



**Walden University**  
**ScholarWorks**

---

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies  
Collection

---

2019

# ADHD and Self-Regulation in the Workplace

Kristine Lynne Barnett  
*Walden University*

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Quantitative Psychology Commons](#)

---

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact [ScholarWorks@waldenu.edu](mailto:ScholarWorks@waldenu.edu).

# Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Kristine Lynne Barnett

has been found to be complete and satisfactory in all respects,  
and that any and all revisions required by  
the review committee have been made.

## Review Committee

Dr. Cheryl Tyler-Balkcom, Committee Chairperson, Psychology Faculty

Dr. David Mohr, Committee Member, Psychology Faculty

Dr. Jessica Tischner, University Reviewer, Psychology Faculty

Chief Academic Officer

Eric Riedel, Ph.D.

Walden University  
2018

Abstract

ADHD and Self-Regulation in the Workplace

by

Kristine Lynne Barnett

MA, University of Houston- Clear Lake, 2001

BA, University of Houston, 1998

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

February 2019

## Abstract

Attention-deficit/hyperactivity disorder (ADHD) diagnosed during childhood can continue into adulthood, but most research on the topic has been done on children and adolescents. This research focus has thus often left out the population of adults with this disorder. In particular, there is little research on the role that self-regulation plays in the lives of adults on several life domains, especially in the workplace. The purpose of this qualitative, phenomenological study was to understand the role that self-regulation plays in the occupational functioning of adults with ADHD. Self-regulation theory provided the tenets that were used to examine how adults with ADHD self-regulate their emotions in the occupational setting. A modified version of the Stevick-Colaizzi-Keen method of analysis of phenomenological data was used to analyze transcripts of participant interviews with 11 Adults who have an ADHD diagnosis and at least one year of work experience. The results showed that many of the participants had difficulty with self-regulation, particularly with effectively managing the situation by considering the long-term consequences for their actions. The study has several social change implications. First, the findings might add to scholarly literature regarding the later-life impact of adult ADHD, enabling such changes as additional treatment of ADHD in adulthood and potential accommodations, support, and training on the job. Given the centrality of employment issues in the life of an adult, the findings may provide direction and insight to employers in managing employees with ADHD, making them more productive members of the workplace.

ADHD and Self-Regulation in the Workplace

by

Kristine Lynne Barnett

MA, University of Houston- Clear Lake, 2001

BA, University of Houston, 1998

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

February 2019

## Dedication

This dissertation is dedicated to my two sons and immediate family members. Their sacrifice, support, and encouragement has been instrumental to the completion of my educational endeavors.

## Acknowledgments

First, I would like to give thanks to both my committee members throughout this process for their time, expertise, and encouragement. My committee chairperson was instrumental to the completion of this study by providing encouragement, emotional support, and guidance throughout the journey. My committee member has been with me throughout this journey since the conceptualization phase and has put countless hours reviewing as well as emotional support throughout the process.

In addition, I would like to thank the participants in the study for taking the time to participate and for sharing their unique experiences with ADHD. I would also like to thank both mental health-care clinics from which all the participants were gathered from in the study.

Finally, I would like to thank my supervisor for all his support with dissertation and countless hours advising me during my practicum and internship with Walden University. I would also like to thank my two sons, who have been by my side throughout this process. I thank my two sons for their understanding and patience while I dedicated many hours working toward my goal.

## Table of Contents

List of Tables .....	v
Chapter 1: Introduction to the Study .....	1
Introduction.....	1
Background of the Problem .....	4
Problem Statement.....	11
Purpose of the Study.....	13
Research Questions.....	13
Conceptual Framework.....	14
Nature of the Study.....	15
Definition of Terms .....	16
Assumptions .....	18
Scope and Delimitations .....	18
Limitations .....	21
Significance.....	22
Summary .....	24
Chapter 2: Literature Review.....	26
Introduction.....	26
Literature Search Strategy.....	27
Conceptual Framework.....	28
Self-Regulation Theory.....	29
Review of Relevant Literature .....	34



