HIGH SCHOOL TEACHERS' EXPERIENCES IN ADDRESSING THE CHALLENGES OF WRITTEN EXPRESSION AMONG STUDENTS WITH AUTISM SPECTRUM DISORDER

by

Kevin James Hasinger

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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APPROVED BY:

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ABSTRACT

The purpose of this transcendental phenomenological study was to describe high school special education teachers' experiences in teaching written expression to students with autism spectrum disorder in Parker County School District, located near the mid-eastern seaboard of the United States. At the onset of the study, written expression instruction was defined as instruction that facilitates the expression of feelings, thoughts, and ideas on paper to convey meaning to and/or persuade the reader (Flowers & Hayes, 1981). The theory guiding this study was Flower and Hayes' (1981) cognitive process theory of writing which defined three essential elements of writing: the task environment, the writer's long-term memory, and the writing process. Specifically, the following research question drove the research: what are the experiences of special education teachers tasked with teaching written expression to high school students who have autism spectrum disorder? Three additional questions were addressed as well: how do high school special education teachers lead students with autism spectrum disorder to identify the rhetorical problem within the task environment at the planning stage of writing; how do high school special education teachers guide students with autism spectrum disorder to access their long-term memory on a specified topic during the translation phase of writing; and how do high school special education teachers guide students with autism spectrum disorder through the reviewing phase of the writing process? Data was collected through interviews, focus groups, and participant observations and analyzed for themes and patterns via the Stevick-Colaizzi-Keen method of qualitative analysis. The results of the study were shared and discussed to build understanding among educators regarding the challenges of teaching written expression to students with autism spectrum disorder.

Keywords: Autism, Written Expression, Special Education, Writing, Communication

Copyright Page (Optional)

Dedication

All of the time, effort, and sacrifice that went into this dissertation is dedicated to my wife, Saran Adero McLean-Hasinger. Her patience and support have been paramount to my success.

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I would like to acknowledge my chairperson, Dr. Billie Jean Holubz. Dr. Holubz took a chance on a returning doctoral student and I will never forget her commitment to see me through this process.

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List of Abbreviations

Applied Behavior Analysis (ABA)

Attention Deficit Hyperactivity Disorder (ADHD)

Autism Spectrum Disorder (ASD)

Cognitive Process Theory of Writing (CPTW)

Elementary and Secondary Education Act (ESEA)

Individuals with Disabilities Education Act (IDEA)

Intelligence Quotient (IQ)

Liberty University International Review Board (LU IRB)

Local Educational Agency (LEA)

No Child Left Behind Act (NCLB)

Parker County School District (PCSD)

Special Education (SPED)

CHAPTER ONE: INTRODUCTION

Overview

Teachers face the unique challenge of educating students with autism spectrum disorder (ASD) (Asaro-Saddler, 2016a; Asaro-Saddler, 2016b; Baker et al., 2018; Zajic & Asaro-Saddler, 2019). The prevalence rate of diagnosed autism among school-age children has risen from .67% in 2000 to 2.67% in 2017 (Xu et al., 2017). Many educators feel ill prepared to take on the challenges of assisting these students to find success in school, particularly with regard to literacy skill acquisition (Baker et al., 2018). Teachers reported having little to no specific teacher-preparation training for working with students with autism in comparison to working with students with other specific learning disabilities in math, reading, and writing (Finnegan & Accardo, 2018; Robledo, 2017). Educators have also expressed that they are ill prepared in terms of instructional strategies to meet the needs of students with ASD (Asaro-Saddler, 2016a; Pennington & Carpenter, 2019). The purpose of this transcendental phenomenological study was to describe high school special education (SPED) teachers' experiences in teaching written expression to students with ASD in Parker County School District (PCSD), located near the mid-eastern seaboard of the United States.

In Chapter One, background information on the subject matter is included and how that connected to this researcher's life and experiences. The problem and the purpose statements are related to the significance of the study. The research questions are revealed and justified, driving this study through current research. To develop a clear understanding of key terms related to the study, definitions are provided and supported by current research to assist the reader. Finally, the chapter resolves with a summary of the contents of Chapter One.

Background

With nearly one out of five children identified as having autism spectrum disorder, educators have worked to become more aware of these unique learners' needs to best serve the population (Pennington & Carpenter, 2019; Xu et l., 2017). Understanding the academic, cognitive, social, and behavioral presentations and characteristics of these students, as well as the distinct history and evolution of the condition (ASD), was important in forming a foundation and background for this study. This provided the understanding of how the challenge of written expression among students with ASD has evolved over time and how this study might benefit society in the future.

Historical

There have been considerable advancements in the knowledge of ASD during the last half-century. Once considered a rare and odd genetic disorder among children, physicians and psychologists find autism in roughly one out of every 68 new births, developing into a highly structured spectrum of conditions to include, but not limited to: (a) low-functioning ASD, (b) Asperger's Syndrome, and (c) high-functioning ASD (Lord et al., 2018). Each of these spectrum assignments of ASD were defined by unique behavioral, cognitive, and socio-emotional characteristics that have been discovered and studied intensely over the last several decades (Farrugia & Hudson, 2006; Lord et al., 2018). Yet, there is still much to discover regarding the unique characteristics and challenges of these exceptional individuals (Asaro-Saddler, 2016a; Baker et al., 2018; Gurry & Larkin, 2005).

Although student disabilities were becoming formally recognized and diagnosed in more standardized manners as early as the 1930s, there was still a lack of understanding to the nature of many of the disorders, particularly autism (Lord et al., 2018; Raiti, 2014). Prior to the 1960s,

there was evidence that many children with disabilities were disallowed from education in public schools (Raiti, 2014). At that time, students with ASD, particularly those in the nonverbal category, were essentially denied the right to a free and appropriate education (Batiska et al., 2017; Raiti, 2014). In the year 1965, the United States Congress passed the Elementary and Secondary Education Act, followed by the Individuals with Disabilities Education Act in 1975, yet many students with disabilities were still in highly restrictive and isolating environments (Elementary and Secondary Education Act [ESEA], 1965; Individuals with Disabilities Education Act [IDEA], 2004). Many students with ASD were housed in self-contained classrooms and allowed very little to no interaction with the outside environment of the school and certainly no interaction with their non-disabled peers (Batiska et al., 2017; Raiti, 2014). However, after a series of very public lawsuits during the 2000s regarding educational and peer access for students defined as having autistic traits, autism spectrum disorder was discovered and researchers clearly defined the characteristics of children with ASD. Researchers' findings required educational institutions to address ASD as a separate disability – requiring special instruction and techniques to meet the needs of students with ASD characteristics as opposed to lumping those children into an emotional disabilities category (Cerra v. Pawling Central School District, 2005; Deal v. Hamilton County Board of Education, 2004; Raiti, 2014; Sackets Harbor Central School District v. Frank Munoz, 2001). Although a breakthrough for advocates of public schooling students with ASD, this presented a myriad of challenges to the educational institution related to finding manners in which to provide the appropriate services to this new classification of students with special needs (Batiska et al., 2017; Raiti, 2014).

Social

Individuals with ASD often suffer from challenging language disorders and deficits,

making communication and expressivity very difficult (Asaro-Saddler, 2016a; Bartolotta & Rizzolo, 2019). Considering the significant portion of the world's population that individuals with some form of autism comprise, it is only logical to see to the proper education of such students as a societal issue (Asaro-Saddler, 2016a; Baker et al., 2018; Westerveld et al., 2016). To ensure success for students with ASD in school and later in life as a productive member of society, it is critical that we determine and utilize new and personalized interventions to assist these students in learning to communicate – to include written expression (Baker et al., 2018; Pratt et al., 2017). Fortunately, researchers have noted that the acceptance of individuals with ASD within society is increasing as our understanding of the syndrome improves (Bartolotta & Rizzolo, 2019; Lord et al., 2018).

Building treatment and educational programs in support of children and adolescents with autism may help them to acquire full integration into society (Pratt et al., 2017). Examples of such programming include, but are not limited to: (a) special education, (b) acute short-term treatment programs, (c) residential treatment programs, (d) applied behavior analysis therapy, and (e) sensory-based occupational therapy (Asaro-Saddler, 2016a; Baker et al., 2018; Westerveld et al., 2016). As an aspect of social responsibility, providing a free and appropriate education and support programming could ensure that adults with ASD maximize independence and increase quality of life (Baker et al., 2018; Pratt et al., 2017). Many individuals with ASD are able to contribute to society through employment and volunteerism (Baker et al., 2018; Westerveld et al., 2016).

As ASD diagnosis rates continue to rise annually, the failure to properly learn to educate students with ASD in the areas of academics, socio-emotional learning, self-regulation, and communication skills would have a significant impact on society in various ways (Baker et al.,

2018; Jarbrink & Knapp, 2001; Xu et al., 2017). As an example of such impact, British researchers Jarbrink & Knapp (2001) determined that based on cost of living rates in the early 2000s, an uneducated/untrained individual with ASD could influence the economy by almost 14.2 million pounds over that individual's lifetime. The majority of these costs are associated with living support and daily activities, but Jarbrink and Knapp (2001) also noted that with even moderate levels of education in basic literacy skills and socio-emotional/communication skills, these costs could be cut dramatically. Autism advocates perceive the financial impact on society to be of minor consequence compared to moral considerations of educating students with ASD, noting that we have a societal responsibility to ensure the proper education and care of our citizens with disabilities (Baker et al., 2018; Raiti, 2014). Baker et al. (2018) asserted that failing to integrate these individuals into our society through proper education and therapeutic services could lead to the disenfranchisement of roughly three to five percent of our population. Such division within communities is rarely productive and often destructive to the concept of a democratic society (Batiska et al., 2017; Raiti, 2014).

Theoretical

In terms of the theoretical background for this problem, it is important first to ensure a firm understanding that the qualitative research model of phenomenology focuses on the commonality of lived experiences among a particular population (Creswell & Poth, 2018). However, there is also a need to understand some of the theoretical basis of the framework driving the observational study of written expression among students with ASD – the cognitive process theory of writing (CPTW). This theory of the cognitive processes required during the writing process provided researchers a framework from which examines written expression in more detail within the context of thinking and learning (Flower & Hayes, 1981; Hayes, 1996).

Flowers and Hayes (1981) proposed that the very act of composing is a goal-directed thinking process that may be observed as a process in which a writer pulls from a variety of subconscious and schematic network of goals (Hayes, 1996). Looking at writing as a nonlinear cognitive web of processes dictated by task environment and the function of memory-based processes allows for the digestion of feedback from teachers regarding the research questions through a singular framework of understanding (Flowers & Hayes, 1981). The task environment is found in the planning phase of writing and described as external forces on the writing processes such as the rhetorical problem (topic, audience, and exigency) and the text produced thus far in the composition process by the writer (Flowers & Hayes, 1981). The writer must access his/her long-term memory during the translation phase of writing, reaching for both external sources of influence and thoughts within the writer's own mind to develop the text (Flowers & Hayes, 1981; Hayes, 1996). Finally, in the reviewing phase of writing, writers read and edit their work, accessing both their working and long-term memory to evaluate, revise, and edit the text (Flowers & Hayes, 1981).

Other theoretical approaches to understanding the written expression of students with ASD are on record. Researchers at the University of West Virginia proposed examining students' writing and academic intervention through the modular approach theory, focusing wholly on the modality in which a child is functioning as opposed to the individual cognitive processes (Anderson et al., 2018). The National Council for Teachers of English has also recently reexamined the student development theory of writing for appropriateness for students with disabilities. Researchers within that organization have established a need to modify the theory in an effort to truly understand the writing needs of all students (Leggette et al., 2017).

Situation to Self

My desire for completing qualitative research on SPED teachers' experiences of teaching written expression to students with ASD was based on my years of observing classroom teachers struggle with guiding students in public school classrooms to communicate with others. As a public educator for the past 21 years, I found myself often lacking a deep understanding of the communication needs of students with autism. That lack of understanding that I felt was prevalent among many other administrators and educators across the United States based on my observations during my tenure of service as a public educator, interactions at professional conferences, and through cross-country communication with other educators via social media professional learning chats. The phenomenological study I have presented in this paper has the potential to assist in filling in the gaps for educational professionals. This potential to support educators' efforts to serve students with ASD provided for a major portion of my personal motivation to complete this research. However, throughout my study, I did not work with participants that I had authority over and only worked with participants at other schools in the district. I also had a somewhat personal connection to the topic of this study in that my young nephew has high-functioning ASD and was currently struggling with the delicate balance between special education and general education services. I watched him struggle to communicate, particularly in writing, and wished I knew more about the nature of the phenomenon. Through close observation and intense dialogue with educators familiar with students diagnosed with ASD, I have gained insights on his challenges.

I utilized the research paradigm of constructivism to guide this study. It seemed reasonable to me that our reality and the learning held there within, was based on our mind interacting with our experiences in the world – we learn by doing (Adom, et al., 2016). I gave

voice to the experiences of SPED teachers tasked with teaching written expression to high school students who have ASD through the lens of the cognitive process theory of writing. The research questions I addressed in this study were open-ended in nature and aligned well with a constructivist-based research paradigm. Of additional note, considering my personal intertwining with the topic of this research, I ensured mindfulness of the post-positivism paradigm in that I was aware that theories, background, prior knowledge, and values may impact or influence observations and perceptions.

When considering my assumptions about the nature of knowledge, that are my epistemological assumptions, it was quickly evident to me that I believed that people develop knowledge based on our perceptions and experiences. Thus, knowledge is a construct of our interaction with the world around us. Ontology is a branch of philosophy that studies the nature of human beings' existence and our place and purpose in society (Creswell & Poth, 2018). I believed that individuals are best understood within the context of relationships and groups, through a collective experience, and can effect change in society. Axiology offers us a look directly at the values a researcher brings to a study (Creswell & Poth, 2018). The axiological assumption I brought to this research study is two-fold: (a) I believed that ALL students can learn and (b) I hoped to give voice to the experiences of SPED teachers serving students with ASD in the area of written communication. I also believed that providing deep, rich descriptions of these endeavors would give insight for further research to empower SPED teachers to improve instruction, thus improving learning for students with ASD in an effort to improve society.

Problem Statement

Students with ASD have unique characteristics that are commonly attributed to the deficits in verbal communication and written expression (Lord et al., 2018). Some of the aspects

of ASD present unique challenges for special educators seeking educational methods to improve learning. Language deficits and communication disorders found among many students with ASD often create conditions that obstruct the instruction of literacy skills such as speaking, listening, reading, and writing (Asaro-Saddler, 2016; Baker et al., 2018; Gurry & Larkin, 2005; Mayes & Calhoun, 2006). As diagnosed cases of ASD have increased over the past several decades, educational researchers have looked closely at students and their unique learning needs (Baker et al., 2018; Finnegan & Accardo, 2017; Xu et al., 2018). Researchers have studied the language, math, and reading skills of students with autism and potential instructional interventions teachers have utilized to support the acquisition of such skills (Baker et al., 2018; Lanter & Watson, 2008; Levy et al., 2019). Students with ASD continue to find written expression to be challenging and teachers have continued to struggle with the endeavor of educating students in this area for decades (Asaro-Saddler, 2016b). Many researchers in the field pointed out a need for additional research to give voice to the experience of teachers who teach written expression to students with ASD (Asaro-Saddler et al., 2015; Baker, et al., 2018; Finnegan & Accardo, 2018; Lanter & Watson, 2008; Pennington & Carpenter, 2019). The problem was that the experiences of high school SPED teachers who teach written expression to students with ASD were widely unknown. Ascertaining this information added to the literature and ultimately provided additional insights to those involved with preservice teacher training and professional development in the further development of effective instructional strategies for students with ASD.

Purpose Statement

The purpose of this transcendental phenomenological study was to describe high school special education teachers' experiences in teaching written expression to students with autism spectrum disorder in Parker County School District, located near the mid-eastern seaboard of the

United States. At this stage in the research, written expression instruction was generally defined as instruction that facilitates the expression of feelings, thoughts, and ideas on paper in an effort to convey meaning to and/or persuade the reader (Flower & Hayes, 1981; Hayes, 1996). The theory guiding this study was Flower and Hayes' (1981) cognitive process theory of writing which defined three essential elements of writing: the task environment, the writer's long-term memory, and the writing process. According to Flower & Hayes (1981), the task environment "includes all of those things outside the writer's skin, starting with the rhetorical problem" (p. 369). They further defined the rhetorical problem as the "school assignment" or quite simply the question to be answered by the writer. Within the confines of the CPTW, the researchers referred to long-term memory as the storehouse of information about a topic that exists both in the mind as well as in outside resources such as books (p. 371). Finally, the writing process, according to the authors, encompasses the basic elements of planning, translating (putting ideas into visible language) (p.373), and reviewing what is written (p. 369). By examining teachers' experiences through the lens of the CPTW at each stage of the writing process, light was shed on both the specific triumphs and challenges teachers face in the classroom.

Significance of the Study

This section on the significance of the study contains a description of the contributions that the study made to the knowledge base or discipline, both theoretically and empirically, and includes a brief description of the practical significance of the study.

Empirical

The empirical significance of this study was evident in statements from other educational researchers that there was limited understanding of the process of written expression of students with ASD – more data was needed to guide and support teaching and learning (Asaro-Saddler et

al.2015; Baker et al., 2018; Finnegan & Accardo, 2018; Lanter & Watson, 2008; Pennington & Carpenter, 2019). The empirical process of objective observation and collection of data would provide the base from which researchers could study the topic through qualitative analysis, particularly concerning the relationship of cognition, processing, and the act of written composition among students with ASD. These findings were coupled with similar data found by researchers of similar topics to build support for the concept of reliability for additional research studies in the area of cognitive-based instructional practices in support of students with austism or similar delays. Furthermore, these findings would be useful to those researchers that have acquired related data on students with ASD in the areas of reading and communication, more commonly studied topics than that of written composition among students with ASD, adding to the body of research in support of these unique learners (Asaro-Saddler et al., 2015). This study provided additional data and evidence that may prove to be valuable by educational researchers and curriculum developers to design effective instruction and intervention in the area of written expression for students with ASD. Special educator experiences of this challenge are important in understanding how students with ASD process information and attempt to move mental ideas to paper through the craft of writing. These complex cognitive processes were identified in the theories of Flowers & Mayes (1981) through the teachers' experiences and observational experiences with students with ASD.

Theoretical

As the qualitative analysis of all data on the topic of teacher experiences on the challenges of teaching written expression to students with ASD was completed, the data was coded and considered through the theoretical framework of the CPTW. This added to the significance of the theory by Flower and Hayes (1981) in that it looked specifically at the

teachers' experiences of the minds of students with ASD and how it moved in and out of the cognitive processes and sub-processes engaged in writing. Examining special education teachers guiding the cognitive processes of students with ASD while engaged in written expression potentially revealed insight into how best to approach the topic with those students. For example, teachers' responses to interview questions, coupled with observations, provided insight into what particular cognitive sub-processes defined by Flowers and Hayes' (1981) cognitive process theory of writing frustrated the autistic mind most commonly.

Practical

The practical significance of this study related to the examination of teacher dispositions toward both current academic and behavioral interventions that influenced student achievement in written expression. This, in turn, informed educators' decision-making processes as related to selecting interventions for students with ASD. Although the intent of this research was not to determine the efficacy of intervention, developing an understanding of teachers' experiences of academic and behavioral interventions implemented in support of written expression among students with ASD led to improved instructional decision-making and provided breadth to qualitative description.

Understanding a process that often leads to high frustration levels among students with ASD could assist educators in maintaining the behavioral presentations of students, reducing time out of class or off-task behaviors, and enhancing home-school relationships with parents. In a practical sense, students may benefit from the teachers' understanding of their challenges in written expression through improved academic intervention and parents may benefit from an improved understanding of behavioral presentations likely leading to reduced negative communication from the school staff. Developing better-rounded, communicative adult citizens

benefits us all within the context of society through inclusion, active engagement in local events, participation in employment, and good citizenry.

Research Questions

The following research questions were primary to this phenomenological research study. The first research question served as central to the study, with the remaining questions functioning as sub-research questions. The responses to these sub-research questions assisted in providing additional voice to the experiences of special educators instructing writing to students with ASD as sought through the central question of the study.

Central Research Question

What are the experiences of SPED teachers tasked with teaching written expression to high school students who have ASD? This question was particularly important in that there was evidence that current field researchers have asserted a gap in the literature regarding teachers' experiences with written expression among students with ASD (Asaro-Saddler et al., 2015; Baker et al., 2018; Finnegan & Accardo, 2018; Lanter & Watson, 2008; Pennington & Carpenter, 2019). One of the primary challenges for the child with ASD is communication – verbal and written (Pratt et al., 2017; Prizant et al., 2000). Flowers & Hayes (1981) have provided an excellent lens in which teachers' experiences working with students with ASD in written expression through the developmental elements of writing - the task environment, the writer's long-term memory, and the writing process were described. (Flowers & Hayes, 1981; Hayes, 1996).

Sub-Research Question One

How do high school SPED teachers lead students with ASD to identify the rhetorical problem within the task environment at the planning stage of writing? The planning stage of the

CPTW as defined by Flowers and Hayes (1981) described the task environment component of their cognitive process theory of writing as "everything outside the writer's skin" (p. 369). This simplifies into two major areas – the rhetorical problem (topic, audience, and exigency) and the text produced thus far in the composition process by the writer (Flowers & Hayes, 1981). The cognitive process of the writer defining the rhetorical problem leads to a series of goals for the author guided by how he/she understands and feels about the identified rhetorical problem (Flowers & Hayes, 1981). To provide a rich description of the experiences of high school SPED teachers who teach written expression to students with ASD, an understanding needs to be had of how instructors lead students to engage the rhetorical problem within the task environment.

Sub-Research Question Two

How do high school SPED teachers guide students with ASD to access their long-term memory on a specified topic during the translation phase of writing? Although there are clear cognitive processes within all the elements of Flowers and Hayes (1981) CPWT, it is this idea of the writer's long-term memory with its emphasis on knowledge of the topic, audience, and writing plans that would provide the most valuable lens with which to view the teachers' dispositional reflections. Long-term memory was referred to as the storehouse of information about a topic that exists both in the mind as well as in outside resources such as in books and previously written text (Flowers & Hayes, 1981, p. 371). Understanding the experiences of high school SPED teachers who instruct students with ASD to access their long-term memory on a specified topic and rhetorical problem during the translation phase of writing helped to build a deep, rich description of the instructors' overall ordeal in the classroom.

Sub-Research Question 3

How do high school SPED teachers guide students with ASD through the reviewing phase of the writing process? The reviewing phase of the writing process is primarily composed of two concepts – reading and editing (Flowers & Hayes, 1981). These actions could be planned or unplanned, but Flowers and Hayes (1981) noted that they are contingent on the sub-processes of evaluating and revising. Teachers have noted to researchers that the impulsivity and lack of focus among many students with ASD may lead to significant challenges in convincing them to read and edit their written work (Asaro-Sadler, 2016a; Christensen et al., 2019; Hayes & Beringer, 2014; Van Der Meer et al., 2014). As a significant and culminating part of the writing process, it was important to have a strong description of teachers' experiences when instructing students through the reviewing phase of composition.

Definitions

These definitions are intended to assist readers in fully understanding the contextual application of the phrases presented. Additional abbreviated terms and acronyms utilized in this paper are defined in the *List in Abbreviations*.

1. *Autism Spectrum Disorder (ASD)* – "a term used to describe a constellation of early-appearing social communication deficits and repetitive sensory-motor behaviors associated with a strong genetic component as well as other causes" (Lord et al., 2018, p. 508). Physicians and psychologists have used the term "high-functioning" to represent an individual with autism spectrum disorder that "presents as having developed language and cognitive abilities but experiences social difficulties, and sensory and motor issues (Lopata, 2010; Walz & Bleuer, 2015; Woods, 2013*).* In contrast, the term "low-functioning" has been used to represent an individual with autism spectrum disorder that presents "with restricted language (Preissler, 2008), behavioral and emotional issues,

severe memory impairment (Boucher et al., 2012), poor adaptive behaviors (i.e., struggles with transitions, repetitive behaviors, and sensory-related issues; Hall & Graff, 2011), and limited social skills (Holt & Yuill, 2014)" (Walz & Bleuer, 2015).

2. *Written Expression* - a form of communication that allows for the expression of feelings, thoughts, and ideas on paper in an effort to convey meaning and/or to persuade the reader (Flower & Hayes, 1981; Hayes, 1996).

Summary

Diagnoses of individuals with ASD have dramatically increased over the past several decades (Xu et al., 2018). These unique learners struggle to communicate effectively within the school environment, particularly concerning written expression (Asaro-Saddler, 2016b). There is considerable evidence that students with both low- and high-functioning ASD have extreme difficulty with written expression (Asaro-Saddler, 2016a; Asaro-Saddler et al., 2015). The purpose of this transcendental phenomenological study was to describe high school SPED teachers' experiences in teaching written expression to students with ASD in Parker County School District, located near the mid-eastern seaboard of the United States. At this stage in the research, written expression instruction was generally defined as instruction that facilitates the expression of feelings, thoughts, and ideas on paper in an effort to convey meaning and/or to persuade the reader (Flower & Hayes, 1981; Hayes, 1996). The theory guiding this study was Flower and Hayes' CPTW which defined three essential elements of writing: the task environment, the writer's long-term memory, and the writing process (planning, translating, and reviewing). This study sought to give voice to the experiences of SPED teachers tasked with teaching written expression to high school students who have ASD during each phase of writing – planning, translating, and reviewing.

CHAPTER TWO: LITERATURE REVIEW

Overview

A thorough review of the research was conducted to identify studies that explore the written expression skills and efficacy of students with ASD, both in low- and high-functioning categories. This chapter provides an overview of the existing literature pertaining to the study. In the first section, the theory selected is discussed as the study's framework and its relationship to the topic of written expression among students with autism. The second section synthesizes the recent literature pertaining to the behavioral, cognitive, and socio-emotional presentations of individuals with ASD. The third section of the literature review provides some historical perspective on the evolution of the condition from confusion with schizophrenia to a spectrum disorder and briefly examines changes in educational institutions to meet the needs of these unique learners. In the final section of the literature review, studies were considered regarding our current understanding of efficacy in literacy among students with ASD and how interventions have impacted the skill acquisition of this unique population of students. Current trends in autism research were explored and are discussed. After reviewing the literature, a gap in the literature emerged and provided a focused area of need for this study.

Theoretical Framework

When completing qualitative research on any given phenomenon, it was important to determine a theoretical framework through which to examine the topic and influence the process of observation (Creswell & Poth, 2018; Gall, Gall, & Borg, 2007). This literature review was focused on the written expression of students with ASD. Specifically, the CPTW was used as a theoretical framework to center the examination of experiences of high school SPED teachers

and processes in writing among students with ASD on the thinking and learning of writing, as opposed to the product (Flower & Hayes, 1981; Gordon et al., 1965).

