their performance. The children will reflect on the strategies that led them to accomplish their goals.

Fourth Level of Competence: Self-Regulation. At the self-regulated level, the children are proactive in their learning. The forethought process allows the teacher to provide opportunities for the children to implement various strategies independently. The children are required to complete challenging assignments and evaluate their self-efficacy at the start of the task. In the performance process, the children are expected to use self-regulatory strategies such as paying attention, self-motivation, and accomplishing tasks beyond the classroom. The reflection process will allow the children to notice the results of a particular behavioral strategy that was used. The teacher will continue to monitor students and support their efforts with positive praise and feedback.

# **Professional Development and Self-Regulation**

In a recent study, researchers have indicated two professional development approaches that have shown moderate to significant improvement of teacher-child interactions, thus improving teacher support of self-regulation in children, specifically in the area of language behavior (Pianta et al., 2017). These approaches included the use of implementing a course on effective teacher-child interactions and offering coaching for teachers.

An experiment was conducted where preschool teachers from ten locations were assigned to either a treatment or control condition. The treatment condition provided the teachers with a MyTeacherPartner (MTP) coaching that supplied teachers with feedback based on interactions with children. The purpose of this feedback was to help teachers improve teacher-child interactions. The control condition was a semester-long course that provided teachers with knowledge and instruction on effective teacher-child interactions. Therefore, one group of teachers received only the course, and another group of teachers received the course and coaching.

The researchers concluded in the results that teachers who received coaching along with the course had more children who demonstrated higher levels of behavioral control. The children of teachers who received the coaching alone showed higher levels of inhibitory control. The course and the coaching had positive impacts on the children's overall self-regulation (Pianta et al., 2017). However, because little is known about preschool teachers' attitudes, beliefs, and perspectives related to addressing emotions and emotion regulation (Silkenbeumer et al., 2018), further research is needed in identifying

which strategies and practices are especially helpful in supporting regulatory development in young children (Pratt et al., 2016).

#### **Summary and Conclusions**

Several studies have been conducted on the various methods used to promote self-regulation in young children in the classroom. Some researchers have similar beliefs on the best strategies and practices for supporting self-regulatory skills in pre-k and kindergarten classrooms. Some researchers have different ideas about the best strategies and practices for supporting self-regulation in young children. Although differences in approaches exist, it is evident from the literature review that the researchers have a common belief in the importance of young children acquiring self-regulation.

#### **Themes Identified in Literature**

Several major themes have been identified in the review of the literature. The first theme identified in the literature was that different researchers focused on a particular domain when suggesting various strategies and practices believed to be effective in supporting self-regulation. The focus was either based on the social-emotional, cognitive, or behavioral domain. Still, other researchers focused on a more integrated approach.

Cadima et al. (2016), Ferrier et al. (2018), Graziano and Hart (2016), Salisch et al. (2017), and Zachariou and Whitehead (2019) believe the social-emotional domain is an essential factor when focusing on supporting self-regulation in young children. Yet, McKinnon and Blair (2019) and Pratt et al. (2016) believe the cognitive aspect of supporting self-regulation should be the primary focus when supporting self-regulation in young children. On the contrary, Warren and Robinson (2018), Sohn et al. (2019), and

Sezgin and Demiriz (2019) believe it is vital to focus on the behavioral domain when supporting self-regulation in young children. Although Salisch et al. (2017) focus primarily on the social-emotional area, and McKinnon and Blair (2019) focus on the cognitive domain, both groups of researchers believe the social/emotional and cognitive fields are interrelated as young children learn to self-regulate. In contrast, Pratt et al. (2016), Leiw et al. (2018), Silkenbeumer et al. (2018), and Broekhuizen et al. (2017) believe all three domains are interrelated as young children begin to self-regulate. The interrelation of all three domains in the development of self-regulatory skills aligns with Bandura's social learning theory.

The second theme relates to the importance of children having the ability to internalize self-regulatory skills. McClelland et al. (2017) believe children use social cues provided from their environment to process internally before responding overtly. Likewise, Regan and Howe (2017) agree with the social learning theory idea that young children need to develop self-efficacy before attempting to self-regulate in various environmental situations. Kroll (2017) and Silkenbuemer et al. (2018) also believe children need to internalize self-regulatory skills before they are capable of exhibiting the desired behavior in a classroom setting.

Some researchers believe children are not able to independently internalize self-regulatory skills without first having co-regulation provided by a teacher. Broekhuizen et al. (2017) agree with the social learning theory that posited the flow of reciprocal interactions occurs with the assistance of co-regulation from a teacher. Silkenbeumer et al. (2018) and Gozde et al. (2017) also agree with the idea of teachers supporting young

children in specific areas such as social/emotional and executive functioning domains. The researchers believe this co-regulation of internal skills enhances young children's behavioral and academic performance. Seale et al. (2015), Neitzel et al. (2016), and McClelland et al. (2017) also believe direct instruction from a teacher when supporting self-regulatory skills has a direct impact on young children's ability to adjust, adapt, and learn in future academic settings.

The fourth theme, which has been identified from the literature, is the idea of a connection between young children's level of self-regulation having a direct impact on their ability to adjust, engage, and learn in future educational settings. Xie & Li (2019) believe children's preschool experiences are the foundation upon which success is built upon. McClelland et al. (2017) believe young children who do not have sufficient social and emotional skills that are required for self-regulation, have a difficult time with learning. Neitzel et al. (2016) also believe that because young children are faced with the challenges of learning new roles, schedules, routines, procedures, and cognitive demands in the classroom, self-regulation is an important part of the adjustment. Lipsey et al. (2017) also agree that children's ability to focus on classroom tasks, engage in learning, and persist regardless of the difficulty is positively related to academic achievement.

The fifth theme identified is the idea that intervening during the early childhood years is an effective preventative means for future self-regulatory problems. Timmons et al. (2016) believe that self-regulation acquisition expands across a lifetime, but it is more critical to develop these skills in the first five years of life. Searle et al. (2015) and Graziano and Hart (2016) expressed the notion that the behavioral and mental problems

experienced across the entire life span start in early childhood. Sohn (2019) and Howard et al. (2019) also mention that recent research has indicated a relationship between self-regulation acquisition in early childhood and fewer behavioral problems in the future. Garrity et al. (2017) also mention that research shows early intervention to be the key to preventing future behavior problems, negative long-term academic problems, and long-term social issues.

## **Young Children Effectively Acquiring Self-Regulation**

What has been revealed in the literature concerning young children and the development of self-regulation acquisition is based on the idea that teachers must not leave this process to chance (Moreno et al., 2017). When desiring for young children to develop self-regulatory skills, teachers need to be intentional in their strategies and practices, which leads to the need for direct instruction. Researchers have also revealed that self-regulatory skills can be nurtured from various angles, such as from a social-emotional, a cognitive, or a behavioral/environmental viewpoint (Pratt et al., 2016; Kroll, 2017). No matter which domain is used to encourage self-regulation, teachers have an important role in scaffolding young children's ability to internalize self-regulatory skills (Muenks et al., 2018; Silkenbeumer et al., 2018; White, 2017).

Young children's ability to comply may cause an inappropriate assumption to be made by the teacher. The teacher may believe these young children are ready to be successful in the learning environment. However, compliance is only a basic outward display of behaviors that do not guarantee the more sophisticated skills needed to self-regulate (Kroll, 2017). There are several effective models for which teachers can use to

effectively support young children's development of self-regulation rather by providing direct instruction for social-emotional self-regulatory acquisition, cognitive self-regulatory acquisition, or both. The outcome of using an effective model will help young children gain the more complex skills needed to self-regulate in the learning environment.

## Teachers' Perspectives on Supporting Self-Regulation of Young Children

Warren and Robinson (2018) believe it is important that teachers recognize and comprehend their own beliefs and biases that affect their teaching. Correspondingly, Pratt et al. (2016) and Silkenbuemer et al. (2018) believe that teachers' perspectives in the areas of specific strategies and practices used to help support self-regulatory development should be further investigated and professional development efforts need to be created as a result. Muenks et al. (2018) point of view is consistent with that of Pratt et al. (2016) and Silkenbuemer et al. (2018) in that few studies have been conducted in the context of various social influences, such as the teacher, on children's competence belief which is a component of White (2018) integrated model to support self-regulation by modeling. Therefore, teachers' perspectives on various strategies and practices that are believed to be effective for supporting self-regulation in young children are still unknown.

# Present Study and the Gap in the Literature

Although the researchers in the literature reveal a need for teachers to support self-regulatory development in young children, there is a lack of agreement on the best strategies and practices for supporting self-regulation in young children (Flook et al., 2015; Dignath & Buttner, 2018). The purpose of this study was to interview a total of 12

preschool and kindergarten teachers to explore their perspectives on effective strategies and practices used to support self-regulatory skills in young children. The data collected from the teachers' interviews were analyzed and reported so that it may become useful to the body of knowledge in the field of education. Policymakers and educators may benefit from the information by using it to create professional learning opportunities that will assist teachers in their efforts to support young children in acquiring self-regulatory skills effectively.

## The Gap in Literature and Methodology

Researchers have revealed the importance of teachers supporting self-regulation acquisition in young children. However, there is no clear consensus as to the best strategies and practices for supporting self-regulation in young children (Floot et al., 2015; Dignath & Buttner, 2018). Teachers' perspectives on the strategies and practices that are used to support self-regulation effectively are needed to provide educators and policy makers with additional knowledge that may be helpful in professional development (Pratt et al., 2016; Silkenbeumer et al., 2018). I used a qualitative approach when gathering the perspectives of 12 preschool and kindergarten teachers about the strategies and practices they believe to be effective in supporting self-regulation. This qualitative method will be explained in greater depth in Chapter 3.

## Chapter 3: Research Method

The purpose of this study was to explore preschool and kindergarten teachers' perspectives on effective strategies and practices used for supporting self-regulation in the classroom. In Chapter 3, I will explain the research design and rationale, the role of the researcher, and the methodology. The trustworthiness and ethical procedures of the study will also be presented. As I discuss, I used a qualitative method to determine preschool and kindergarten teachers' perspectives on effective strategies and practices used for supporting self-regulation skills in the classroom. As suggested by Creswell and Creswell (2018), conducting a qualitative study will provide the researcher with an opportunity to interact with the participants in a natural setting, as well as gather data using various modes such as interviews.

## **Research Design and Rationale**

Teachers play a pivotal role in the self-regulation process for children. Teachers can either promote or hinder self-regulatory skills because students need teachers to coregulate in the development of emotion-regulation until they can self-regulate (Silkenbeumer et al., 2018). Due to the possibility for teachers' attitudes, perspectives, and beliefs to affect the quality of service provided to children, planners of professional development programs may need to target the belief system of teachers as an avenue for improving teacher quality (Hur et al., 2015; Weyns, 2017). I investigated teachers' perspectives on effective strategies and practices used to support self-regulation. One of my aims in conducting this research study was to build upon previous research that focused on the perspectives of classroom teachers about the socioemotional skills needed

by young children to be ready for primary school (Kinkead-Clark 2017). I sought to answer the following research question: Based on the perspectives of the preschool and kindergarten teachers, what strategies or practices have been effective in supporting students' self-regulation?

The three major types of research methods include quantitative, qualitative, and mixed methods. The quantitative research method entails the researcher testing a particular hypothesis (Creswell & Creswell, 2018). I did not test a theory in this study; therefore, a quantitative method was not an appropriate choice. The best method for my study was a basic qualitative method. By using a qualitative basic study, I had the opportunity to analyze raw data from a contextual standpoint. Once the data are collected and analyzed, the researcher is able to describe the overall events and information that directly relate to the research question (Burkholder et al., 2016). This qualitative basic study was conducive to describing the participating preschool and kindergarten teachers' perspectives of effective practices and strategies used for supporting self-regulation skills.

The data collection instrument that was used for this qualitative study was a semistructured interview. I used predetermined questions to elicit 12 preschool and kindergarten teachers' perspectives of various strategies or practices that are effective for support self-regulation in the classroom. Rubin and Rubin (2012) suggested that semistructured interviews allow for more focus to be on the information that is tailored to the research questions. Although semi-structured interviews were used, I asked

participants follow-up questions based on answers to the original interview questions to gain additional information to provide a richer description.