ADHD in Adulthood.....	34
Self-Regulation in Adults With ADHD.....	39
Definition and Role of Self-Regulation in Behavior .....	40
Research on the Role of Self-Regulation in Adults With ADHD.....	42
Occupational Issues in Adults With ADHD .....	50
Summary and Conclusion .....	58
 Chapter 3: Research Method.....	 65
Introduction.....	65
Research Design and Rationale.....	66
Research Questions.....	66
Role of the Researcher .....	70
Methodology .....	73
Participant Selection Logic .....	73
Data Collection .....	75
Instrumentation.....	75
Data Analysis Plan.....	77
Issues of Trustworthiness.....	78
Credibility.....	79
Transferability .....	80
Dependability .....	81
Confirmability .....	82
Ethical Procedures .....	82

Summary .....	84
Chapter 4: Results .....	86
Introduction.....	86
Setting .....	87
Data Collection.....	88
Demographics.....	89
Data Analysis .....	92
Epoche.....	92
Horizontalization .....	93
Textural Description .....	93
Structural Description .....	94
Textural-Structural Description.....	94
Composite Description.....	95
Evidence of Trustworthiness.....	95
Credibility.....	96
Transferability .....	96
Dependability .....	97
Confirmability .....	98
Results.....	98
Theme 1: Essential Description of ADHD in the Workplace .....	99
Theme 2: Difficulties in Processing Emotions.....	111
Theme 3: Emotional Regulation Strategies.....	123

Theme 4: Medication Challenges and Benefits.....	129
Summary .....	133
Chapter 5: Discussion, Conclusions, and Recommendations .....	65
Introduction.....	134
Interpretation of the Findings.....	134
Theme 1: Essential Description of ADHD in the Workplace .....	135
Theme 2: Difficulties in Processing Emotions.....	138
Theme 3: Emotional Regulation Strategies.....	141
Theme 4: Medication Challenges and Benefits.....	144
Conceptual Framework.....	145
Limitations of the Study.....	146
Recommendations .....	148
Implications.....	149
Positive Social Change.....	149
Theoretical Implications.....	151
Recommendations for Practice.....	152
Conclusions .....	152
References.....	156
Appendix A: Letter of Cooperation.....	156
Appendix B: Recruitment Letter for Individual Clinicians .....	156
Appendix C: Letter of Invitation to Participate .....	156
Appendix D: Participant Interview Protocol Form .....	156

Appendix E: Participant Thank you Letter .....	156
Appendix F: Participant Screening Questions .....	156

***List of Tables***

Table 1. Participant Demographic Information .....	91
--	----

## Chapter 1: Introduction to the Study

### Introduction

Attention deficit hyperactivity disorder (ADHD) is one of the most prevalent and diagnosed developmental disorders. As of 2011, 11% or 6.4 million children were diagnosed with ADHD, which is an increased average of 5% from 2003 to 2011. There are also a large number of adolescents with ADHD. Recent statistics have shown that 3 million adolescents between the ages of 12-17 are diagnosed with ADHD (NIMH, 2013). In addition to the children and adolescents diagnosed with ADHD, the number of adults diagnoses have increased, with recent statistics indicating that 4% of adults in the United States over the age of 18 have the disorder (NIMH, 2013). This disorder is characterized by inattention, hyperactivity, and impulsiveness, and symptoms can affect the individual throughout their lifetime.

Historically, ADHD has been considered a problem that only exists during childhood; however, research has shown that ADHD can persist well into adulthood (Retz et al., 2012; Targum & Adler, 2014). Because researchers are just beginning to focus on the impairments ADHD may create in adults, there is little research on or with adults who have been diagnosed with ADHD (Hansson-Hallerod et al., 2015; Retz et al., 2012). Interestingly, the research on ADHD in adulthood has indicated that symptoms can impact several life domains such as interpersonal relationships, occupation, education, health, marriage, parenting, and financial status (Anastopoulos et al., 2011; Barkley, 2015; Retz et al., 2012). Nonetheless, the current research on adults with ADHD has not adequately addressed the challenges faced by those with this disorder.