The process of written expression and composition was described through a series of intellectual processes by the cognitive process theory of writing proposed by Flower and Hayes (1981). This theory of the cognitive processes involved in composing allowed researchers to examine written expression in more detail within the context of thinking and learning. The cognitive process theory asserted, "the process of writing is best understood as a set of distinctive thinking processes which writers orchestrate or organize during the act of composing" (Flower & Hayes, 1981, p. 366). Flowers and Hayes (1981) also noted, "these processes have a hierarchical, highly embedded organization in which any given process can be embedded within any order" (p. 366). The authors proposed that the very act of composing itself is a goal-directed thinking process that could be observed as a process in which a writer pulls from a variety of subconscious and schematic network of goals. These goals were created in one of two ways:

> By generating both high-level goals and supporting sub-goals which embody the writer's developing sense of purpose, and then, at times, by changing major goals or even establishing entirely new ones based on what has been learned in the act of writing. (Flower & Hayes, 1981, p. 381)

The cognitive process model moved significantly away from thoughts that are more traditional on the process of written expression. An example of a traditional approach to writing is the stage models of writing, such as the pre-write, write, re-write model, and the conception, incubation, production model (Britton, 1978; Gordon et al., 1965). These models have been widely accepted for decades, but focus on the completion of a product as opposed to the mental process involved in composition, such as generating new ideas and concepts (Flower & Hayes,

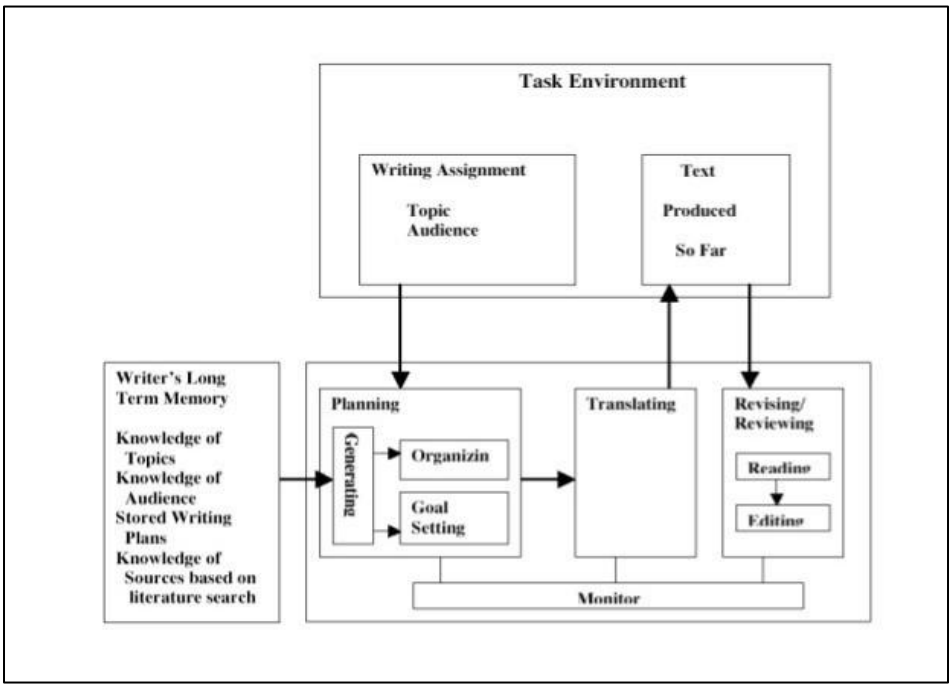
1981). Although Flower and Hayes (1981) gave much credit to the analytical units of the linear stage of writing analysis, the lenses through which the authors hope the observer will view the process of written expression focuses on how the major elements of writing interact in the total process of composition through thinking. Thus, writing was a set of distinct thinking processes monitored and maintained through the writer's long-term memory as opposed to stages of development in the product (Flower & Hayes, 1981). The overarching research question presented in Chapter One was aimed at examining teachers' experiences of the cognitive dissonance and challenges that manifest as a student with ASD engages in the process of written expression. Although there are clear cognitive processes within all components of the Flowers and Hayes (1981) theory – planning, translating, and review – it is this idea of the writer's long-term memory with its emphasis on knowledge of the topic, audience, and writing plans that will provide a valuable lens with which to view the teachers' dispositional reflections.

A second major component of the cognitive process theory of writing demarcated a hierarchical organization of the process of composition, "with component processes embedded within other components" (Flower & Hayes, 1981, p. 375). Embedding was a simplified example of this concept. Through embedding, the writer used a variety of thinking processes and stage concepts within one another simultaneously – planning, translating, and reviewing within the same segment of the written process. The authors believed that "a process that is hierarchical and admits many embedded sub-processes is powerful because it is flexible: it lets a writer do a great deal with only a few relatively simple processes – the basic ones being, plan, translate, and review" (Flower & Hayes, 1981, p. 376). The writer oversaw all of these processes through his/her working memory. The writer then drove the planning aspect of the writing processes through generation, organization, and author goal setting. According to Flowers and Hayes

(1981), this worked in tandem with the writing process of translating, allowing for the cognitive process of generating ideas to consistently influence translation into text through the final set of writing processes focused on the review process. The review process was primarily focused on evaluating the writing and revising to build into the evolving task environment (Flower & Hayes, 1981; Hayes 1996). The sub research questions were strongly aligned with these components of the cognitive process theory of writing in that they specifically examined teachers' experiences in guiding students with ASD to grapple with the rhetorical questions, interact with the text within the context of the task environment, and embed multiple cognitive processes simultaneously through working and long-term memory while engaged in written expression.

Figure 1

A Schematic of the Cognitive Process Theory of Writing



Note: Flowers, J. & Hayes, J. (1981). The cognitive process theory of writing. College of Composition and Communication, 32(4), 365-387. (For permissions, see Appendix A)

The feedback from teachers related to this aspect of the research added significantly to the over-arching central research question.

The additional aspects of the cognitive theory of writing focused on the goal-orientation of writing and its interaction with the task environment. Flowers & Hayes (1981) examined writing as a complex network of sub-goals that develop as the writer continues on the journey towards his or her content goals within the context of the task environment. This complex network of goals that develops through the cognitive process of writing was created as writers composed and evolved in a variety of manners during writing, creating a schema of interest and side-topics potentially enriching written expression all related to the purposefulness of writing (Flower & Hayes, 1981, Hayes & Berninger, 2010; Hayes & Berninger, 2014). The task environment was another critical component of the cognitive process theory of writing. Flowers and Hayes (1981) described the task environment component of their theory as "everything outside the writer's skin" (p. 369). This simplified into two major areas – the rhetorical problem (topic, audience, and exigency) and the text produced thus far in the composition process by the writer (Flowers & Hayes, 1981). The cognitive process of the writer defining the rhetorical problem led to a series of goals for the author guided by how he/she understood and felt about the identified rhetorical problem. This complex network of goals that developed through the cognitive process of writing was created as writers composed and evolved in a variety of manners during writing, creating a schema of interest and side-topics potentially enriching written expression. All of these complex interactions related to the purposefulness of writing and evolving the ever-changing state of the task environment (Flower & Hayes, 1981, Hayes & Berninger, 2010; Hayes & Berninger, 2014). As all three components of the cognitive process theory of writing intermingled, the relationship between working memory and writing processes

with the Flowers & Hayes (1981) task environment was the driving force in the development of short-term and long-term writing goals for the student. The engagement with the rhetorical question pushed the work forward externally and perpetuated the nonstop evolution of thinking through consistent reflection and interaction with the text produced thus far.

Hayes returned to the cognitive process theory of writing in 1996, providing some insights from Flowers and Hayes' (1981) decade and a half of evaluation and interaction with their initial model. In this revised model, much of the content of the original Flowers and Hayes (1981) theory remained intact such as the task environment, cognitive writing process, and the influence of the writer's long-term memory. Hayes (1996) did provide an updated organization to the original model, with this version holding two major components – the task environment and the individuals. Hayes (1996) noted the following about the task environment:

> The task environment consists of a social component, which includes the audience, the social environment, and other texts that the writer may read while writing, and a physical component, which includes the text that the writer has produced so far and a writing medium such a word processor. (p.6)

He went on to say that the individual component had become considerably more complex and stated, "the individual incorporates motivation and affect, cognitive processes, working memory, and long-term memory" (Hayes, 1996, p. 6) and that the revised model moved to focus more on the individual aspects of writing as opposed to social ones. Hayes (1996) went on to identify four major differences in the old and new models: (1) emphasis on the central role of working memory in writing; (2) inclusion of visual-spatial as well as linguistic representations; (3) focus on the role of motivation and effect on writing processes; and (4) the reorganization of the cognitive processes section. With regard to the latter of these major differences, Hayes (1996)

stated that “revision was replaced by text interpretation; planning has been subsumed under the more general category, reflection; translation has been subsumed under a more general text production process” (p. 7).

In completing the research for this transcendental phenomenological study, the cognitive process theory of writing allowed the filter all of the research participants’ statements, responses, and expressions, coupled with observations, through the relationship of cognitive processes and written expression. The responses were reviewed through the lens of this theory and considered for their relationship and purpose within the context of the complex cognitive process of decision-making through the maze of sub-processes during writing (Flower & Hayes, 1981). In short, all of the data collected in this study was examined with attention to the cognitive processes being described or observed.

The concept of cognitive observance or cognitively driven instructional practices as the basis for research was not a new idea and had proven useful for several researchers. Devine et al. (1993) reported on the role of cognitive models in first and second language reading and writing. This research demonstrated that writers utilize different cognitive models and therefore perform differently on writing tasks. The idea of individualized cognitive processes within the act of writing composition was a direct link to the seminal work of Flowers and Hayes (1981), and although some would assert that cognitive models of writing are falling out of favor, there is evidence to support a significant increase in the citation of Flowers and Hayes’ original works on the cognitive process theory of writing (Hayes, 2017). Hayes (2017) pointed out that after his revision of the initial 1981 model in 1996, citations of the work of Flowers and Hayes (1981) increased annually through 2012. Citations of the 1996 revisionist theory have also shown a marked annual increase in citation among researchers (Hayes, 2017). More recently, MacArthur

and Graham (2016) utilized the cognitive process theory of writing as a foundation for supporting writing in research at the collegiate level. Akin and MurrellJones (2018) also hoped to support writing instruction at the university level through the application of a derivative of Flowers and Mayes' theory called cognitive load theory, which examined the complex cognitive interactions described by Flowers and Hayes (1981) and worked to assist writers in sequencing them based on their needs. In both of these works, the authors utilized the basis of the cognitive process theory of writing to examine writing performance and attempted to intercede on the behalf of adolescent writers by closely examining their cognitive processes relative to the process of written expression (Akin & MurrellJones, 2018; MacAruthur & Graham, 2016).

Related Literature

Over the past five to six decades, ASD has evolved from a "narrowly defined, rare disorder among childhood-onset" to a condition that is becoming common and seen as present across all races and cultures (Baio et al., 2018; Lord et al., 2018, p. 508; Xu et al., 2018). Although the diagnosis of and advocacy for autism has increased, the primary characteristics of social communication deficits and sensory-motor disorders have not significantly changed over time (Lord et al., 2018). The communicative and language challenges of students with ASD have been widely documented, but researchers are still struggling to come to terms with the uniqueness of the spectrum of characteristics presented by these individuals (Baron-Cohen, 2008; Fitzpatrick et al., 2016; Happe, 1994; Mayes & Calhoun, 2003). These social communication and language deficits persisted over time and manifested in a variety of contexts, often presenting in struggles with (a) social-emotional reciprocity; (b) non-verbal communication behaviors; and (c) the inability to develop, maintain, and understand relationships (Lord et al., 2018). However, autism was not easily defined by a set of characteristics, although

communication and sensory-motor concerns seem consistent across the spectrum. Additional concerns existed in terms of behavioral, cognitive, and additional socio-emotional appearances (Lord et al., 2018; Xu et al., 2018).

The History of Autism Spectrum Disorder and Educational Law

Although there was research linking the term autism to schizophrenic patients of the very early 1900s, the greatest pioneers of research into the phenomenon now commonly referred to as autism spectrum disorder were Dr. Hans Asperger and Dr. Lego Kanner, who began to present lectures and papers on the autistic psychopathy during the late 1930s and early 1940s (Feinstein, 2010; Wolff, 2004). Asperger and Kanner approached their research of the autistic psychopathy in different manners, but eventually presented theories with considerable overlapped ideas and concepts about the condition (Feinstein, 2010; Johnson et al., 2018). Both also wrote landmark papers on the idea of autism – Kanner published "Autistic Disturbances of Affective Contact" in 1943, and Asperger published "Die 'Autisischen Pyschopathen' in Kindersalter" in 1944; however, it is commonly accepted that he presented the paper years before in 1938 (Feinstein, 2010; Johnson et al., 2018; Wolff, 2004). Germany's Dr. Gerhard Bosch noted that Asperger and Kanner likely never referred to the other's work, not out of professional jealousy, but because they dealt with very different subjects. Bosch asserted "he (Kanner) was dealing with severe cases. He had another picture and for Kanner, Asperger was describing a very different condition" (Feinstein, 2010, p. 12). Kanner's diagnostic features identified in the 1943 paper continue to be prevalent in modern-day evaluation of autism spectrum disorder:

> A profound lack of affective contact with other people; an anxiously obsessive desire for the perseveration of sameness in the child's routines and environment; a fascination with objects, which are handled with skill in fine motor movements; mutism or a kind of

> language that does not seem intended for interpersonal communication; good cognitive potential shown in feats of memory or skills on performance tests. (Feinstein, 2010, p. 24)

Unlike the nonverbal descriptions of Kanner's patients, Asperger described his subjects as overly verbal regarding certain subjects, particularly favorite topics of the individual children and perceived the condition as more of a personality disorder. This variance in descriptions supported the modern evolution of the idea of autism as a spectrum disorder (Feinstein, 2010; Johnson et al., 2018).

During the 1960s, additional historical evolutions of the descriptions of autism spectrum disorder occurred. For the first time, true psychoanalytic and biological theories emerged, as well as advanced epidemiology (Epstein et al., 2019; Feinstein, 2010; Lotter, 1966). There were also additional proposals for large-scale screening for autism in children (Epstein et al., 2019; Feinstein, 2010; Lotter, 1966). Bruno Bettelheim, a clinician and educator of emotionally disturbed children, put forward the idea that individuals presenting with autistic characteristics should not be treated with psychotropic pharmacology or shock therapy, but rather extensive psychoanalytic therapy (Epstein et al., 2019; Feinstein, 2010; Johnson et al., 2018). As an intense follower of Freudian psychology, Bettleheim believed that childhood psychosis, schizophrenia, and autism (these terms were usually interchangeable at the time) was a result of environment and parenting as opposed to some biological factor. Dr. Bernard Rimland, founder of the Autism Society of America (ASA) and Autism Research Institute (ARI), countered this argument with his biological theories (1928). Rimland asserted that autism was not a psychological manifestation, but rather a developmental disorder initiated by genetics and biomedical defects (Epstein et al., 2019). However, Rimland did agree with Bettelheim in his thought that pyscho-

behavioral therapy could assist children with ASD to learn to cope with symptoms and potentially retrain their behavioral tendencies concerning socio-emotional interactions. Rimland was also a proponent of the Applied Behavior Analysis (ABA), a systemic educational approach to treating individuals with autism (Epstein et al., 2019; Feinstein, 2010; Johnson et al., 2018).

Early theories on how to combat autism continued to advance in the 1970s. Eric Schopler, a co-founder of the Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH), demonstrated that most children with autism did not have a psychological disorder, similar to the beliefs of Rimland (Epstein et al., 2019; Schopler & Reichler, 1976). He also showed that the parents of children with autism could in fact be effective collaborators in the treatment process, extending therapy beyond the clinic (Epstein et al., 2019; Schopler & Reichler, 1976). During this time, A. Jean Ayres was doing seminal work on the sensory issues related to autism. Ayres coined the process by which individuals register, modulate, and discriminate sensations through the sensory systems to produce purposeful, adaptive behaviors in response to the environment as sensory integration (Ayres, 1976). This was yet another tremendous insight into the unique challenges facing children and adults with autism and supported the implementation of occupational therapy as a means to assisting patients in better understanding and processing in their environments (Ayres, 1976; Epstein et al., 2019).

Researchers and developmental psychologists demonstrated considerable advancements in the diagnosis of autism through new approaches that seemed predisposed to demonstrate that autism was a more biological and environmental condition. The validity of diagnosis among many controversial psychiatric categories was also challenged during this period (Epstein et al., 2019; Feinstein, 2010). Lorna Wing (1981) published an epidemiological study that advanced the idea of autism being a spectrum-like disorder. Wing (1981) identified a triad of impairments

common among individuals with autism – social interaction, communication, and imagination. Eventually, physicians and psychologists formalized the spectrum disorder concept with the publishing of the DSM-III-R in the mid-80s (Epstein et al., 2019). They continued to utilize the spectrum concept in the 1994 DSM-IV, but additional diagnostic elements were included. According to Epstein, et al. (2019), the DSM-IV included a "dimensionality approach, recording sums of positive items in standardized diagnostic instruments to obtain disorder-specific scores" (p. 3). In 2013, autism was officially reclassified as autism spectrum disorder, removing previous designations such as Asperger's Syndrome and Pervasive Developmental Disorder – Not Otherwise Specified (PDD-NOS) (Epstein et al., 2019).

Over the last several decades, there were also a myriad of reactions to the phenomenon of autism in the public schools, most of which were driven by public policy (Mandlawitz, 2002; Yell et al., 2005). Parent/student advocacy groups coupled with improved diagnostics have required educational institutions to find new and creative ways to not only meet the needs of students with ASD, but also to avoid expensive due process litigation linked to special education compliance (Epstein et al., 2019; Mandlawitz, 2002). Mandlawitz (2002) wrote that "in numerous State (SEA) and local educational agencies (LEA), the threat of due process hearings and litigation is viewed as a serious issue, such that practices and/or policies, while educationally sound, have been adapted specifically to avoid litigation" (p.1). In the early 1990s, there was still quite a bit of confusion about the autistic condition, so educators and policymakers related to special educators had to develop appropriate categorization to serve these unique students. Finding the appropriately trained personnel to serve students with autism spectrum disorder was also a tremendous challenge. Due to these unique challenges, the standard was set somewhere in the middle concerning a free and appropriate education (FAPE). Mandlawitz (2002) wrote:

> In short, the arbiters in special education cases look to the school district's program to determine if it is 'reasonably calculated to provide some educational benefit.' Lawyers and educators accept that in special education law and practice that provision of services must be more than the minimum. However, courts also do not expect the LEA to provide 'optimal' special education. (p.3)

With the onset of the No Child Left Behind Act in 2001, Congress again heightened the expectation for servicing students with disabilities (No Child Left Behind Act [NCLB], 2001). Legislators demanded that all pupils be held to federal evaluations of student performance such as standardized testing, that all students were educated by a highly qualified professional educator, and that all students graduated from high school (Yell et al., 2005). The multi-tiered system of support (MTSS) often referred to as Response To Intervention (RTI) became a standard expectation in the support of students in route to a potential special education evaluation, another response to educational law in the school building. This was eventually mirrored in public policy related to health care providers in the 2010s, in that almost all of the United States state governments required insurance providers to cover early intensive behavioral interventions for children suspected of having autism, as well as those with similar behavioral disorders. A myriad of services were made available in public schools for students identified on the spectrum that included, but were not limited to: (a) applied behavior analysis (ABA), (b) occupational therapy (OT), (c) physical therapy (PT), (d) direct instructional services with both special and regular educators, (e) behavior coaches, and (f) autism itinerant service specialists that focus primarily on socio-emotional skill development (Epstein et al., 2019; Yell et al., 2005).

Characteristics of ASD and Impact on Learning

The characteristics of individuals with ASD have varied considerably based on that person's placement on the overall autism spectrum (Levy et al., 2019). These characteristics of diagnosis were broad, but may be narrowed down to several categories such a behavioral, cognitive, and socio-emotional; the latter of which often includes social communication challenges (Levy et al., 2019; Lord et al., 2018). These attributes have dramatically influenced teachers' experiences while instructing students with ASD in any subject. To understand the actions, cognitive processes, and classroom interaction of students with ASD, these characteristics within all three designations were studied.

Behavioral Characteristics

Researchers believed that many of the behavioral presentations among individuals with ASD related to the frustration of limited social communication skills and/or the inability to cope with sensory-motor stimulation (Farrugia & Hudson, 2006; Joyce et al., 2017; Lord et al., 2018). Some of the outward expressions that educators categorized as negative or inappropriate in manner present as related to anxiety (Lord et al., 2018). In a recent study, researchers found that "46.8% of the children with ASD presented levels of anxiety within the clinical spectrum compared with 15.3% of the children of traditional development" (Syriopoulou-Delli et al., 2018, p.1). Syriopoulou-Delli and colleagues' (2018) research revealed high levels of anxiety in children with ASD associated with higher Intelligence Quotients (IQ) and verbal skills. It has also long been documented by physicians and researchers that many of the aggressive behavioral reactions of students with ASD may be linked to occurring psychiatric conditions such as Attention Deficit Hyperactivity Disorder (ADHD), Anxiety, and Depression (Baio et al., 2018;

Levy et al., 2019; Lord et al., 2018). Educators and researchers perceived irritability and aggression as connected to these conditions within the spectrum of autism, often manifesting among younger individuals as minor physical aggression and adults as verbal bellicosity (Farrugia & Hudson, 2006; Levy et al., 2019; Lord et al., 2018).

Another behavioral consideration for students with autism spectrum disorder was the relationship between their sensory-motor behavioral expressions and tendencies and the typical characteristics of students diagnosed with ADHD (Christensen et al., 2018; Levy et al., 2019). Researchers have found that both parents and teachers report similar behavior presentations and lack of ability to attend among students with autism and students without autism, but diagnosed with Attention Deficit Disorder or ADHD (Christensen et al., 2019; Van Der Meer et al., 2014; Zajic et al., 2016). Lord et al. (2018) estimated that roughly one in four individuals (28.2%) identified as having ASD also had a clinical diagnosis of ADHD. Repetitious physical behaviors, often referred to as stemming, are commonly associated with the lack of ability to remain focused and still, as are verbal utterances (Zajic et al., 2016). There is some speculation among researchers that clinical diagnoses of ADHD among individuals with ASD are mistaken and based on true characteristics on the autism spectrum (Christensen et al., 2018; Van Der Meer et al., 2014). This complex continuum of social anxiety, frustration in socio-communication, attention deficits, and lack of motor-sensory control, often led to significantly challenging behaviors such as withdrawal, shouting, physical aggression, and refusal to engage in learning within the typical school setting, to include the special education classroom (Donnellan & Leary, 2012; Farrugia & Hudson, 2006; Joyce et al., 2017; Levy et al., 2019; Lord et al., 2018).

Aggression was also a major problem among younger students with ASD, but there was limited information to the contributing factors (Bitsika et al., 2017; Fitzpatrick et al., 2016).

Several researchers have determined that the prevalence of aggression towards the caretakers and teachers of children with ASD approaches 68% with that rate dropping to 32% towards non-caregivers (Fitzpatrick et al., 2016; Kanne & Mazurek, 2011). There was also evidence that as adolescents with ASD mature, the symptomatic presentations of generalized aggressive behavior decreases. Researchers have noted that this decrease over time is likely due to cognitive development and treatment application in the form of coping skills and strategies (Bitsika et al., 2017; Donnellan & Leary, 2012; Levy et al., 2019). It was also found that aggression among young males with ASD present much higher rates than their female peers (Bitsika et al., 2017; Lord et al., 2018). Speculation regarding the contributing factors to aggression among children with ASD varied considerably among researchers. Some demonstrated that there were corollary links to aggression and chemical/hormonal imbalances present among children with ASD (Bitsika et al., 2017; Livingstone et al., 2015). Within this vein of thinking are strong links between attachment disorders, ADHD, and oppositional disorders with the generic characteristics found on the broad spectrum of autism (Bitiska et al., 2017; Van Der Meer et al., 2014). Phillip Gerard (2018) provided evidence that there was a significant correlation between low self-worth with anger and aggression in children with ASD. Gerard (2018) asserted that due to the self-isolation of children with ASD related to their innate desire to follow self-imposed social rules or guidelines, it often led to low self-esteem and feelings of self-worthlessness. Fitzpatrick et al. (2016) echoed this in their research, although the researchers also noted that neuropsychiatric factors also exist in adolescents with ASD.

Addressing the presentations of angry and aggressive behavior among children with ASD have also proven to be a challenge for physicians, psychologists, and psychiatrists alike (Fitzpatrick et al., 2016; Lord et al., 2018). The strategies for the treatment of the negative

aspects of ASD such as social communication and interaction delays, restrictive and patterned behaviors, and aggression fell into two primary categories – therapeutic and pharmacologic (Baio et al., 2018; Fitzpatrick et al., 2016; Livingstone et al., 2015). In terms of therapeutic intervention, the concept of completing thorough functional behavior assessments, typically completed by a psychologist or psychiatrist, was prevalent (Fitzpatrick et al., 2016). Understanding the function of the child's behaviors often led to insights into intervening (Bitsika et al., 2017; Levy et al., 2019). Coupled with developing an understanding of the purpose of the child's behavioral presentations were treatment methods such as the teaching of reinforcement strategies, personalized coping skills, and functional/social communication therapy (Fitzpatrick et al., 2016; Levy et al., 2019). Much of the nonpharmacological behavioral treatment of aggression among adolescents with ASD functioned on the principles outlined in learning theory and operant behavior patterning (Fitzpatrick et al., 2016). Once a particular behavior was defined and its function determined, treatment in the form of rehearsed schedules of reinforcement, social story modeling, functional communication training, and other applied behavior analysis strategies was suggested (Batiska et al., 2017; Fitzpatrick et al., 2016; Wong et al., 2015). The most prevalent of these strategies were the reinforcement techniques that provided desirable consequences following behavior to increase the likelihood that the behavior will occur again, often referred to as differential reinforcement strategies. Wong et al. (2015) determined that the differential reinforcement therapeutic approach was an evidence-based practice when working with students having ASD (Fitzpatrick et al., 2016).

Physicians and psychologists commonly treated young people with ASD presenting disruptive and/or aggressive behaviors with a variety of pharmaceuticals, primarily mild antipsychotics (Livingstone et al., 2015). Common antipsychotic medications utilized among

patients with ASD include, but are not necessarily limited to: (a) Haloperidol, (b) Risperidone, (c) Aripiprazole, (d) Olanzapine, (e) Clozapine, and (f) Lurasidone (Fitzpatrick et al., 2016; Livingstone et al., 2015). Physicians and psychiatrists have also found that antidepressants, cholinesterase inhibitors, mood stabilizers, and NMDA receptor antagonists support the reduction of irritable and aggressive behavior among patients with ASD (Fitzpatrick et al., 2016; Livingstone et al., 2015). Livingstone et al. (2015) also determined that the consistent use of pharmaceutical intervention in patients with ASD reduced the occurrence of self-harm, while Van Der Meer et al. (2014) noted a considerable reduction in hyperactivity and physical stemming among research subjects in clinical trials. Researchers have noted that the majority of researchers emphasized that pharmacological intervention in and of itself is insufficient in the long-term treatment for the symptoms of ASD (Livingstone et al., 2015; Van Der Meer et al., 2014). Researchers agreed that the most effective approach to addressing the negative behavioral presentations among individuals with ASD is mixed-method containing both pharmacological and therapeutic approaches (Batiska et al., 2017; Fitzpatrick et al., 2016; Livingstone et al., 2015; Van Der Meer et al., 2014).