#### Role of the Researcher

I am an African American woman employed as a fourth-grade teacher by a small suburban district. My role in the study included being an interviewer. My relationship with the participants at the school site was based on being colleagues in the same school, though I knew most of them for less than a year. I have been teaching for the past 14 years in second, fourth, and fifth grades and have witnessed students not demonstrating self-regulation. Therefore, I have formed certain biases about students not displaying self-regulation in the classroom. It was my goal to remain objective throughout the entire research study process by reflecting on these biases as I collected and analyzed data. On the same day, after interviewing the participants, I used a reflective journal to write down my thoughts to help me distinguish my thinking in comparison to the information provided by the actual participants. Because I teach in the upper grades, I was hoping the grade level difference would help to minimize any potential desire to hold back or be guarded with honest answers, which may have occurred if I had worked in the same grade level as the participants.

I did not have any supervisory or instructional privileges that involved asserting power over any of the participants. There was no relationship with any participants at the originally intended second school site. I was careful to maintain the confidentiality of the participants and ensure their identities are being protected. Confidentiality of the participants was accomplished by using aliases throughout the research process.

Composite profiles of the participants were created (see Chapter 4) so as not to reveal any of the participants' identities.

# Methodology

In this section, I will identify my participation selection process. I will also provide information on the type of data collection instrument that was used and the basis for how it was developed. Next, I will provide the procedures for recruitment, participation, and data collection. Last, I will provide an overview of the data analysis plan.

## **Participant Selection Logic**

I selected the participants based on criteria that aligned with the research question. Preschool and kindergarten teachers who had at least 1 full year of experience were selected. I chose 1 year because my research focus was on teachers' perspectives on effective strategies and practices for supporting self-regulation in preschoolers and kindergarteners. The participating teachers needed to have had an opportunity to work with preschoolers and kindergartners to answer the interview questions. My goal was to record each participant's unique perspective on effective strategies and practices used to support self-regulation in the classroom.

I asked about length of employment as preschool or kindergarten teachers in the initial email invitation. However, I had no way of validating the length of teachers' employment in that position. I had to accept the number of years that were disclosed by the participants from their initial response to the email invitation.

I strove to recruit four preschool and eight kindergarten teachers to participate in this qualitative study. The rationale for choosing 12 teachers was to gain as much insight as possible based on each participant's perspective and experience with the various strategies and practices used to support preschool and kindergartners' self-regulation. My main goal was to capture a holistic picture of the various complexities surrounding the issue of supporting self-regulation in preschoolers and kindergarteners based on the teachers' perspectives at a suburban elementary school in the Southeastern part of the United States. According to Creswell and Creswell (2018), to capture a complex picture of an issue, researchers must collect multiple perspectives, describe the various factors that are involved in the situation, and depict the larger picture based on those factors.

I sent a recruitment email that clearly, yet briefly, outlined the scope of the research study to potential participants who were thought to meet the sampling criteria. Potential participants who were interested in participating in the study were asked to select the interesting statement and send the email response to my Walden email address. If potential participants desired to inquire about more information, they were asked to contact me at the telephone number or email provided in the email invitation. The consent form for the research study included any potential benefits or risks for participating in the study. The consent form also outlined additional background information and procedures about the study. The consent form also clearly outlined that participation in the study was voluntary and disclosed privacy procedures. If the participants had any additional questions concerning the information outlined in the

consent form, the contact information for Walden's research participant advocate was included in the consent form.

#### Instrumentation

The main instrument for my study was an interview with participants using an online platform or the telephone. Due to COVID-19 federal, state, and local health mandates, I was not able to conduct in-person, face-to-face interviews with participants during the data collection period. The interview was recorded using an audio recording application through an online platform, which was outlined in the consent form. The questions were set up in a semistructured manner for me to ask open-ended questions to the participants. However, there were also follow-up questions based on the initial responses provided by the interviewees. Using a semistructured interview helped me organize and guide the interview process. There were a specific number of questions asked of all participants; however, based on the individual responses, probing questions were asked based on initial responses.

For my interview protocol, I developed a set of semistructured questions that were directly related to the research question and the information found in the literature review. Based on the literature review, I identified several determinants as supporting self-regulation in young children. My interview questions were based on these factors. One determinant is teachers' readiness to provide direct instruction to help improve cognitive self-regulation in young children through the process known as coregulation. Another determinant is teachers' skillfulness in modeling desired expectations so that children have an opportunity to engage in forethought, performance, and reflection. Also,

teachers' willingness to provide opportunities for observation, emulation, and self-control to strengthen or weaken young children's inhibitions was recommended when supporting young children's self-regulatory skills. Please see Appendix A for more detailed information on the interview protocol and the types of questions that were asked during the interview. The interview questions were based on the study's conceptual framework to ensure content validity.

In their study of preservice student teachers' views on the importance of educational research, Haberfellner and Fenzl (2017) asked participants precise questions about thoughts, expectations, relevance, advantages, and disadvantages. Similarly, I also began my interviews by asking participants to share their thoughts, including the relevance, advantages, disadvantages, and expectations, regarding supporting self-regulation for young children in preschool and kindergarten classes. I also asked the participants questions that pertain to their experience with supporting self-regulation in the classroom and asked them to provide suggestions about strategies and practices they believed to be helpful in the classroom.

My subsequent interview questions included asking participating teachers about personal experiences in teaching self-regulation, various strategies and practices they believed to be most effective in supporting self-regulation, and possible areas of concern for supporting self-regulation in the classroom. Eventually, the participants were asked to share suggestions for improving self-regulation support for preschool and kindergarten students. As Ravitch and Carl (2016) noted, when researchers ask questions related to

experience, opinions, values, and knowledge, the potential for gaining a deeper understanding of the topic is possible.

# Procedures for Recruitment, Participation, and Data Collection

I used convenience sampling to recruit participants who were located at two different school sites. This type of sampling strategy allowed me to choose a specified amount of preschool and kindergarten teachers who have had prior experience in supporting students' self-regulation in the classroom. A selection of experienced teachers who had at least 1 full year teaching prekindergarten or kindergarten students brought value to the study by providing useful information from real world experience. The teachers were invited to participate in the study by receiving a recruitment email invitation from the organization's site contact person (see Appendix B). I did have enough teachers willing to participate from the first emailed invitation at the designated school sites, so I did not have to send out a second invitation to a third school site for preschool and kindergarten teachers within the same suburban location upon Walden University Institutional Review Board (IRB) approval. All potential participants had approximately 1 week to reply to the initial email invitation to confirm their interest. Otherwise, I considered them not interested. Once I started receiving responses from the email invitation, I began emailing out the consent form to those who agreed to participate. The participants had 1 week to read and reply to the email by typing the words "I consent." Before the actual interview began, I asked the participants if they had any additional questions or if clarification was needed. The one-time interview was expected to take approximately 45 to 60 minutes either by telephone or through video

conferencing, depending upon the preference of the potential participant. No face-to-face interviews were offered at that time due to COVID19 state and local recommendations.

The data collection was projected to begin approximately November 2020 or February 2021. The district where I conducted research had three cycles for acceptance and approval of research applications. An overview of the interview was provided to the participants by email the day before. The overview included information about the opening, the expected length of the interview, the approximate number of questions, and a reminder of confidentiality. The interview was audio-taped and handwritten notes were taken as well. Creswell and Creswell (2018) recommended researchers use handwritten notes as a backup in case the audio-tapping fails. The recording was transcribed by hand once a participant completed an interview.

The interviews took place over 3 full weeks, and the participants were given times that were convenient for them. There was only one interview given to participants. A follow-up phone call was also made to participants, so that I check for accuracy. A summary of the participants' statements was used during this follow-up call. I provided a thank you email to all participants to show my appreciation. If a participant requested to withdraw from the study before the official end, they were permitted to exit the study without any further obligations. Any participants who would have dropped out would have been replaced by another potential participant who expressed interest but did not get chosen during the first selection. However, no replacements were needed because all participants participated until the end.

## **Data Analysis Plan**

The nature of this research study was qualitative, which was consistent with gaining a better understanding of preschool and kindergarten teachers' perspectives of effective strategies and practices for supporting self-regulation in the classroom. The qualitative study was designed to include interviews. The interview questions were based upon the development of a priori codes constructed by the framework. The a priori codes included teacher support, which is defined as teachers providing opportunities to strengthen or weaken young children's inhibitions; direct instruction, which is defined as teachers providing explicit examples of expected rules and routines in the classroom; and modeling, which is defined as providing young children with clear explanations and demonstrations of self-regulatory behaviors while verbalizing the reasoning and thoughts behind the actions. The interview transcriptions were the instrument used for data analysis.

To analyze the data that was collected, I used Creswell and Creswell (2018)'s five steps to analyzing data. The first step in analyzing qualitative data was to organize and prepare the data for analysis. This preparation included sorting my materials in a manner that provided me with a clear layout of the information that had been collected. The second step involved generally looking at the overall data to gain a sense of the credibility and the general idea of what the participants have said. The third step was to place the data into categories using segmented parts of the sentences taken from the transcripts then assigning a term to the categories. This type of coding is known as in vivo Codes. Using in vivo Coding allowed me the opportunity to analyze the participants'

actual language, which provided richer information about the participants' perspectives (Saldana, 2016). The next step consisted of me using the data from the transcript to generate a detailed description of the participants and applying the terms from the categories to develop the themes. Once the data was analyzed and merged into themes, a narrative was used to covey the information.

I had a discrepancy within my study, so I used this information as part of the evidence for that specific theme. In real life, many things have contradictions; therefore, using a discrepancy in a situation would only add to the validity of the study (Creswell & Creswell, 2018). I first explained the evidence that built the theme and then mention the discrepancy that was found. Creswell and Creswell (2018) believe that providing contrary information on a particular theme will only add to the credibility of an account.

### **Issues of Trustworthiness**

As I consider the trustworthiness of my study, I focused specifically on the area of credibility. To ensure that my study was valid, I made sure to check my personal biases throughout the interview process. The way that I checked my personal biases was by keeping a reflective journal so that I was aware of my personal beliefs. Self-reflection of any potential biases, throughout the entire research process, helped to increase the overall validity of the study as well.

I attempted to stay as neutral so that I could learn as much about the phenomenon as possible. Because I did not have an outside moderator, I was transparent in disclosing my perspectives and biases when reporting the results, so that I would provide full disclosure to the reader. I also had ethical recruiting by ensuring that the participants met

the criterion that was previously mentioned in the study. Approximately three weeks were spent in the field interviewing the preschool and kindergarten teachers. When the interviews were completed, the participants had an opportunity to validate a summary of statements through a second follow-up call. Providing these statements helped to ensure the researcher understood what was said by the participant during the interview. This follow-up call was the technique that I used to perform member checking.

To make sure that transferability applied to my research study, I provided rich, thick details when explaining the focus of my study. I also provided readers with a clear description of my role in the study and revealed the participants' positions and rationale for selection. I also provided a concise and detailed description of the data collection and analysis procedures so that a full and accurate depiction of the research method was provided. Creswell and Creswell (2018) suggest that a solid framework should be given for a comparison of similar studies.

The use of appropriate methods that were aligned to the core constructs and concepts of my study helped my study in the area of dependability. A clear rationale was provided for my choice of instruments, participants, and data analysis procedure. The confirmability of my study was based on the reporting of any biases that derived from my gender, culture, occupation, or socioeconomic background, which may affect the interpretation of findings in my study.

#### **Ethical Procedures**

Written permission to proceed with my study was requested and granted by the Walden University IRB committee before I began recruiting my participants and

collecting data. Also, the participants were asked to sign a written informed consent agreement before participating in the study. The participants were provided with an opportunity to ask any questions before they sign the informed consent agreement. The informed consent agreement was designed in such a way that it was clear, concise, and easy to be interpreted by the participants. The purpose of the informed consent agreement was to help alleviate any potential ethical and legal issues that could arise. The informed consent indicated that the participants' information would be confidential and explained that fictitious names would be used when discussing the findings of the study. However, the participants' wishes were considered first when decisions were made regarding reporting of the data, so the final decision concerning anonymity was given to the participants.