For adults with ADHD, the role that self-regulation has in daily life is one of the most under-researched issues in the ADHD literature (Mitchell et al., 2012; Richard-Lepouriel, 2016; Shaw et al., 2014). *Self-regulation* is effortful or voluntary control of one's behavior that enables an individual to adjust or alter responses to a particular situation or event (Retz et al., 2012; Targum & Adler, 2014). It is important because it enables an individual to respond to situations and events in a socially desirable manner that contributes to positive outcomes. The ability to self-regulate one's emotions is useful in preventing an individual from acting on impulses that can result in negative outcomes. Emotional dysregulation occurs when these adaptive processes are impaired, leading to behavioral responses that are not in line with goals (Shaw et al., 2014).

Individuals with emotional dysregulation tend to have difficulty tolerating stressful emotional experiences, which can pose problems in relationships and with self-concept (Rawana et al., 2014). Individuals with ADHD are deficient in self-regulation, which has been associated with low frustration tolerance, mood instability or lability, and emotional overreactivity that leads to lower quality of life (Surman et al., 2013). Emotional dysregulation has been long associated with a symptom of ADHD; however, the current diagnostic criteria for ADHD do not include emotional dysregulation as a measure (Shaw et al., 2014; Skirrow & Asherson, 2013). Prior research has shown that self-regulation is problematic for individuals with ADHD and is a major component of impairment for those with ADHD (Shaw et al., 2014). The inclusion of self-regulation in the conceptualization of ADHD is important due to its presence throughout the lifetime and its impact on impairments. Clinical recognition of self-regulation as a diagnostic

feature of ADHD could prompt more treatments and therapeutic interventions for individuals diagnosed with this disorder.

While self-regulation is under-researched in adults with ADHD, research focusing on the role of self-regulation in the workplace among adults with ADHD is particularly insufficient. Because adults spend so much of their lives in the occupational setting (just as children spend many of their hours in the school setting), and because successful employment is necessary to contemporary life, understanding how ADHD affects adults' workplace self-regulation is crucial. As a necessary first step in such research, I investigated the impact self-regulation on the daily lives of adults with ADHD, focusing specifically on their lived, day-to-day experiences with occupational functioning.

By studying first-hand accounts of how self-regulation impacts the workplace functioning of adults with ADHD, I sought to address crucial gaps in adulthood ADHD research. There is a need to represent adults with ADHD in the research literature because such attention may spur more recognition of the condition while adding to the knowledge base on adults with ADHD. This study may give employers an opportunity to understand the challenges faced by adults with ADHD, thereby supporting social change on an organizational level. Research into the need for employment-based accommodations and self-regulation strategies for workplace settings can lead to program and training development. Using the study results, employers can develop such supportive structures as support groups for adults with ADHD, where participants can discuss ways to cope and navigate various systems in the community.



In this chapter, I offer a review of background information on ADHD, present the problem statement, and discuss the purpose of the study. I then present the research questions I developed for this a phenomenological, qualitative study before introducing the conceptual framework and nature of the study and defining key terms. The assumptions, scope, and delimitations, limitations and significance of the study are also addressed in this chapter.

### Background of the Problem

ADHD is typically considered a childhood disorder (Barkley, 2015), resulting in a lack of research regarding adults with ADHD. When children are diagnosed with ADHD, many of them receive accommodations in school, training in strategies and tools for school and home success, and for some medication (Ramsay, 2010a). However, when children transition into adulthood, they often lose access to many of the services and accommodations they previously received because of the need to transfer into another health service or insurance plan, reduced parental involvement, and a belief that they have grown out of ADHD (Swift, Sayal, & Hollis, 2014). Thus, adults with ADHD may not receive adequate services to manage their symptoms, which may lead to difficulty in managing time and appointments and thus increased functional impairment (Eklund, 2016). In adulthood, such assistive and medical services are usually the responsibility of the recipient, as is seeking the help and paying for it. However, due to the poor transition and difficulties faced with treatment availability and expertise, a significant proportion of adults do not seek services for their ADHD (Swift et al., 2014). Consequently, Targum and Adler (2014) suggested that diagnosis of ADHD in

adulthood is greatly undertreated, estimating that only 10 to 25% of adults with ADHD are diagnosed and properly treated. As a result, many adults with ADHD have trouble performing in the work setting due to the deficits associated with ADHD. The problems these individuals may face include reduced motor coordination and working memory, problems with planning, goal setting, anticipation, and self-regulation and physical hyperactivity (Adamou et al., 2013).