Psychologists and paraprofessionals employed applied behavior analysis therapy to assist in the training and retraining of patterned behavior among adolescents with ASD (Leaf et al., 2016). Psychological researchers showed that applied behavior analysis was a therapy built upon science to determine how behavior works, how the environment influences the behavior, and how learning takes place (Baily & Burch, 2017). Those utilizing the applied behavior analysis to serve students with ASD have intended to increase language and social communication skills, build the ability to attend and focus, and decrease problematic behaviors among their clients (Baily & Burch, 2017; Denee et al., 2015; Leaf et al., 2016). Applied behavior analysis was

effective in remediating attention and focus deficiencies as well as negative behavioral presentations among students with ASD (Baily & Burch, 2017; Levy et al., 2019). Some researchers attributed the success of the therapy to the adaptive nature of the programming. Applied behavior analysis therapists personalized therapy services to the individual needs of the student with autism and therefore, it was genuinely a personalized learning experience (Baily & Burch, 2017; Leaf et al., 2016; Levy et al., 2019).

Cognitive Characteristics

Individuals with ASD presented with IQ levels that varied dramatically, in a similar manner to individuals without a diagnosed disability (Karalunas et al., 2018; Mayes & Calhoun, 2003). This varied cognitive ability level among students with ASD was commonly categorized as Low- and High-Functioning (Lord et al., 2018). When examining 164 subjects across an age range from 3- to 15-years-olds, Mayes and Calhoun (2003) found that as age increased, so did IQ. The researchers asserted that this was probably reflective of both an actual increase in IQ over time and the "likelihood that brighter children were often diagnosed later in life" due to their ability to cope within the educational environment as compared to non-disabled counterparts (Mayes & Calhoun, 2003, p. 1). To this end, unless a child was presenting with clear developmental delays at ages two to three, it was very difficult for clinicians to accurately determine cognitive deficiencies in the future or determine a functional IQ due to atypical language development patterns of individuals with ASD (Karalunas et al., 2018; Lord et al., 2018). This led to a large variance in statistics with regards to the percentage of individuals with ASD that also qualify as having an intellectual disability as measured at less than or equal to a 70 IQ (Channell et al., 2019; Karlunas et al., 2018; Mayes & Calhoun, 2003).

Researchers have noted a considerable gap between verbal and non-verbal cognitive abilities among students with ASD during the late pre-school years (Channell et al., 2019; Lord et al., 2018; Mayes & Calhoun, 2003). Although this gap seemed to close among most students with autism as they approach middle childhood, significant graph-motor skill deficits were found among both High- and Low-functioning students with autism throughout their formative years (Batiska et al., 2017; Mayes & Calhoun, 2003). However, performance in the areas of math, spelling, and reading varied based on IQ assessment; thus, academic performance was well aligned with cognitive ability. Of particular significance was the fact that writing performance among both High- and Low-functioning students with ASD was at a considerable deficit as compared with non-disabled peers with similar IQs (Channell et al., 2019; Karlunas et al., 2018; Mayes & Calhoun, 2003). In addition to the physical challenges presented by fine motor and visual-motor skills of engaging in school, children with ASD also had difficulty managing the range of processes, including "the cognitive act of organizing their thoughts and presenting the message in a way that best represents their ideas" (Asaro-Saddler et al., 2015, p. 104). St. John, Dawson, and Estes (2017) found that executive function skill development was a significant predictor to academic success among school-aged children with ASD. Researchers have noted that the executive functioning skills associated with organizing one's thoughts and actions is particularly challenging for students with ASD (Batiska et al., 2017; St. John et al., 2017). The executive functioning and organization deficits found among students with ASD mirrored those of students with ADHD (Channell et al., 2019; Leno et al., 2018). Leno et al. (2018) also found that although executive function scores of subjects with ASD were similar to counterparts with ADHD, the IQ and hyperactivity scores among the ADHD groups were considerably higher. Students with ASD in Leno et al.'s (2018) study consistently scored 8-15 IQ scale points lower

than subjects with diagnoses of ADHD and ODD/CD. Regardless of IQ designation, abilities and deficits in executive functioning varied among each individual with ASD, as autism is a spectrum disorder (St. John et al., 2017; Ryan & Marshall, 2018).

Much of the research surrounding ASD has focused primarily on higher functioning individuals on the spectrum, with only about 11% of the data collected within the public autism research database focusing on individuals with IQ scores lower than 85 (Chakrabarti, 2017). As noted previously, individuals with ASD also presenting with an intellectual disability were common, with one out of three identified as autistic being labelled as Low-functioning (Channell et al., 2019; Karlunas et al., 2018). Among these individuals, the vast majority also demonstrated minimal verbal abilities and developmental regression (Chakrabarti, 2017). This did not mean that students with Low-Functioning ASD were unable to access the concept and act of written expression, although it certainly depended on the severity of the intellectual or developmental disability present. Mild to moderate intellectual disabilities often coincided with motor delays as well, complicating the act of written expression for many students with Low-Functioning ASD (Rosenberg et al., 2017).

Socio-Emotional Characteristics

In addition to generalized expressions of anxiety by individuals with ASD, there was strong support for the internalization of symptoms and social anxiety among the population (Kuusikko et al.2008; Rodgers et al., 2016; South et al., 2017; White et al., 2013). As students with High-Functioning ASD progressed in age, so did their level of social anxiety and inability to cope in complex social situations (Kuusikko et al., 2008; South et al., 2017). However, there was some evidence that as students with autism age, they become less likely to avoid others (Lord et al., 2018). White et al. (2013) found that elevated social anxiety among many High-

Functioning students with autism served as a predictor of aggression (Pugliese et al., 2012). When compared to children with Social Anxiety Disorder, Opposition Defiant Disorder, and/or Conduct Disorder, students with High-Functioning ASD with any identified intellectual disability demonstrated statistically insignificant differences in the reporting of humiliation and fear of social rejection (Pugliese et al.2012; Rodgers et al., 2016; South et al., 2017). It is believed that the inability to cope in complex social structures was a trigger for many of the sensory-motor manifestations of behavior such as aggression and disruptiveness among individuals with ASD, similar to the presentations of individuals with Oppositional Defiant or Conduct Disorders (Lord et al., 2018; Pugliese et al., 2012; South et al., 2017; White et al., 2013). Pugliese et al. (2012) asserted that this overlapping of behaviors among students with ASD and outward behavior-related psychiatric disorders demonstrated a need to "consider the role of social anxiety, particularly the fears of humiliation and rejection, in the expression of aggression among children with High-Functioning ASD" (p. 1121). South, Rodgers, and Heckes' (2017) research supported this idea in that they found the symptoms of anxiety add an additional level of challenge to individuals with ASD, as well as their families. The lack of certainty in schedule and social interaction success exacerbated anxiety, and in turn, other unwelcome behavior presentations with individuals with ASD (Batiska et al., 2017; Joyce et al., 2017; South et al., 2017).

In addition to presentations of anxiety, many researchers and physicians have noted a steady manifestation of depression-like symptoms in students with ASD, particularly younger children (Fitzpatrick et al., 2016; Livingstone et al., 2015; Lord et al., 2018; Wigham et al., 2017). Children at age ten having ASD demonstrated higher average depressive symptoms scores than their non-disabled peers (Rai et al., 2018). This pattern continued through maturation

of adolescence in the early twenties, yet some evidence remains that adults with ASD continued to be high-risk for developing depressive symptoms as compared to the general population (Burns et al., 2018; Rai et al., 2018). Many students with ASD reacted to a sense of failure and rejection by withdrawing and/or refusing to communicate with the outside world (Joyce et al., 2017; Pugliese et al., 2012; South et al., 2017). These feelings of inadequacy as related to academic performance and social prowess may have easily led to reduced motivation in school, as well as refusal to engage in the learning process (Asaro-Saddler, 2016a).

Much of the manifestations of anxiety, depression, and social withdrawal among students with ASD have been linked to the social cognition, interaction, and communication deficits common to the disorder (Joyce et al., 2017; Rai et al., 2018; Wolstencroft et al., 2018). Chita-Tegmark (2016) found that individuals with ASD spend roughly 50% less time attending to social stimuli as their non-disabled counterparts. Children with ASD simply do not notice and/or cannot process certain social signaling and are most impacted when the stimuli has high social content, leading to feelings of being overwhelmed or frustrated (Chita-Tegmark, 2016; Rai et al., 2018). The lack of ability to read facial expressions and understand the corresponding emotions has been commonly documented as a significant draw back to students with ASD's success in the school environment (Cunha et al., 2016; Chita-Tegmark, 2016).

Impact of the Presence of ASD on the Family Unit

The family unit was a critical component of support for children with ASD (Emily & Grace, 2015; Petrou et al., 2018). Considerable effort was required of parents in support of teacher instruction in the classroom (Emily & Grace, 2015; Petrou, et al, 2018). The impact of this family-unit support, or lack thereof, influenced teachers' experiences in instructing students with ASD. This support was oftentimes required well into adulthood and potentially a life-long

endeavor for some families in the case of Low-functioning children with ASD (Emily & Grace, 2015). Unfortunately while providing the necessary intensive support for family members with ASD, a tremendous toll is often taken from those providing for the needs of the disabled (Baio et al., 2018; Lopez et al., 2019; Petrou et al., 2018). Schlitz et al. (2018) found that the impacts on the mental of health of parents and siblings of children with ASD present in the form of extreme stress, anxiety, and depression. Parents similarly reported feelings of family burden and extreme stress to Lopez et al. (2019). Researchers have asserted that these feelings of burden, stress, anxiety, and depression may affect family health as well as lead to unmet needs for the child with autism (Lopez et al., 2019; Petrou et al., 2018). Much of the stress and negative indicators reported by parents were associated with angry and aggressive behaviors and tantrums attributed to the child or children in the household with ASD (Schlitz et al., 2018). Parents noted that even when utilizing medications to temper the angry and aggressive behavior presentations by their child or children with ASD, the positive effects typically wore off after school time or daytime hours (Livingstone et al., 2015; Schlitz et al., 2018). The prevalence of angry and aggressive tantrums among children with ASD coupled with a perceived lack of external supports by parents of children with autism may often lead to feelings of hopelessness and being overwhelmed (Emily & Grace, 2015; Schlitz et al., 2018).

The feelings of extreme stress, anxiety, and depression among parents of children with ASD could not solely be designated as due to negative behavioral presentations. Researchers have found that those outside of the family unit often overlook the economic impacts of raising a child with ASD (Jarbrink & Knapp, 2001; Saunders et al., 2015). Saunders et al. (2015) found that “families of children with autism spectrum disorder (ASD) endure significant financial and employment burden because of their children’s numerous needed services” (p. 36). Many

individuals with ASD required a myriad of services such as applied behavior analysis therapy, occupational therapy, speech language therapy, and at times physical therapy (Batiska et al., 2017; Saunders et al., 2015). The time and effort that is required to support children with ASD, particularly those who also have an intellectual disability, is hefty and often requires a parent to leave work to care for their children (Saunders et al., 2015). Parents also reported finding it necessary to leave employment to home school their children with disabilities due to multiple behavioral issues and bullying within the school-based educational setting (Lopez et al., 2019; Saunders et al., 2015). Roughly one in two parents of children with ASD accompanied by an intellectual disability noted they have had to stop work to care for their child in some capacity; and one in four parents of children with a diagnosis of only ASD reported the same (Saunders et al., 2015).

Research on the experiences of siblings of individuals with ASD and the quality of their sibling relationships has yielded mixed results (Braconnier et al., 2018). Many siblings slipped into a care-taking mode, thus taking on considerable stress along with or in the place of the parents in the home (Batiska et al., 2017). Some siblings reported negative experiences and interactions with their siblings with autism with particular demarcation of aggressive episodes towards them by their brother or sister (Braconnier et al., 2018). There was also evidence that the presence of a sibling with ASD in the household could affect the typically developing sibling's adjustment and socio-emotional health (Jones, et al., 2019). Younger typically developing siblings of children with ASD presented a higher likelihood of parroting and acquiring behaviors and social characteristics associated with the condition. This was less common when the typically developing sibling was older. However, older typically developing siblings

demonstrated socio-emotional health impairments due to the stressed relationships in the home (Braconnier et al., 2018; Jones, et al., 2019).

Literacy Skills Development among Students with Autism Spectrum Disorder

Students with ASD consistently performed lower on standardized assessments of literacy skills as compared to other age-alike disabled and non-disabled peers (Baker et al., 2018; Gurry & Larkin, 2005; Mayes & Calhoun, 2006). It was widely accepted that the primary reasons behind these deficits in academic performance are associated with the language disorder and communication trials associated with ASD (Dynia et al., 2016; Lanter & Watson, 2008; Kimhi et al., 2017; Mayes & Calhoun, 2008). However, there was evidence that students with ASD, particularly those who are high functioning, had the ability to acquire age-appropriate literacy skills (Kimhi et al., 2017; Mayes & Calhoun, 2003). In addition to the clear communication and language issues associated with ASD students, it was also important to remember that many students with autism also present with intellectual delays (Asaro-Saddler et al., 2015; Channell et al., 2019; Karlunas et al., 2018). Thus, they have numerous challenges when approaching speaking, listening, reading, and writing: (a) communication deficits; (b) difficulties with expression; (c) sensory-motor deficits; (d) lack of attentiveness and focus; and (e) lack of perseverance skills – just to name a few (Asaro-Saddler et al., 2015; Baker et al., 2018; Westerveld et al., 2017). When considering the value and importance of emerging literacy skills, it was important to fully understand the spectrum of needs related to ASD and how best to approach addressing those needs in an academic setting (Baker et al., 2018; Robledo, 2017; Weterveld et al., 2017).

Speaking, Listening, and Reading

Students with ASD demonstrated a wide range of communication abilities. Some students could apply standardized language patterns, but others demonstrated a variety of oral language disorders (Baker et al., 2018; Lanter & Watson, 2008; Levy et al., 2019). Specifically, high-functioning students with ASD had deficits in the areas of receptive and expressive language, but commonly had similar rates of articulation errors as compared with like-aged peers (Baker et al., 2018; Lord et al., 2018). Many low-functioning students with ASD presented as non-verbal or partially non-verbal, particularly if an intellectual disability had been identified (Karalunas et al., 2018; Lord et al., 2018). Skwerer et al. (2015) found that the significant deficits in receptive and expressive language further exacerbate the myriad of challenges facing students with ASD in the classroom environment, adding to their negative behavioral presentations and lack of academic motivation. The children's limited or complete inability to verbalize their thoughts and feelings towards others in a complex social environment underscored the need for very individualized intervention as it relates to communication among students with ASD (Baker et al., 2018; Skwerer et al., 2015).

Students with ASD also often had difficulty with complex directions due to challenges in auditory processing and present as having deficits in executive functioning (Batiska et al., 2017; Lanter & Watson, 2008; St. John et al., 2017). Many researchers considered this a result of hearing loss, language deficits, and the presentation of ADHD-like characteristics (Baker et al., 2018; Christensen et al., 2018; Van Der Meer et al., 2014). It has been determined that the prevalence rate of the characteristics of ASD among hearing and visually impaired individuals is dramatically higher than those with normal hearing and vision (Do et al., 2017). The overall risk-ratio for ASD was 31 times greater among visually impaired persons and 14.1 times greater among hearing-impaired persons when compared to reported ASD prevalence in the general

population (Do et al., 2017; Lord et al., 2018). There were clear connections between language deficits, hearing/vision deficits, and the executive functioning of individuals with autism (Batiska et al., 2017; Do et al., 2017; St. John et al., 2017).

There was also some evidence that a lack of listening skills led to difficulty in literacy comprehension among non-hearing impaired students with ASD (Asaro-Sadler, 2016a). Again, there were those researchers that would also connect the inability to attend with auditory focus to symptomatic ADHD, a common characteristic found among students with ASD (Baker et al., 2018; Mayes & Calhoun, 2006; Skwerer et al., 2015). However, there was some evidence that these auditory processing deficits presented themselves even when ADHD had not be diagnosed (Asaro-Sadler, 2016a; Batiska et al., 2017). Regardless of the manifestation medium, without appropriate listening and speaking skills, reading became a unique challenge for the child with autism, even among those diagnosed as High-functioning and without intellectual disability (Asaro-Sadler, 2016a; Baker et al., 2018; Gurry & Larkin, 2005; Mayes & Calhoun, 2006). There was significant evidence that without proper listening skills and exposure to read-aloud, storyteller modeling, and re-telling of nursery rhymes, proper reading fluency, prosody, and comprehension could not appropriately develop among children (Harris et al., 2017; Hibbin, 2016). Researchers have determined that the modeling of proper vocal fluency and expression is critical in assisting the acquisition of those skills among target audiences (Asaro-Sadler, 2016a; Harris et al., 2017). Hibbins (2016) pointed out that transactional cross talk also plays a major factor in students learning to comprehend and process oral language. Considering the deficits exposed by researchers in speech and language among children with ASD combined with the inability to fully interact with peers in a social manner, it was clear why literacy skills such as

comprehension and the ability to summarize text became such a challenge for these unique learners (Asaro-Sadler, 2016a; Baker et al., 2018; Harris et al., 2017; Hibbin, 2016).

Written Expression

Researchers Zajic et al. (2016) noted, **"**writing has been observed to be particularly challenging for some children with high-functioning autism disorder" (p. 2). Additionally, researchers have found that children with High-functioning ASD produced shorter, less complex texts compared to non-disabled age-alike peers (Asaro-Saddler, 2016b; Zajic et al., 2019; Zajic et al., 2016). Researchers focused on the written expression among students with autism which demonstrated that much of the difficulty in writing is potentially correlated with the lack of ability to attend and focus, as well as graphomotor skill deficits (Asaro-Saddler et al., 2015; Baker et al., 2018; Finnegan & Accardo, 2017; Robledo, 2017; Zajic et al., 2016). This train of thought was supported in the findings of various researchers that confirmed correlation between the symptomatic presentation of ADHD among a large portion of the autistic population (Christensen et al., 2019; Van Der Meer et al., 2014; Zajic et al., 2016). The inability to attend had been widely documented as a significant challenge for disabled and non-disabled students attempting to write for any extended period of time (Rodriguez et al., 2017). Furthermore, researchers have found that fine motor and/or graphomotor deficits correlated with early reading development (Suggate et al., 2016). If students with ASD presented as having weak central cognitive coherence, theory of mind, and executive functioning, they may also have presented as having challenges in the area of written expression (Asaro-Saddler et al., 2015; St. John et al., 2017; Ryan & Marshall, 2018). The lack of self-awareness, ability to self-regulate, and overall executive function skills among students with ASD have been documented as impacting success in the area of literacy, particularly written expression and language learning (Berninger et al.,

2016). There was also considerable evidence that students with autism struggled with the socio-emotional factor of persistence and grit when working through the process of writing (Baker et al., 2018; Lord et al., 2018; Mayes & Calhoun, 2003). Lacking the ability to persevere during the task of writing affected all types of students, but particularly those with the characteristics of ASD (Asaro-Saddler, 2016b; Benvenuti, 2017). This was difficult for special education teachers to contend with during instruction, particularly as related to the planning and translating phases of writing when students with ASD must consistently interact with challenges within the task environment and become frustrated with their engagement with the rhetorical question. Asaro-Saddler (2016a; 2016b) pointed out that oftentimes students with ASD succumb to feelings of defeat and inadequacy and simply give up on the task of writing as opposed to pushing through the challenge of the process.

Accardo & Finnegan (2017) found that students with both High- and Low-functioning ASD receive less instruction in early emergent literacy and handwriting skills due to concerns related to other manifestations of autism. “In fact, the handwriting of children with ASD has been found to be lower quality, specifically in terms of letter formation” as related to fine motor and visual-motor skills deficits (Asaro-Saddler et al., 2015, p. 104). Motor deficiencies coupled with language deficits in turn exacerbated the unique challenges of written expression among middle childhood aged students with ASD (Finnegan & Accardo, 2017; Mayes & Calhoun, 2006; Suggate et al., 2016). There are examples of graphomotor skill shortfalls being linked to reduced ability to identify letters, call letter sounds, and decode words at a rate to support proper emergent reader fluency (Asaro-Saddler, 2016a; Suggate et al., 2016). These deficits considerably influenced the writing process in general, but made the reviewing phase of writing as described in the CPTW almost impossible for the student with ASD. Teacher perception

studies have demonstrated that teachers aren't eager to take on the challenge of teaching handwriting or written expression to students with ASD due to their outbursts and other behavioral responses, yet acknowledge that building a trusting relationship for friendship is fundamental in working through the process of composition (Ayub et al., 2017; Petrina et al., 2017). Although the struggles of students with High-functioning ASD in written expression have been quite similar to those of their non-disabled peers, educators are aware of the very particular and unique needs of individual students with ASD to find successful methods and strategies to enhance their ability to succeed in the classroom setting (Baker et al., 2018; Finnegan & Accardo, 2017).

Strategies for Improving Literacy Skills among Students with ASD

Based on what we have known about the literacy skills and academic deficits of students with ASD, many educational researchers have proposed pedagogical recommendations for improving student performance in the area of literacy (Asaro-Saddler, 2016a; Baker et al., 2018; Finnegan & Accardo, 2017). These researchers intended for some of these recommendations to remediate the deficits in receptive and expressive language among students with autism (Davis et al., 2015; Lanter & Watson, 2008). Others have focused on more traditional approaches to remediation such as repeated reading programs, phonics exercises, and the memorization of sight words (Asaro-Saddler et al., 2015; Kang et al., 2015; Pennington & Delano, 2012). Yet, most special educators agreed that it is difficult to determine what educational interventions will work with students with ASD as there is such a spectrum of behavioral, cognitive, and socio-emotional skill range (Asaro-Saddler et al., 2015; Baker et al., 2018; Finnegan & Accardo, 2017; Saddler & Bak, 2014).

Asaro-Saddler et al. (2015) asserted that self-regulation might be the key to assisting students with ASD find success in the literacy classroom (Asaro-Saddler, 2016b). In their research review of dozens of instructional strategies influencing the performance of students with ASD in the area of writing, Accardo, et al. (2019) found that nine among the most effective intervention strategies related to self-regulation among students. The self-regulation strategy approach worked to teach students with ASD to monitor their use of strategies and apply those without external social pressures (Asaro-Saddler, 2016b; Dijkhuis et al., 2017; Mack & Wong, 2018). The concept of self-regulation was evident in all three phases of writing as described by the CPTW. Students were required to manage their thoughts and frustrations as they grapple with the rhetorical question during the planning phase. They also had to manage multi-tasking during the translation phase – moving in and out of the working and long-term memory as needed to embed multiple cognitive processes. Finally, during the review phase, students had to self-regulate the impulse to "be finished," but rather are required to spend time and effort in self-reflection of their work. Self-regulation had the potential to assist in a variety of other academic or social settings for students with ASD, to include quality of life among adults with ASD (Dijkhuis et al., 2017). Self-regulation strategies were noted as most effective if coupled with student interests, particularly as related to written expression (Asaro-Saddler, 2015; Asaro-Saddler, 2016b; Iadarola et al., 2018). Mak & Wong (2018) found indications that the use of performance portfolios empowered students and "contribute to students' development of self-regulation learning" and often led to student self-efficacy in writing (p. 49).

Educators implemented evidence-based approaches with the instruction of English language arts skills to intervene on behalf of students with autism spectrum disorder, just as they have done so with non-disabled students (Asaro-Saddler, 2016a; Asaro-Saddler, 2016b; Iadarola

et al., 2018). Finnegan and Accardo (2017) found that "patterns in performance are not dissimilar" among students with ASD when compared "to other individuals who struggle with written expression" and are not disabled in some manner (p. 879). They also suggested that if the needs of individuals with ASD are similar to other individuals with learning problems, then educators may feel more confident with placing students with ASD in more inclusive environments to receive those same (research-based) interventions (Finnegan & Accardo, 2017). Educators have shown that simple scripted or invented writing interventions influence student success in the areas of phonemic awareness, spelling, and word reading (Finnegan & Accardo, 2017; Graham et al., 2017; Holfslundsengen et al., 2016). Graham et al. (2017) also found that when traditional writing strategies were coupled with a daily reading support group, the impacts extend to the areas of reading comprehension, vocabulary, and decoding of words. When appropriate, traditional models of reading and writing intervention combined as a treatment for students with ASD, the results demonstrated that they could strengthen overall reading and writing and that the two skills may be learned together as opposed to in separate instructional periods (Graham et al., 2017; Iadarola et al., 2018). A variety of methodologies have been studied, but to date one of the most promising seems to be the utilization of technology as an aide to the written expression process (Asaro-Saddler, 2016b; Pennington & Delano, 2012; Root et al., 2017). Asaro-Saddler et al. (2015) asserted, "students with ASD can become fluent writers when appropriate supports, such as technology, are put in place. Teachers should be sure to have high expectations of their students and provide the appropriate adaptations necessary for success" (Pennington & Delano, 2012, p.117).

Assistive Technology

Technology-based interventions have been shown to allow for some accommodations that support the performance of students with ASD in the areas of reading, writing, and behavior (Asaro-Saddler et al., 2015; Ashburner et al., 2012; El Zein et al., 2016; Knight et al., 2013; Pennington & Delano, 2012). Researchers have documented that the use of technology supports the overall academics, adaptive behavior, challenging behavior, communication skills, independence, social competence, and vocational skills, in addition to supporting reading and writing instruction in the classroom environment among students with ASD (Coffin et al., 2016; Odum et al., 2015). Within the context of examining students from the lens of the CPTW, the use of assistive technology may have reduced the frustration level among students with ASD, particularly during the planning and translation phase of writing when students are required to grapple with the rhetorical question and task environment. Examples of the most common technology-based interventions included, but were not limited to: (a) software providing interactive instruction and allowing sensory input from the student; (b) the use of voice output communication aids (VOCA); (c) video models of instruction; d) multimedia presentational software as a means to engage the learner's sensory needs; (e) digital and interactive social stories; and (f) allowing students to compose through word processing as opposed to the written word in accommodation of graphomotor deficits (Asaro-Saddler, 2016; El Zein et al., 2016; Odum et al., 2015; Pennington & Delano, 2012; Root et al., 2017; Saadatzi et al., 2018). These technology-based interventions attempted to circumvent the unique cognitive, motor, and sensory challenges of the student with ASD and build upon strengths within the spectrum (Asaro-Saddler, 2016a; Asaro-Saddler, 2016b; Coffin et al., 2016; Odum et al., 2015).

One strength noted by some researchers among students with autism in the classroom was their interest and fluency with technology (Asaro-Saddler et al., 2015; Saadatzi et al., 2018).

Researchers have confirmed that building upon the interests of students with ASD is an effective evidence-based practice to support students with ASD (Teti et al., 2016; Root et al., 2017). Pennington and Delano (2012) found that technology-aided instruction in written expression aligned with content-of-interest topics has been shown to significantly impact the writing achievement of students with ASD as evaluated by curriculum-based measures (Coffin et al., 2016). One theory to why technology was successful in improving the written expression of students with ASD was that it allowed the individual to focus on content and less on the cognitive and sub-processes of writing – essentially using less cognitive and physical energy to complete the writing task (Asaro-Saddler et al., 2015; Root et al., 2016). Coffin et al. (2016) noted that the complex skill requirements of written expression challenge the student's physical, cognitive, and sensory systems and asserted that technology may have the potential to serve as an equalizer of sorts. Additionally, there was some evidence that students utilizing technology to complete tasks of written expression demonstrated more motivation and stamina (Coffin et al., 2016; Pennington & Delano, 2012). Zein et al. (2016) found that the introduction of an iPad application for phonemic awareness in addition to teacher-directed instruction for younger students with ASD increased both academic performance and overall motivational engagement. Another example of technology influencing the motivation and engagement of students with ASD in reading and writing was found in the research of Saadatzi et al. (2018) in which virtual reality glasses and robot peer assistance was utilized in the form of small-group technology-assisted instruction. Like Saadatzi and colleagues (2018), many educational researchers have found students with ASD and their non-disabled peers much more excited about completing rudimentary reading and writing assignments when exposed to advanced, interactive technologies (Coffin et al., 2016; Odum et al., 2015; Zein et al., 2016). Teacher perceptions of

the implementation of technology-aided writing processes were considerably positive (Asaro-Saddler et al., 2015; Zein et al., 2016). Teachers also held a belief that the students with ASD benefited from such adaptive technology (Asaro-Saddler et al., 2015).