A copy of the summary report was made available to the participants. All written recordings of transcripts are stored in a locked cabinet inside of my home. Digital versions of transcripts are stored on a password-protected computer device that is stored at home, and the audio versions of interviews are stored on a password-protected cell phone. If the cell phone is lost or stolen, all stored information on the device will be deleted immediately by my cell phone carrier. The data that was collected for the study will be saved for five years after publication and then destroyed.

Participants were under no obligation to participate, as participation in the study was strictly voluntary. The participants could also have withdrawn from the study at any time during the process. This information was detailed in the informed consent agreement. All ethical procedures were explained to the participants at the beginning of

the study. This explanation was also outlined in the informed consent agreement. Because the interviews took place at my school, I ensured confidentiality by interviewing each potential participant using a private online platform invitation id number and password. The administration and all other individuals were not provided with any specifics about the study or interviews. At my school site, I had a minimal relationship with the potential participants. I did not have any authority over the potential participants at my school, and we taught on different grade levels. I did not have any participants agree to participate from the second school site location.

#### **Summary**

Chapter 3 has provided an outline of the research method used in this basic qualitative study to obtain the four preschool and eight kindergarten teachers' perspectives on the effective strategies and practices used to support self-regulation. I had planned to conduct interviews for data collection. Once I received approval from Walden's IRB committee (approval no. 10-28-20-0658611), I began the process of soliciting and selecting qualified participants. The participants were currently teaching or had taught preschool or kindergarten for at least one school term. I created a data collection and analysis plan that addressed issues such as trustworthiness and ethical procedures. Chapter 4 will provide the results of the research study.

## Chapter 4: Results

In Chapter 4, I report the results of the data collection and analysis of this basic qualitative study. The purpose of this research was to identify teachers' perspectives on effective strategies and practices used to support self-regulation in preschool and kindergarten classrooms. The study's research question informed the data collection and analysis. The research question was as follows: Based on the perspectives of preschool and kindergarten teachers', what strategies or practices have been effective in supporting students' self-regulation? In this chapter, I describe the setting, reveal detailed information about the data collection procedures, report the data analysis process, present the thematic results, and provide evidence of the trustworthiness of the research study.

## Setting

During the data collection process, there were environmental conditions that may have influenced participants' experience. I conducted this study during the COVID-19 pandemic. Participants were not offered an opportunity to have an in-person, face-to-face interview as per the guidelines provided by the IRB which were under the local, state, and federal health mandates at the time. Participants were only offered the opportunity to choose either an online platform for a face-to-face interview or a telephone interview.

Twelve preschool and kindergarten teachers participated in this study. Everyone who participated had the required 1 year of teaching experience in the classroom. The participants were all state-certified teachers as well. Nine of the 12 participants were kindergarten teachers. The other three participants were preschool teachers. Six of the 12 teachers had at least 10 years of teaching experience in the current grade level reported at

the time of the study. All participants worked in the same elementary school. Table 1 presents the demographic information of the participants in terms of current grade taught and years of experience.

 Table 1

 Participant Demographics

Participant identifier	Grade level	Years of experience
P-1	Kindergarten	15
P-2	Kindergarten	3
P-3	Preschool	10
P-4	Kindergarten	8
P-5	Kindergarten	9
P-6	Kindergarten	4
P-7	Kindergarten	12
P-8	Preschool	16
P-9	Kindergarten	5
P-10	Kindergarten	15
P-11	Kindergarten	28
P-12	Preschool	4

### **Data Collection**

I sent all potential participants an initial email invitation in the first week of the data collection process. After one week, I had 12 individuals respond with interest to the study. The 12 individuals were then sent a consent form to which they all responded via email by the second week. The scheduling of interviews was completed during the second week as well. Interviews were held during Weeks 3 and 4 of the data collection process. All 12 participants selected to complete their interviews on an online platform.

There were 12 participants from whom data were collected. I conducted interviews to collect data. There was one interview for each participant. The duration of data collection for each of the interviews was between 30 and 45 minutes. Although the

participants and I were able to see each other using a visual camera, the interviews were only audio recorded.

There were two variations in the data collection procedure in Chapter 4 that were different than originally presented in Chapter 3. In the previous chapter, I stated that the interviews would take anywhere from 45 minutes to 1 hour. However, most of the interviews took approximately 30 to 45 minutes, even with the use of probes that were intended to extract more information from the participants. Also, one of the 12 participants had a personal trauma occur during the data collection period and could not participate in a follow-up member checking phone call.

## **Data Analysis**

I used a hybrid coding method during the data analysis process. First, I used a set of predetermined a priori codes that I generated from the literature review. The a priori codes included teacher support, direct instruction, and modeling. These predetermined codes were used to develop the 12 interview questions that were used to collect data from the participants. Afterward, the data were analyzed using deductive reasoning. I used the data collected by the participants to help gather additional information on the three predetermined a priori codes reported in the literature review. Dissecting the participants' data using the three a priori codes assisted me in gaining a more distinct understanding of the current data and how it related to previous research. The a priori codes also provided me with a guideline for examining the results of the in vivo coding process.

## **In Vivo Codes Inductive Analysis**

After analyzing the data using deductive reasoning, the data were then analyzed by using inductive reasoning. The in vivo coding process led to the development of various codes that were grouped into categories and organized into themes. The in vivo codes were based upon the participants' actual words. These codes were then used to create categories based upon repeated patterns found in the data. Finally, the categories were structured into seven themes.

### **Categories**

After completing, reviewing, and confirming the transcriptions, I started the data analysis by coding the exact words of the participants. The in vivo codes listed in Appendix C were used in the coding process to organize the data according to the findings suggested in the coding manual (Saldana, 2016). There were two cycles of coding. The first cycle allowed me to apply the in vivo coding method, and the second cycle was used to merge all the codes so that the categories could be developed. Once the categories were developed, the themes were established.

**First Category.** The eight categories emerged from the in vivo coding process. Repetition was the first category to be repeated among all 12 participants during the interviews. This category included codes such as developing and consistently following routines, repeatedly teaching rules and procedures, and the daily practice of academic concepts. One participant stated that "teaching it once or twice or even 10 times does not make it instilled."

Second Category. Modeling was the second category to be mentioned by all 12 participants during the interviews. Codes such as peer assistance, practicing what you preach, and social books were revealed during the data analysis. One participant revealed, "They will follow your behaviors before they follow what you are telling them they should be doing."

Third Category. Differentiation was a third category to emerge from codes such as the use of classroom set-up flexibility, providing various types of rewards, teaching to different types of learning modalities, reteaching by using different methods, providing small group/individualized instruction, and providing individualized feedback to young children. One participant mentioned, "Sometimes you may have to reorganize a classroom area if students are up and out of their seats visiting this area during an inappropriate time." Another participant stated, "Some learn well through music" which may help students remember academic concepts. Yet, another participant said, "We show visual representations to help students remember various skills and concepts."

Fourth Category. Motivation was the fourth category that emerged by using codes such as promoting problem-solving, providing choices, peer celebration, and use of both intrinsic and extrinsic motivators. One participant believed empowering young children in the classroom helped to create intrinsic motivation in young children. This participant explained, "The children get to choose which teacher they want to work with first." The participant also mentioned wanting young children to feel part of the decision-making process which may help motivate them to learn new skills and follow the rules.

**Fifth Category.** Student/Teacher Relationship was another category that emerged during the data analysis. For this category, the codes included providing prompts, reaffirming children's world, showing love, and providing teacher assistance. Eight participants spoke specifically about the importance of teacher assistance when establishing the student-teacher relationship. One of the eight participants stated, "You can provide a way to prepare them for learning, and the ones that are struggling, you must give them more support."

Sixth Category. I identified the Student Reflection category from codes such as talking it out, practicing self-soothing, coregulating students' emotions, allowing for self-expression, self-soothing/calming techniques, using tangible rewards such as Dojo points/Soar Bucks/Rocket Ships, and using visual aids such as filling the jar with ping pongs. Participants stated that they used these various practices and strategies so that students could gauge and reflect upon their behaviors. Talking it out was repeated throughout several interviews. One participant gave a few examples of what to say when helping young children talk it out. The participant referred to phrases such as "Do you think that was the right thing to do?" and "What could you have done better?"

**Seventh Category.** The Positive Reinforcement category was based upon codes such as verbal praise, soar buck incentives, positive notes home, and acknowledgment of students' behavior. Participants mentioned that the acknowledgment of students' appropriate behavior was more effective over time than constantly pointing out misbehavior. Acknowledgment of acceptable student behavior from teachers would

include providing students with positive notes home, giving students soar bucks, and basic verbal praises.

Eighth Category. The eighth category developed was Instructional Pacing, which was produced by using the following data. One teacher suggested using small steps with young children through a strategy known as "Now and Then." This strategy required teachers to have flexibility and patience. Six of the 12 participants also mentioned small steps as a strategy to help ensure students could follow rules and learn academic skills. For example, when teaching young children how to count, the participants believed it was best to go in small steps for children who were not quite understanding the skill. One participant mentioned, "I would have to shorten it down to like two or maybe even sometimes one number."

#### Themes

There was a development of seven themes that derived from the eight categories. The first theme consists of supporting self-regulation by repetition of rules, procedures, and academic concepts. The second theme is based on the presumption that supporting self-regulation in young children may require teachers to differentiate instruction, classroom environment, and reward systems when attempting to meet the needs of all students. The third theme encompasses the belief that when supporting self-regulation in young children, there may be a need for the teacher to help increase young children's intrinsic and extrinsic motivation. The fourth theme embraces the idea of nurturing the student-teacher relationship when attempting to increase emotional, cognitive, and behavioral self-regulation in young children.

Theme 5 consists of providing positive reinforcement as a more effective method for assisting young children in developing self-regulation skills than the use of negative consequences. The sixth theme incorporates the need to adjust instructional pacing when attempting to help build young children's cognitive self-regulatory skills. Lastly, Theme 7 contains the belief that when supporting young children's emotional and behavioral self-regulation, it may be effective to encourage young children to self-reflect.

# **Discrepant Cases**

There were two discrepant answers provided during the interviews. The contradictions were about impulsive behaviors when attempting to support students' working memory. One of the participants answered, "just accept the fact that you are dealing with a five-year-old, perhaps even a four-year-old until September." Another participant answered, "I can't really." Both statements appeared to contradict the literature review about the importance of teachers providing coregulation to help students control impulsive responses in young children (see Silkenbeumer et al., 2018) The statements were included in the data analysis to capture participants' authentic responses. Despite these contradictions, keeping this information in the results provided another way to maintain trustworthiness in the study.

#### Results

### **A Priori Codes Results**

Once the transcriptions were reviewed and verified, data analysis began with the initial coding of all participants' responses. I used a priori codes listed in Appendix C in the initial coding process as a way to organize the data according to the findings from the

literature review. Based on these three a priori codes, three determinants for demonstrating effective practices and strategies in supporting self-regulation in young children were developed. The three determinants included the teachers' ability to support young children's self-regulation by providing opportunities for observation, emulation, and self-control to strengthen or weaken young children's inhibitions; the teachers' willingness to provide direct instruction to young children; and the teachers' ability to model the desired expectations to young children.

## Teacher's Support of Self-Regulation

According to the literature review, supporting young children's working memory is an effective way for teachers to support young children in building cognitive self-regulatory skills. Specifically, young children need the ability to control prevalent responses to complete a task (Lipsey et al., 2017). Young children also need cognitive flexibility to fluidly switch between various rules or routines (Moreno, 2017). This ability to shift their attention from one activity to another activity helps young children in overcoming habitual thinking. In addition to the information found in the literature review, many participants expressed a great amount of success when supporting young children's working memory when integrating music and repetition in the classroom.

Table 2 provides the a priori code, the categories, the participants' identifier, and sample excerpts from the interview responses about teacher support.

**Table 2**A Priori Code Teacher Support

A priori code	Category	Participant identifier	Excerpt
Teacher Support	Supporting Working Memory Through Music	P-1	"There is a reason why kids remember words to songs."
	Supporting Working Memory Through	P-9	"So, we have a morning group like a circle time where we have songs."
Supporting Working Memory by Increasing Students' Impulsive Response Control  Supporting Working Memory by Assisting Students' in Overcoming Habitual Thinking	Repetition	P-2	"Well, for kindergartners, a lot of it is going to come from the teacher just actually speaking
		something over and over and showing it over and over."	
	Assisting Students' in Overcoming	P-7	"Finding out what is the trigger." "Children at that age are still learning how to control their behavior."
		P-12	"Sometimes you
			know, they just need some kind of reassurance."