Despite the negative effects of adulthood ADHD, researchers are just beginning to give it attention in the scholarly literature. Research conducted on adults with ADHD has demonstrated that the symptoms of ADHD can severely impact the lives of adults with ADHD, especially for those who remain untreated (Barkley, 2015). The existing literature on ADHD in adulthood has indicated that symptoms can simultaneously impact several life domains such as interpersonal relationships, occupation, education, health, marriage, parenting, and financial status (Anastopoulos et al., 2011; Barkley, 2015; Retz et al., 2012). Therefore, this disorder can have an effect on the individual's overall quality of life and future outcomes if left unrecognized and unmanaged.

Pitts (2014) suggested that the medical community is just beginning to recognize ADHD in adults. However, there is significant research that still needs to be conducted. Although there is an increase in clinical diagnoses of ADHD as well as research indicating that ADHD persists into adulthood (Prevatt & Levrini, 2015), there is very little research on the experiences of adults with ADHD (Hansson et al., 2015). Adults with ADHD have similar symptoms as their childhood counterparts; such symptoms can negatively impact the individual both cognitively and emotionally with additional

negative outcomes that may yet be discovered. Similar to children diagnosed with ADHD, adults may experience hyperactivity, problems with sustained attention, relationship problems, disorganization, impulsivity, difficulty with organization, and difficulty completing tasks, which can lead to problems with employment and social difficulties in relationships (Barkley, 2015; Camilleri & Makhoul, 2013; Miranda, Berenguer, Colomer, & Roselló, 2014). Researchers have indicated that ADHD in adulthood can have serious implications for those with this disorder (Brod et al., 2012). Moreover, Brod et al. (2012) suggested that ADHD symptoms in adults might contribute to a lifetime burden of illness, financial difficulties, lower educational attainment, job performance, and social challenges.

One of the most problematic areas for adults with ADHD is learning to self-regulate their emotions in many life domains, particularly in relationships and in the occupational setting. Prior research has shown that self-regulation is problematic and a major component of impairment for those with ADHD (Shaw et al., 2014). Individuals who have problems with self-regulation (emotional dysregulation) have difficulty in their ability to tolerate stressful emotional experiences, which can pose problems in relationships and with self-concept (Rawana et al., 2014). According to Adamou et al. (2013), some of the specific workplace problems associated with poor self-regulation of adults with ADHD are related to the lack of adequate social skills that makes it difficult to effectively work with colleagues, managers, and the public. Thus, difficulties in the ability to self-regulate can pose serious problems for adults with ADHD, specifically regarding their ability to maintain employment.

Given the negative impact that problems with self-regulation have on the workplace functioning of adults with ADHD, Shaw et al. (2014) have indicated an increased interest in research on the role that self-regulation on potential functional impairment. Therefore, researchers are beginning to question whether self-regulation should be included in the diagnostic criteria when evaluating individuals with ADHD (Retz et al., 2012; Shaw et al., 2014; Skirrow & Asherson, 2013). Discerning the nature of emotional dysregulation as it relates to ADHD is important because self-regulation can be confused with other mood disorders, thus leading to an incorrect diagnosis (Surman et al., 2011).

Other researchers have pointed out that it may be useful to include emotional lability as a core feature of ADHD rather than a co-existing disorder (Skirrow & Asherson, 2013). However, it is difficult to make this argument when these symptoms are associated with other psychiatric disorders. Shaw et al. (2014) proposed that fostering the gap between emotional dysregulation and ADHD can lead to better treatment approaches. Poor self-regulation was once included in the DSM as a symptom of ADHD. Surman et al. (2013) purport that since 1968, the DSM has included insufficiencies in self-regulation as part of the associated symptoms, but not a central feature. However, today the criteria listed in the DSM do not include self-regulation deficits despite the association it has with ADHD. Although there is little research on emotional symptoms as core features in ADHD, Surman et al. (2013) found that the deficits in self-regulation to be significantly associated with lower quality of life, increased car accidents, legal

involvement, and poor social adjustment, indicating that the symptoms are important to identify in order to properly treat individuals with ADHD.