Current Trends in Autism Research

The history of research related to the condition now referred to as autism spectrum disorder spans back well over sixty years with some early research occurring during the 19th century (Baio et al., 2018; Lord et al., 2018; Xu et al., 2018). As research on this condition has broadened, several major categories of study have been established related to individuals with ASD. These areas include, but aren't limited to the education of students with ASD, the social behaviors of individuals with ASD, the communication abilities of individuals with autism, and the neuroscience related to the condition of autism (Whyatt & Torres, 2018). Just as the foci for research has varied in the past, it continues to be diverse in nature; yet, when examined, some trends may be noticed. As scientists have continued to explore autism and its impacts on the individual, families, and society, the National Institute for Mental Health's Research Domain Criteria and Precision Medicine reiterates the focus that future research should work to "bridge the psychiatric and psychological classification methodologies with biomedical techniques," that is to study the biology of autism (Whyatt & Torres, 2018, p. 1).

One current trend in professional research linked to autism spectrum disorder was the use of assistive technology to improve the communication between the afflicted individual and others (Lorah et al., 2018). Due to the expense (as much as $9000.00 each) of high-quality assistive technologies, particularly augmentative and alternative communication systems, there has been limited use among individuals with ASD. However, as the iPod Touch, iPad, and similar devices have become available for reasonable expense, the use of high capability speech-

generating devices as augmentative and alternative communication systems has been on the rise (Lorah et al., 2018). A myriad of application developments for operating systems other than Windows, particularly for Apple iOS, have supported this increase in usage. Van der Meer and Rispoli (2010) found that roughly 50% of individuals with ASD lack functional vocal output capabilities. According to Lorah et al. (2018), high capability speech generation devices met this need among individuals with autism "by accepting the user selection of picture-symbol, letter, word, or phrase, after which a synthetic or digitized output is produced to communicate the speaker's message to the listener" (p. 3). As mentioned previously in this literature review, assistive technology has been well-received by both student and teacher in classrooms with students with autism, but research topics are trending to focus on the whole of the autistic child's life to include communication in a variety of contexts, not just the school building (Coffin et al., 2016; Lorah et al., 2018; Odum et al., 2015).

Another trending focus for research among those interested in learning more about topics surrounding autism spectrum disorder was neuroimaging and resulting brain mapping for activity. Neuroimaging methods have the potential to serve as a powerful tool for understanding the etiology of specific subtypes of autism spectrum disorder: autism with intellectual disability, autism with a history of developmental regression, and non-verbal autism (Jack & Pelphrey, 2017). Neuroimaging may do much more than reveal the structure of the brain via magnetic resonance imaging, but rather it could expose insights into the functioning of the brain as well. Specifically, Jack and Pelphrey (2017) noted that although research is limited in the field, the use of neuroimaging has led to significant developments in understanding how individuals with autism spectrum disorder respond differently to sensory stimuli as compared to their nondisabled peers. Whyatt & Torres (2018) found that biomarkers acquired through magnetic resonance

imaging scans may be a useful tool for both medical and psychiatric doctors in determining aspects of individuals with autism spectrum disorder. Researchers have also noted that these brain biomarkers may assist therapists in determining the best course of action for treatment, particularly therapies related to the sensory needs of individuals on the spectrum (Jack & Pelphrey, 2017; Whyatt & Torres, 2018). There was also considerable traction among researchers in the field focused on utilizing neuroimaging to assist scientists in better understanding the neuro-dynamics of the brain found in nonverbal or limited-verbal individuals with autism (Jack & Pelphrey, 2017; Lorah et al., 2018). Low-functioning individuals with autism spectrum disorder are often understudied and less is known about their brain functioning as opposed to their High functioning or savant counterparts, and our knowledge surrounding the nonverbal aspect of autism spectrum disorder was noted as limited at best (Jack & Pelphrey, 2017).

Neuroscientists have demonstrated considerable effort to study additional biological indicators or autism beyond neuroimaging (Bildo et al., 2018; Shen et al., 2018; Whyatt & Torress, 2018). A string of studies examining the impact of microbial infections and inflammatory events among pregnant mothers on the prevalence rate of spectrum-like presentations in children has gained considerable attention from the community with autism (Bildo et al., 2018). Based on the groundbreaking work of Dr. Paul Patterson during the 1990s and early 2000s on neurotransmitters and the interplay between the biology of inflammation and its impact on the developing brain and behavior, many researchers have sought to understand how infections during pregnancy impact fetal brain development (Bildo et al., 2018; Blaylock & Strunecka, 2009). Bildo et al. (2018) noted, “multiple prenatal/maternal exposures most notably for infection, have been linked to an increase of ASD in offspring” (p. 242). An unrelated, but a

similarly veined study found that high-risk infants that were later diagnosed with autism spectrum disorder were found to have had abnormally high extra-axial cerebrospinal fluid when examined between ages 6-24 months (Shen et al., 2018). These types of events and physiological presentations could be utilized as biomarkers to determine risk for and potential onset of autism-like behavioral, social, or communicative presentations allowing doctors, therapists, and parents to be better prepared to serve the needs of the child with ASD (Bildo et al., 2018; Jack & Pelphrey, 2017; Shen et al., 2018; Whyatt & Torres, 2018.

Summary

Students with ASD have unique behavioral, cognitive, and socio-emotional characteristics that were commonly attributed to the condition (Levy et al., 2019; Lord et al., 2018). ASD is a disability characterized by deficits in socialization and restricted, repetitive patterns (Asaro-Saddler et al., 2015; Bitiska et al., 2017; Lord et al., 2018; Van Der Meer et al., 2014). However, individuals with ASD are "a highly heterogeneous group that varies in terms of language development, intellectual ability, and adaptive functioning" (Asaro-Saddler et al., 2015, p. 104). Some of the aspects of ASD presented unique challenges for traditional educational methods and settings (Mayes & Calhoun, 2006; Westerveld et al., 2017). Language deficits and communication disorders found among many students with ASD created conditions that obstruct literacy skills such as speaking, listening, reading, and writing (Asaro-Saddler, 2016a; Baker et al., 2018; Gurry & Larkin, 2005; Mayes & Calhoun, 2006). These attributes and unique characteristics dramatically influenced teachers' experiences when teaching students with ASD.

As diagnosed cases of ASD have increased over the past several decades, researchers have looked closely at students and their unique educational needs (Xu et al., 2018). Considerable time has been devoted to studying language, math, and reading skills of students

with autism and potential interventions to support the acquisition of such skills (Finnegan & Accardo, 2017; Graham et al., 2017; Holfslundsengen et al., 2016). However, written expression continued to be a very challenging area of study for students with ASD (Asaro-Saddler, 2016a). Many researchers in the field pointed out a need for additional research about the nature of written expression and students with ASD, as well as what educators believed worked when intervening with students with autism (Asaro-Saddler et al., 2015; Coffin et al., 2016; Root et al., 2017). Finding new ways to meet the needs of these unique learners was paramount so that they may, in turn, contribute to society and become productive citizens.

The intention of this study was to examine the experiences of special education teachers surrounding the writing process of students with ASD. Specifically, this study gave voice to the experiences of SPED teachers tasked with teaching written expression to high school students who have ASD. The indent was to describe how high school special education teachers led students with autism spectrum disorder to identify the rhetorical problem within the task environment at the planning stage of writing; how high school special education teachers guided students with autism spectrum disorder to access their long-term memory on a specified topic during the translation phase of writing; and how high school special education teachers guided students with autism spectrum disorder through the reviewing phase of the writing process.

CHAPTER THREE: METHODS

Overview

The purpose of this transcendental phenomenological study was to examine special education classroom teachers' experiences of the students' challenges of written expression among children with Low- and High-functioning autism spectrum disorder in Southern State high school public education classrooms. The theory that guided this study was the cognitive process theory of writing, as it provided for a very structured method in which written expression could be examined as a set of distinctive thinking processes and sub-processes that writers orchestrate or organize during the act of composing. Specifically, the following research question primarily drove the research: what are teachers' experiences of the cognitive challenges of written expression among children with Low- and High-functioning autism spectrum disorder? Two additional questions were addressed as well: what are teachers' perspectives of students' processes in embedding multiple elements in their writing, and what are teachers' experiences of how the task environment and rhetorical problem influence the writing efficacy of students with Low- and High-functioning autism spectrum disorder?

In Chapter Three, the transcendental phenomenological design, research questions, and procedural design of the study were explored and defined. All aspects of this study were designed to ensure alignment with the overall purpose and goals of the study and to stay true to the qualitative methodology. During Chapter Three, the participant selection process, data collection with an emphasis on instruments, and other research-related concerns were discussed. Chapter Three was concluded once enough procedural and structural information about the study had been provided to support consideration for repeated examinations in the future.

Design

The qualitative research design was defined as a process of inquiry occurring within a natural setting intended to understand a social or human problem (Creswell & Poth, 2018). In qualitative research, the inquiry process was based on building a deep, rich image of a given topic formed with written descriptions reporting the views, beliefs, and dispositions of the participants (Creswell & Poth, 2018). As opposed to a focus on quantitative aspects of a problem, qualitative research placed emphasis on developing understanding through people's actions, words, and documents to discover patterns of contextual meaning among data (Creswell & Poth, 2018). The qualitative method of phenomenological research was focused on investigative research used to gain an understanding of views and experiences about a central phenomenon (Moustakas, 1994). Specifically, phenomenology was most appropriate for this study in that it lent itself well to the examination of teachers' experiences of the challenges of written expression among students with ASD in that it emphasized building deeper meaning and understandings on a particular phenomenon through the participants' lived experiences. The phenomenological approach has allowed researchers to develop deep and rich descriptions of human experiences within the context in which they occur. Developing rich descriptions of experiences within a context has been helpful for researchers to understand individual and group experiences of a given phenomenon.

Phenomenology was selected as the research design for this study due to the nature of the primary research question – it was open-ended and focused on a collective experience. Moustakas (1994) wrote that research must focus on the wholeness of experience in a search for the true meaning of those collective experiences. The strategies and methods of qualitative data analysis that were recommended by Moustakas (1994) allowed for a thorough examination of the

transcribed data from interviews, focus groups, and observations as planned in the research data collection process. The purpose of this study was to understand the shared experiences of special educators as they worked with students with ASD in the content area of written expression, thus the purpose of the study was suited to a phenomenological approach as opposed to the case study or other qualitative methodologies. Researchers utilized the grounded theory approach to construct new theories through the collection and analysis of data (Creswell & Poth, 2018). As there was no intent to develop a unique theory, grounded theory was not appropriate. Other research approached that function within the context of culture and history are the ethnographical and historical qualitative methods (Creswell & Poth, 2018). Ethnography and historical qualitative methods were also poor choices for this study in that there was almost no focus on culture and history. Due to the case study method of qualitative research focusing on the singularity of the individual's experience with attention to plural realities due to subjectivity, this approach was also not selected for this study. In this study, a rich description of the phenomenon was provided by closely examining a collective of experiences. Quantitative designs were not appropriate approaches in this research in that they are more focused on objectivity and used to describe, test relationships, and examine cause and effect relationships (Creswell and Poth, 2018).

Transcendental phenomenology attempts to remove all biases and presuppositions about a topic or experience that requires the researcher to look at aspects in a manner as such as they have never experienced the phenomenon prior to the current examination, a new perspective on the experience (Moustakas, 1994). The transcendental phenomenologist only describes the phenomenon as it appears and understands an experience's meaning through intuition and reflection, committing his/herself to descriptions of the experiences as opposed to any

explanation or analysis (Moustakas, 1994). The transcendental approach was used with phenomenological research to focus on description and presented a fresh perspective of the teachers' experiences of the challenges of written expression among students with ASD while ensuring that personal bias did not cloud objective observations with judgment and suppositions.

Research Questions

The following research questions were central to this phenomenological research study. The first research question served as the primary, with the remaining questions as secondary to the first. The responses to these sub-research questions assisted in providing additional voice to the experiences of special educators instructing writing to students with ASD as sought through the central question of the study.

Central Research Question

What are the experiences of SPED teachers tasked with teaching written expression to high school students who have autism spectrum disorder (ASD)?

Sub-Research Question One

How do high school SPED teachers lead students with ASD to identify the rhetorical problem within the task environment at the planning stage of writing?

Sub-Research Question Two

How do high school SPED teachers guide students with ASD to access their long-term memory on a specified topic during the translation phase of writing?

Sub-Research Question Three

How do high school SPED teachers guide students with ASD through the reviewing phase of the writing process?

Setting

This research was completed within the context of Southern State public schools, located within the middle section of the eastern seaboard of the United States. Specifically, teachers in high school classrooms in the public schools of PCSD in Parker, Southern State that contained a certified educator serving at least one student with ASD in the academic area of written expression were targeted as a source of data collection. PCSD contained seven high schools, all of which also contained robust SPED departments. Pseudonyms were utilized for both individuals and school sites to protect the identity of those involved in the study (see Appendix B). PCSD had an elected Board of Commissioners overseeing the direction of the district and a superintendent managing the day-to-day operations. PCSD functioned from the top down in terms of administrative structure: (a) Board of Commissioners, (b) Superintendent, (c) Executive Directors, (d) Directors, (e) Coordinators, (f) Principals, (g) Assistant Principals, and (h) Assistant Administrators (Parker County School District, 2019). Within the context of the high schools, both classified and certified employees were present to complete a variety of tasks necessary for building management, teaching, and learning. Additionally, each school site within all of these traditional 9-12 public high schools maintained a full staff of special educators and multiple levels of special education service delivery, to include both pull-out and inclusive models (Parker County School District, 2019; Southern State Department of Public Instruction, 2019). Each school site selected for consideration of participants served at least one, but likely multiple, students identified as having autism Spectrum Disorder.

The schools in PCSD were utilized for this study to ensure demographic diversity in terms of race, gender, socio-economic status, and primary language. The midlands region of Southern State, where PCSD is located, provided a balance of these demographics, with the

upstate comprising more heavily of affluent Caucasians and the lower state comprising more heavily of African-Americans and those in the lower socioeconomic group (Southern State Department of Public Instruction, 2019). All of this demographic data was collected as part of the individual interview process. Although this demographic data was not critical to the pure intent of the study, it was important to have access to a diverse group of demographics to support the concepts of reliability and repeatability. According to the Southern State Department of Public Instruction (2019), the schools of PCSD were racially comprised of roughly 60% African-American; 30% Caucasian; and 10% Hispanic/Other, with about 87% of these students falling below the national poverty index, qualifying for free or reduced-price lunches.

This specific setting was selected due to the prevalence of access to students identified as requiring specialized educational services. PCSD had a higher rate of identification of students with special needs as compared to the state average of 12.7% (Southern State Department of Public Instruction, 2019). Parker County School District (2019) noted on their website that 14.3% of their student population of a little over 24,000 students had been identified as requiring special services. There was also an emphasis on the entire high school 9-12 spectrum of services as opposed to certain categories of students with special needs to support the concept of maximum variation. SPED teachers served some of the students with ASD in these schools within autism self-contained settings, but many students with ASD were served via specific learning disability settings or mild/moderate intellectual disabilities settings. This provided for the sampling of the entire spectrum of teachers of students with ASD, both Low- and High-functioning. Finally, PCSD was selected out of convenience to this researcher's employment in the district as well as personal residence.

Participants

The target population for this study was comprised of roughly 95 certified special educators employed at the high school level in PCSD who were teaching or had taught at least one student with Low- or High-functioning ASD written expression and composition. The minimum sample size would be no less than 12-15 with a focus on maximum variation and a continued effort to add additional participants until thematic saturation was achieved (Patton, 2015). Data saturation references the point in the research process when no new data was uncovered during analysis. This repetitive data indicates that the collection of additional information may not be necessary and could potentially yield only similar results (Creswell & Poth, 2018). Phenomenological researchers often used purposive sampling to avoid probability in population, ensuring that subject selection was based on a given phenomenon, characteristic, and/or shared experience, and to ensure the selection of information-rich cases (Patton, 2015). Purposeful sampling was utilized in this study to ensure that all participants were experiencing or had experienced the phenomenon central to the study, that they had lived the experience of teaching students with ASD in the subject of written expression. Procedures for sampling were purposeful and of a formal nature –potential participants were identified based on the criteria for participation: certified special educators serving at least one student with ASD in the academic area of written expression. The procedure for acquiring participants was selective invitation based on school district approval and recommendation. Initial contact was allowed from the school district on this researcher's behalf via invitational email, including information regarding the purpose of the study. Once a willingness to participate was confirmed, a direct follow-up was used to determine the subject's level of desire in participating in the various aspects of the study.

Procedures

Two primary steps were necessary for acquiring the requisite permissions to proceed with the study. The first major step was to present and obtain an assented request for research (see Appendix B) from the Local Education Agencies (LEA) considered as part of the participant base and setting of the study. These types of requests were typically submitted to a school district's Assessment Department or Accountability, Assessment, Research, and Evaluation Department. IRB approval was applied for and received (see Appendix C) before reaching out to any potential participants or collecting any data. Once LEA IRB approval was acquired from the school district, the Liberty University IRB process was initiated by the submission of an application of approval. Once approval was received from Liberty University IRB, a return to LEA level was necessary to identify appropriate school sites and potential employees as participants in the study based on the characteristics desired.

This proposal included well-vetted interview and focus group questions, as well as any other instruments of evaluation such as demographic polling via questionnaire (see Appendix D). These questions were vetted by educational professionals at the university level with expertise in the fields of phenomenological research and special education. To find interview and focus group subjects, the next step was to provide invitations of participation to the potential participants of the study – PCSD's Accountability, Assessment, Research, and Evaluation Department facilitated this process via email. These invitational emails (see Appendix E) were provided to site-based administrators to then forward to relevant staff. The initial research participation survey emails included informed consent (see Appendix F) documents. Once informed consent documentation was in place, the study proceeded with contact of the participants and data collection.

Once the educators agreed to participate, interview times were developed so that individual responses and data could be collected. To ensure convenience and to maximize participation, the video-conferencing software Microsoft Teams was utilized to facilitate the interviews and focus groups. The interviews were completed with individuals and data recorded through Microsoft Teams and by scripting. There was full transcription of the audio recording data so that all of the interviewee's expressions and meanings were captured (Moustakas, 1994). Subsequently, this process was repeated for the focus group sessions at the same or similar participant sites, again transcribing all verbal data. Once all data was collected, it was analyzed for themes, patterns, and potential meaning through the act of coding (Moustakas, 1994). Following the focus group data analysis process, classroom observations were conducted in the natural setting of the classroom, or via Microsoft Teams if necessary, to ascertain a deeper understanding (Creswell & Poth, 2017; Patton, 2015). The data collected from these participant observations was cross-referenced and analyzed with existing data to develop and synthesize composite textural and structural descriptions (Moustakas, 1994).

At this point in the study, all data was compiled and triangulated to draw a greater grasp on the meaning of the teachers' experiences of the challenges of written expression among students with Low- and High-functioning ASD. Once this set of steps was completed for all participants and the researcher, a composite textural-structural description of the meanings and essences of the experience was built, integrating all individual textural-structural descriptions into one that represents the experience of the whole group (Creswell & Poth, 2018; Moustakas, 1994). These results, findings, and conclusions were reported in Chapters Four and Five. Working within the guidance of dissertation committee members, the final dissertation was completed and edited as needed. Finally, once the defense of the dissertation was successful, the

research findings and dissertation were published, making them public, or revised as directed by the committee members.

The Researcher's Role

In this phenomenological research, I served as the primary instrument for data collection, the human instrument (Creswell & Poth, 2018; Moustakas, 1994). All data during the course of this research study flowed through me and my dispositions and philosophical assumptions (Creswell & Poth, 2018). When considering my motivation to research the topic of written expression skills among students with Low- and High-functioning ASD, I was immediately reminded that I am led by both an educator's and an uncle's heart. My experience as a K-12 educator and administrator has made it clear to me that there is still much to be learned about the child with autism and his or her preferences for learning. My work as a school-based administrator also demonstrated a clear connection to the selected setting for this study, the high school learning environment. Those same experiences provided me with a basis for understanding the backgrounds, training, and general philosophical assumptions of the study participants – high school teachers of students with ASD. I was also extremely familiar with the structure and function of SPED departments within a high school, the SPED evaluation process, and the designation of students with ASD within the context of SPED. With all this being said, I understood that I could not let my position as a high school principal within PCSD impact my work as a researcher or the participants involved in the study in any manner. Throughout my study, I did not work with participants that I have authority over and worked only with those participants at other schools in the district with whom I have not had any working relationships. As the human instrument for this study, I evaluated the data provided from participant interviews, focus groups, and observations to synthesize collective meaning through rich

descriptions. I consistently watched students with ASD struggle to find their niche in the school community, both in terms of social structures and academics. As an observing administrator, I often longed to assist them, with limited knowledge of how to do so.

As I reflected, these were the two primary motivators to the selection of my research topic. Realizing these motivators allowed me to discern that I will see my research through a very particular lens –through my experiences. My experiences and interactions over time within the context of the topic have provided me with a set of assumptions and biases. I was a 44-year-old white male high school principal with a nephew with autism and served as a practicing Christian. This created a paradigm through which I viewed most of life's experience, to include this research topic. I had the belief that all children can learn and that students with ASD were no exception to that rule. With the proper intervention, students with ASD could be successful in school-based communication skills of both a verbal and written nature (Asaro-Saddler, 2016). I could not allow too much of this perspective to influence my work as a researcher. Although the mind frame could not be avoided completely, I worked to find a balance between my subjectivity and objectivity of the perceptions I record (Moustakas, 1994).

To provide a transcendental assessment of the data I collected, it was necessary to ensure that I was focused on remaining an outsider to the process as opposed to someone with considerable experience (Moustakas, 1994). My role was to describe and report, more so than to test a hypothesis or explain. Furthermore, my role was to build understanding and meaning about the topic based on participant response and classroom observations, more so than to attempt to make recommendations or judgments (Moustakas, 1994). As an educator with many years of experience serving students with autism, I found it difficult to separate my thoughts and feelings from my evaluation of the teachers' experiences. Moustakas (1994) called the freedom from

judgments and presuppositions in phenomenological research epoché. Epoché meant that essentially only the researcher's perception might point to the truth of an experience (Moustakas, 1994). This state of epoché was the first step towards transcendental-phenomenological reduction, which is describing only what you see within a context of experience (Christensen, Johnson, & Turner, 2010; Moustakas, 1994). This process is transcendental in that the observed phenomenon was treated as if it is was brand new experience being witnessed for the first time (Moustakas, 1994). Again, the achievement of epoché was challenging for me due to my close involvement with students as an administrator, and my clear involvement and dedication to the development of my nephew. I had clear dispositions about the proper education and therapy for students with autism and had to be very deliberate and intentional about focusing on the newness of my work in completing this study.

Allowing the overall experience to be viewed or reported on from a variety of perspectives was critical to the concept of imaginative variation and horizonalization. Through this process, I derived structural themes through observations and other data points. This led to the final step in the phenomenological research process—synthesis. Moustakas (1994) stated that in the phenomenological model he utilized "the structural essences of the imaginative variation are then integrated with the textural essences of the transcendental-phenomenological reduction to arrive at a textural-structural synthesis of meanings and essences of the phenomenon or experience being investigated" (p. 36). At this point, the phenomenologist worked towards the deepest understanding, or truth, about the lived experience (Moustakas, 1994).

Data Collection

The primary medium for data collection for phenomenological studies has been the interview (Moustakas, 1994; Rubin & Rubin, 2012). Interviews with educators drove much of

the data collection for this particular qualitative study. Focus groups were also utilized as a follow-up to the interview process to engage educators in reactionary discussions regarding similar topics reviewed during the individual interviews (Kruger & Casey, 2014). Microsoft Teams video-conferencing was utilized to collect interview and focus group data. To gain even deeper meaning regarding the phenomenon of study, research observations of special educators working with students with ASD were completed (Patton, 2015). Since current social conditions deemed some face-to-face research observations inappropriate, instructors were asked to allow a Microsoft Teams link into the classroom. Data was not collected prior to IRB and local district approval.

Interviews

The interview design was semi-structured and interactive in nature to allow flexibility in probing the participants and to allow more exploration based on participant responses (Moustakas, 1994). Moustakas (1994) affirmed that the primary medium for data collection in phenomenology was the extended individual interview with those experiencing the phenomenon of research interest. I implemented open-ended questions to ensure the breadth and depth of answers from a variety of participants (Rubin & Rubin, 2012). The interview questions were as follows (See Appendix G):

1) Briefly describe your experience in working with students identified as having autism spectrum disorder in the school setting.
2) Please share your thoughts on how students with autism communicate in the classroom setting.
3) Please discuss how students with autism spectrum disorder approach learning in general.
4) Describe how you think your students with autism spectrum disorder experience writing.

5) Describe how your students with ASD approach writing assignments; try to focus on their cognitive process.
6) In working with students with autism spectrum disorder, please describe the connection or disconnect between written expression and oral expression. Describe the gap in performance you observe between students expressing themselves in writing and verbally.
7) Describe how your students with ASD embed multiple writing procedures and/or strategies simultaneously while working independently on a piece of writing.
8) Discuss how your students with ASD interact with their previous work on a writing assignment (text already written) as they return to the work at a later time.
9) Describe your experiences with students with ASD's behavior during writing exercises as it relates to signs of anxiety or inattention (behavioral response) in response to interacting with the writing prompt, problem, and/or rhetorical question.
10) Please share anything else you would like to share that could be valuable in understanding how you experience teaching written expression to high school students who have autism spectrum disorder.

The first question was designed to allow the participant to have a chance to become comfortable in the interview setting by answering a non-threatening and relatively straightforward question. Ideally, this question allowed for the development of a simple rapport between the participant and the interviewer (Patton, 2015). The second and third questions were broad in nature and focused primarily on the communication and learning styles among students with ASD. These were intended to serve as background questions and provide some insight into how the participants felt that students with autism Spectrum disorder could share their thoughts

and feelings. Watson and Lanter (2008) note that oral communication disorders are strongly correlated with student performance in writing expression. Furthermore, the communicative and language challenges of students with autism Spectrum Disorder have been widely documented, but researchers continue to struggle to come to terms with the uniqueness of the spectrum of characteristics presented by these individuals (Baron-Cohen, 2008; Happe, 1994; Mayes & Calhoun, 2003).