**Supporting Working Memory Through Music.** The use of music is a strategy that several participants believed to be effective for supporting students' working memory. Participant P-1 stated that using music was a great way for her to assist young children in remembering their sight words, phonics, and increased the students' phonemic

awareness. This participant also mentioned a specific strategy called muscle memory, which allowed the participant to use kinesthetic movement along with the songs.

Participant P-11 mentioned the idea that some of her students were auditory, so it was helpful to also have music in the classroom to help these young children learn better. One way this participant specifically accommodated her auditory learners was by using videos with music. Participant P-10 also stated the use of videos with music was an effective practice used in his classroom to assist young children in remembering academics.

Supporting Working Memory Through Repetition. According to all 12 participants, another strategy believed to be effective in building young children's working memory is the use of repetition. Participant P-1 specifically mentioned that providing young children with big routines from the very start of the school year, provided the young children with a strong foundation for successfully following the expectations of the classroom for the rest of the year. Participant P-2 stated it was important for her to support the young children's ability to self-regulate by being very clear with speaking her expectations and providing pictures to further clarify the expectations. All 12 participants agreed it was important to go over the rules, expectations, and academics on daily basis using repetition as a method to co-regulate young children's self-regulatory abilities.

If an expectation, rule, or procedure was not being followed by young children,
Participant P-7 stated it was her duty to reteach the desired expectation. This participant
also believed it to be inevitable that young children would stray away from following
what was expected from time to time. However, instead of her responding with some type

of negative reaction to an infraction, she believed it was better to provide the young children with additional support, thus needing to repeat the strategy. Overall, this participant believed young children do enjoy following rules and expectations and the teachers should be willing to reteach the expectations as need.

Supporting Students' Impulsive Response Control. Participant P-1 believed young children should be guided by the teacher's support when learning how to control impulsive responses. She said, "once we've taught the strategies of how to get back on track," the students would be able to control their responses because they would emulate what she had shown them. Participant P-3 believed young children were quite impulsive at times. Therefore, she stated it was best to use a variety of strategies to support children's impulsivity.

She provided an example of a time when she was about to read a book on dogs.

She knew the young children would be very excited to tell her about their dog.

Instead of reprimanding them, she allowed the children to share one thing about their dog. Participant P-3 told the young children "Okay, tell me one thing about your dog, a dog you like, a dog you've seen, or a dog from another book." This participant believed this strategy very useful in alleviating impulsiveness that appeared when she mentioned the title of the read-aloud.

On the other hand, Participant P-2 believed that impulsiveness was just part of young children being only four or five years of age. He stated that children would perhaps learn to control responses as they grow older. Therefore, not much was indicated as an effective strategy for impulsiveness. Participant P-8 also believed that young

children were generally impulsive, so there was not much that could be done to change this behavior. She believed that it was okay to let the behavior remain if it did not affect the young child or other young children.

Supporting Students in Overcoming Habitual Thinking. Participant P-1 stated that an effective practice for her to support young children in overcoming habitual thinking was to gain information on young children's cognitive ability. She stated that instead of approaching young children's cognitive ability from a chronological position, based on age, it was more beneficial to know how they functioned in real life. She mentioned knowing this information guided her in better assisting a child in overcoming habitual thinking. If a young child had an Individualized Educational Plan (IEP) on record, this would also be very helpful for her to know as well.

Participants P-3 and P-5 believed the most effective strategy for supporting young children in overcoming habitual habits includes preparing them. Participant P-3 specifically stated by making the young children aware that something different or new would take place that day, she provided them with an opportunity to adjust their expectations. She would often go over the original way the task was performed and compare it with the new manner that it would be performed for the day. She also would include extra time so the young children could explore the new task, which she stated made them more comfortable with the shift.

Participant P-6 stated that modeling was an effective practice to help children overcome habitual thinking. She provided an example of when her students were expected to leave a task and line up. Along with the paraprofessional, she would model

for the students how they were to have a bubble in their mouths and duck tales behind their backs. They did not only tell students what the expectations were, but they demonstrated them as well.

Participants P-7 and P-11 agreed that helping students to overcome habitual thinking was an effective way to build young children's working memory. Participant P-7 said the manner that she accomplished this with her students was by using direct instruction. She said that young children may often be tunnel-visioned about certain things. However, she would counter this habit by teaching them new coping skills that would help them overcome their thinking. Participant P-11 stated that she assists her students in overcoming habitual thinking by verbally reminding them things may need to be different based on expectations.

Participant P-12 provided emotional support as a strategy to help her students overcome habitual thinking habits. She stated that sometimes she had to become more than just her students' teacher. She had to become like a family member to them. She said sometimes for young children to overcome habitual thinking, they need to have the reassurance that everything was going to be okay. She stated that some of her students just needed to feel comfortable and safe and then they were able to move on.

### Teachers' Willingness to Provide Direct Instruction

According to the literature review, providing young children with direct instruction is an important and effective practice for supporting self-regulatory skills (Flook et al., 2015; Dignath & Buttner, 2018). The 12 participants believed that creating a daily routine for explicitly explaining the procedures, rules, and expectations for

academics and behavior helped their young students develop cognitive self-regulatory skills. All participants believed explicitly teaching their young students how to recognize and focus on their behavior helped assist them to develop emotional self-regulatory skills. If the young students were experiencing difficulties in academics and/or behavior, the participants believed their positive teacher-child relationships were an important factor in mitigating these challenges. See Table 3 for a sample of excerpts provided by some of the participants.

Table 3

A Priori Code Direct Instruction

A priori code	Category	Participant identifier	Excerpt
Direct	Daily Routine for Explicit	P-2	"It is critical that the teacher be very
Instruction	Explanation of Rules, Procedures, and Expectations		clear with speaking the expectations."
		P-7	"You develop that routine, then it is expected."
	Teaching Young Children to Recognize and Focus on Their Behavior	P-4	"When someone's name pops up, I'll say what do you think you've done good?"
		P-6	"I always use a treasure box, and if they really struggle, I read social stories."
		P-11	"Well, we reward our students."
	Teaching Young Children to Overcome Challenges Using Praise, Encouragement, and Rewards	P-12	"We give constant praise for positive behavior."

**Daily Routine for Explanation of Rules.** Participant P-1 believed in the idea of making big routines as part of the classroom norm from the first day of school. This participant stated that 99% of the time the rules remained the same from the beginning of

the school term to the last day of school. Participant P-1 stated during the interview "That consistency helps." She believed teaching rules or academics once or twice or even ten times was not enough to instill the concepts in young children. The children would need the opportunity to have the rules or expectations explained verbally, demonstrated visually, and experienced by hands-on activities. Participant P-1 believed all these components needed to be a part of direct instruction.

Participant P-2 believed young children who may not have had a lot of social cues from home will need the teacher to be very clear with speaking the expectations. This participant believed a verbal reminder of the expectation is more powerful than displaying the rules on the classroom walls because most preschool and kindergartners cannot read yet. However, if the teacher decided to display the rules, they need to have pictures to show the students what the words mean. This participant also believed consistently modeling the expectations for rules and procedures would be beneficial to young children. This participant stated during the interview, "I do believe most people will do better if they know better." The participant believed if young children are directly taught the expectations, they would more likely follow them.

Participant P-5 also stated modeling the expectations was very important when teaching the rules and expectations to young children. This participant stated she was constantly reminding her students what the rules were and what she expected of them. She would also model the behaviors she expected them to follow. Then she would use positive reinforcement by giving students verbal praise when they were doing the right

thing. This acknowledgment was used to encourage her students to look to their peers as a model.

Participant P-6 also mentioned that prekindergarteners and kindergartners do not read yet, so they would need more visual aids such as pictures to help remind them of the rules and expectations. This participant stated it was important to teach the rules with fidelity to the young children daily. Furthermore, Participant P-7 believed children do enjoy following rules and expectations, so it is important for teachers to provide a routine for which these rules and expectations are taught daily. Participant P-7 warned, however, to keep the rules and expectations simple for young children.

## Teaching Young Children to Recognize and Focus on Their Behavior.

Participant P-2 believed that for young children, it was a matter of allowing children to be a part of what was called a "group contingency". The group contingency provided an opportunity for the young children to work together toward a goal. This working together made it possible for peer influence to be used positively. For example, the teacher putting a ping pong ball in a jar when one student does well would result in the class earning a reward but also provide that individual student with the praise and appreciation of their peers. Also, this group contingency provided young children with the opportunity to reflect upon how their behavior influences their environment.

Participant P-3 stated it was important for young children to talk through steps about the decisions they made. For example, the students would be asked questions about what the teacher's expectations were, what happened, and how they could fix what was done incorrectly. This participant believed having these discussions provided her students

the opportunity to reflect on their current behavior and focus on how the behavior could be changed for the better. Participant P-3 mentioned that it was important for her students to know that it is okay for them to mess up, but they needed to work on fixing the problem.

Some of the participants choose to use a classroom behavior system such as Class Dojo or a school-wide money reward system to help students reflect upon their behavior. Participants P-4 and P-5 used a school-wide money system to reward students. Participant P-4 also used Class Dojo to help keep a points system for each student. The students can visually account for the number of points they have earned for the day. This participant also made sure to ask the students what they did correctly as a way for them to focus on their behavior. Likewise, the school-wide money system was used to provide students with a positive way to self-reflect and focus on their behavior.

Participant P-6 also provided time for discussion to help young children reflect and focus on their behavior. This participant stated that social stories would be shown to the students on videos. Once the videos were over and the students were calm, the participant would talk with the students about why they were upset and what the students could do differently in the future. Participant P-12 also believed these conversation pieces with young children to be very important in self-reflecting and focusing on what they could do better the next time.

Participant P-12 believed that having some type of visual representation of the students' behavior progression was a great way to help students reflect and focus on their behavior. This participant mentioned that in the past, rocket ships were used to show the

students whether their behavior was improving. This participant also stated that using a behavior menu was also effective in helping young children reflect and focus on their behavior. Having young children see their behavior progression helps them know what they are striving towards. However, young children should receive some type of positive praise so they can hear it as well.

## Teaching Young Children to Overcome Challenges Using Praise,

Encouragement, and Rewards. Participant P-1 stated that the use of a *First and Then* or *Now and Then* chart helped her students to learn how to overcome feelings of being overwhelmed or challenged. The first and then board helped to break down a challenging assignment into manageable parts where the students can achieve goals in smaller increments. When young children worked in smaller increments, they tended to overcome the difficulties of completing an assignment that required multi-processing skills. This allowed the students to overcome the challenge of feeling overwhelmed when given a task.

Participant P-2 believed that showing young children love through encouragement was a great way to help them overcome challenges. The teacher needed to reteach a skill differently if children were experiencing difficulties in understanding. This participant believed the most important part of young children overcoming challenges in the classroom was building a positive teacher-child relationship. The building of this relationship assisted the teacher in understanding the students' needs and provided the teacher with possible solutions in helping the children to overcome challenges.

Participant P-7 also mentioned the teacher-student relationship was the key to helping

students overcome challenges. The participant stated, "Any challenge that a student has, he or she will be able to cover it as long as he or she knows that the teacher cares."

Participant P-4 stated that young children need lots and lots of encouragement and positive reinforcement with short-term goals. Along with the short-term goals, it was important to provide time for practice until the students achieved their goals. This participant also mentioned the use of timers as being an effective practice for helping young children accomplish more complex assignments by breaking them into parts. For example, the students may have been given ten minutes to complete a small section of the task, then took a break before moving on to the next section. Participant P-6 also mentioned that breaking assignments up into increments was helpful for students in overcoming challenges.

Participants P-8, P-9, and P-10 all mentioned the importance of repetition when helping children over challenges. In addition to repetition, the need for providing praise and rewards was highly recommended by these participants. Participant P-9 also mentioned the need for empowering the students with the gift of choice. This participant believed when young children felt they are part of the decision-making process, they seemed motivated to persevere through challenges.