Jarrett (2015) suggested that researchers should place greater focus on self-regulation when developing a treatment for adults with ADHD due to the impairment in many life domains. Thus, research on the role of self-regulation will shed light on some of the functional impairments such as the impact that it has on social and occupational functioning in adults with ADHD. Researchers have often used behavioral observations and rating scales to demonstrate the link between emotional dysregulation and ADHD (Anastopoulos et al., 2011; Barkley, 2015). However, few have looked at how self-regulation and dysregulation impact the lives of adults with ADHD. Skirrow and Asherson (2010) conducted a study investigating emotional lability of adults with ADHD and found that adults with ADHD reported more emotional lability associated with ADHD impulsivity rather than another co-occurring disorder. Their study indicated a need for explaining why and how some ADHD symptoms such as self-regulation are not accounted for by the current ADHD diagnostic criteria. My study was thus necessary to raise awareness of the possible role that self-regulation has on major life domains in adults with ADHD and to provide further evidence of the potential need to add self-regulation as a symptom of ADHD to the DSM.

The workplace is a social and interpersonal domain that requires one to function in socially acceptable ways. Interpersonal relationship is a substantial area that relates to self-regulation. To function properly in the workplace, one must maintain healthy relationships with coworkers and supervisors. For adults with ADHD, social functioning

can prove to be difficult and one of the most debilitating areas for those affected by this disorder. Ramsay (2010a) suggested that although social functioning is a known impairment for individuals with ADHD, there is a significant lack of research in this area. Adults with ADHD have difficulty maintaining interpersonal relationships. Ramsay suggested that even those with mild cases of ADHD have deficits in social functioning that impairs their ability maintain relationships. Interpersonal skills are often reported as problematic among adults with ADHD, and these problems can have serious implications such as social rejection in relationships and diminished occupational functioning.

One of the most challenging impairments that adults with ADHD may experience is in the area of interpersonal functioning. Fleming and Snell (2008) indicated that emotional well-being is associated with the ability to recognize and process emotions. However, this ability is problematic for adults with ADHD because of their misinterpretation of social cues. Adults with ADHD may have significant problems with interpersonal functioning and may be less likely to successfully engage in social interactions, relationships, and activities. An unsuccessful social life can have a negative impact on employment because maintaining functional relationships are an important component of performing in the workplace (Barkley, 2015).

Indeed, adults with ADHD may have a poor work history and may be more likely to experience lower job status and satisfaction in the work environment than adults without ADHD (Ramsay, 2010b). Similarly, Adamou et al. (2013) suggested that the impairments associated with ADHD, such as poor time management and organization, difficulty keeping up with the workload and following instructions, and emotional lability

are often problematic in the workplace. The symptoms of ADHD cause many deficits in executive functioning and social domains, such as poor motor coordination, impaired working memory, an inability to plan adequately and anticipate needs, insufficient organizational skills, low self-regulation, and increased and inappropriate emotional arousal. Any of these deficits can considerably affect one's ability to function in the workplace (Adamou et al., 2013). Of course, having problems with employment can lead to difficulties in all life domains and diminished overall quality of life and well-being (Adamou et al., 2013). These high stakes indicate a strong need to adequately diagnose, understand, and provide a practical treatment for adults with ADHD, particularly for their success in employment settings.

Prevatt and Levrini (2015) believed that as adults with ADHD transition into more challenging employment roles, their impulsivity and ability to pay attention might become more of a problem, affecting their ability to cope with the workplace demands. In a workplace-based study, employers reported adults with ADHD as having more problems and impairments, presumably due to the symptoms of ADHD (Barkley, 2015). Such problems included the inability to complete assigned work, refraining from educational opportunities at work, not being punctual, and challenges managing time and addressing their daily responsibilities. As a result of the challenges adults with ADHD face in their workplace, marital and family functioning, personal self-esteem, stress and stress management, and financial stability may also suffer (Prevatt & Levrini, 2015). Stable employment is important for all adults, but may be especially difficult for adults

with ADHD to achieve unless they have adequate strategies for managing the ADHD in place.