With question number four, the participants were asked to attempt to be empathetic and answer from the perspective of the child with autism. Patton (2015) emphasizes that this is often helpful in gaining new insights. The participant was required to reflect on his or her observations of students completing writing tasks and to share thoughts on the approach to written expression taken by students with autism with question five. This provided some insight into students' inability to cope with sensory-motor stimulation (Farrugia & Hudson, 2006; Lord et al., 2018). Information was gained on the behavioral tendencies of the child with autism when under the stress of writing (Donnellan, & Leary, 2012; Farrugia & Hudson, 2006; Lord et al., 2018). Furthermore, participant responses from this question provided valuable insight into the cognitive processes of students with ASD that may be evaluated for alignment with the cognitive process theory of writing (Flower & Hayes, 1981).

Question six was the first significantly complex question of the interview, as it required synthesis of the responses from several preceding questions. It was important to wait until the interview was significantly underway before asking challenging, higher-order thinking questions so that there was time for the development of participant comfort with the interviewer (Patton, 2015). At this point in the interview, the participants were relaxed and demonstrated a willingness to share freely without concern of judgment by the interviewer. Question seven

asked participants to reflect on their students with ASDs' ability to embed, the process of implementing multiple writing components at one time during the act of composition (Flowers & Hayes, 1981; Hayes, 1996). Some individuals with ASD also have intellectual disabilities and significant communicative difficulties that have led to the development of autism classifications of both Low-functioning and High-functioning (Channell et al., 2019; Karalunas et al., 2018; Lord et al., 2018). IQ scores dramatically vary among students with ASD, as do long term and working memory; thus, students approach cognitive tasks in very different manners (Channell et al., 2019; Karalunas et al., 2018). Working memory drove Flowers & Hayes's (1981) concept of embedding in the writing process.

With questions eight and nine, input was sought on how students with Low- and High-functioning ASD interacted with the task environment during written expression. The task environment was one of the major components of the cognitive process theory of writing (Flowers & Hayes, 1981; Hayes, 1996). It was comprised of the rhetorical problem (topic, audience, and exigency) and the text produced thus far in the composition process by the writer (Flowers & Hayes, 1981). Question eight focused on the child with ASD's interactions with previously written texts, linking the complex processes of writing to ideas of long-term memory and synthesis. Question nine requested input on how students with ASD engaged and responded to the challenge of the rhetorical questions. The goal was to understand how cognitive dissonance during the writer's grappling with the task environment manifested itself in behavioral presentations common among students with ASD. Researchers have demonstrated that many of these behaviors manifested as presentations of anxiety, paranoia, and/or depression and may significantly affect the learning environment and individual cognitive stability (Farrugia & Hudson, 2006; Lord et al., 2018). Question ten allowed for a wrap-up of the interview and for

the participant to share any lived experiences not drawn out by the interview questions presented by the interviewer (Patton, 2015).

Focus Groups

Focus groups were formed primarily from departments within a particular school setting that served the student population of focus; for example, a special education department or a group of general educators of inclusion. Focus group sizes were set at four individual participants and included previously interviewed participants (Kruegar & Casey, 2014). Four focus groups were held among designated participants. These focus group sessions were held in a vacant or unused classroom within the school-based site after school to create convenience in participation for the subjects. The participants' responses were captured by audio recording via Microsoft Teams video-conferencing and through scripting. A complete list of focus group questions are listed in Appendix H.

Question one was aligned with the primary interest and topic of the dissertation research project. It provided insight into the nature of the experience of teaching writing to students with ASD and uncovered many of the challenges facing such teachers in the instructional area of written expression (Donnellan, & Leary, 2012; Farrugia & Hudson, 2006; Lord et al., 2018). This question aligned with the interview questions two through six. Question two was aligned with interview question seven, and focused on the SPED teachers' experiences in engaging students with ASD in the process of embedding as described by Flowers & Hayes (1981; Hayes, 1996).

Question three was designed to gain insight into how teachers experience guiding students with autism to interact with the task environment as defined within the CPTW (Flowers & Hayes, 1981; Hayes, 1996). It served as a two-part question focusing on how teachers help

students interact with the current text and throughout the process of writing with the rhetorical question. This question aligned well with interview questions eight and nine. With question four, the goal was to gain insight into teacher experiences of how students react behaviorally to the instruction in written expression, particularly when interacting with the task environment as defined by Flowers & Hayes (1981; Hayes, 1996). The goal was to get a rich description of how typical autistic behavioral presentations influenced teacher experiences, and what the cognitive dissonance students with ASD experienced when engaged in the writing process (Donnellan, & Leary, 2012; Farrugia & Hudson, 2006; Lord et al., 2018). Question five aligned with interview question ten, and allowed for a wrap-up to the focus group and for the participants to share any lived experiences not drawn out by the interview questions presented by the group facilitator (Patton, 2015).

Observations

Research observation has been an accepted form of data collection among phenomenological researchers (Patton, 2015). In support of the primary research question, observations were focused on the dispositions of teachers when working with ASD students during writing instruction. In support of sub-research question one, observations also attempted to examine the students with ASDs' process of embedding and how they seemed to be implementing multiple writing strategies and concepts simultaneously. Finally, in an effort to discern a better understanding of the second sub-research question, how the students with ASD interacted with the task environment was examined – that is the previously written text and the rhetorical question.

During the observations, both descriptive and reflective field notes were kept as guided by the observation protocol document (see Appendix I). The descriptive field notes provided

detailed information on what was seen, heard, and experienced, as well as specific content, language, and actions. When writing reflective field notes, an account was provided of what was learned while completing the observation. Researcher thoughts and feelings on the data collected were written within the descriptive field notes. All observations were scheduled with the appropriate school personnel in advance. During the interviews, this researcher served as a non-participant. The goal was to acquire permission to complete one classroom observation for each teacher interviewed as the special educators interacted with students with ASD during a period of writing instruction, roughly 30-45 minutes. In some cases, societal conditions did not allow for classroom visits, and the participant educators were asked for the researcher to observe their instructional experience via Microsoft Teams.

Data Analysis

All data collection methods yielded discernable data (Creswell & Poth, 2018; Saldana, 2016). That data was analyzed through qualitative methodology. The intention was to identify, examine, and interpret patterns and themes in textual data and determine how that data helped to answer the central and sub-research questions.

Interviews & Focus Groups

Specifically, the modified Stevick-Colaizzi-Keen method was utilized, described by Moustakas (1994), and the data found in the transcripts of individual interviews, focus groups, and observation notes was analyzed. These transcriptions were developed in one of two manners. In addition to scripting during the interview/focus group sessions, the interviews and/or focus groups were completed via Microsoft Teams video conferencing, which had the capabilities to provide a written transcription of the video meeting. The Stevick-Colaizzi-Keen method emphasized that the researcher was the first informant to contribute to the research and

essentially that data analysis began at the onset of data collection (Moustakas, 1994). The process employed phenomenological reduction, which includes bracketing, horizonalization, organizing invariant qualities and themes, and constructing textural descriptions (Merriam, 2009; Moustakas, 1994). Phenomenological reduction refers to the process by which a researcher seeks to get to the pure essences of the phenomenal experience through the mental dismissal of subjectivity (Moustakas, 1994). During the interview and focus groups, information provided by respondents was restated or summarized and then the participant was questioned as to the accuracy to determine the validity of the statements. This type of member checking was important to the qualitative analysis to help improve the accuracy, credibility, validity, and transferability (Byrne, 2001; Creswell & Poth, 2018). By coding and horizonalizing participant expressions, a researcher in a state of epoché builds true meaning about a phenomenon through structural and textural descriptions (Moustakas, 1994; Saldana, 2016). The coding of textual data and recognition of themes was completed by hand and through the qualitative data analysis software Qualitative Data Analysis Miner Lite (QDA Miner). However, it was found that hand coding and analysis yielded better results than those suggestions provided by the software.

One reason this method of analysis was utilized was the clear steps identified by the designers. The initial analysis steps required the researcher to (a) consider each statement for significance in terms of describing the experience, record relevant statements; (b) list non-repetitive and non-overlapping statements (these are the invariant meaning units); (c) relate and cluster the meaning units into themes; (d) synthesize the units and themes into a description of the textures of the experience; (e) reflect on the textural description and through imaginative variation; (f) build a description of the structures of the experience; and (g) then construct a textural-structural description of the meanings and essences of the experience (Moustakas,

1994). While segments and themes were synthesized into a description of the texture (the what) of the phenomenon, imagination variation was implemented to consider that textural description from a variety of different perspectives. Doing so led to the realization of the structure (the how) of the phenomenon. Moustakas (1994) referred to the merging of these descriptions as a textural-structural description. Moustakas (1994) defined a textural-structural description as a thorough representation of each participant's responses clustered by structure and theme as they related to describing the shared experience (Creswell & Poth, 2018; Saldana, 2016). Once this set of steps was complete for all participants and the researcher, a composite textural-structural description of the meanings and essences of the experience were built, integrating all individual textural-structural descriptions into one that represented the collective experience of the whole group. While describing the findings through analysis, each named theme was addressed, describing the meaning taken from that data supported by evidence. Those findings and well-defined collective experiences were related to the central and sub-research questions to provide conclusions to the study, give voice to teachers' experiences, demonstrate knowledge added to existing literature, and share implications for future research (Creswell & Poth, 2018; Moustakas, 1994; Saldana, 2016). While relating the findings to the central research question of the study, themes that described the general experience of high school special educations teachers instructing students with ASD in written expression were sought. The sub-research questions were answered by connecting relating themes discovered through analysis. Coded and themed data related to teachers assisting students with ASD to identify the rhetorical problem within the task environment was utilized to support answering sub-research question one. Thematic materials related to the writer's long-term memory during the translation phase of writing was connected

with sub-research question two, and any themes describing the review phase of the writing process was related to sub-research question three.

Observations

Although the process of analyzing the data collected in the descriptive field notes and personal thoughts and dispositions in the reflective field notes followed similar tenets to those of the Stevick-Colaizzi-Keen method, the process varied a bit from the strict coding of transcriptions. All descriptive field notes and journal entries were reviewed and data was coded similarly to the transcripts of interviews (Patton, 2015; Saldana, 2016). However, the reflective field notes and journal entries changed a bit over time and required delayed analysis based on the researcher's personal reflections. This researcher felt there would be an immediate reflective or emotional response to some of the descriptions and that would be documented quickly; however, as the descriptive field notes were coded, the reflections and thoughts on the observation of the experiences and the teachers' thoughts and feelings evolved and thus changed the reflective field notes and journal entries. The reflective field notes were allowed to become living documents as this researcher worked through the process of analyzing these data for codes, themes, textures, and structures. Although the observations were non-participatory in nature, a deep, patient reflection of the experiences and descriptions of the classroom observations would yield powerful connecting data when reviewed in triangulation with interview and focus group data review results (Creswell & Poth, 2018).

Trustworthiness

Trustworthiness addressed credibility, dependability, transferability, and confirmability. Since qualitative researchers do not use instruments with established metrics about validity and reliability, it was pertinent to address how the research study's findings were credible,

transferable, confirmable, and dependable (Creswell & Poth, 2018). By doing so, it was demonstrated to the reader that the findings of this study were true, accurate and not clouded by personal assumptions or judgment.

Credibility

The richness of the data collected in this study lent itself to credibility; thus all interview, focus groups, and field notes were grounded in the literature and reviewed by experts (Creswell & Poth, 2018). A complete and comprehensive list justifying each question provided to participants was included in the question selection justifications. Every effort was put forth to build structural-textual descriptions and eventually structural-textural composites for consensus understanding that included prolonged engagement and multiple data points.

Dependability and Confirmability

To ensure dependability and confirmability of the research results, the following actions were taken: (a) created an audit trail; (b) implemented an external audit review; (c) allowed expert review of questions; (d) ensured the use of triangulation of data when coding for themes, (e) use of member checking, etc. (Creswell & Poth, 2018; Patton, 2015). Confirmability involved the establishment that the research findings were related to the participants' responses and observations as opposed to this researcher's personal dispositions and biases (Patton, 2015). An audit trail, which supported confirmability, was one such demonstration that this researcher proceeded through a transparent coding process and developed a rationale for clustering invariant meanings into themes (Moustakas, 1994; Patton, 2015). Having an external audit of the research conducted lent to the credibility and accuracy of the findings of this research study. These external audits also provided the opportunity for the research findings to be challenged which in turn, led to this researcher's return to reflective practice in an effort to strengthen the research

(Patton, 2015). This proposal also included well-vetted interview and focus group questions. These questions were vetted by educational professionals at the university level with expertise in the fields of phenomenological research and special education to support dependability and confirmability (Moustakas, 1994). Finally, a triangulation analysis was implemented to support the confirmability and validity of the research findings through a convergence of data from multiple sources (Patton, 2015).

Transferability

Transferability referred to the extent that the results of this research study could be generalized to other settings (Creswell & Poth, 2018). A thorough description of the context and assumptions were provided that were key to the study (Creswell & Poth, 2018). Lincoln and Guba (1985) supported this assertion when they stated that the most effective manner in which to demonstrate transferability is to provide a thick description of the phenomenon. These rich descriptions helped the reader construct the scene that surrounds the research study, from the daily lives of participants to the way that implicit biases might have affected their responses (Lincoln & Guba, 1985). To support the trustworthiness aspect of transferability, it was important to select participants who would allow for a wide sampling demographic, ensuring maximum variation (Patton, 2015). Transferability was considered similar to generalizability, or external validity, in quantitative research; it was established primarily by providing the readers with evidence that the findings of the study could apply to other locations, situations, times, and participant groups (Patton, 2015).

Ethical Considerations

In terms of ethical considerations of this phenomenological study, a foremost concern was the acquisition of IRB and local district approvals to proceed with data collection. Without

this approval, the study could not have advanced to the data collection process. Close adherence to informed consent procedures was ensured. To address the confidentiality of sites and participants, pseudonyms were assigned to participants and school sites and every effort was made to ensure anonymity. All data was secured in a locked file cabinet in this researcher's home and all digital records were password protected for a period of three years, then destroyed. Through the research, this researcher considered the influence of position in relation to participants and considered the concepts of debriefing and the impact of research on all educational constituents (Creswell & Poth, 2018; Patton, 2015). Although this researcher did not know the participants or have any prior interactions with them, it was important to realize that many viewed this researcher as a school administrator and immediately had preconceptions about personal intentions and were leery to share their whole truth with during individual interviews and/or focus groups (Moustakas, 1994; Patton, 2015).

Summary

The purpose of this transcendental phenomenological study was to describe high school SPED teachers' experiences in teaching written expression to students with ASD in PCSD, located near the mid-eastern seaboard of the United States. Through the lens and guidance of the cognitive process theory of writing, data was collected through interviews, focus groups, and observations and analyzed for themes and patterns via the Stevick-Colaizzi-Keen Method of qualitative analysis. The results of the study were then shared and discussed to build an understanding among readers regarding educators' experiences of the challenges of teaching written expression to students with ASD. The study also gave voice to the special educators' experiences while guiding students with ASD through the various components of the writing process as defined by the CPTW.

CHAPTER FOUR: FINDINGS

Overview

Chapter Four is comprised of four sections – a concise overview of Chapter Four, a rich description of the participants, an explanation of the results, and a brief summary of the chapter. The purpose of this transcendental phenomenological study was to describe high school special education teachers' experiences in teaching written expression to students with autism spectrum disorder in Parker County School District, located near the mid-eastern seaboard of the United States. In the results section of this Chapter, the participants were introduced and data shared from observations, focus groups, and observations as well as how that data was analyzed and processed. The data was presented in themes and utilized these to answer the central research question and all three sub-research questions in a narrative manner.

Participants

In selecting participants for this research study, potential candidates were identified based on the criteria for participation: certified special educators serving at least one student with ASD in the academic area of written expression; thus, the sampling was purposive. Purposive sampling was utilized to ensure that all participants had experienced the phenomenon central to the study. The procedure for acquiring participants was one of selective invitation based on school district approval and recommendation. Initial contact was allowed from the school district on this researcher's behalf via invitational email that included information regarding the purpose of the study and informed consent. Once a willingness to participate was confirmed, this researcher followed up directly to determine the subject's level of desire in participating in the various aspects of the study. Below, a rich, detailed description is provided of each participant of the study. Various demographic, experiential, and observational information was obtained in an

effort to create a portrait of each individual who participated in the study. During interviews and focus groups, data was member checked by restating and summarizing information and questioning study participants for accuracy. The individuals were described in the order in which this researcher encountered them while collecting study data. To ensure anonymity, participants were assigned realistic pseudonyms that were reflective of the culture of each individual.

Amy

Amy was a white female. She was very well spoken and articulate. Amy spoke in a very region-neutral accent. Amy's disposition was calm, but she demonstrated a tendency to tap on things. Amy was a participant in an interview, focus group, and observation. She had been teaching special education to middle and high school students for roughly 21 years. Although her teaching certification was multi-categorical, Amy had primarily served students on the resource continuum of special education services. Her students presented with a variety of disabilities to include, but not limited to specific learning disabled, autism, emotionally disabled and other health impairments. During both the interview and focus group, Amy was an eager and engaged participant. As mentioned, her demeanor was calm, but her voice became excited when responding to student-specific questions, particularly during the focus group when interacting with other special education teachers, often noting, "I totally understand what you're saying, I experience that all the time with my kids as well." Through her responses to the interview and focus group questions, Amy was perceived to be very well versed in teaching written expression to students with disabilities, including students with autism. Her responses were thoughtful and, on several occasions, asked for a moment to consider her response by stating, "Let me take a minute and think about that before I respond." During the observation portion of Amy's participation, she was very calm and direct while working with several students (one of which

was autistic) on a writing assignment. Her demeanor in the classroom as a teacher was very similar to her manner during the interview and focus group. However, it should be noted that Amy utilized humor while working with students; that did not translate during her responses to the inquires.

Brenda

Brenda was a white female. Her voice was meek, and at times, sounded as if it was trembling. Brenda's disposition was reserved and shy, at times sounding very hesitant to respond to questions. Brenda spoke with a thick southern-style accent. Brenda was a participant in an interview, focus group, and observation. Brenda was a novice educator, this being only her second year in the field and as a special educator. Specifically, Brenda held certification in special education with a focus on moderate intellectual disabilities. This population of students are often referred to as the trainable mentally handicapped. Although she served as a teacher in a moderate intellectually disabled classroom, her students were multi-categorical, including mildly intellectually disabled, moderately intellectually disabled, autistic, and other health impaired. It was clear from the questions and observation that Brenda had a deep compassion and commitment for these significantly disabled students – this was clearly her passion. She noted, "I can't explain it, but I'm drawn to serve these children. I simply love them." Brenda seemed to be a shy person. Although she willingly participated in the study, she came across as lacking confidence and self-efficacy. Her responses were often insightful during her interview participation, but broken in speech and spoken without much conviction. During the focus group, the other educators often dominated the conversation, and it seemed as if Brenda was willing to sit back and allow them to share. She only shared during the focus group when prompted by one of the other educators or when this researcher asked for her thoughts on a given question. In

contrast, Brenda was energetic, encouraging, and engaged as she worked with two students with ASD on a writing assignment during the observation. She smiled, spoke fluently, and facilitated a positive emotional climate in which these students could participate in the writing assignment.

Carl

Carl was a white male. His voice was melodic, but Carl spoke very quickly and with much modulation, and this researcher often had to ask him to repeat his response to confirm understanding of his meaning. He also spoke with a region-neutral accent. There was a frenetic energy about Carl, akin to hyperactivity. Carl would barely sit still during both the interview and focus group and demonstrated a lot of movement in the classroom during the observation. Carl was a participant in an interview, focus group, and observation. Carl was an experienced special education teacher, serving students for almost 24 years. Yet, he presented as very humble, stating, “I’ve made it this long in special education because I’ve always been able to learn from great colleagues.” Most of his years of experience were in the area of emotionally disabled students, but he had also served specific learning disabled and students with ASD as well, primarily in a self-contained setting. At the time of this interview, Carl was the teacher in an emotionally disabled special education classroom that contained multi-categorical students including, but not limited to autistic, emotionally disabled, and other health impaired. He often used run-on sentences and jumped topics, almost presenting as an individual with ADHD. Carl often smiled when speaking about his students with ASD and noted, “they are some of my best kids, and sometimes I really enjoy working with them in writing.” It was evident that after more than two decades of service to special education children, Carl was still committed to their well-being and academic and emotional progress.

Dorothy

Dorothy was a white female. Her voice was firm and confident, at times borderline loud. Dorothy's disposition was energetic, outgoing, and confident, sometimes coming across as a bit boisterous. She often began her responses by restating, "I've had a lot of years of experience working with autistic students." Dorothy spoke with a slight southern-style accent. Dorothy was a participant in an interview, focus group, and observation. Although Dorothy has served special education students as an instructional assistant for roughly 20 years, this was only her second year as a certified special education teacher. Without prompting, she shared that she had served as an instructional assistant in several self-contained classrooms and was currently a teacher in a mild intellectually disabled classroom. Dorothy held certification in special education with a focus on mild intellectual disabilities. This population of students was often referred to as the educable mentally handicapped. Although she served as a teacher in a mild intellectually disabled classroom, her students are multi-categorical, including mildly intellectually disabled, specific learning disabled, autistic, and other health impaired. Again, without prompting, Dorothy noted that she entered the teaching profession at a late age, deciding to return to the university and complete her special education certification in her early 50s, and after about two decades of service to special needs students as an instructional assistant. Dorothy was quickly perceived as a kind individual. Although a bit arrogant at times about her extensive experience, she also mentioned several times that she "really loves these kids and want to help them like a special educator helped her child," now a high-functioning young adult with autism. She was very straightforward, direct, and quick to respond to the interview questions. Her responses were also concise and succinct in nature. When participating in a focus group, Dorothy was very open to participation and often spoke first when an inquiry was posed. She also seemed to have

follow-up comments to most of her colleagues' responses. During the observation, Dorothy was friendly with her students, but very direct, and it was clear that an environment of high expectations was present for all of her students, including those identified as having ASD. Her kindness towards students was also evident when she was required to quietly redirect one of the students with ASD not cooperating during the writing lesson.

Esther

Esther was an African-American female. She wore eyeglasses and her voice was very strong and resonant. Dorothy's disposition was very calm, focused, and confidently secure in self-efficacy. Esther spoke in a distinctly New York area accent. Esther was a participant in an interview and observation; she was unable to attend her scheduled focus group session due to a last minute conflict. Esther was a veteran educator of 37 years. Without prompting, she shared that she retired 6 years ago, but returned as a working retiree to continue serving the special education students in Parker School District. For the entirety of her educational career, she had served as a resource teacher and provided students with both pull-out and push-in/co-teaching service delivery. As a resource teacher for such a long period, she had reached students with every disability type served under special education. Although not arrogant, she was very proud of her service, noting:

> I have been around a long time and have been highly successful, but am still learning. Our students with autism, in particular, continue to change each year, and it has been interesting and a point of pride to keep up with the evolutions along the spectrum.

Esther had a sense of strength and control about her, but also brought about a feeling of familiarity and comfort when speaking. During the observation period, this contrast was evident in the manner in which the students behaved. They were highly compliant and there was very

little redirection necessary as Esther appeared quite strict in the classroom. However, they also referred to her as “Mama E” and one hugged her as he entered the classroom. Based on the ease of student interaction with Esther, it was evident through observation that strong relationships existed between the students and teacher.

Frank

Frank was a white male. The large beard contrasted his very thin body frame. His voice was clear and calm, and his speech pattern had a distinct cadence to it – very short and crisp. Frank appeared very focused and serious. He utilized very little humor or anecdotes when interacting with his students during the observation, and colleagues during the focus groups. Frank simply came across as a very direct and resolved high school special educator. Without prompting, Frank proudly shared that he was a member of the military for roughly 10 years prior to deciding to go into education. He had two licensure certificates – one in special education/learning disabled, and one in secondary history. He went on to share that he began his career as an educator by teaching human geography to ninth grade students, but after two years, he shifted into a special education resource position where he has been for the last three years. When asked why he chose to switch from general to special education, he replied, “although working with the ninth graders was a challenge, I saw that special education students in my classrooms needed the most help. That’s why I got into this field, to help those that needed the most help.” Frank’s personality and demeanor seemed to have been considerably shaped by the military. He sat and stood up straight when instructing his students and maintained his unique cadence through various aspects of conversations and instructional delivery. Even with the strict military training in his background, it was also clear that he was willing to be flexible and do whatever it took to help students succeed. During the observation, he noted to students, “if what

I'm doing isn't working, you need to speak up. I'll change what I'm doing if it will make you successful."

Georgia

Georgia was a white female. Her voice was warm and welcoming, accentuated by a thick southern accent. Of note, Georgia's classroom was quite a mess, with papers stacked up all over several desks and tables during the observation. Georgia participated in an interview, focus group, and observation. Georgia explained to that "special education is her life" and that "she couldn't live without these kids." In fact, she had served special populations for the entirety of her 28-year career. Georgia had served in a variety of special education service delivery settings, but most recently as a specific learning-disabled self-contained classroom educator. She served students with learning disabilities severe enough that the majority were not on a diploma track for graduation, but rather a high school credential. However, she noted, "my kids aren't slow; they just haven't had many opportunities to learn and write. I hate it for them, but some were never required to learn to write well in elementary or middle school." She gave off the impression that she believed in her students' ability to succeed, even if they were not on track to graduate with a full diploma. Georgia was very entertaining as she responded to interview and focus group questions. During the focus group, she responded to poignant comments by other special educators by saying, "I heard that." This usually elicited laughter from the group members. Her outgoing nature translated into the classroom as well, where she used considerable humor and vocal engagement strategies with her students to keep them focused on their writing. The relationships between Georgia and her students were well-defined and positive.

Harriet

Harriet was an African American female. Her voice was very soft and gentle in nature, and she presented with a consistent, kind smile. Harriet also presented as a fairly shy and humble individual. She noted at one point during the interview, “I feel like my students excel at times in writing, particularly as it pertains to responding appropriately to the prompt, but that’s not my doing – they’re just smart kids.” Harriet spoke with a thick southern-style accent. She was a participant in an interview, focus group, and observation. Harriet had served special populations for the past 12 years. Although the vast majority of her students were identified as specific learning disabled, she also served high-functioning autistic and other health impaired students as well. Her experience as a special educator had been as a resource continuum teacher, although she held a multi-categorical teaching certificate in special education. She stated during her focus group that she might be “interested in becoming a school psychologist one day,” noting that she desired to “understand the needs of students better.” Harriet’s demeanor during all three phases of data collection was calm, reserved, and patient. Although she appeared a bit shy, she demonstrated a strong rapport with her students during the observed writing lesson. She interacted with her students with fluency and it was clear that a positive emotional climate was present in the classroom.

Iris

Iris was a white female. Iris’ voice was smooth, delicate, and presented an air of calmness. She smiled often, and when combined with the steadiness of her voice, made this researcher feel at ease. Iris spoke with a mild southern-style accent. She participated in an interview, focus group, and observation. Iris had taught in special education for 20 years. Most of that time had been devoted to the resource level continuum of services, but she also had

experience as a learning-disabled self-contained instructor. Although very laid back and friendly in demeanor, Iris had high expectations for her students, noting, “I refuse to accept the perception that students with autism can’t write effectively. In my classroom, they will perform as needed. It’s my job to ensure they are successful.” This surprising firmness also came across during the observation of her writing lesson, as her redirections were very strong, and expectations for verbal participation among the writers were enforced regularly. During the focus group, Iris was very reserved, yet attentive. She rarely contributed unless prompted, but made several facial expressions when the other special educators in the focus group discussed the challenges of teaching students with ASD written expression. It almost seemed as if she disapproved of these comments.