Participant P-12 stated praising her students was effective in helping them overcome challenges. The participant suggested that it was helpful to praise the students for what they were doing along the way. This praise provided the young children with the motivation to continue through any difficulties. It was mentioned that the praising of a

particular student would also help other students who were witnessing the praise try harder as well.

# Teacher's Ability to Model Desired Expectations to Young Children

According to the literature review, when teachers model positive behaviors the motivation of young children improves. When motivation is improved, then children are more likely to increase in their observational learning. Students tend to remember and use things that have caught their attention (White, 2017). Therefore, teachers should have the ability to model the desired behavior and academic expectations they are looking to be produced from young children. See Table 4 for a sample of excerpts provided by some of the participants.

**Table 4**A Priori Code Modeling Expectations

	<u> </u>	D .:	
A priori	Category	Participant	Excerpt
code		identifier	
Modeling	Demonstrating to	P-2	"What I expect from them, I'm doing it
Expectations	Students What Is		myself."
Lapectations			mysen.
	Expected		
		P-3	"If you want students to behave and act a
			certain way, then you need to show that."
			•
		P-5	"If they don't know what is expected, then
		1-5	
			how will they know what to do?"
		P-9	"The way we act, they will act the same
			way."
			•
		P-12	"They will follow your behaviors before
		1-12	•
			they follow what you are telling them."

**Teachers Having the Ability to Demonstrate Expectations.** Participant P-1 shared about a time that she was student teaching. She explained that the teacher she was

observing decided to place herself in the *Chill Zone* location of the classroom. Normally this location was reserved for students who needed to take a moment out and reflect on behavior. The teacher however was having a moment and decided to use her moment to model to her student what they would need to do in a similar situation. Participant P-1 stated the students were all quiet and observant. This teacher had caught their attention, and she knew the students would emulate their teacher eventually. This participant believed this moment demonstrated to her the power of modeling.

Participant P-2 believed modeling could be used when teaching behavior and academics. An example was given about modeling *Think Alouds* when teaching mathematic concepts to children. Not only would the teacher be writing on the board and providing the children with a visual demonstration, but verbal explanations would be happening simultaneously. This same method could be transferred over into modeling the expected behavior. The teacher would not only tell what they expected from the children but would also demonstrate the specific expected behavior.

Participant P-7 believed modeling self-regulation to be so important to young children's classroom success. She said, "If a teacher sets the tone, the students' behavior will follow. For example, if teachers' do not want the students yelling in the classroom, this participant stated that the teacher should not yell either." Another example, if the teachers wanted the students to show kindness in the classroom, then as educators they should model kindness as well. Participants P-9 and P-12 believed young children will follow the teachers' behavior before they follow what teachers ask them to do.

## **In Vivo Coding Results**

After the a priori coding process was completed, I began the open-coding process by using in vivo codes. The in vivo coding helped me capture the exact words from the participants. During the analysis, the in vivo codes that repeated were used as a basis for creating sub-categories. The sub-categories were used to develop larger categories, and ultimately to construct the seven themes.

## Theme 1: Implement Routines and Daily Practice to Support Self-Regulation

I was able to construct seven themes which are based on the first and second cycle open-coding analysis and the development of eight categories. The first theme was based on the participants' implementation of routines and practice in repeating rules, procedures, and academic concepts daily until young children were established enough to learn and apply them independently. This implementation of routines and daily practice may have helped to build children's overall self-regulatory skills in the areas of academics and behavior based on participants' ability to co-regulate the students' cognitive and behavioral experiences. Table 5 provides a summary of the codes, categories, and subcategories for Theme 1.

Table 5
Theme 1 Codes

Code	Category	Subcategory	Theme
Consistency	Repetition	Consistent Routines	It may be beneficial
			for teachers to
Show It Over and		Repeated Emphasis of	develop consistent
Over		Rules, Procedures,	routines while
		and Expectations	providing young
			children with
Routine Every Single			continuous reminders
Time			of the expected rules
			and regulations,
Lots of Practice		Daily Practice of	before beginning a
		Academic Concepts	daily practice of
Repeat Everyday			academic concepts as
			an effective way to
Develop a Routine			co-regulate young
			children's behavioral
			and cognitive self-
			regulatory abilities.

All 12 participants mentioned that an effective practice for assisting students' cognitive and behavioral self-regulatory skills included developing a daily routine, repeating classroom rules and expectations, and reviewing academic concepts daily. Participant P-3 provided a specific example of how young children were required to enter the classroom to prepare for the lesson of the day. The children were required to come inside in a straight line and sit on a blue square. It was the daily routine that allowed the children to become successful in following this procedure. This participant also used the same music every day as a well to help build that routine for the children. "We would stick to routine", the participant made it clear during the interview having this type of routine assisted in co-regulating young children's ability to follow classroom expectations and created an atmosphere conducive for learning.

When Participant P-8 was asked about motivating young children who experience challenges with academics and/or behavior, her response was "For us, it's just repetition." To assist the young children in being successful at various goals, it was as simple as encouraging them to keep doing the skill over and over until they were successful. When the young children were successful at meeting a goal, there would be a positive recognition such as hand clapping or high fives.

When asked about co-regulating young children's working memory, Participant P-10 mentioned, "It's a lot of repetition." An example was provided during the interview. This participant stated, "When teaching kindergartners the letter sound for the letter A, we would practice the sound five or more times." This participant believed it was helpful for students to practice a concept or skill over and over for them to learn it authentically.

Participant P-12 also believed taking time to explain the rules and routines to young children may be effective in co-regulating self-regulatory skills. This participant explained, "I will explain it verbally, but then I also have to explain it while they 'doing it." The participant believed it to be important to not only talk to young children by telling them what they are doing wrong but to talk them through it. Talking them through it will help them understand exactly what they are to be doing. This type of strategy not only provides the young children with co-regulation for the teacher but also direction instruction.

### Theme 2: Differentiate Practices to Support Self-Regulation

The participants' use of implementing different self-regulatory skill-building strategies in academics and behavior helped to provide students with an opportunity to

show positive progress. Academic self-regulatory skills may have improved based upon the participants' willingness to teach to their young children's different learning modalities, participants' ability to be flexible with the classroom set-up, and the participants' capability to reteach skills using various techniques. Behavioral self-regulatory skills may have been improved by the participant's use of differentiated reward systems which include tangible, visual, and auditory rewards.

Theme 2 has several subcategories which were used to create a differentiation category. There were references made to flexible seating being used as a method to differentiate the classroom setting by Participants P-2 and Participant P-10. Participant P-2 also voiced the belief that if a child has impulsive behaviors while instruction is happening, it may benefit the teacher to reorganize the classroom. This participant stated, "if this child is consistently going to the art area at the wrong time, maybe turn the bookshelf in a different direction."

Other participants believed in differentiation in areas such as the use of various types of instructional strategies. Three participants said they used songs in their instruction as a strategy to help children learn and retain information. Participant P-9 shared that using music in the classroom was helpful for their kindergarteners when learning the rules and following daily routines. This participant also believed music is helpful when teaching young children academics.

Participant P-1 suggested that children are more apt to remember words to a song but do not learn their sight words as easily. It is believed by the participant that music along with kinesthetic movement help to build muscle memory. This participant added

songs to the learning experience and thought it to be an effective way to support the students' working memory. P-11 also believed some young children are auditory learners and would benefit from having music as part of their learning experience.

Another way some participants believed in implementing differentiated strategies and practices is to ensure visual aids were available to young children as part of the learning process. Participant P-1 reported using visual aids as a manner to help young children reflect on their behavior. This participant also disclosed the idea of working to meet the needs of her students when considering each of their learning modalities. Not only did she use music to appeal to the auditory learners, but she used visual aids for the visual learners as well.

Participant P-4 felt that timers worked for her young children when setting up expectations for them to complete assignments. Instead of giving her children what may seem like an "overwhelming" amount of work, she would break the assignment down into chunks. After each short goal was completed, then she would provide them with additional information on what they will do next. This is a strategy used by this participant to help differentiate the amount of time a particular task would be due. The participant shared that differentiating this manner provided an avenue for all students to meet various goals no matter the difference in learning capabilities.

Participant P-6 indicated one way to differentiate classroom practice when motiving students who experienced challenges with academics or behaviors was to provide those students with something tactile. For academics, this participant suggested differentiating instruction by teaching in small groups. When dealing with behavior

challenges, the participant said she tried a lot of different things. The participant clarified this statement by providing an example. If young children were experiencing behavioral problems, they may have needed anything from having alone time to the use of a fidget which may have helped them calm down.

## Theme 3: Provide Intrinsic and Extrinsic Motivation to Support Self-Regulation

The third theme was based upon the participants' use of providing young children with tangible rewards as an initial extrinsic motivator for academics and behavior. The examples of tangible rewards included providing students with positive notes to take home and the participant's use of behavioral tracking systems like Class Dojo and Soar Buck. However, moving toward intrinsic motivation by teaching problem-solving skills and providing young children with self-expression and choices produced authentic learning opportunities for building self-regulatory skills such as intrinsic motivation.

Participant P-2 provided an example of building children's intrinsic motivation to help increase self-regulation through implementing a strategy called "group contingencies". There was a jar kept at the front of the classroom. When a student did something positive, a marble would be entered into the jar. The children in the classroom would be allowed to acknowledge their peers' success by giving verbal praises. Using this strategy allowed the young children to not only receive a visual of their self-regulatory behaviors but also provided them with an opportunity to see how their behaviors affected their classroom environment. The desire was for the young children to learn the importance of community. The individual child did not get an immediate reward, but the entire class was rewarded once marbles were filled at the top of the jar.

Another practice used by Participant P-3 was to teach problem-solving skills to the young children for building self-regulation skills. This participant decided the best way to teach these skills was to empower her students. For example, there may have been a moment when a young child needed to be pulled to the side and asked them questions such as "What did you do?" and the answer was usually "I don't know". The participant stated that she would remind them what they did inappropriately because sometimes they did forget. She would then ask a few other leading questions that would help the young children make better choices.

Participant P-6 taught another strategy called "sticky fingers" at the beginning of the year. This strategy would be used to provide her young students with tools for calming themselves down when they were in the middle of a stressful or unpleasant situation. This participant also provided a safe spot in the classroom that is called the Chill Zone for students to go visit if they needed a moment to calm down. There were pictures located in this zone with questions addressing anger, sadness, or frustration. This strategy was used as a manner to co-regulate the students' emotions during a highly charged situation.

Participant P-7 emphasized the importance of direct instruction when coregulating young children's ability to use self-regulatory skills. "As an educator, we should help teach what is causing their behavior" the participant explained. Young children should understand the reason they displayed a particular behavior. The participant goes on to say once young children understand what is causing their behavior, they have a better opportunity to improve it.

She noted this type of direct instruction could be accomplished by providing young children with visual and verbal cues. She also mentioned that the long-term goal was to see children not only respond to extrinsic rewards, but also intrinsic rewards as well. If the children can see their behavior with some type of visual aid, there may be more of a long-term intrinsic gain. Participant P-12 also believed young children should receive direct instruction from the teacher on how to behave. She also went on to express the importance for young children to understand the reasons why their behavior was inappropriate.

Participant P-11 commented about the teacher's ability to model the expected self-regulatory behaviors. This participant stated that she would show a representation of what it meant to follow the rules and be a good citizen in the classroom. This participant said she also took the time to explain to the students why rules are important to the classroom and society. The participant not only provides a verbal explanation but would also provide charts for the students to monitor their behaviors so that they can self-reflect and adjust their behaviors if needed. This participant believed it was worth mentioning that if there is a young child who continues to have a difficult time self-regulating after various strategies are used, then it may be helpful to reach out to a behavioral specialist.

# Theme 4: Build Student-Teacher Relationships to Support Self-Regulation

According to several of the participants, the student-teacher relationship was the responsibility of the teacher. It was the participants' responsibility to provide students with prompts when needed for academics and behavior. It was also the participants' responsibility to ensure that young children felt their world mattered. Showing young

children care in this manner provided the young children with a sense of feeling loved and comforted. This feeling of love and comfort helped to build trust, thus provided a foundation for which the participants could use to help co-regulate the young children's emotions.