Researchers are just beginning to address the issue of self-regulation in individuals with ADHD in general, but there is a lack of research that focuses on self-regulation, dysregulation, and its impact specifically on adults and their quality of life (Barkley, 2015). Furthermore, Adamou et al. (2013) suggested that there are few studies of the social and occupational functioning of adults with ADHD. Additional research is needed as better criteria for diagnosis and detection identify more individuals with ADHD, which can lead to improved interventions in the workplace for adults with ADHD. My goal in this study was to examine how emotional dysregulation impacted the daily workplace functioning of adults with ADHD. Specifically, I worked to gain a better understanding of the extent to which emotional dysregulation impacts the daily lives of adults with ADHD by examining their lived, day-to-day experiences of occupational functioning.

### **Problem Statement**

Although ADHD is often diagnosed during childhood, the symptoms of ADHD will continue into adulthood for approximately two-thirds of children diagnosed with the disorder (Prevatt & Levrini, 2015). The greatest effect of this condition among adults is on their ability to function well in a workplace. Lindstedt and Umb-Carlsson (2013) indicated that the core symptoms of ADHD could affect an adult's ability to work effectively and maintain employment. Targum and Adler (2014) claimed that ADHD symptoms of inattention and distractibility might result in serious complications in the



workplace and conflicts with colleagues. As a result, adults experiencing the symptoms of ADHD may have difficulty finding and keeping adequate employment, which can lead to economic problems that will exacerbate symptoms and make them prone to developing some comorbid disorders (Adamou et al., 2013). There are few studies of the best practices to resolve these social and occupational dysfunctions of adults with ADHD (Adamou et al., 2013).

Even though the Americans with Disabilities Act (ADA, 1990) recognized ADHD as a disability, there are few supportive measures regarding accommodations and career counseling for employees with this condition. One possible cause for this inattention to this population could be a lack of acknowledgment of ADHD in adulthood in the first place, preventing the discovery of practical, supportive measures that would help adults with ADHD function better in the occupational setting, particularly improving their self-regulation (Martell, 2009). Self-regulation improves how people in general handle life stressors; and yet, researchers have insufficiently explored the role that self-regulation plays in the occupational functioning for adults with ADHD. The limited studies on the topic have only shown that adults with ADHD can have grave deficits in self-regulation (Mitchell et al., 2012; Richard-Lepouriel et al., 2016). Understanding the implications of these deficits can reveal whether best practices to help adults with ADHD should start with targeting this symptom. Therefore, in this study I attempted to increase scholarly understanding of how self-regulation impacts the work lives of adults with ADHD.

### Purpose of the Study

The purpose of this qualitative, phenomenological study was to understand the role that self-regulation plays in the occupational functioning for adults medically diagnosed with ADHD. Self-regulation refers to individuals' abilities to adapt their emotional states through selecting, attending, and appraising emotionally arousing stimuli (Shaw et al., 2014). Investigating the role of self-regulation in the workplace is important because employment can affect an individual in several domains such as emotional and financial well-being, thus impacting the individual's quality of life. Further information about the experiences of adults with ADHD may assist employers working with adults with this disorder, encourage more research on employment outcomes and issues for adults with ADHD, aid in defining necessary accommodations in the workplace, and help to conceptualize the role of self-regulation in adults with ADHD.

The population targeted in this study was adults with existing diagnoses of ADHD recruited from local ADHD treatment clinics across northeast Ohio. Participants met the following inclusion criteria: (a) adults who had been medically diagnosed and had a history with ADHD treatment, (b) adults with at least 1 year of work experience but may or may not be currently employed, (c) adults living away from parents or caregivers, (d) female or male adults who were 18 to 70 years old.

### Research Questions

The purpose of this qualitative, phenomenological study was to understand the role that self-regulation plays in the occupational functioning of adults medically

diagnosed with ADHD. This study adds to the limited body of research regarding ADHD in adulthood. In it, I sought to answer the following research questions:

RQ1: What are the lived experiences of adults with ADHD in the workplace?