Jerome

Jerome was an African-American male. His voice was distinctly low-pitched, but very welcoming. Throughout both the interview and focus group, Jerome kept a very serious, straight face. When other participants utilized humor, he did not seem amused like the rest of the group. This seriousness was evident through all three phases of data collection. Jerome noted:

> Some of our students only get one shot at having a successful life and we’re the equalizer, we have to make the difference as educators. If they can’t properly express themselves in writing, how can we expect them to be successful out there (in the world)?

Jerome had been working in special education for roughly 21 years. However, he mentioned that he began as a special education assistant, acquiring his certification to teach special education students a bit later in life than the average educator does. Once certified, Jerome began to teach in a learning-disabled self-contained classroom that served multi-categorical students to include learning disabled, other health impaired, autistic, and emotionally disabled. Overall, Jerome

appeared to be a very determined and dedicated educator with a disposition that his students must succeed, with failure not being an option.

Kailyn

Kailyn was an African-American female. Her voice was chipper, often high-pitched, and melodic. She was quite talkative, particularly during the focus group, and spoke with a region-neutral accent. Kailyn was very likable and seemed popular with her students during the observation period. She was tremendously friendly and outgoing, exhibiting an incredible amount of energy – even for a young educator. This was Kailyn's first year teaching special education. She seemed very excited to have the opportunity to teach, noting, "yes, working with autistic students is hard, really hard, but we have to find ways to better understand their needs so they can learn to be successful, even my low-functioning students." Although Kailyn was a self-contained teacher of students with ASD, she also served a couple of students with mild intellectual disabilities in her classroom as well. She also explained that the students with ASD in her classroom were all over the spectrum, some considered High-functioning and others Low-functioning – one of whom was completely nonverbal. Although she exhibited extremely positive energy regarding her position, during the observed instructional period, she struggled with managing the behavior outbursts by her students with ASD during the writing lessons. In general, Kailyn presented as a positive, motivated young special educator with a belief that all students can learn.

Lucy

Lucy was a white female. Lucy's voice was of medium-pitch and calming. She spoke in a mid-western style accent and presented as extremely intelligent, using a high level of both academic and conversational vocabulary. Lucy was trained as a school psychologist, but decided

to go into direct services because she "felt that was where the difference makers were in the educational system." Lucy had been teaching for more than twenty years and had served students with essentially every category of disability. However, most of the students served over her years of service were learning disabled, autistic, and other health impaired. Of note, Lucy mentioned that she "finds her autistic students the most interesting to work with as they differ so much from one another in terms of needs." Lucy's cerebral approach to understanding students with ASD also came across during the observation of her writing lesson with students. She used logic and rationalization to talk students through their resistance to writing and engaging with the prompt. She coupled this approach with her smooth, calming voice. Lucy clearly had a strong understanding of her students and their behavioral tendencies.

Results

Once all of the data was collected from interviews, focus groups, and observations, the transcripts and observation protocol notes were examined, and the researcher color-coded/listed significant and relatable statements. This focused data set was then utilized to realize codes resulting in the development of themes among the responses and scripts. Through Moutakas' process of horizontalization, unnecessary data was removed, and varied values were assigned to the reduced statements and script (1994). At this point, themes and subthemes began to emerge. A free version of the qualitative data analysis online software, Qualitative Data Analysis Miner Lite (QDA Miner), was utilized to examine the data for additional similarities (Provalis Research, 2021). QDA Miner was a qualitative data analysis software that was used for the analysis of textual data such as interview transcripts, open-ended responses, etc., but the hand coding was found to be more meaningful. The following section discusses these evolving themes and subthemes and eventually how they relate to the study's central and sub-research questions.

Theme Development

After the data from interviews, focus groups, and observation protocol notes were thoroughly examined, three distinct significant themes emerged. Additionally, several subthemes emerged that either function within the context of a major theme or were interrelated between multiple major themes. These themes were established through the coding of all member checked data, assigning value to the themes/subthemes, and determining the relationships among the data. This process began with ensuring the accurate transcription of the interviews and focus groups, as well as ensuring clear notes on observation protocol scripts. Like-data was color-coded for simple similarities, and a horizontalization process was utilized that was much more focused and specific, requiring deeper connections between the transcribed comments and observations. Shortly thereafter, both themes and subthemes were seen emerging and added value to certain commonalities in the experiences of the participants. From this analysis, a detailed story surfaced that allowed connection to the emerging themes and subthemes into a textural-structural hierarchy of sorts, as modeled in Figure 2 (also see Appendix J). This complex network of common experiences was utilized to eventually respond to the central and sub-research questions.

Theme 1: Resistance to Begin Writing

One of the most predominant themes extrapolated from the data was the resistance to begin writing. This phrase referred to the teachers' experiences with the unique challenge of getting students with ASD to engage in the writing process from the very start. It also alluded to the special educators' perception that students with ASD often resist engaging with the prompt or rhetorical question. Ten of the twelve interviewees shared that students with ASD, both Low- and High-functioning, often had a difficult time grappling with the prompt or purpose in writing.

Several subthemes emerged from the theme resistance to begin: (a) importance of relevance, (b) process of rationalization, and (c) behaviors.

Resistance to begin writing – the importance of relevance. Eight of the twelve participants noted that the concept of relevance or meaningfulness as related to the topic or purpose of the writing was an important factor in encouraging students with ASD to engage in the planning phase of writing. One of the first cognitive processes identified in the schema of writing, as defined in the cognitive process theory of writing, is the individual's engagement and interaction with rhetorical questions, or prompts (Flowers & Hayes, 1981). The shared experiences of the special educators who were interviewed and who had participated in focus groups provided insight into the teachers' disposition that when encouraging students with ASD to write, the concept of relevance was very important in finding success at getting the writing process started. Carl noted during his interview, "getting them started is sometimes the hardest part. They really resist moving forward a lot of the time because they don't find the topic of the writing worthwhile or relevant." Dorothy stated, "my autistic students are very hesitant to write, and my extensive experience leads me to believe that if the prompt doesn't strike a chord with the autistic child, then they won't even pick up the pencil."

The importance of using relevance to engage students was not a novel concept to this study. Several researchers addressed relevance as an important motivating factor related to writing assignments (Asaro-Saddler et al., 2015; Kang et al., 2015; Pennington & Delano, 2012). However, it clearly emerged as a shared belief among the special educators that the relevance of the rhetorical question was particularly important to engage students with autism in the planning stage of writing. Jerome noted during a focus group that:

> Yes, I agree that relevance is important. Although, I do feel like we have to teach these kids how to interact with and deal with issues and questions that they aren't interested in, having something in front of them that they can immediately connect with or that is important to them is a great way to get them to write.

In that same focus group, Kailyn stated:

> Agreed. If we want them to learn the process of writing, we're going to have to give them topics and prompts that they care about. I think that probably also lends itself to the authentic nature of their work. Autistic kids are tough and they'll dig in their heels if they don't have an opinion about or care about whatever it is that you're trying to get them to write about.

During Lucy's one-on-one interview, she shared that her students with ASD often presented a fixed mindset and that if a topic was not relevant; they may or may not be willing to complete the assignment or lesson. She stated that:

> The autistic mind seems to work in a variety of ways, but it seems like egocentrism is a factor. The students have to be interested in a topic or reason behind the writing and show particular willingness to write if they feel like they gain something from the process.

Although Iris noted that she felt that her students with ASD would "perform as needed" on all writing assignments, she also noted that "of course, if they care about the rhetorical question as you referred to it, they'll be much more likely to participate." Amy was keenly aware of the sentiment shared by Iris noting, "I think if you either give the autistic student choice on topic or provide a relevant prompt, you'll be in much better shape [to get them to engage]." Although Georgia noted that a relationship with the teacher was likely the primary motivating factor in

getting a student to grapple with the rhetorical question, she made a similar statement in her interview:

> I can tell you this, if the student cares about the topic or likes the subject matter, they are more likely to be successful. If they find it boring, it is an uphill climb to get the child to complete the assignment. Now, I can do it, but it isn't easy.

Georgia also stated during her interview, "it's a real fight to get them started. I'm not certain why, but they resist to respond to the prompt."

Resistance to begin writing – the process of rationalization. Another subtheme that evolved from the comments of participants as well as the script and notes from observations was the special educators' belief that rationalizing with students with ASD was often successful at getting them to begin interacting with the rhetorical question aspect of the writing. Many of the participants saw this process of rationalizing and helping the student with ASD think through the prompt or question as a type of intervention. Amy noted, "if you can walk them through their thinking, they are more likely to get a point in which they can successfully complete the assignment." Very similarly, Georgia noted during a focus group:

> Oh yes, they may not do it on their own, but if you sit down next to them and help them think through the process and rationalize how and why they could respond to the prompt, they are much more likely to get going. Of course, that doesn't mean not to let the students come up with their own ideas, but rather to scaffold their thinking with them as a help. You've got to help them make early connections with the prompt.

In that same focus group, Frank stated:

> If you aren't going to ensure that the kids care about the topic or that it interests them, I agree that you kind of have to walk their mind through responding to the prompt. In addition, it can take a while; the autistic student thinks a certain kind of way.

Lucy commented during her one-on-one interview that:

> These types of students, particularly the High-functioning type, are real thinkers. When they are done writing, they are done writing. When they have an idea as to what to write in response to a topic, they'll begin writing, but not before. Therefore, some external regulation through guided thinking and scaffolding in writing is pretty critical. At first, like when they are beginning the assignment, it may feel like we're [teachers] doing the work for the child, but really we're just helping them rationally work through the point of the exercise and their own thinking about the topic, or question, or whatever.

Additional examples were yielded of the shared experience of walking students through, or rationalizing, the need to respond to the rhetorical question when classroom lessons were observed. When observing Esther's writing lesson with three students, one of whom was a student with ASD, in her resource classroom, this strategy was evident. Without prompting, Esther stepped to the desk of the student with ASD and immediately began helping the student think through the prompt. This seemed as if it was a common intervention, as the teacher enacted it without any prompting by the student or observation of struggle. Esther remained very calm; reread the prompt, had dialogue about the prompt, and then provided some scaffolding for the student's interaction with the prompt to allow for some self-generated ideas by the student with ASD. An almost identical process was observed in Amy's classroom. Amy sat between two student's desks and went back and forth with both in turn, helping them rationalize and think through the process of getting started on the assignment and engaging the rhetorical question.

This process was very conversational, and Amy encouraged the students to speak as much as she was speaking – a balanced dialogue and brainstorming procedure. A very similar approach was witnessed of encouraging students to engage with the prompt of the day in Carl, Georgia, and Lucy's classrooms.

Resistance to begin writing - behaviors. The majority of participants referenced the manifestation of unique and sometimes disruptive behaviors as students with ASD began a writing exercise or process. It was determined that this subtheme could be linked to several major themes presented in this section, but it was mentioned primarily within the context of getting students to begin the writing process and engage with the rhetorical question (see Figure 2 and Appendix J). These behaviors ranged in content and severity – from minor disruptions to the writing process to the major disruption of the entire classroom and lesson. Carl shared that:

> My students can really get out of hand sometimes, particularly if I provide too much academic push. I work with some ED [emotionally disabled] kids, but my autistic students can be just as volatile. It can be scary at times. If they don't want to do something or don't want to think about the topic, they can really have emotional outbursts and sometimes a repetitive tic.

Dorothy shared similar thoughts about this challenge:

> Oh yes, behaviors definitely occur when my students with autism don't wish to write. They often shut down and refuse to participate in the lesson or writing assignment. Excuses are used like that they don't care or don't know what to write about. Rarely, does it become a large outburst, but I do have some students that will shout if I push them too much to get started.

Brenda stated:

> It would be silly to think that autistic students wouldn't have behavioral outbursts or other presentation when challenging them academically. Particularly in content areas such as literacy and writing. Part of the challenge of educating these students in writing is to get over their initial disagreeable disposition towards the assignment.

So, the participants shared with me their collective experiences of not only the challenge of getting their students with ASD to engage in the process of writing right from the start, but also that they often times had to mitigate negative or distractive behavioral presentations while in that process. Georgia mentioned during a focus group, "I love these children with all my might, but I get frustrated and angry when they won't attempt to write as I've asked them to; they just won't even get started and complain out loud." Sometimes these negative behavioral presentations are a bit more aggressive than simple complaints. During an observation of Carl's classroom, one student shouted to "leave him alone" when encouraged by the teacher to begin pre-planning his response to the prompt on the board. Although consoled and kindly encouraged by Brenda during an observation, two of her students, one of whom was autistic, decided to shut down and did not participate. The student with ASD put his head down and pretended to be asleep while Brenda attempted to lovingly redirect the child.

Theme 2: Lack of Focus

The co-morbidity rate of individuals diagnosed with ASD and ADD/ADHD was considerable over the last two decades (Leitner, 2014). Many young people on the spectrum were often first diagnosed, and in some cases misdiagnosed, with ADD/ADHD and or sensory issues prior to the medical professional coming to the conclusion that the child had ASD (Christensen et al., 2019; Van Der Meer et al., 2014; Zajic et al., 2016). Others remained undiagnosed with a formal attention deficit condition, but presented as inattentive, impulsive, and unfocused

(Christensen et al., 2019; Leitner, 2014; Van Der Meer et al., 2014; Zajic et al., 2016). Participants expressed shared experiences related to a lack of focus and attention among students with ASD when working with them in the curricular area of written expression.

Lack of focus - comorbidity with ADHD. The typical symptomatic presentations of ADHD and ASD have a history of co-occurrence (Leitner, 2014). In fact, many individuals with ASD were often first diagnosed with simple sensory disorders and attention deficit issues (Zajic et al., 2016). This presence of behaviors and impulsive tendencies very prevalent among students with ADHD was alluded by the majority of the student participants during interviews and focus groups. Moreover, there was also some evidence of hyperactive or impulsive/unfocused behavior during the observational data collection process. Lucy was the participant that was the most direct about this perception and challenge:

> A lot of the behaviors being referenced here are the result of the condition, but we also have to remember that many of these autistic students were or are also suspected of having ADD/ADHD at some point. So, the fidgeting, lack of focus, inattentiveness, and impulsive behavior almost speaks to some type of comorbidity with autism spectrum disorder. I don't know the exact research or statistics, but this is really about most of our autistic kids. They jump subjects, change directions in midstream, and can't seem to remain focused on an almost daily basis in many cases. I'm assuming you all see this as well and I don't think we can talk about making student success in writing without knowing we have to deal with these ADHD-like challenges.

In that same focus group, Kailyn shared similar experiences:

> It kind of seems like a lot of the symptoms of ADD and autism are very similar when you sit back and think about it. Some of rigidity they demonstrate could also be related to

> either of these conditions. With my low-functioning kids, I see the distractibility and inability to attend toa task in particular. I can ask my autistic students questions about the prompt and within a very short period of time, seconds sometimes, they are off on another topic or tangent that the initial writing assignment made them think of. They jump all over the place and are completely distractible by others and even by their own thinking as they attempt to write.

Both Amy and Frank mentioned that many of their students presented as hyperactive at times during instruction and particularly off task during writing time. Carl voiced similar experiences and challenges with his students:

> My kids are a lot like me, all over the place. (laughs) I've dealt with my own hyperactivity all my life and am kind of used to it now, but even some of my ED students mention to me that I'm too hyper. My autistic students can be hyper at times, but more unfocused than anything else. Even when they show out on occasion, it's due to them getting frustrated. Their minds work a certain way and they have to go with the flow of there is some type of dissonance – they get really frustrated. Without direct support, some of our autistic students can't stay on topic at all. They kind of write creatively and it leaves the purpose of the writing. Not always, but sometimes they could be writing about history and end up talking about a trip they took or a vacation. Again, some of my autistic students are my best writers, but the lack of focus and ability to maintain attention to the prompt is a challenge for them, and for me as their teacher.

Iris and Jerome zeroed in on the impulsivity of many students with ASD during their focus group. Iris stated:

> I agree with the group, these students can be hyper at times and are definitely not focused during writing unless I'm sitting with them one-on-one. But the impulsivity strikes me at times. I have one student that will get a bit stressed during class and then begin to pick at his skin. This action is so impulsive and repetitive that he can often make himself bleed. It's terrible. Also, when my students write, they will often blurt out new ideas or sentences without thinking first, disrupting the whole class.

Jerome replied to Iris:

> Impulsiveness is simply part of the condition though, so we know what to expect and have to safeguard against these disruptions. Not easy, I know, but we have to try. Our students that have autism are likely to be inattentive, a bit disruptive, hyper, and they will definitely act before they think sometimes. We really have to know that up front walking into the classroom to serve these kids.

The notes from several observations aligned well with the comments made by the participants during interviews and focus groups. Students were observed being off-task, particularly if not given one-on-one attention and/or provided very clearly delineated scaffolding for their thinking. Although some outbursts and negative behaviors were observed, the most common inappropriate behavior noted related to a lack of engagement in the task, such as a lack of attention or focus on the assignment.

Lack of focus - trouble embedding. When participants were asked about their students' abilities to embed multiple tasks simultaneously during writing and how they supported the process of embedding, there were multiple assertions of how challenging this process was for both the students and teacher. Brenda noted, "this really isn't even an option for Low-performing

autistic students" and that her "kids have trouble maintaining two separate thinking processes at the same time." Brenda went on to state:

> Asking my students to maintain attention on the prompt or question that is driving the simple writing assignment while working through the process of putting words on the paper is extremely difficult. This may be easier for Higher-functioning students with autism, but for the majority of my autistic students this is really tough. You can try to sit with them and talk them through it, which helps with one task at a time, but every time you bring their attention to one thing, they almost instantly lose the connection with the other task.

Dorothy noted during a focus group:

> Although I feel like my students can be successful with writing, some limited ability writing of course, this idea of embedding is hard for them. The autistic students in my classroom are grouped with others with mild intellectual disabilities, so they are aren't necessary considered High performing. Then again, they aren't really as Low-performing as some autistic students in our school that are in the moderate intellectual disabled classroom. However, they really can't balance several tasks at once or multitask while writing. I don't think they can handle that cognitively; they kind of have one track minds.

During a focus group, Frank became a bit adamant about the necessity of supporting embedding with his High-functioning students with ASD. He stated:

> I understand that it's tough to get our autistic students to multitask and keep what they've written a moment ago in mind while they're writing something new, but it's our job to help them do it. We have to model that behavior and be very intentional about demonstrating this idea [embedding] to our kids. If they fail to learn how to effectively

> embed these multiple tasks as you referred to, they really won't be able to master written expression in our classrooms. Good writers, even proficient writers, can do this and the result is a coherent and persuasive product.

Lack of focus - challenges of working memory. Some participants connected the inability of students with ASD to embed multiple writing processes with the challenge of working memory. A writer's working memory functions as a warehouse for idea exchange and embedding the multiple cognitive processes required for writing (Flowers & Hayes, 1981). Lucy stated, "so much happens within the context of working memory when our students write." Iris shared the following during a focus group:

> Although I tend to believe that our High-functioning autistic students can do just about everything any other child can do in terms of writing, I do agree with the others about working memory and the challenges of embedding as you referred to it during our interview. Autistic students do seem to have a hard time with this idea of embedding and seem to have trouble keeping what they've already said about a topic or prompt in mind as they move forward. To be honest, they also have trouble keeping in mind where they were headed in their writing, which can lead to frustration. Asking for too many trains of thought at one time is difficult for them to handle and is really a bit unfair considering their condition and its traits.

There also seemed to be a connection to another subthemes discussed later related to the finality of a student with ASD's work (see Figure 2 and Appendix J). Jerome noted:

> Once my autistic students are done, not all of them but most of them, they are done. It seems that once they've written something and they've moved on to another section or perhaps paragraph, what was written in that previous paragraph or whatever is irrelevant

> to them. They have trouble thinking back and sometimes don't present connected paragraphs. So, they may have two very well-written paragraphs that are perhaps loosely related to the prompt, but maybe not aligned or connected with each other. And then when pointed out, the students often don't see what he problem is.

During a virtual observation in Georgia's classroom, something quite similar was observed to what was being described by the participants. Georgia was having a conversation with a student with ASD that seemed to have academic delays, albeit not severe, as he was doing quite a bit of text production. However, the child was writing sentences one after another that had something to do with the topic in their digital journal, but not appropriately aligned with one another to make sense to the reader. Georgia asked the student:

> Sweetie, you said this (using mouse to point at student's writing on screen) two sentences above and then this right here (pointing at a different portion of the students' writing), why baby? Those don't seem to go together at all. What do you think? (silence) If you're trying to convince someone that video games don't get in the way of homework and family time, you really can't say two different things about the games within a couple of different sentences. You've got to keep in mind what you just wrote about while you write each new sentence.

Theme 3: Resistance to Revise

A significant majority of the participants noted a shared experience in which students with ASD often refuse or resist editing their writing. Eight out of twelve individuals made a reference to or a series of statements about the writer's hesitancy to go back and revise his or her composition. This resistance was sometimes related to not wanting to include data taken from outside sources or being asked to rethink a position statement regarding a particular topic.

However, the participant comments demonstrated that most of the resistance to revise or edit was rooted in the idea of rigidity as related to the child with ASD's line of thinking – a type of in the moment thinking. As Jerome so clearly put it, when his students with ASD felt they were complete with an assignment, "they were done."

Resistant to revise - avoids sources. Several of the special educators felt as if their students with ASD avoided using outside sources in their writing. Amy noted, "they don't care to use sources, and if they do, they don't like to cite the sources." She went on to say:

> I'm not really sure why they don't want to do it, but it might be because they are so set in their own ideas sometimes. Almost like, 'I don't want to know what they thought about this topic, I have my own ideas' or something like that.

Carl stated:

> On occasion, they will be excited about finding a source or website that helps in their writing. However, in general, my students with autism just want to tell it the way they see it and would rather free-write. This makes it challenging to teach them how to do research or ask for a research paper. As I stated earlier, I really think this goes back to them wanting things a certain kind of way in a certain order.

While discussing the ideas of revision during her interview, Esther mentioned a resistance to using sources as well, noting:

> And for some reason my children just don't want to cite sources in their writing. When we're doing research with the upperclassmen, they still want to say things the way they feel [it] should be. I will show them a source that corrects that line of thinking, but it won't matter to some and they push back, almost as if the historian's views or research

> I'm sharing is flawed. Therefore, getting them to go back and make changes or revision based on researched content is very difficult.

Resistance to revise - emphasis on own ideas. The participants continued to stress the idea that their experience with many students with ASD was that their thinking was rigid and focused on their own ideas. This focus on his or her own content by the student was evidenced during all three phases of data collection. Carl noted that his "kids just won't budge sometimes. They see things their way and believe that is accurate. In their mind, I think it is accurate and that why they are so inflexible about discussing edits to their papers." Dorothy noted during a focus group "oh, they're stubborn" and went on to say to her colleagues:

> Do you really think they are that rigid in their thinking or is it just a power struggle? I mean, I've absolutely had these experiences, but I'm less convinced that it is 'just the way they think' as opposed to their behavior. Lots of my kids want to be in control and want things their way. That might be a behavioral tendency as opposed to their lack of flexible thinking. Then again, they might be one in the same.

Brenda also referenced a connection to behavior when a student with ASD was asked to revise his writing (see Figure 2 and Appendix J):

> I agree with the behavior aspect. My students definitely resist when we go back to work with a previous piece of writing, no matter how simple. Just goes to show you how challenging it is to write with these kids, tough to start, tough to revise, tough all the way around. However, I do think it is more than behavior – they do think a certain way that is very egocentric.

During that same focus group, Amy continued the discussion by stating:

> I understand (Dorothy's) perspective, but I really do feel like my autistic students think in a unique manner. I like the word egocentric – that's a good way to describe it. I feel like my students have a very direct line of thinking. That isn't to say they aren't a challenge in terms of being stubborn or difficult, but I think there is a little more to it than just that.

While observing a writing lesson in Harriet's classroom in which students were in various phases of their writing, there was a conversation between Harriet and a student with ASD surrounding some revisions. The student was very willing to correct some punctuation and subject-verb agreement when asked to do so by Harriet. However, when she challenged the student to revise some of the content in the essay, the student pushed back, questioning the teacher as to why. This exchange went on for several moments and although polite, it did not end up furthering the learning or resulting in an effective revision of the student's work.

Resistance to revise - in the moment thinking. In addition to the participants' experiences related to students with ASD hyper-focusing on their own unique ideas in their writing, another concept that emerged as a subtheme was in the moment thinking. This phrase, in the moment thinking, was used to reference the idea that many of the participants perceived that their students with ASD had a difficult time returning to their thoughts and feelings from a previous time, or previous portion of a composition. Lucy's comments during her interview summed this shared experience up quite well:

> Based on my previous work as a school psychologist and my current role as a special education teacher, I genuinely believe that students with autism, particularly those with emphasized characteristics related to ADHD, are often caught up in the moment with their ideas. This is one of the reasons I noted that revision of work is so challenging for them. They can't understand why they would go back and work on something from a

> previous day. Kind of like 'I felt that way a couple of days ago, I feel this way today – those aren't the same, so what are you talking about Ms. Teacher.' (laughs) I don't mean to make light of this challenge, but it is almost comical how some of our autistic students can only think in the here and now at times.

Lucy brought this idea up again during a focus group, to which Kailyn stated:

> That's an interesting idea. I need to think about that – they really do seem to have an attitude that today is a new day and that sometimes what happened previously doesn't matter. Not just with writing, but lots of things such as rules to games, getting in trouble. This really could be part of why they resist our efforts on editing their essays.

Although Iris asserted that her students have learned to complete proper revisions to their writing appropriately, she also noted:

> They've learned to revise and edit using the standard editing tools and process. But they resist it, just as they do with writing in general. I do think there is something to the idea of them being focused on their own ideas in their own time; like a self-centered writer in some ways

Resistance to revise – the finality of work. The subthemes of emphasis on own ideas and in the moment thinking are clearly aligned with the idea that almost all of the participants shared as a challenge when teaching revision to students with ASD, the finality of work in the eyes of the student. Amy shared that students with autism often "see their first complete draft as a final draft" and "don't seem to agree with the idea of changing their original ideas to make the work better." Brenda noted that her students with ASD tended to "think in a certain way that is very egocentric." Iris repeated this sentiment when she stated that many students with ASD are "self-centered" in their approach to writing. Carl noted that when his students with ASD "are

done, they are done." Esther shared her thoughts on this idea of the finality of work as well during her interview:

> Revision is just as hard for my autistic students as it attempting to respond to a prompt, or rhetorical question as you put it, that they really aren't that interested in. They often only want to do one draft, sometimes with minor revisions. Once they've expressed their thoughts, that seems to be enough for them to feel that they are complete. Of course, there are exceptions and they are a bit more likely to be willing to revise a research paper as opposed to an essay. But in general, they like to be in control of when their work is finalized and submitted. Sometimes some of my smartest autistic students are willing to take a lower grade just to be complete and not have to engage with a piece of writing again. It surprises me because autistic students tend to be able to be rationalized with, but not always when it comes to their thoughts and ideas.