Participant P-2 revealed teaching "kindergarteners provides a great opportunity to show love". This participant articulated the belief that young children see teachers as either the teacher likes them, or the teacher does not like them. The participant explained the reason for this thinking is because young children's point of reference is very limited. Sometimes young children may say that the teacher is mean, when in fact the teacher is attempting to build structure or redirect misbehavior. However, if a teacher purposely builds a positive relationship with the students, trust could be built with the young children.

Participant P-4 shared about the times she had to be more like a mom than a teacher at that moment. She said sometimes it was best to allow a young child to continue crying and get it out than to demand that they stop immediately. After the child has stopped crying and settled down, she would talk to them so that they could work through their feelings. P-5 suggested that when young children are struggling in an area, it is the teacher's responsibility to give them additional support.

Participant P-7 voiced her thoughts about the importance of the teacher-student relationship. She stated, "You can be the greatest teacher as far as theory and the structure of teaching a lesson, but if you do not have a relationship with that child where the child trusts you and know that you care about them, that goes out of the door." This

participant believed the best motivator for young children to develop self-regulation is based on a positive relationship with the students. Any challenge the students have could be overcome if they know the teachers care about them.

Participant P-12 voiced her opinion about the responsibility of the teacher to encourage a positive relationship with students. She believed that most times young children need reassurance. The teacher needs to remember that for young children, many things taught in the classroom are new to them. Therefore, it may be helpful to ensure the students feel comfortable and safe before attempting to teach academics. The teacher may need to take on a role of a mother figure first.

## Theme 5: Provide Positive Reinforcement to Support Self-Regulation

According to several responses from the participants, verbal praise has been very important when striving to support young children's self-regulatory skills. Also, it was important for participants to acknowledge the young children as they demonstrated appropriate behavior or academic achievement. When the participants provided these positive reinforcers, it encouraged the young children to work harder at achieving their goals. Achievement of goals may have produced more self-efficacy in young children, thus providing students with another avenue for self-regulating.

Participant P-1 shared that she rewards her students with stickers and stars when they have completed a short-term goal on the Now...Then chart. The students are told what they need to complete now and what they would be allowed to do after the task is completed. This chart helps the students not be so overwhelmed with the entire

assignment at one time. Giving the students the freedom to do what they would like after a completed, within limitations, provides them with positive reinforcement.

Participant P-2 would stimulate his students' interest as a strategy to demonstrate positive reinforcement. When a student seemed to be uninterested in a lesson, he would find out the interest of the child from either the child's parents or asking the child directly. He would use this strategy instead of forcing the child to partake in the lesson in a rigid manner. This method seemed to be an effective way for grabbing and keeping the child's attention.

Participant P-3 explained that instead of dealing with students in a punitive manner when there is a disagreement with peers, she would have a personal discussion with the children. She would ask what was expected of them and how they could go back and fix the problem. She would have the students apologize to each other. This participant would then allow the children a chance to make a better choice than before.

## Theme 6: Pace the Instruction and Curriculum to Support Self-Regulation

Several participants mentioned the idea of supporting self-regulation in young children by slowing the pacing of the instruction and curriculum. Delivering the instruction in a manner where young children had to learn the skill or behavior in chunks helped them to become more successful. For example, if students were struggling to learn the numbers 1-10 in a particular week, the teacher would only focus on a couple of numbers instead of all 10 numbers. Another benefit of slowing the pace of instruction or curriculum, provided the participants with additional time to teach the young children classroom procedures, rules, and expectations in a more authentic manner.

Participant P-1 said that she used small steps with her kindergarten students to help them become more successful in completing a certain task. She implements the Then...Now chart which she stated has been more successful than using behavior cards or check-off lists. The Then...Now chart provided young children with a tangible reward as soon as they complete a particular task. Participant P-4 also believed in giving her kindergartners lots of encouragement and positive reinforcement when they were trying to meet short-term goals. If they were working on learning numbers from 1-10, she would only present a couple of numbers at a time to students who would struggle with recognizing numbers. She wanted her students to be successful.

When trying to teach sight words to kindergartners, Participant P-2 suggested only teaching two or three words at a time. He stated that if a teacher attempts to teach all ten sight words, it might be overwhelming for some students. "Sometimes, you just have to teach that one sight word and show it over and over", the participant added. He believed once the teacher feels the child has learned the sight word, it is okay to introduce the second word. The success was deemed to be better with this practice because the teacher was limiting the amount of new content.

"We have to see that their frustration level has a very fine line," Participant P-9 stated. She believed that it is important to make sure teachers do not cross young children's frustration levels when presenting content. If a teacher sees that a child has not reached the cognitive level to learn a particular concept, then it may be wise to take a step back. She believed it was important for her not to cross that frustration line when

teaching her kindergartners. It was important for her to the each of her children's appropriate learning levels so that she could adjust her instruction accordingly.

Participant P-12, who teaches prekindergarten, emphasized the importance of shortening the amount of information presented to young children. She provided an example that if she were teaching identifying numbers, she would not give students who are struggling four or five numbers like she would give everyone else. She would only give those students two numbers. She would also have to repeat these numbers over and over until they were able to learn them. She stated that she would not move on until her students were capable of learning at least some of the information.

# Theme 7: Encourage Young Children to Self-Reflect to Support Self-Regulation

The participants provided several examples of strategies and practices that were used in the classroom to promote self-reflection. When young children were encouraged to self-reflect, it provided them with an opportunity to look inward instead of outwardly. Once the young children looked inside of themselves, they began to become more aware of their own emotions. With the assistance of the participants, the young children were provided with an avenue for understanding the choices and options for making better choices.

One practice that Participant P-1 believed to be important and beneficial to supporting self-regulatory skills in her classroom was self-soothing. She explained how she modeled and practiced with her kindergartners self-soothing and calming skills. She would teach her students to count to ten and take deep breaths. She accomplished this

practice by providing verbal guidance, using pictures for visual cues, and modeling the expectation.

Teaching the strategy called "Sticky Fingers" allowed participant P-6 to provide her students with a tool to help them take deep breaths and calm down. She would be sure to provide this tool at the beginning of the year so that her kindergartners would be able to use it at any time. Also, allowing her young students to talk through their emotions seemed to be more effective once they have calmed down. She mentioned that at this early age a lot of students may not know how to self-regulate their emotions, so it is important for the teacher to get involved.

# **Discrepant Cases**

The only nonconfirming data that showed up in the results were that of Participant P-2 and Participant P-8. Participant P-2 believed teachers may have to accept the fact that they are dealing with four and five-year-old children when it relates to impulsive behavior. He also believed having impulsive behavior as a young child is neither good nor bad. He stated that provided the behavior is not harmful to the student or their peers, then there is no serious issue.

This belief is consistent with Participant P-8 who stated she could not control her young prekindergartners' impulsive behavior. She believed she could not assist in their impulsiveness because she had students who had special needs. However, she did say that if the impulsiveness was an unsafe behavior, she would redirect them immediately. She said, "We just have to kind of let it ride."

#### **Evidence of Trustworthiness**

# Credibility

I was able to check my personal biases throughout the interview process by keeping a reflective journal. When I was doing the interview, I wrote down additional notes for my thoughts and went back to review before I transcribed and analyzed my data. I attempted to stay neutral as possible by only using the direct words spoken by the participants when analyzing data. I participated in ethical recruiting by ensuring that the participants met the criterion that was mentioned in the study. The specified amount of time was spent in the field interviewing the preschool and kindergarten teachers.

Finally, when the interviews were completed, member checking took place when I made a follow-up phone call to the participants to ensure no errors were made. I read each response provided by the participant during the review to ensure accuracy. This was different than the original summary of statements I had planned to provide the participants. This was changed due to limitations of any personal contact of the Covid-19 safety requirements.

# **Transferability**

To ensure the transferability of my research, I provided rich details when explaining the focus of my study. I also provided readers with a clear description of my role in the study and revealed the participants' positions and rationale for selection. I also provided a concise and detailed description of the data collection and analysis procedures so that a full and accurate depiction of the research method was provided.

# **Dependability and Confirmability**

The use of appropriate methods was aligned to the core constructs and concepts of my study to ensure dependability. A clear rationale was provided for my choice of instruments, participants, and data analysis procedures. Finally, the confirmability of my study was based on the reporting of any biases which may have derived from gender, culture, occupation, or socioeconomic background, that could have possibly affected the interpretation of my research findings.

#### **Summary**

Participants in this study shared a variety of strategies and practices they believed to be effective in supporting self-regulation in young children. Although research has revealed several components considered to be beneficial in supporting self-regulation, participants provided additional aspects they found helpful. Participants not only believed in the effectiveness of teacher support, direct instruction, and modeling, but they believed in the effectiveness of specific strategies and practices to accomplish these goals. All 12 participants believed in the effectiveness of using repetition in the classroom through routines, rituals, and daily practice.

For young children to become more successful in obtaining cognitive, emotional, and behavioral self-regulation, a teacher must be willing to repeatedly provide direct instruction, support students, and model the expectations. The participants shared the importance of differentiating the support they provide students when modeling and providing direct instruction. Differentiation in these areas may require an adjustment of instructional pacing in the curriculum. The participants also believed in the importance of

building positive student/teacher relationships while supporting students' intrinsic motivation. Ultimately participants wanted their students to arrive at a place of self-reflection.

#### Chapter 5: Discussion, Conclusions, and Recommendations

Young children's experience in starting school is an important developmental stage in their lives. They are faced with new social and academic roles and expectations that require the ability to self-regulate their emotional and cognitive behaviors. These young children must adapt to these demands to competently function in a school environment (Neitzel et al., 2016). Teachers need to assist young children in acquiring the appropriate skills needed to self-regulate so that they are successful in meeting these new requirements (Broekhuizen et al., 2017).

The purpose of this study was to explore teachers' perspectives on effective strategies and practices used to support self-regulation in preschool and kindergarten classrooms. The findings of this study may contribute toward the development of more relevant professional learning communities. These communities may then provide teachers with effective strategies and practices to support young children's self-regulation skills. Acquiring self-regulation skills is needed for children's social and academic success in the classroom (Cadima et al., 2016; Willis 2016).

This chapter contains a discussion of findings and themes that were developed through analysis of the collected data. I interpret the findings in relation to the empirical and theoretical literature reviewed in Chapter 2. Limitations of the study are identified and recommendations for future research are offered. In addition, implications of this study are presented as they relate to the various stakeholders.

## **Interpretation of the Findings**

Through deductive analysis and inductive thematic content analysis, I identified seven themes. The first theme encompasses that using daily repetition of rules, procedures, and academic concepts is an effective practice when attempting to coregulate young children's cognitive self-regulatory skills. The second theme reveals that strategies are most effective when they are differentiated based upon young children's social, emotional, and cognitive needs. For example, teachers should be willing to coregulate by using a variety of reward systems and be willing to differentiate the classroom environment as needed to help promote self-regulation. The third theme indicates an effective practice for teachers of young children is to support self-regulation through extrinsic and intrinsic motivation.

The fourth theme highlights that a positive student-teacher relationship plays an important role in effectively supporting self-regulation in young children. Theme 5 encapsulates that positive reinforcement is an effective practice used in the classroom to help co-regulate young children's emotional and cognitive self-regulatory skills. Theme 6 reveals that an effective practice is to adjust the pacing of curriculum and instruction when supporting young children's emotional and cognitive self-regulation. Theme 7 encapsulates that an effective strategy in coregulating young children's emotional and cognitive self-regulation is for teachers to encourage students to self-reflect. I used the evidence undergirding each of these themes when answering the research question.

# **Findings in Relation to the Research Question**

All 12 participants considered it important to coregulate young children's self-regulation by using repetition. Many of the participants also mentioned how important it is to differentiate when providing support to young children's emotional and cognitive self-regulation. Most participants agreed that the student-teacher relationship, positive reinforcement, and self-reflection were effective components when coregulating young children's self-regulation. The majority of participants also mentioned how effective the practices of pacing the delivery of curriculum and instruction and supporting intrinsic and extrinsic motivation are when coregulating young children's self-regulation ability.

Study findings documented how self-regulation of emotion and attention allows children to learn better based on their social, emotional, and cognitive experiences (Williams & Berthelsen, 2017). Research also revealed that preschool children's interpersonal relationships with teachers and their peers projected kindergarten academic success due to an increase in emotional knowledge and social competence. When young children acquire emotional knowledge, they have a better chance of academic success and school adjustment (Gershon & Pellitteri, 2018). Based on the social cognitive theory, teachers have an important role in modeling positive relational skills to their students (Weyns et al., 2017). The following section will show findings that either extended or confirmed the information that was revealed in Chapter 2.