RQ2: In the experiences of adults with ADHD, how does self-regulation affect their performance in the workplace?

### Conceptual Framework

The self-regulation theory (SRT; Heatherton & Baumeister, 1996) served as the theoretical framework for this study. I used this theory to examine how adults with ADHD regulate their emotions to successfully in the occupational setting. SRT refers to the ways in which people start, regulate, disrupt, stop, or change behaviors to attain personal goals, strategies, or standards (Heatherton & Baumeister, 1996). Furthermore, Baumeister's model holds that the failure to regulate emotions and behaviors has its roots in the majority of psychological pathologies. Thus, the theory can be applied to many social and personal problems (Dale & Baumeister, 1999).

SRT identifies three components included in the development of self-regulation: standards of desirable behavior, monitoring the thoughts and situations that impede achieving the standard, and willpower or self-regulatory strength (Baumeister et al., 2007). SRT proposes that control processes are fundamental to self-regulation by overriding automatic responses. Furthermore, self-regulation involves feedback loops in which the individual compares the self to standards to get as close to the standard as possible, comparing again until the goal is eventually reached (Dale & Baumeister,

1997). Therefore, when self-regulation fails, there is a disruption in the individual's ability to attend or regulate behavior leading to an unmet goal.

Individuals are not always successful in self-regulating their behaviors, resulting in what Heatherton and Baumeister (1996) called self-regulation failure. Baumeister and Heatherton suggest that underregulation and misregulation are involved in the failure of self-regulation that results in unmet goals. Underregulation refers to the failure to employ control. Misregulation refers to the employment of control that is misguided or counterproductive, leaving the desired goal unmet.

SRT was appropriate for my exploration the experiences of adults with ADHD, and I used it to highlight the experience and provide an explanation of the self-regulatory failure and impact on specific problems faced by adults with ADHD. Research on self-regulation in individuals with ADHD has shown that poor self-regulation is a significant problem and can impact the individual's quality of life, especially in social relationship and occupational functioning. In particular, the problems adults with ADHD have in setting and achieving goals significant to the SRT outlines the functional impairments associated with occupational functioning adults with ADHD. By using SRT and addressing occupational functioning with adults with ADHD from a phenomenological perspective, this study allowed for a deeper understanding of the problems experienced by adults with ADHD.

#### Nature of the Study

In this study, I used qualitative inquiry and the phenomenological approach to explore the perceptions and experiences of adults with ADHD and the implications of

self-regulation on occupational functioning. The rationale behind the selection of the phenomenological approach to this study was that it is the most appropriate approach for generating an in-depth understanding of the workplace perceptions and experiences of adults with ADHD. Creswell (2013) suggested that the phenomenological research method is useful to describe the lived experiences of a specific phenomenon from the perspective of several individuals.

I gathered data through in-depth semi-structured interviews with participating adults diagnosed with ADHD. Data was collected, transcribed, interpreted, and then coded for thematic importance and textural descriptions to gather meaning and understanding of the participants' experiences. I recorded the personal experiences of adults with ADHD via the interviews and then placed the interview data into meaningful chunks and themes. I then combined the themes to represent the distinctiveness of the experiences of adults with ADHD. The data analysis involved a modified version of the Stevick-Colaizzi-Keen phenomenological data analysis, as summarized by Moustakas (1994). Correspondingly, Creswell (1998) suggested that most researchers find the Stevick-Colaizzi-Keen method of analysis of phenomenological data the best approach due to its practicality and usefulness.

#### Definition of Terms

*Attention deficit hyperactivity disorder (ADHD)*: ADHD is a neurodevelopmental condition that has three different presentations: inattentiveness, hyperactive-impulsive, and combined inattentiveness and hyperactive-impulsive. The main symptoms include inattention and hyperactivity that are continuous and present in more than one setting,

which disrupts development and interferes with daily functioning (American Psychiatric Association, 2013).

*Comorbidity*: Comorbidity is the addition of an existing diagnosis of the presence of another psychiatric disorder (Barkley, 2015).