While observing Frank's writing lesson with students with ASD, it was clear that he was flexible and willing to listen to his students. However, when one student announced that he was finished and Frank noted that there was "still work to be done," the student protested, saying, "I'm not messing with this anymore." Frank began to rationalize with the student, a commonly used intervention noted among the observations, and encouraged the student that there was "more to be said on the topic." However, the student reiterated that he was finished by stating, "I don't have anything else to say." At the end of the observation, Frank was asked how he felt about the situation. He noted, "a bit frustrated, but it's no big deal. Happens all the time." Georgia was clear about her experience with the challenges of both getting students to begin their writing assignments and with the revision process, stating:

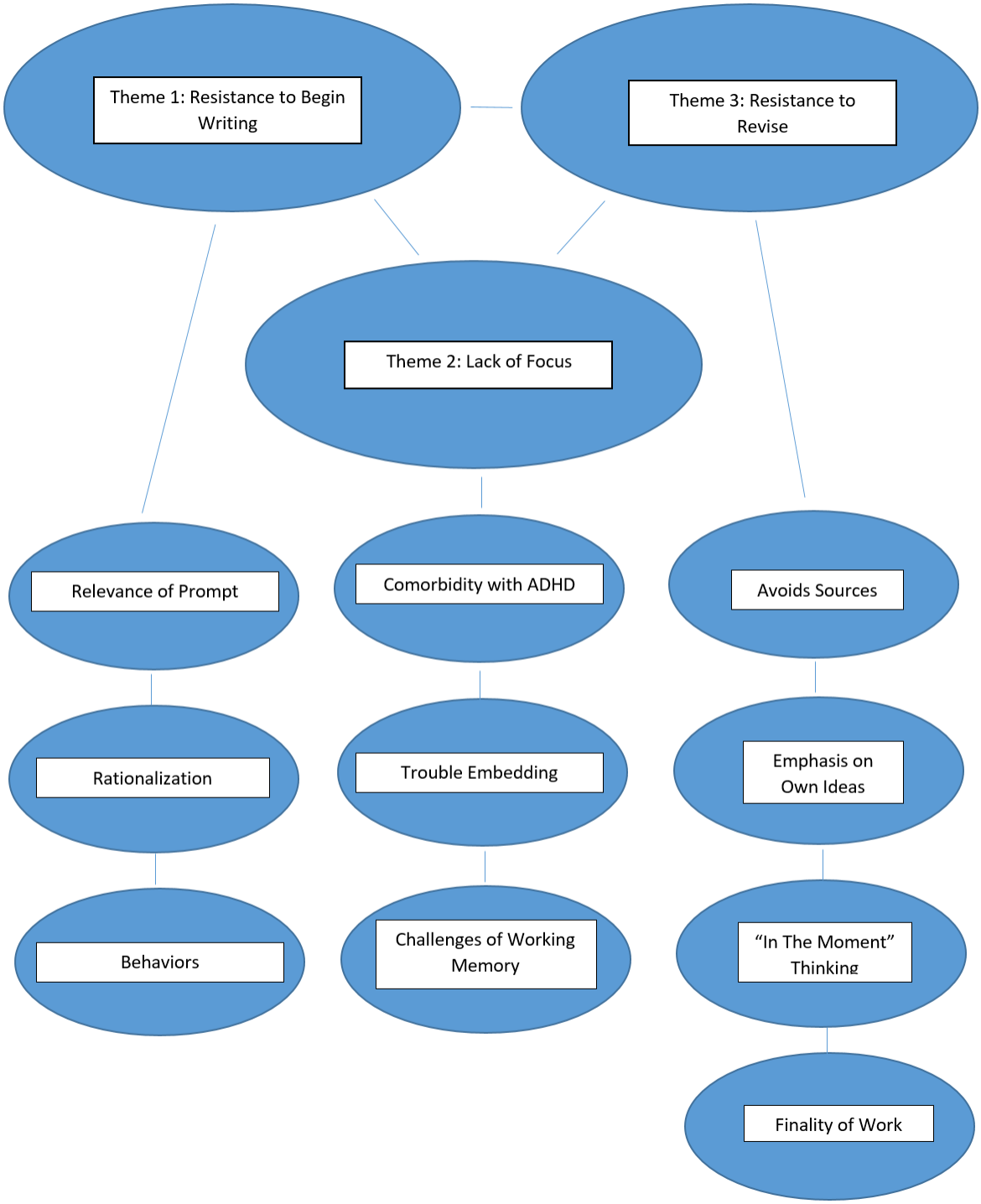
> It's hard to get them to do anything ahead of time and at the end. [They] can't stand to edit. When they are ready to be finished, you better believe they are finished. It's almost like they can see how it can be changed. I will say that they are willing to fix missing periods or something like a run on sentence without much fuss. But asking them to go back and change a paragraph or rewrite a sentence can be tough; sometimes they even show out.

Harriet mentioned during her interview that she has an interest in becoming a school psychologist one day and had a particularly insightful thought:

> It's almost like they don't like metacognition in a way. They don't like to think about their own thinking. I wonder if they believe that most of their thinking isn't flawed. For example, when we play games in class – sometimes we do that for social skills – my autistic students might create their own rule. Even when I show them in the instructions for the game that they are playing it wrong, they still want to use the rule that they just made up.

Figure 2

Major Theme and Subtheme Relationships



Research Question Responses

The purpose of this transcendental phenomenological study was to describe high school special education teachers' experiences in teaching written expression to students with autism spectrum disorder in Parker County School District, located near the mid-eastern seaboard of the United States. To that end, the research questions were designed in such a manner to evoke responses among participants that provided some of the shared experiences and challenges among the special educators as they have endeavored to teach writing to students with ASD. Data was collected from interviews, focus groups, and from classroom observations of the special educators providing direct instruction in written expression to their students with ASD. Below, the responses to these research questions are provided in detail.

Central Research Question. The central research question asked: what are the experiences of SPED teachers tasked with teaching written expression to high school students who have autism spectrum disorder (ASD)?

The special education teachers participating in the study shared various challenges that they had encountered while serving students with ASD in the academic area of written expression. Participants gave voice to common experiences that students with ASD demonstrated when it came to the beginning of the writing process, the unique challenge presented by the students' lack of focus and inattentiveness, as well as the students' resistance to the revision process. These challenges presented by students with ASD during writing often led to disruptive behaviors, shut downs, and a lower quality of writing than the participants believed was achievable by their students. Thus, all three themes emerging from the data analysis related to this central research question and provided voice to the special educator participants in response to this inquiry.

Sub-Research Question One. Sub-research question one asked: how do high school SPED teachers lead students with ASD to identify the rhetorical problem within the task environment at the planning stage of writing?

Participants described how students with ASD often resisted engaging with the rhetorical question, or prompt, during writing lessons. Theme one, or resistance to begin writing, was one of the most predominate themes emerging from the data collected through interviews, focus groups, and observations. Specifically, the special educators felt as if students either struggled with or avoided interacting with the rhetorical question. In responding to this resistance, the subtheme's importance in relevance and utilizing a process of rationalizing with the writers emerged as an intervention that the special educators felt was somewhat effective in counteracting the resistance of the students. However, regardless of intervention, the participants agreed that often times negative behaviors manifested when students with ASD were encouraged to interact with the rhetorical question and plan their composition.

Carl, a participant in an interview, focus group, and observation, shared that it was particularly difficult to get the students with ASD to begin and plan the writing process if the topic lacked relevance. He stated, "they resist moving forward a lot of times because they don't find the topic worthwhile or relevant." This disposition among the special educators was reaffirmed by both Dorothy and Jerome, with Jerome sharing "yes, I believe relevance is important" and that "having something in front of them that they can immediately connect with, that is important" is more likely to elicit engaged behaviors. During her interview, Lucy discussed a type of egocentrism among students with ASD and went on to say:

> Like I mentioned earlier, the students have to gain something from the process. Their resistance to responding to the prompt might have a lot to do with that egocentrism,

> almost a ‘what’s in it for me’ kind of thinking. Relevance and meaningfulness supports learning for all children, but might be particularly impactful when it comes to getting students with autism to respond to a prompt or question on an assignment.

When students refuse or resist to begin planning their response to the rhetorical question or prompt, the special educators noted that they could often be persuaded to work through that resistance by rationalizing and scaffolding the start of the writing process and pre-planning. Frank stated, “you kind of have to walk their mind through responding to the prompt.” Georgia discussed the importance of this rationalization process as an intervention for getting the students to respond to the rhetorical question. She stated:

> They need that help, helping them walk through the planning of their writing and how to respond to the prompt appropriately. By talking them through it, like I said right by their side, quiet and rationally, they often times will begin to write, or at the very least make an outline or scratch down some ideas.

This approach to guide the students through responding to the rhetorical question in several observations was also observed, namely the lessons led by Amy, Carl, Esther, and Georgia. They all had a similar approach of using close proximity and talking calmly through how the student with ASD might respond to the rhetorical question. In the case of Esther, she implemented the strategy without prompting, but in other cases, the special educator noticed frustration or avoidance behaviors among the students and responded thusly.

Sub-Research Question Two. Sub-research question two asked: how do high school SPED teachers guide students with ASD to access their long-term memory on a specified topic during the translation phase of writing?

There were only limited references to the translation process in between planning and

revision by the participants, but several noted that this process of writing seemed to be simpler to teach. The special educators also noted that there was less resistance from students with ASD to actively engage in the writing process once they got past the initial resistance to the rhetorical question, but before they began the revision process. Therefore, although a specific theme did not emerge to address this sub-research question directly, both themes one and two as designated in the theme development, resistance to begin writing and resistance to revise, respectively, influenced its resolution. Amy noted that:

> Once the students get an idea or feel like they know how they want to move forward, things flow pretty well in the classroom. Now, with that being said, my students will often stray off topic, but they are engaged and writing without much prompting.

Carl noted that his High-functioning students with ASD were very proficient in writing, once he got them to engage in the process. Specifically related to the translation phase of writing, he shared:

> My students will go for pages and pages if they get on a tangent. I'm serious, if they are enjoying expressing themselves like when I give them a question or prompt they're interested in, they can put a lot down on paper.

After describing the rigor of getting her students to begin the writing process, Kailyn stated:

> The content isn't the issue when working with autistic students, or at least those that are High-functioning like resource students. If you look at their ideas on paper, they can be quite excellent. When they get in the zone, they can really have a lot to say about a topic and sometimes can communicate through writing better than they can through speaking, particularly if asked to share with a group as opposed to just me.

Also noted was that several participants shared that due to a lack of focus and inattentiveness, the

translation phase could present problems for their writing instruction and student products. For example, Brenda stated, “asking my students to maintain attention on the prompt or question that is driving the simple writing assignment while working the process of putting words on the paper is extremely difficult.” Some participants also noted that they struggled with assisting their students to stay on prompt, possibly due to working memory issues or the interaction of symptomatic presentations of ADD/ADHD with the working memory. During a focus group, Iris shared, “I do agree with the others about working memory and the challenges of embedding.” Iris went on to say, “Autistic students do seem to have a hard time with this idea of embedding and seem to have trouble keeping what they’ve already said about a topic or prompt in mind as they move forward.” Similarly, Esther shared:

> They seem to constantly get confused or off topic sometimes. Not always, sometimes they fly away with much success. However, sometimes they can jump around and even provide a paragraph that is completely off the prompt or that isn’t answering the question given on the board.

Sub-Research Question Three. Sub-research question three asked: how do high school SPED teachers guide students with ASD through the reviewing phase of the writing process?

There was a definitive shared experience among the special educators participating in the study that the revision process was particularly challenging to teach students with ASD. The resistance to revise experience as theme three in the theme development was demarcated and provided direct insight into the resolution of sub-research question three. The teachers noted a resistance to change in the composition, particularly if it related directly to the students with ASDs’ ideas and content. Participants confirmed that students with ASD did not seem to enjoy utilizing outside resources and presented a considerable emphasis on their own ideas. Another

emerging idea from the participants' responses related to revision was that their students often thought in the moment and when they felt that the writing was complete, there was a type of finality to the composition. Esther commented that "for some reason my children just don't want to cite sources in their writing" and that it is "almost as if the historian's views or research I'm sharing is flawed." Carl made a comment during his interview that affirms the perception of Esther, stating, "they see things their way and believe that it is accurate."

It was also noted that sometimes encouraging the idea of revisions to students with ASD led to behavioral outbursts or shut downs. Although some felt this resistance to revise was related to a power struggle or about control, many felt that it was due to a unique emphasis of the students with ASD on their own ideas. Brenda noted during a focus group, "I do think that they think in a certain way that is very egocentric." During that same focus group, Amy shared:

> Yeah, there has to be more to it than just a behavioral thing. These kids really do have a certain way of thinking that feels really linear, almost orderly. Once they've put something down on paper, they see as it as complete and all that they have to say on the topic.

Lucy expanded on this orderly, in the moment thinking during her interview by stating that her students were often "caught up in the moment with their ideas. They can't understand why they would go back and work on something from a previous day." Iris described writers with ASD as "self-centered" and that they were not certain why they would need to change their previous arguments or persuasions from an essay. She stated:

> My students have the tools to revise, they understand the process of editing and improving their writing. They simply don't think it's necessary unless related to something like grammar. They like rules, so that isn't an issue. But they don't really care

to craft their ideas from a previous day into something more effective or impactful for the reader.

All of these subthemes relate to the sub-thematic idea that students with ASD see a certain finality in their writing. Once they have put their thoughts and content down on paper, it is as it should be. Esther noted, “once they’ve expressed their thoughts, that seems to be enough for them to feel that they are complete.” Georgia reiterated this perception during a focus group when she noted, “when they feel that they’ve said what needs to be said or that the answer you’ve asked is answered, that’s that, they’re finished.”

Summary

In Chapter Four, the results of the analysis of data taken from participants was described. This data was collected through one-on-one interviews, focus groups of three or four special educators, and through observations of special educators teaching written expression to students with ASD. Themes emerged from this analysis, along with subthemes, and these thematic units were utilized to give voice to the teachers’ shared experiences, particularly the common challenges, of teaching writing to students with ASD. Three major themes emerged: (a) resistance to begin writing, (b) lack of focus, and (c) resistance to revise. These themes were presented along with associate subthemes in this chapter through narrative, using direct quotes acquired during the data collection process.

These themes and subthemes were utilized to answer the central research question, as well as the three sub-research questions. The special educators shared rich descriptions of the challenges associated with teaching writing to students with ASD. The descriptions often utilized real-world examples to root their perceptions and dispositions in the practicality of writing instruction in their classrooms. These shared challenges commonly referenced by the educators

include, but are not limited to: (a) the challenge of getting students to engage with the rhetorical question, (b) how behaviors can easily manifest when academic push is applied to students with autism, (c) how a lack of focus can impact the process of writing, particularly during the translation phase, and (d) the resistance to revision presented by students with ASD.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this transcendental phenomenological study was to describe high school special education teachers' experiences in teaching written expression to students with autism spectrum disorder in Parker County School District, located near the mid-eastern seaboard of the United States. Chapter Five is comprised of several sections, beginning with a brief overview and concise summary of findings. A discussion of the findings as related to current literature and theory follows the summary of findings, as well as a discussion of the methodological and practical implications of the findings. Then, an outline is shared of the delimitations and limitations of the study, as well as several recommendations for future research. Finally, the chapter closes with a brief summary.

Summary of Findings

In an effort to answer the central and sub-research questions, transcendental phenomenological design was used to capture, and subsequently give voice to, the essence of the phenomenon as experienced by the high school special education teachers in teaching written expression to students with ASD. To provide for proper examination of the research questions, twelve research participants were engaged. The qualitative data was collected through one-on-one interviews, focus groups, and classroom observations. That same data was then analyzed with the Stevick-Colaizzi-Keen method. This process employed Moustakas' procedures of phenomenological reduction, which includes bracketing, horizonalization, organizing invariant qualities and themes, and constructing textural descriptions (Merriam, 2009; Moustakas, 1994). From the analysis, three major themes emerged: (a) resistance to begin writing, (b) lack of focus, and (c) resistance to revise. The participant responses to the interview and focus group questions,

coupled with the observation notes/scripts, provided the thematic foundation for answering the central and sub-research questions of the study.

The central research question asked: what are the experiences of SPED teachers tasked with teaching written expression to high school students who have autism spectrum disorder (ASD)? At one point or another, all twelve participants provided details that allowed for a clear understanding of high school special educator's experiences when teaching students with ASD written expression. Although participants expressed some positive experiences, the overall shared experiences that emerged most clearly were those associated with the challenges related to teaching writing to students with ASD. Specifically, participants gave voice to common experiences that students with ASD demonstrated a significant resistance when it came to the beginning of the writing process, the unique challenge presented by the students' lack of focus and inattentiveness, as well as the students' resistance to the revision process. These common experiences represented the three major themes emerging from data analysis, with multiple intermingled sub-themes emerging as well (see Figure 2 and Appendix J). The participants also noted that when encountering these challenges during the writing process, particularly during the planning and revision phases, their students often exhibited unwanted behaviors commonly focused on avoidance of the task. Unfortunately, these behavioral presentations also tended to create a disruptive environment in the classroom, further coloring the special educators' experiences.

The first sub-research question asked: how do high school SPED teachers lead students with ASD to identify the rhetorical problem within the task environment at the planning stage of writing? Theme one, or resistance to begin writing, was the driving force in answering this question. This was one of the most predominate themes emerging from the data collected. The

majority of the special educators felt as if students struggled with and avoided engaging with the rhetorical question. The subtheme's importance of relevance and utilizing a process of rationalizing with the writers emerged as interventions that the special educators utilized effectively to get the students with ASD started in the writing process. The participants shared experiences also expressed that often times negative behaviors manifested when students with ASD were encouraged to interact with the rhetorical question and plan their composition.

The second sub-research question asked: how do high school SPED teachers guide students with ASD to access their long-term memory on a specified topic during the translation phase of writing? Although a theme did not emerge from the responses and observations that was directly related to this question, there was evidence that students with ASD did not struggle as much with the translation phase of writing as compared to the planning and revision phases. Both themes one and two, resistance to begin writing and resistance to revise, respectively, informed the response to this sub-research question in that students with ASD required very little guidance during the translation and development phase of writing. However, it was noted that lack of focus and inattentiveness as described in theme two influenced the translation phase of writing, requiring intervention from the teachers in the form of redirection to keep students focused on the task of writing. Some participants noted that they struggled with assisting their students to stay on prompt, possibly due to challenges of students with ASD as related to accessing their working memory. Thus, the process of embedding was established as difficult for students with ASD during the translation phase of writing.

Sub-research question three asked: how do high school SPED teachers guide students with ASD through the reviewing phase of the writing process? Theme three, resistance to revise, provided insight into the resolution of sub-research question three. The teachers shared that

students with ASD often resisted the revision process, specifically when it influenced changes to the students' ideas and original content. Participants also noted that many students with ASD resisted including outside source information, again deferring to their own ideas as opposed to those shared by others, even experts on a given topic. Another emerging subtheme from the participants' responses was the finality of the composition. The participants shared that students with ASD felt that they had completed a writing assignment once all of their ideas were included in the assignment. Participants also noted that sometimes encouraging the idea of updates and changes to a given piece of writing could lead to behavioral outbursts or shutdowns. All of the subthemes related to theme three, resistance to revise, demonstrated that students with ASD saw a certain finality in their writing and pushed back against encouragement to update the initial draft of a composition.

Discussion

The purpose of this transcendental phenomenological study was to describe high school special education teachers' experiences in teaching written expression to students with autism spectrum disorder in Parker County School District, located near the mid-eastern seaboard of the United States. A transcendental phenomenological design was chosen for this research because it relies more on the lived experiences of the participants and less on the viewpoint of the researcher. The following three themes emerged from the data analysis: (a) resistance to begin writing, (b) lack of focus, and (c) resistance to revise. There were multiple interconnected subthemes beneath these overarching thematic structures, creating a complex texture. This section provides a discussion of the correlation between the study findings and the empirical and theoretical literature reviewed in Chapter Two, and provides further information that can

potentially inform the instructional practices of special educators workings with students with ASD in the curricular area of writing.

Empirical Discussion

After all data was analyzed, three distinct themes emerged from participant responses and observation scripts: (a) resistance to begin writing, (b) lack of focus, and (c) resistance to revise. Multiple interconnected subthemes also emerged from the data analysis. In the following section, the data to support for those themes and subthemes and the interrelationship with empirical research are described.

Resistance to Begin Writing

Ten of the twelve participants in this study shared that getting students to engage the rhetorical question and begin the writing process was very difficult. They noted this resistance to being writing (theme one) as a common trait among many of their students with ASD. Researchers have found that students with ASD often demonstrate resistance to academic push and rigor, often demonstrating negative behavioral presentations when engaged by the special or regular education teacher to complete a given task (Asaro-Saddler et al., 2015; Baker et al., 2018; Westerveld et al., 2017). Some of this refusal to participate in the educational process has been linked to deficits among students with ASD in the areas of speaking, listening, and reading (Asaro-Saddler, 2016b; Zajic et al., 2019; Zajic et al., 2016). However, researchers have also noted written expression as a unique challenge for students with ASD (Asaro-Saddler et al., 2015; Baker et al., 2018; Finnegan & Accardo, 2017; Robledo, 2017; Zajic et al., 2016). Participants also shared that negative behavioral presentations such as shutting down, outbursts, and other disruptive behaviors often accompanied this refusal to being writing. These types of statements were plentiful, thus leading to the identification of the first subtheme under theme

one, resistance to begin writing – the importance of relevance. The shared experiences of the special educators who were interviewed had participated in focus groups informed that when encouraging students with ASD to engage in written expression, the concept of relevance was very important in finding success at getting the writing process started. Accardo, et al. (2019) found that nine among the most effective intervention strategies related to self-regulation among students. Yet, researchers also noted that self-regulation strategies are most effective if combined with student interests that are relevant to the writer (Asaro-Saddler, 2015; Asaro-Saddler, 2016b; Iadarola et al., 2018). Based on the feedback from the study participants, an emphasis on relevance among content, audience, and materials within the context of the rhetorical problem aspect of the task environment significantly influences student engagement in the planning phase of writing.

Another subtheme that emerged as connected to theme one was resistance to begin writing – process of rationalization. Researchers have found that there are in fact interventions and strategies that can be implemented in the classroom to scaffold and support learning in the English Language Arts for students with ASD (Asaro-Saddler et al., 2015; Baker et al., 2018; Finnegan & Accardo, 2017; Saddler & Bak, 2014). Participants noted that providing the one-on-one intervention of a conversational rationalization of the rhetorical question or prompt's request was often successful in helping students self-regulate their feelings and begin the writing process. This was echoed in some of the current research reviewed that noted that students with ASD, particularly those labelled as high-functioning, could rationalize well to think themselves out of certain situations when adult-led scaffolding was present (Asaro-Saddler et al., 2015; Batiska et al., 2017; St. John et al., 2017). Many participants mentioned this process of intervening on behalf of the student through conversational rationalization – a balanced dialogue

and brainstorming procedure – but it was also noted during five of the twelve observations completed as part of the data collection process.

There is considerable research documentation that students with autism will act out when pushed to complete tasks that they deem undesirable (Farrugia & Hudson, 2006; Levy et al., 2019; Lord et al., 2018). The majority of participants noted manifestations of negative behaviors among their students when interventions failed to support them in beginning the writing process (as well as during the revision phase of writing). This third subtheme, resistance to begin writing – behaviors, particularly those of an aggressive nature, was not surprising in that it has been well documented by researchers (Lord et al., 2018). However, based on the participants' comments, these negative behaviors were commonly: limited refusal to participate, shutting down, and/or outbursts that were disruptive of the classroom. Asaro-Saddler (2016a; 2016b) pointed out that often times, students with ASD succumb to feelings of defeat and inadequacy and simply give up on the task of writing, as opposed to pushing through the challenge of the process. There is also considerable evidence that students with autism struggle with the socio-emotional factor of persistence and grit when working through the process of writing (Baker et al., 2018; Lord et al., 2018; Mayes & Calhoun, 2003).

Lack of Focus

Participants in this study reiterated and expanded upon prior research observations through their comments and interactions during interviews and focus groups as related to behavioral traits of students with ASD. One behavioral consideration for students with autism spectrum disorder is the relationship between their sensory-motor behavioral expressions and tendencies and the typical characteristics of students diagnosed with ADHD (Christensen et al., 2018; Levy et al., 2019). Lord et al. (2018) estimated that roughly one in four individuals

(28.2%) identified as having ASD also have a clinical diagnosis of ADHD. A subtheme that emerged from participant comments and observations was that students often succumbed to a lack of attentiveness and focus during writing assignments due to co-morbidity with ADHD (subtheme one). This lack of focus, coupled with impulsivity and inattentiveness noted by current research and the study participants emerged in an additional subtheme – trouble embedding. Furthermore, researchers have documented that teachers report that the complexity of socio-communication, anxiety, impulsivity, and lack of attentiveness are significant contributing factors to student failure among children with autism (Donnellan & Leary, 2012; Farrugia & Hudson, 2006; Joyce et al., 2017; Levy et al., 2019; Lord et al., 2018). Although research clearly established that students with ASD are often also diagnosed with ADHD, the participants provided additional insight into how that influences their ability to embed multiple writing processes at once with the task environment through their working memory (Levy et al., 2019; Lord et al., 2018). This seemed to be the prevailing thought among participants, that students with ASD have difficulty embedding various writing processes simultaneously during writing due to their challenges with working memory (a subtheme of theme two) and ability to attend as related to their lack of focus. Teachers shared that they felt as if students had a difficult time maintaining components of writing in their memory as they worked through the translating phase of writing. Researchers have noted a considerable gap between verbal and non-verbal cognitive abilities among students with ASD during the late pre-school years (Channell et al., 2019; Lord et al., 2018; Mayes & Calhoun, 2003). However, writing performance among both High- and Low-functioning students with ASD was at a considerable deficit as compared with non-disabled peers with similar IQs (Channell et al., 2019; Karlunas et al., 2018; Mayes & Calhoun, 2003). Researchers have also noted that the executive functioning skills associated with

organizing one's thoughts and actions is particularly challenging for students with ASD (Batiska et al., 2017; St. John et al., 2017). Participant observations related to the challenges of students with ASD to attend and maintain the act of embedding could be the result of the co-morbidity with ADHD, deficits in working memory, as well as deficits in executive function skills.

Resistance to Revise

Participants expressed many challenges of teaching students with ASD written expression during their interviews and focus groups. One such challenge that emerged from their collective experiences as a major theme was the resistance of students with ASD to revise and edit their writing. Students with autism are known to struggle with perseverance and grit when working through the process of writing (Baker et al., 2018; Lord et al., 2018; Mayes & Calhoun, 2003). The ability to persevere within the context of the task environment of writing may influence all types of students, but particularly those with the characteristics of ASD (Asaro-Saddler, 2016b; Benvenuti, 2017). The majority of participants, eight of twelve, shared that students with ASD often resisted revision to their previous writing. Asaro-Saddler (2016a; 2016b) noted in her research that students with ASD suffered from feelings of failure and inadequacy, and often wanted to complete writing assignments quickly, without interest to develop a better product through revision. The overwhelming perception of the special educators was that this was due to the rigidity of the processing among students with ASD. Some researchers have noted that a certain rigidity in thinking is present among students with ASD due to significant deficits in receptive and expressive language (Baker et al., 2018; Skwerer et al., 2015). Other researchers asserted that this rigidity is closely related to a lack of executive functioning skills among students with ASD (Batiska et al., 2017; Lanter & Watson, 2008; St. John et al., 2017). The study participants did not provide insight as to why students with ASD presented such rigidity

when it comes to the revision process, but they expressed shared experiences of students refusing to use outside sources and presenting a tremendous emphasis on their own ideas (both subthemes of theme three). Additionally, the participants noted that students with ASD had a unique characteristic of thinking only in the moment and that once their ideas had been captured as related to the prompt, there was a certain finality of work, seeing no need to edit or revise (both subthemes of theme three). These four subthemes not only demonstrate how the participants perceived the resistance to revise among students with ASD, but also show clear connections to the suggested rigidity of students with ASD as established in prior research. To be successful in the classroom, educators must be are aware of the needs of individual students with ASD to find engaging methods and strategies for intervention (Baker et al., 2018; Finnegan & Accardo, 2017).