# Findings in Relation to Supporting Young Children's Cognitive Self-Regulation

The literature review identified the importance of executive functioning skills in young children's ability to self-regulate. Executive functions refer to any range of related

but distinct cognitive processes. These executive function skills include working memory, inhibition control, and attention shifting (Flook et al., 2015; McKinnon et al., 2019). There is evidence that shows that when teachers coregulate young children's working memory, inhibition control, and attention shifting abilities, they are effectively supporting young children's overall self-regulation growth.

# Repetition

The participants indicated there were many times when young children entered the school for the first time and did not display appropriate behavior for a structured environment. They came in with varying degrees of self-regulation skills. Some children had a higher level of self-regulation that allowed them to be more successful in the classroom, but others had very little self-regulation, which caused them to struggle with following expected rules and procedures. The participants felt it was their responsibility to change this disparity by ensuring that all children were provided with an opportunity to develop self-regulation skills that would allow them to be successful in the classroom.

One practice that all participants agreed to be effective when supporting young children's self-regulation skills was the use of repetitious practice. Repetitious practice was presented in various forms such as repeatedly modeling expected behaviors, rules, procedures, and academic skills.

Establishing routines was another way that the participants helped the young children become successful in developing self-regulation. The participants believed that when young children knew what was expected of them, they were more apt to behave in a manner that agreed with the expectations. On some occasions when children did not

follow the expectations, their peers would provide them with an example of what they should have been doing. At other times, the participants would remodel the expected behavior positively, instead of negatively reprimanding the young children, which could have harmed their intrinsic motivation. The literature review revealed the effectiveness of modeling expected behaviors and establishing routines to help build executive functioning skills. However, the participants explained the importance of using daily repetition to effectively build young children's working memory when supporting their self-regulatory growth.

## Differentiation

When the participants attempted to coregulate young children's working memory, inhibition control, and attention shifting abilities, they also noticed that all children did not need the same type or amount of support. The participants believed it was an effective practice for them to be willing to differentiate the type and amount of support provided to the young children when attempting to help them self-regulate their cognitive processes. The participants expressed how some young children came into preschool or kindergarten knowing their alphabets and how to count to 100, yet other young children did not know any of their alphabet or numbers. Then some young children were placed somewhere in between these two groups.

Because the young children were on different academic levels and abilities, the participants would use different strategies when building executive functioning skills to help ensure their academic success. These strategies were sometimes based on catering to different learning modalities to ensure optimal learning and cognitive processing. For

young children who were more visually stimulated, the participants would use visual aids such as pictures, charts, videos, and modeling expectations while the students observed.

Participants would also use auditory aids such as reading stories, incorporating music, providing verbal reminders, and giving verbal explanations for students who were more auditory learners. For the kinesthetic learners, the participants would use flexible seating arrangements and rearranging the classroom environment to meet their need for movement. The young children also received rewards based on differentiated practices. Some young children needed immediate individual verbal feedback while other young children required visual representations like individual charts and stickers to show success. There was also a group of young children who were satisfied with receiving a general class reward instead of individual rewards. The literature review revealed the importance of coregulating young children's self-regulation skills. However, the participants believed differentiating these coregulation efforts was an important part of building young children's self-regulation skills.

#### Curriculum and Instructional Pacing

The literature review revealed the importance of using various types of curriculum and instruction that directly supports self-regulation acquisition. Tools of the Mind, Promoting Alternative Thinking Strategies (PATHS), The Kids in Transition to School (KITS), Chicago School Readiness Project (CSRP), Head Start Research-Based, Developmentally Informed (REDI), and Creative Curriculum are the names of a few of these types of programs. Yet, one hindrance to these types of programs is the requirement of extensive teacher training and expensive resources (Sezgin & Demiriz, 2019). There

was also another obstacle identified by the participants in this study, which helps extend the knowledge found in the literature review. This obstacle was based on the limited amount of time available in a classroom instructional daily schedule. Because academic state standards are required for kindergarten in some U.S. states, the opportunities for providing direct instruction for self-regulation growth are limited.

Many of the participants who taught kindergarten agreed that these academic state standards required a great amount of time to adequately teach to their students. Many of their students were at different cognitive and emotional developmental levels when they entered kindergarten. This variation in cognitive and emotional developmental levels required the participants to be flexible when teaching the state standards, which required additional time. However, the literature review revealed that when teachers are provided the opportunity to coregulate young children's executive functioning skills and emotional skills, academic skills will increase as well (Gershon & Pellitteri, 2018).

Participants believed that it was necessary at times for them to teach young children in smaller steps or show videos first to model the academic skill when coregulating their executive functioning skills. Showing videos of a skill being performed provides young children with observational opportunities. The literature review demonstrated the effectiveness of providing observational opportunities when supporting cognitive self-regulation growth. When teachers provide young children with observational opportunities, it may lead to increased self-efficacy (Regan & Howe, 2017). Nevertheless, when participants show videos or chunk assignments into smaller parts to promote mastery or reteach unmastered academic skills, they needed additional

time that was not available in most cases. This use of additional time to build young children's cognitive self-regulation may result in some academic standards not being covered by the end of the school year.

#### Intrinsic and Extrinsic Motivation

There is an intrinsic connection between cognitive and affective development that produces a greater understanding of how young children put forth problem-solving efforts and how motivational patterns develop over time (Kelley, 2018). Therefore, as teachers scaffold children's problem-solving abilities, they need to be sure to include the emotional aspect as well (Kelley, 2018). If young children's emotional needs are met through the relationship with the teacher, they may become cognitively ready to receive academic instruction from the teacher (Blair et al., 2018). This knowledge was confirmed by several participants for this current study.

A participant explained how the teacher-student relationship was one of the most effective ways to motivate young children in her classroom. The participant believed that although she had great teaching skills in theory unless her students trusted her by taking their emotions into account, the academic instruction had little to no effect. This participant also mentioned that in the long-term, young children not only need to respond to extrinsic rewards given by teachers, but intrinsic motivation needs to be demonstrated as well. She asserted that young children need to understand that it is important to do something because it is the appropriate thing to do.

However, another participant said that although intrinsic motivation is important, it was not an effective strategy for him to say to his kindergartners that they were

expected to do something because it was the right thing to do. This type of explanation did not mean much to his 4- or 5-year-old students. This was the reason he believed that providing extrinsic rewards such as candy, earned points, student choice, class bucks, and other treats was a more effective way of initially motivating his young students. As young children's cognitive and emotional processing skills were developed by the participant's scaffolding efforts, his expectation of them to independently demonstrate problem-solving skills was deemed more appropriate.

#### Findings in Relation to Supporting Young Children's Emotional Self-Regulation

As indicated in the literature review, self-regulation of emotion is considered an important part of the widespread approach to self-regulation (Silkenbeumer et al., 2018). Research has indicated a link between young children acquiring emotional knowledge and academic success (Gershon & Pellitteri, 2018). When young children can control their emotions by controlling their impulses, keeping their attention focused on the appropriate tasks, and problem-solving through reasoning and thinking, they are more prepared for successful learning in an academic environment. It is important to understand that there is an interdependence between emotional and cognitive self-regulation (Willis, 2016).

#### Teacher-Student Relationship

Kindergarten teachers expect that young children will follow directions, pay attention, get along with their peers, adhere to a structured schedule, and work independently or within groups (Kroll, 2017). However, some children experience difficulties with these expectations. The literature review revealed that for young children

to build confidence in independently engaging in a classroom environment, the relationship with the teacher should be a priority (McKinnon et al., 2019). Several participants in this study provided examples of the effectiveness in building a positive teacher-student relationship.

One participant mentioned how it was his responsibility to stimulate the mind of his young students. He made sure to find out what interested the children. He would then locate books and reading passages related to that topic. He believed that it was also his responsibility to build a strong connection with his students to help motivate their level of engagement. This participant went so far as to contact parents to obtain additional information about some of his students' interests. Classrooms, where teachers know details on students' lives outside of school and offer them opportunities to express themselves through independent studying, are essential (Gozde et al., 2017).

Another participant mentioned that an effective practice she used in building the teacher-student bond was to reaffirm her young students' world. She provided an example of how she would read her preschoolers a book about dogs. She stated that the children would become very excited and wanted to share their own past experiences with dogs. She said instead of reprimanding the children and requiring them to remain quiet so she could read the story, she would provide them with a set amount of time and a set of parameters for them to share their experiences. The literature review revealed that proactive approaches to monitor children's behavior while providing them with activities that are directly related to the children's interests are important in supporting self-regulation (Cadima, 2016).

Another participant described how he provided his kindergartners with prompts when their behaviors were off task. He would ask them about what they should be doing differently, or he would ask them to look at their area. He may have also asked them to touch their nose and mask as a reminder to keep their mask on. The literature review revealed three different levels of co-regulating young children's emotions. Level 2 is specifically characterized by the teacher providing young children with different types of prompts. This strategy requires young children to self-regulate certain parts of their emotions by implementing a specific behavioral response which helps young children establish their repertoire of appropriate responses (Silkenbeumer et al., 2018).

# Positive Reinforcement

The literature review has indicated the importance of teachers learning different ways to implement effective strategies for supporting emotional regulation. Two strategies include promoting positive classroom climates and fostering relationships with the students (Warren & Robinson, 2018). The results of a recent study revealed children who experienced closer relationships with their teachers showed the greatest gain in self-regulation (Cadima et al., 2016). It is believed the social aspect of the classroom environment is an important component for supporting self-regulation development (Gozde et al., 2017). All participants from this study believed in providing some form of positive praise when supporting emotional self-regulation in young children.

One participant mentioned providing lots and lots of encouragement and reinforcement when her students became emotionally discouraged in completing a task or while learning a new concept. She explained how she would use positive reinforcement

by providing her students the opportunity to talk about their feelings. The literature review has shown that emotional competence is achieved through one's knowledge of emotions, how these emotions are experienced and demonstrated, and the ability to regulate these emotions (Ferrier et al., 2018). This participant confirmed the effectiveness of building young children's emotional competence when helping them regulate their emotions.

Several other participants believed positive reinforcement includes providing encouragement and acknowledgment of young children's appropriate behaviors.

Bandura's Social cognitive theory has posited that an individual's confidence is based on their ability to achieve a task. This self-efficacy is determined by four concepts which include past performance, verbal encouragement by others, observing others' failures or successes, and one's emotional reactions (Muenks et al., 2018). Two of the participants mentioned how they would verbally praise their students when they noticed them behaving appropriately or accomplishing a given task. The participants also explained that acknowledgment was not based on the young children's failures but was more focused on their successes. The participants agreed that using positive reinforcement by building their students' confidence in following expected behaviors appeared to be a more effective strategy in their classrooms.

# Student Reflection

The purpose of self-regulation is to shift from an undesired behavioral response to an acceptable behavioral response. The literature review has revealed different types of emotion regulation strategies that affect various points of self-regulation. Some soothing strategies may be helpful for young children to address body reactions and sensations that may be felt during emotionally stressful times. This response modulation directly affects behavioral inclinations by either inhibiting or modifying them (Silkenbeumer et al., 2018).

Several participants believed in allowing young children to talk out their feelings when they were upset helped them to self-reflect. One participant explained that she allowed her students to apologize when they had done something inappropriate during a conflict with another student. She said this action was a more effective strategy than ignoring the situation which usually caused the situation to escalate. She would help them self-soothe by asking them about their feelings and how they could handle a similar situation in the future. The participants confirmed that using various soothing strategies was effective when co-regulating their students' emotions.

Another participant explained an effective strategy used to help her students self-reflect was to model a particular self-soothing technique. She did not expect her students to be able to self-soothe independently. She would model it first, so they would see it. Then she would verbally explain the steps she was doing so they would hear it, then she invited them to perform it. She said once the techniques were modeled a few times, they became an intrinsic tool to help calm her students during emotionally stressful situations. This participant's strategy also confirmed previous research about the positive effects of teaching self-soothing strategies to regulate emotions and the importance of modeling.