Theoretical Discussion

This study used the theoretical framework of Flowers and Hayes' (1981) cognitive process theory of writing as a basis for reviewing participant statements and observation scripts during data analysis. This theory of writing has been the basis for a variety of cognitive theories of writing, as well as a conduit for teaching the phases of writing, defined by the CPTW as planning, translating, and reviewing. Flowers and Hayes (1981) also stressed the importance of working memory, as the writer engages with the rhetorical question, accesses previously written text, and creates new text all within what they referred to as the task environment. The data collected and analyzed during this study provided considerable insight into how students with ASD engaged with aspects of writing as defined by the CPTW, such as the rhetorical question, embedding during the translating phase of writing, accessing working memory, and revisionary writing.

Concerning Flowers and Hayes' (1981) planning phase of writing as defined by the CPTW, a writer begins to engage with aspects of the rhetorical question, such as topic and audience, as they begin to intentionally or subconsciously begin to generate ideas, organize ideas, and set short-term and long-term writing goals. Clearly, this is an important point in the writing process and requires a high level of critical thinking as well as prolific access to working memory. Participants in the study noted this necessary rigor as a likely source for a resistance to begin the writing process among students with ASD. Several participants and notes from observations also demonstrated that students presented with behavioral outbursts during the planning phase of writing in an effort to avoid engagement with the rhetorical questions or problem. However, study participants also shared a few strategies that assisted the learner with ASD through the complex process of planning. These interventions included ensuring an alignment with the prompt or rhetorical problem with student interests or ensuring relevance of the topic to the students and providing a scaffold of rationalization to the students through a one-on-one conversation.

During the translating phase of writing, as described in Flowers and Hayes' (1981) CPTW, writers are required to maintain a focus on the topic and audience, access the text previously produced, and continue to develop new text. Although less cognitively rigorous as the planning phase, this process requires a strong working memory and the ability to embed multiple processes to fully capitalize on the writer's short and long-term goals. Participants noted that embedding as defined by Flowers and Hayes (1981) was very difficult for their students with ASD due to a considerable lack of focus, inattentiveness, and impulsivity. Through discussion and observation, the data yielded several common beliefs among the special educators as to why embedding and access to working memory tended to be such a challenge for their students with

ASD. These dispositions included, but were not necessarily limited to, a comorbidity with ADHD, student deficits in working memory, and the inability of the students to multitask multiple cognitive writing processes (embed).

Participants also shared a very distinct collective experience that getting students to engage in the revision or writing, or reviewing phase as Flowers and Hayes (1981) referred to it, was quite challenging. Flowers and Hayes (1981) note in the CPTW that reviewing consists of evaluating and revising the text, while continuing to interact with elements of the task environment. For most writers, this is a time to go back and improve their work, enhance their argument or persuasion, and develop a better composition. However, the participants noted that students with ASD resisted revision and often demonstrated rigidity in their metacognition. The special educators noted that students with ASD often avoided utilizing outside sources and ideas in their writing, but rather had a somewhat compulsive need to stay true to their own in-the-moment ideas. This idea of finality of work, which is that the writing student with ASD does not see a need for or is unwilling to engage in the reviewing phase of writing, was a shared experience among the participants.

Implications

The findings from this transcendental phenomenological study demonstrated the shared experiences of high school special educators who instructed students with ASD in the content area of written expression. That data collected from this study can inform the preparation programs of pre-service teachers, generate interventions for the classroom to improve student success in writing, and provide different perspectives on the challenges of teaching written expression to students with ASD. The findings also provided some insight on how different types

of students engaged with the various stages of the writing process. This section discusses the theoretical, empirical, and practical implications that emerged from the study.

Theoretical Implications

Flowers and Hayes' (1981) cognitive theory of writing provided the framework from which to examine how the participants and notes from observations described shared experiences while teaching students with ASD written expression. The central and sub-research questions were intentionally designed to align with certain aspects of the cognitive process theory of writing. To that end, this intentionality in question-design elicited responses from participants and observations that were easily seen through the lens of the theory. The findings of the study demonstrated that students show significant difficulty when engaging in the planning and revising phases of writing (Flowers and Hayes' 1981 theory). Specifically, participants shared that students with ASD showed a resistance to begin writing and to revise, but were considerably more engaged during the translation phase of writing, although even this was still a struggle. Specifically, the generating aspect of Flowers and Hayes's CPTW was most challenging for students with ASD as they grappled with the exigency of the rhetorical question or problem within the task environment. Participants also noted that the process of embedding, or implementing multiple cognitive processes simultaneously during writing was a significant challenge for writers with autism. These comments reemphasized the importance placed on long-term and working memory by Flowers and Hayes (1981) as critical to the translation phase of writing. The CPTW provides a clear process for reviewing and revising a composition, both within the task environment as a unique phase of writing. However, participants noted the unwillingness to review among students with ASD, adding that there seemed to be a level of resistance to the metacognitive process of self-evaluation and revision.

Empirical Implications

In the last half-century, ASD has evolved from a "narrowly defined, rare disorder among childhood-onset" to a condition that is becoming common and seen as present across races and cultures (Baio et al., 2018; Lord et al., 2018, p. 508; Xu et al., 2018). The study findings confirm that students with autism are found throughout our public schools in both general and special education settings. The challenges expressed as collective experiences by the special educator participants of teaching written expression to students with ASD also confirm the findings of many other researchers (Asaro-Saddler et al., 2015; Baker et al., 2018; Finnegan & Accardo, 2017; Robledo, 2017; Zajic et al., 2016). However, the participants in this study were specific about these identified challenges in that they primarily related to the planning and revision phases of writing. The data collected from responses and observations described special educator experiences that found students with ASD to have two particular complications with the writing process – engaging the rhetorical question or problem and embedding. Many researchers in the field pointed out a need for additional research to give voice to the experience of teachers who teach written expression to students with ASD (Asaro-Saddler et al., 2015; Baker, et al., 2018; Finnegan & Accardo, 2018; Lanter & Watson, 2008; Pennington & Carpenter, 2019). To that end, it is recommended that preservice teachers, as well as current special educators, have exposure to intervention strategies for students with ASD to overcome the resistance to begin writing and revise compositions. It is also important for educators to comprehend the connection of embedding and student access to working memory. Furthermore, if both general and special educators had a better understanding of how to model and rehearse the process of embedding with students, this challenging combination of cognitive processes could be developed over time. As it was noted by participants that a lack of focus, inattentiveness, and impulsivity influenced

the implementation of embedded through the translation phase of writing, it is also recommended that educators have a clear understanding of dealing with hyperactivity and perhaps the co-morbidity of ADHD among students with ASD. This proactive support for educators and parents may increase the success rate of young special educators and better inform their instructional practices in the area of written expression when working with students on the Spectrum. In turn, this may increase students' success in the writing classroom.

Practical Implications

As the understanding of ASD has broadened over time, so has the multitude of reactions to the phenomenon of autism in the public schools, most of which have been driven by public policy (Mandlawitz, 2002; Yell et al., 2005). At the beginning of this study, the problem identified was that the experiences of high school SPED teachers who teach written expression to students with ASD is widely unknown. At that time, this researcher proposed that ascertaining this information would add to the literature and ultimately provide additional insights to those involved with preservice teacher training and professional development in the further development of effective instructional strategies for students with ASD. Therefore, this research study has practical implications that can benefit educational policy makers, administrators, teachers, and a variety of other stakeholders who have ties to students with ASD. Through discussion with and observation of the participants, several interventions and strategies emerged that can increase the chance of success when educating students with ASD in the content area of written expression.

Policy Makers and Administrators

Over the last three decades, there was a multitude of reactions to serving students with ASD in the public schools, most of which were been driven by public policy and parental

advocacy groups (Mandlawitz, 2002; Yell et al., 2005). The educational expectations for students with ASD were also emphasized by the language of the No Child Left Behind Act in 2001 which demanded that all pupils, to include those with significant special needs, be held to federal standards of evaluation (No Child Left Behind Act [NCLB], 2001). The findings of this study are encouraging of maintaining high standards of expectation for students with ASD in written expression. Teachers consistently shared that with proper academic, social, and behavioral interventions, students with autism could find success in the area of literacy, specifically writing. To that end, administrators and public policy makers should continue to support high standards for all students, to include those with unique learning needs. However, as noted by several participants regarding Low-functioning students with ASD, exceptions to the rule must exist as an ethical imperative. Administrators and policy makers should also work to ensure pupil access to the appropriate related special education services that can increase the likelihood of success for students with ASD, such as: (a) applied behavior therapy, (c) occupational therapy, and (d) behavior/social skill coaches.

Teachers

Two common classroom interventions shared by the majority of the participants related to relevance and student interest. Participants asserted that if the student with ASD deemed the topic and or audience (aspects of the rhetorical question or problem) of the prompt relevant to them or of interest to them, they were much more likely to engage in the planning process. Additionally, the participants noted that if the topic was not of interest or deemed irrelevant to the student with ASD, a one-on-one process of rationalization through quiet conversation was at times helpful. This process allowed a teacher supported scaffold for the students' thinking through the rhetorical question or prompt, and often helped students develop a connection or to

find meaningfulness in the topic or audience. Another practical application of these interventions is that they assist in avoiding behavioral outbursts among the students due to academic push during the planning and translating phases of writing. Avoiding disruptive behaviors in the classroom increases the likelihood of overall success in the classroom among all students present (Asaro-Saddler et al., 2015; Baker et al., 2018). Combining strategies such as these with traditional literacy development interventions could have the potential to significantly impact student achievement in the area of written expression among students with ASD (Asaro-Saddler et al., 2015; Kang et al., 2015; Pennington & Delano, 2012)

Parents, Students, and Community Support Services

Based on the thematic responses of participants as related to how significant the lack of focus among students with ASD impacts the process of writing at all phases, it would be wise that parents, physicians, and other health professionals consider mitigation strategies such as pharmaceuticals, behavioral interventions, and academic maneuvers known to be effective with students with ADHD. Physicians and psychologists commonly treated young people with ASD presenting disruptive and/or aggressive behaviors with a variety of pharmaceuticals, primarily mild antipsychotics (Livingstone et al., 2015). However, researchers have noted that the majority of research emphasized that pharmacological intervention in and of itself is insufficient in the long-term treatment for the symptoms of ASD (Livingstone et al., 2015; Van Der Meer et al., 2014). The most effective approach to addressing the negative behavioral presentations among individuals with ASD is mixed-method, containing both pharmacological and therapeutic approaches (Batiska et al., 2017; Fitzpatrick et al., 2016; Livingstone et al., 2015; Van Der Meer et al., 2014). Based on the experiences of the participants, attempting to mitigate some of the hyperactivity and lack of focus could also be addressed with self-regulation skills and through

behavior training programs, such as applied behavior therapy. Schools and outside services utilizing the applied behavior analysis to serve students with ASD have intended to increase language and social communication skills, build the ability to attend and focus, and decrease problematic behaviors among students (Baily & Burch, 2017; Denee et al., 2015; Leaf et al., 2016). Applied behavior analysis was effective in remediating attention and focus deficiencies, as well as negative behavioral presentations among students with ASD (Baily & Burch, 2017; Levy et al., 2019).

Delimitations and Limitations

The delimitations for this study were a direct result of this researcher's choices regarding inclusions and exclusions from the study. For this study, the delimitations included the location selected to complete the research and the subjects selected to be participants. The location of the study was Parker County School District (pseudonym), found among the Southern State Public Schools (pseudonym), and located within the middle section of the eastern seaboard of the United States. The location for this study, the Parker County School District (pseudonym), was selected out of convenience of location and because it demonstrated a higher percentage of special education students than surrounding districts. The participants were selected from high schools within PCSD who were teaching at least one student with Low- or High-functioning ASD written expression and composition. This delimitation was necessary to ensure that the study participants could provide data that would yield shared and collective experiences about teaching students with ASD in the content area of writing. After this, a transcendental phenomenological design was selected for this study because it focuses on the lived experiences of the participants as opposed to viewpoint of the researcher.

It should be noted a limitation of the study was that it only encompassed primarily one county region in a southeastern state. Therefore, the study's findings may not be truly representative of the larger context of the entire United States. Another limitation may be that out of the seven high schools from which participants were selected, five were considered urban and two suburban. Therefore, this researcher was unable to include representation from a rural high school. Another limitation was the number of participants engaging in the study. Out of 95 potential participants, only 12 agreed to become involved in the research study. Due to this small sample size and the somewhat focused location of the study, it may be challenging to generalize the findings and results to all high school special educators who teach written expression and composition to students with ASD.

Recommendations for Future Research

This research study provided meaningful and useful insights into the shared experiences of high school special educators who teach students with ASD in the content area of written expression and composition. However, there is a need to enhance the understanding of some of the findings presented in this document and the many questions generated by this research. As stated previously, researchers have noted in recent years a need for additional research into students with autism and written expression. Future research related to this topic should focus on three primary areas as related to writing and students with ASD: (a) interventions for effectively mitigating the students with ASD's resistance to begin writing in the planning phase and to revise during the reviewing phase of writing, (b) students with ASD's working memory abilities and how that may relate to co-morbidity with like-symptoms of ADHD, and (c) how best to model and rehearse the cognitive process of embedding during the translation phase of writing. The research from this study demonstrated that students with ASD demonstrate a considerable

resistance to beginning the writing process and when evaluating and revising a document. When considering future recommendations for researching academic interventions at the beginning and end of the writing process for students with ASD, both phenomenological and quantitative studies would be most useful. It would be important to continue to gain insight into the experiences of educators as they implement interventions, as well as the quantitative frequency data of student success. Better understanding of the relationship of the co-morbidity or like-symptoms of ADHD and those on the spectrum of autism has the potential to inform instructional practices for any student that demonstrates a lack of focus, inattentiveness, and impulsivity. Specifically, additional phenomenological study, or perhaps case study, would be most beneficial in developing an increased understanding of these behavioral presentations. Thirdly, research into the working memory of students with ASD has the potential to shed some light on why said students have such a difficult time embedding multiple cognitive processes while maintaining a focus on the initial rhetorical question or problem. A final recommendation would be to have this study repeated in other areas of the country and with general educators (as opposed to only special educators) to support the potential transferability of the findings and results.

Summary

The purpose of this transcendental phenomenological study was to describe high school special education teachers' experiences in teaching written expression to students with autism spectrum disorder in Parker County School District, located near the mid-eastern seaboard of the United States. The participants included 12 high school special educators that taught at least one student with ASD in the content area of written expression and composition. Data was collected through interviews, focus groups, and classroom observations and then analyzed using coding

methodology as prescribed by Moustakas (1994). The finding and results of this study support current literature regarding the challenges of teaching literacy skills to students with ASD. However, this research adds to the current literature as it provided a close examination of high school special educators' experience in teaching written expression to students with ASD. The findings revealed that teachers of students with ASD in writing encounter considerable resistance of the students to begin writing, a significant lack of focus and ability to stay focused on the rhetorical question or problem while embedding, and a resistance to revise compositions. Future research is recommended to explore additional interventions for effectively mitigating the students with ASD's resistance to the planning and reviewing phases of writing, the relationship of working memory, a lack of focus, and the ability to embed among students with ASD, and how best to model and rehearse the cognitive process of embedding during the translation phase of writing. The significance and impact of this study to participants and other educators of students with ASD can lead to an enhanced understanding of the behavior tendencies of their students as they relate to the phases of writing, as well as improved classroom interventions during the planning and reviewing phase of writing. Participants also benefited from a sense of community, as they comprehended that the challenges they faced daily instructing these unique learners in written expression were shared with others– realizing that they were not alone.

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APPENDIX A

Permission to Utilize Graphic Located in Figure 1

Use of graphic

Report message · Block user

Kevin Hasinger 48 minutes ago

Dr. Flower,

I am a doctoral students completing a study that utilizes the Cognitive Proccess Theory of Writing as a theoretical framework. May I have permission to utilize the schematic presented in your seminal work within my dissertation? I've attached the graphic I'm referencing to this message.

Thank you,
Kevin J. Hasinger, Ed.S.

flower-and-hayes-cognitiv...eory-of-writing-7-638.jpg

Linda Flower to you 8 minutes ago

Kevin, of course you are welcome to use that. If it is at all relevant, here is a look-back chapter i wrote for that 2017 book on Cognition and Writing.
Linda f

Flower What Can Cognitive Rhetoric Offer us.pdf

Perspectives on Cognition... Writing Front Matter.pdf

APPENDIX B
District IRB Approval Letter

Jennifer Coleman, Ph.D.
Executive Director

Accountability, Assessment, Research and Evaluation
Stevenson Administration Building

December 21, 2020

Kevin Hasinger
[redacted]

Dear Kevin Hasinger,

The Research Committee of Richland County School District One has ***approved*** your research request regarding ***"High School Teachers' Experiences in Addressing the Challenges of Written Expression among Students with Autism Spectrum Disorder."*** The study is approved for the 2020-2021 school year at Columbia High School and Lower Richland High School.

You are free to coordinate with the school principals to request voluntary participation utilizing a personal email account during non-work hours. Richland One's standard protocol for request for research participation is limited to two email attempts **only** and I must be copied on all email correspondence (jennifer.coleman@richlandone.org).

Lastly, please be reminded to maintain the confidentiality of the data and do not make public the name of the district or schools. We ask that you provide us with a copy of your completed research.

Sincerely,
[redacted]
Dr. Jennifer Coleman, Ph.D., Chair
Richland One Research Committee

[Insert Date]

[Recipient]
[Title]
[Company]
[Address 1]
[Address 2]
[Address 3]

Dear [Recipient]:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a Doctorate of Education degree. The title of my research project is A Phenomenological Study of Teachers' Experiences of the Challenge of Written Expression among Children with Autism Spectrum Disorder and the purpose of my research is to examine special education classroom teachers' experiences of the challenges of written expression among children with Low- and High-Functioning Autism Spectrum Disorder.

I am writing to request your permission to conduct my research in School District A.

Participants will be asked to click on the link provided to schedule an individual interview or focus group meeting. The data will be used to examine special education classroom teachers' experiences of the challenges of written expression among children with Low- and High-Functioning Autism Spectrum Disorder. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

Thank you for considering my request. If you choose to grant permission, please provide a signed statement on official letterhead indicating your approval.

Sincerely,

Kevin J. Hasinger, Ed.S.

List of Potential Sites for Research Using Pseudonyms

PCSD: A1 High 1, A1 High 2, A1 High 3, A1 High 4, A1 High 5, A1 High 6, A1 High 7

APPEXDIX C

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

January 22, 2021

Kevin Hasinger
Billie Holubz

Re: IRB Exemption - IRB-FY20-21-204 HIGH SCHOOL TEACHERS' EXPERIENCES IN ADDRESSING THE CHALLENGES OF WRITTEN EXPRESSION AMONG STUDENTS WITH AUTISM SPECTRUM DISORDER

Dear Kevin Hasinger, Billie Holubz:

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

Your stamped consent form can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. This form should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,
G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

APPENDIX D

Demographic Questionnaire

Please complete the following demographic inquiries:

- Age:
- Gender:
- Ethnicity:
- Degree Level (Bachelors, Masters, Post-Graduate, Doctorate):
- Degree Type (Special Education, Science, etc.):
- Teaching Certifications:
- Years Teaching:
- Years Teaching in Special Education:

APPENDIX E

Invitation to Participate (Email)

Dear Special Educator,

My name is Kevin J. Hasinger, and I'm completing a phenomenological research study about special education teachers' experiences in teaching writing to students with autism spectrum disorder (ASD). Specifically, the purpose of this transcendental phenomenological study is to describe high school special education teachers' experiences in teaching written expression to students with autism spectrum disorder in Parker County School District. As part of this study, I will be collecting data from special educators just like you through interviews, focus groups, and observations or reflective journaling. If you are interested in participating in a short one-on-one interview and/or a small focus groups of special educators to discuss the challenges of teaching writing to students with ASD, please complete the short linked survey below, providing your name and your preferred contact method. Once I've received your contact information, I'll reach out to determine a time convenient for you to discuss your experiences.

Sincerely,

Kevin J. Hasinger, Ed.S.

Principal – Dreher High School

Doctoral Candidate – Liberty University

APPENDIX F
Consent

Title of the Project: A PHENOMENOLOGICAL STUDY OF TEACHERS' EXPERIENCES OF THE CHALLENGE OF WRITTEN EXPRESSION AMONG CHILDREN WITH AUTISM SPECTRUM DISORDER
Principal Investigator: Kevin J. Hasinger, Ed.S., Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be special educator that has served at least one or more students identified as having autism spectrum disorder in the content area of written expression. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research project.

What is the study about and why is it being done?

The purpose of this transcendental phenomenological study is to examine special education classroom teachers' experiences of the challenges of written expression among children with low- and high-functioning autism spectrum disorder. I hope to develop rich descriptions of the experiences of educators working with students with ASD in the content area of writing.

What will happen if you take part in this study?

If you agree to be in this study, I would ask you to do the following things:

1. Schedule an individual interview with the researcher that would last approximately 30 minutes, would be held at your school site, and would audio-recorded and transcribed.
2. Participate in a scheduled focus group meeting with 3-4 other educators to collectively respond to several questions. The focus group would last approximately 30 minutes, would be held at your school site or another agreeable location, and would be audio-recorded and transcribed.
3. Some participants will also be asked to allow a non-participatory observation of the educator working with students having autism spectrum disorder in the content area of written expression for approximately 30-45 minutes or what is deemed appropriate by the educator as an instructional period.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life. However, it should be noted that I serve as a mandatory reporter of child abuse, child neglect, elder abuse, and/or intent to harm self or others.

How will personal information be protected?

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records. If data collected from you is shared, any information that could identify you, if applicable, will be removed before the data is shared.

Participant responses will be kept confidential through the use of pseudonyms. Interviews will be conducted in a location where others will not easily overhear the conversation. Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted. Interviews/focus groups will be recorded and transcribed. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings. Confidentiality cannot be guaranteed in focus group settings. While discouraged, other members of the focus group may share what was discussed with persons outside of the group.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University or the school system in which you are currently employed. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you, apart from focus group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Kevin J. Hasinger. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at [redacted] or [redacted]. You may also contact the researcher's faculty sponsor, Dr. Billie Holubz, at [redacted].

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Your Consent

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you may contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

The researcher has my permission to audio-record me as part of my participation in this study.

_____

Printed Subject Name

_____

Signature & Date

APPENDIX G

Interview Questions

1) Briefly describe your experience in working with students identified as having autism spectrum disorder in the school setting.
2) Please share your thoughts on how students with autism communicate in the classroom setting.
3) Please discuss how students with autism spectrum disorder approach learning in general.
4) Describe how you think your students with autism spectrum disorder experience writing.
5) Describe how your students with ASD approach writing assignments; try to focus on their cognitive process.
6) In working with students with autism spectrum disorder, please describe the connection or disconnect between written expression and oral expression. Describe the gap in performance you observe between students expressing themselves in writing and verbally.
7) Describe how your students with ASD embed multiple writing procedures and/or strategies simultaneously while working independently on a piece of writing.
8) Discuss how your students with ASD interact with their previous work on a writing assignment (text already written) as they return to the work at a later time.
9) Describe your experiences with students with ASD's behavior during writing exercises as it relates to signs of anxiety or inattention (behavioral response) in response to interacting the writing prompt, problem, and/or rhetorical question.

10) Please share anything else you would like to share that could be valuable in understanding how you experience teaching written expression to high school students who have autism spectrum disorder.

APPENDIX H

Focus Group Questions

1) Describe your experiences when tasked with teaching written expression to high school students who have autism spectrum disorder. Attempt to describe their cognitive process.
2) How do you attempt to assist your high school students with ASD blend various elements of writing during the process of composition? What have been your experiences when guiding them to embed these strategies as they write? Provide examples if possible.
3) Describe your experiences when guiding your high school students with ASD to grapple with the task environment, specially how they are able to pick up where they left off on a piece of writing and how they approach and respond to a prompt and rhetorical questions driving the writing assignment. Give examples if possible.
4) Share with me how students with ASD behavior manifests during your instruction of written expression and why you think these presentations occur.
5) Please share anything else you would like to share that could be valuable in better understanding your experiences in supporting students with ASD in the content area of writing.

APPENDIX I

Observation Protocol

A Behavioral Protocol for the Observation of Writing

Part I – Environment (Describe the learning environment)

- Text
- Text
- Text

Part II – Demographics (Describe the visible demographics of the classroom)

- Text
- Text
- Text

Part III – Long-Term Memory/Primary Objective (Describe Topic, Audience, and Writing Plans)

- Text
- Text
- Text

Part IV – Embedding/Processes (Describe Planning via Organization, Goal Setting, and Generating Ideas; Translating, Reviewing through Evaluating and Editing; Overall Self-Regulation/monitoring)

- Text
- Text
- Text

Part V – Task Environment (Describe the Rhetorical Problem via Topic, Audience, and Exigency); Interaction with Test Produced So Far)

- Text
- Text
- Text

Part VI – Miscellaneous Observations (General Observations; Questions Asked; Teacher Behavior; Student Behavioral Presentations; Signs of Anxiety/Stress, etc.)

- Text
- Text
- Text

APPENDIX J

Thematic Table

Theme	Subthemes	Codes
Resistance to Begin Writing (Informs CRQ, and SRQ1)	Importance of Relevance	Meaningfulness of Topic to the Student Importance of Topic to the Student Student Belief that Topic is Worthwhile Student Interest in the Topic Connection to Self
	Process of Rationalization	Talking Through the Prompt with Student Rationalization is a Common Intervention Scaffolding Conversational Approach Brainstorming
	Behaviors	Resists Academic Push Outbursts Shut-Downs Avoidance of Non-Preferred Task
Lack of Focus (Informs CRQ, SRQ1, and SRQ2)	Comorbidity with ADHD	Prevalent Among Students with ASD Similar Symptoms for ASD and ADD/ADHD Hyperactivity
	Trouble Embedding	Struggle with Cognitive Multitasking Difficulty Maintaining Focus on Writing Tasks Impulsivity
	Challenges of Working Memory	Embedding Trouble Keeping Previously Written Text in Mind Disconnected Paragraphs or Sentences
Resistance to Revise (Informs CRQ and SRQ3)	Avoids Sources	Dislikes Citation Process Dislikes Research and Using Others Ideas
	Emphasis on Own Ideas	Rigid Thinking Related to Behavior Resistant to Change Egocentrism
	In the Moment Thinking	Unique Ideas Spontaneous Thinking and Beliefs Difficulty Returning to Prior Thinking

	Trouble Accessing Previously Written Text
Finality of Work	First Draft as Final Draft Resistance to Change Original Ideas Avoidance of Metacognition