## Findings in Relation to the Conceptual Framework

The findings of this study are within the context of the conceptual framework.

The participants' perspectives of effective strategies and practices include the belief that there should be an integration of cognitive, emotional, and behavioral co-regulatory efforts when supporting young children's self-regulation skills. The participants provided examples of co-regulating their students' cognitive regulation by supporting their working memory and strengthening or weakening their inhibitions. They also provided examples of co-regulating their students' emotional regulation by using various strategies they believed to be effective.

The participants also shared examples of providing direct instruction when showing their students explicit examples of expected rules, routines, and procedures. The conceptual framework also determined young children's ability to conceptualize during the cognitive process is not based merely on their environment but on the input of others. This idea was confirmed by the participants' willingness to model by demonstrating and verbalizing the reasoning or thoughts behind the expectations, rules, procedures, and skills. Modeling provided their students with essential observational opportunities posited in the conceptual framework.

## **Limitations of the Study**

Twelve different participants were included in this study. These participants were either preschool or kindergarten teachers. All participants have taught at least 1 year as a state-certified teacher, but they all had varying degrees of experience and educational levels. The participants' teaching experience range from three years to twenty-eight

years. The participants' educational levels range from bachelor to doctoral levels.

Limitations such as these were beyond the control of this study.

I originally planned to include four preschool teachers and eight kindergarten teachers from two organization sites. However, only three preschool teachers and nine kindergarten teachers from one site were willing to participate. I had no control over the number of teachers willing to participate and the site location. During the time of this study, a pandemic occurred which hindered all in-person face-to-face interviews.

Interviews had to take place via an online platform or a telephone call. All 12 participants agreed to an online platform interview.

The findings from this study were based on a relatively small number of participants which may make it difficult to generalize the results to a larger group of individuals. The location of the research was based on a school from a suburban setting. Therefore the context of the research study may be affected by factors such as the location, the small number of participants, and their unique cultural experiences. To address these limitations, I provided a rich and detailed description of the results to provide a realistic representation of the findings. Providing readers with a realistic description may help to increase the validity of the results and provide enough contextual knowledge for the reader to transfer certain aspects of the findings to future research.

The qualitative research design may also be a limitation. I used a single set of interview questions to collect data from the participants. There were no other data collection tools used which might have produced triangulation. To ensure that my research has dependability, I used interview questions that were based on obtaining

answers to my research question. Member checking was used to ensure my findings are aligned with the data provided by the participants. However, there was one participant who could not follow up with the member checking. To help eliminate potential biases during the interview process, I took journal notes to reflect upon after each of my interviews. I was also mindful of the type of language used during the interview process.

# Recommendations

The present study has several strengths including the use of a priori codes. These codes helped to provide me with the development of inquiries needed to gain a better understanding of the teachers' perspectives on effective strategies and practices based on the information identified in previous research. The study includes the experiences and actual words of preschool and kindergarten teachers who are presently supporting young children's self-regulation. The study confirmed several key elements of previously identified research yet revealed a need for additional considerations.

This research study confirms the need for teachers to support young children's cognitive and emotional self-regulation development. However, past research has revealed the support is neither solely based on young children's cognitive processes nor solely based on their emotional processes. Therefore, it may be worth considering effective strategies and practices which could simultaneously support young children's cognitive and emotional processes daily since they are determined as interdependent upon each other. This research also revealed the need for teachers to use direct instruction to support young children's self-regulation, but kindergarten teachers' have expressed

concerns about the limited amount of time available to provide direct instruction in support self-regulation development.

This study has also confirmed previous research on the importance of teachers' willingness to model cognitive and emotional self-regulation when supporting young children's self-regulation development. However, this study revealed teachers' belief that repetition plays a huge role when modeling self-regulation. Modeling for young children is not just a one-time event but must be practiced daily to be considered effective. In addition, just as it is recommended for teachers to differentiate academic instruction, the participants from this study believe modeling to support self-regulation development should be differentiated as well.

One weakness of this study is the small number of preschool and kindergarten teachers who participated. Due to this limited quantity of participants taken from one school site, it may be difficult to make a generalization based upon the data from this study. It is recommended that additional future research be conducted on a larger scale to determine if similar results are generated. Also, due to the use of interviews only to collect data, it is highly recommended that future researchers use an additional data collection instrument. This additional instrument may help provide triangulation which could further validate the results of the study.

# **Implications**

The empirical implication is that the purpose of education goes beyond the scope of academic achievement as measured by state standardized tests. There is a need for an expanded viewpoint of education that is inclusive of young children's social-emotional

development (Burroughs & Barkauskas, 2017). One specific area of importance in young children's social-emotional development is self-regulation. Self-regulation of attention and emotions allows children to learn better (Williams & Berthelsen, 2017). When children learn easier in the early stages, they have a better chance of becoming academically successful in subsequent years.

It is also well documented in research about the importance of teachers supporting self-regulation development in young children. However, there is no clear consensus of effective strategies and practices found in most state-mandated standards and curriculum that would guide teachers in providing direct instruction when supporting self-regulation in young children. The impact of positive social change is for policy makers to revisit state standards and curriculum to broaden their scope for developing a more multi-dimensional approach to education. It is recommended this multi-dimensional approach include effective practices and strategies designed for teachers to support young children's self-regulation development to provide them with a better opportunity to succeed academically.

## Conclusion

Previous research has provided several effective strategies and practices believed to support self-regulation in young children. However, very limited research has been conducted on the teachers' perspectives of effective strategies and practices used to support self-regulation in young children. These stakeholders have a unique perspective because they are in the classroom daily with young children. They are the individuals who authentically see what is working and what is not working in the classrooms.

I recommend future researchers make it a practice to consult with preschool and kindergarten teachers who are currently in the classroom. Gaining their perspective may prove useful to policy makers when researching effective strategies and practices used to support young children's self-regulation development. This type of practice may also assist policy makers in gaining additional insight into the types of training resources possibly needed in the educational professional learning environment. These training resources may help to ensure teachers' understanding and increase their capacity in supporting young children's self-regulation development during these primitive years.

Because teachers have different levels of educational background knowledge and teaching experiences, it may prove helpful if they are provided with clear and concise guidance on how to effectively support young children's self-regulation development in the classroom. When teachers are provided with researched-based effective strategies and practices, this may also decrease the amount of time that is used in guesswork and wasted efforts. A clear set of expectations provided by state policy makers for supporting young children's self-regulation development printed along with academic standards may increase young children's academic achievement.

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# Appendix A: Interview Protocol

#### **Interview Protocol**

Date
Location
Гіте
Interviewer
Number of Participant
Name of Digital Copy
File Name of Transcription

**Interviewer:** My name is Cheryl Thomas and I will be interviewing you today. I am a doctoral student with Walden University and I am currently obtaining data for my research study. The goal of this research study is to explore preschool and kindergarten teachers' perspectives on effective strategies and practices that support self-regulation in the classroom. I value your opinions and insight on the subject matter. I want to know what works and what does not. Ultimately this study will inform future early childhood education research and professional development efforts about strategies and practices that may be useful in supporting self-regulatory development in young children. The interview will be based on 10 questions. The interview should take no longer than 45-60 minutes. Just as a reminder, this interview is confidential. Do you have any questions for me before we begin the interview?

Interviewer (Ice Breaker Question): "How was your day?"

**Content Questions:** 

1. How do you help students understand the rules and expectations of the classroom?

**Use of Probe:** 

\*\* Tell me more...

2. How do you help motivate students who are experiencing challenges with academics and/or behavior?

Use of Probe:  **What doesmean?
3. What are some strategies and practices you believe are beneficial to supporting students' self-regulatory skills?
Use of Probe:  **Could you explain your response more
4. How do you support students' working memory (the ability to retain information for a short period of time)?
Use of Probe:  ** I need more detail please
<b>5.</b> How do you support students' inhibition skills (the ability to control impulsive responses)?
Use of Probe:  ** Tell me more
6. How do you support students' cognitive flexibility (the ability to overcome
habitual thinking and adapt to a new situation)?
habitual thinking and adapt to a new situation)?  Use of Probe:  **Could you explain your response more
Use of Probe:
Use of Probe:  **Could you explain your response more
Use of Probe:  **Could you explain your response more  7. What skills do you believe students must have to be successful in the classroom?  Use of Probe:
Use of Probe:  **Could you explain your response more  7. What skills do you believe students must have to be successful in the classroom?  Use of Probe:  **Can you give me an example  8. What skills do you believe students demonstrate as a result of having self-
Use of Probe:  **Could you explain your response more  7. What skills do you believe students must have to be successful in the classroom?  Use of Probe:  **Can you give me an example  8. What skills do you believe students demonstrate as a result of having self-regulation?  Use of Probe:

10. What are some practices or strategies you have in place to help students recognize and focus on their own behaviors?

# **Use of Probe:**

- \*\* I need more detail please...
- 11. What is your level of education?
- 12. How long have you been teaching preschool/kindergarten?

Interviewer: Is there anything you'd like to share that we have not covered?

Thank you so much for your time. Again, this interview is confidential. I will be providing you with an abstract of the final study as a way to provide you with the results of this research.

## Appendix B: Participant Email Invitation

# Preschool and Kindergarten Teachers' Perspectives on Effective Strategies and Practices for Supporting Self-regulation

**Email Participation Invitation** 

Dear Pre-K and Kindergarten Teachers:

Cheryl D. Thomas

I am a doctoral student at Walden University. I am currently conducting a qualitative research study under the guidance of Dr. Beryl Watnick, my doctoral committee chairperson at Walden University. My proposed research is to examine preschool and kindergarten teachers' perspectives on effective strategies and practices used in the classroom to support self-regulatory skills. I am looking for preschool and kindergarten teachers who have taught for at least one year. The interview will take approximately 45-60 minutes to complete. There will be two options for participating in the interview, which are a telephone interview or a video conferencing interview. Participation in the interview will be kept confidential which will be further explained in the consent form. Walden's Institutional Review Board has reviewed and approved the ethical components of this study which is also outlined in the consent form. Please check the following statements and email your response to **cheryl.thomas4@waldenu.edu** if you are interested in participating.

I am a certified pre-k or kindergarten teacher who has at least one year minimum in the classroom.
Yes, I am interested in participating in this study.
If you have any questions regarding this research, please feel free to contact me at 770-374-7989 at cheryl.thomas4@waldenu.edu or my chairperson, Dr. Beryl Watnick, at beryl.watnick@waldenu.edu. Thank you,

## Appendix C: A Priori and In Vivo Codes

## A Priori Codes Used for Deductive Analysis

**Teacher Support** – teachers' willingness to provide opportunities for observation, emulation, and self-control to increase or decrease young children's inhibition ability **Direct Instruction-** teachers' readiness to provide direct instruction to help improve cognitive self-regulation in young children

**Modeling-** teachers' skillfulness in modeling desired expectations, so that children have an opportunity to engage in forethought, performance, and reflection

## **In Vivo Codes Used for Inductive Analysis**

Repetition- Routines, and Daily Review of Rules, Academics, and Procedures

Modeling -Peer Observations, Peer Assistance, Practice What You Preach, Use of Social
Books, and Use of Videos

**Differentiation-** Individualized Instruction, Small Group Instruction, Visual Learning Modality/Videos, Specific Feedback, Identity Trigger Impulses, Tactile Learning Modality/Flexible Seating, Auditory Learning Modality/Music and Songs, Chunking Assignments and Instructions into Smaller Parts

**Motivation-** Problem Solving Skills, Teacher and Peers as Extrinsic Motivator, Personal Choices, Goal Setting and Visual Accountability, Intrinsic Motivation

**Student/Teacher Relationship-** Co-regulating by Providing Prompts, Reaffirming Young Children's World, Exploring Young Children's Interest

**Student Self-Reflection-** Talking it Out with the Student, Empowering the Student, Practicing Self-Soothing Techniques, Allowing for Self-Expression

Positive Reinforcement- Verbal Praises, Tangible Rewards, Positive Notes Home,
Acknowledgment of Individual Students, Acknowledgment of Whole Class
Curriculum and Instructional Pacing- Small Steps in Providing Instruction, *Now and Then* Boards, Teacher Patience, Chunking Assignments, Slower Pace for Introducing
New Concepts