*Emotional dysregulation*: Emotional dysregulation is the behaviors, actions, and emotional responses that are poorly regulated such as irritability, volatile moods, quick reactivity, low frustration tolerance, and difficulties with managing anger. Emotional dysregulation is defined by three separate domains: controlling temper, affect lability, and emotional reactivity (Vidal et al., 2014).

*Emotional self-regulation*: Emotional self-regulation is the ability to deter inappropriate behavior as it relates to strong adverse or constructive emotions. Additionally, it is the ability to self-modify physiological arousal as well as to recover focus/attention to organizing oneself toward an external goal (Gottam & Katz, 1989).

*Emotional lability*: Emotional lability refers to the emotional deficits associated with the inability to control one's temper, and includes symptoms such as irritability, a hot temper, unpredictable moods, being set off easy, and a low frustration tolerance (Vidal et al., 2014).

*Occupational functioning*: Occupational functioning refers to the ability to carry out roles, responsibilities, and tasks expected of each employee.

*Self-control*: Self-control is the ability to inhibit, override, and reroute responses that are associated with short-term rewards and impulsivity to strive for long-term benefits (Reynolds, & McCrea, 2016).

*Social functioning*: Social functioning refers to those behaviors necessary for productive interactions in friendships and intimate relationships (Rabiner, Carrig, & Dodge, 2016).

### Assumptions

There were several assumptions for this qualitative research study. First, I assumed that the participants in this study would be honest and forthcoming in their responses to the interview questions. Due to the unique sample available for the study, the results may not be generalized to a broader population. I also assumed that the inclusion criteria I selected were appropriate and that the participants had experienced the same or similar phenomena. adults with medically diagnosed ADHD with at least one year of experience were recruited for the study. Additionally, I assumed that the participants had been appropriately diagnosed with ADHD before the study.

I further assumed that the interviews would provide an open and comfortable environment that allowed the participants to respond in a candid manner. Lastly, I assumed that the participants in the study had a sincere interest in participating in the research and were not participating for any other purpose or motivation.

### Scope and Delimitations

A qualitative approach was used for this study to investigate the role of self-regulation in adults with ADHD. This specific focus was chosen to fill the gap in research among adults with ADHD, especially pertaining to the perceptions and experiences about self-regulation in the workplace. The scope will include adult participants with ADHD utilizing open-ended, semi-structured interviews. This study

was limited to investigating only adults with ADHD who have a current diagnosis of ADHD due to the severity and impact on the lives of adults with this disorder. Individuals without ADHD were excluded from this study due to irrelevance for the focus of this study due to their lack of experience with the symptoms of ADHD in the workplace, which is the focus of this study. Because qualitative research does not allow for causal relationships, there was no need to explore the experiences of those who have not experienced the phenomenon under investigation. Children were excluded from this study since the focus of this research is limited to the adult population over the age of 18 and those with past work experience.

Adults with ADHD are the focus of this research due to the lack of research among the adult population with ADHD. There are several studies that address the complexities of this disorder in children; however, the lack of research is in those who continue to struggle with this disorder as an adult (Hansson-Hallerod et al., 2015). The conceptual framework of SRT was used to limit the responses that focus on self-regulation. Other theories were excluded due to the nature of inquiry and research focus.

The scope and delimitations of this study include the issues of credibility (internal validity) and transferability (external liability). Qualitative research is subjective in nature, which lends itself to the controversy surrounding the measurement of quality and trustworthiness in the results obtained from this approach. Validity and reliability are imperative to qualitative research due to the subjectivity of the researcher's interpretations that can pose risks to the validity of their findings. Researchers



conducting qualitative studies can significantly reduce these risks by careful planning and by employing strategies in every stage of the research project.

Credibility is the “internal validity” in a qualitative study and refers to the notion that the descriptions of individual’s experiences are immediately recognizable to those sharing the same experience (Cope, 2014; Henderson, & Rheault, 2004). Shenton (2004) suggests that credibility is one of the most important elements to establish trustworthiness because it determines how confident the researcher is, concerning the study’s research findings. Başerer, Başerer, and Tüfekçi Akcan (2016) argue that only participant validation can be used to ensure the credibility of the data. Credibility in this study was addressed by ensuring that the participants chosen in the study are centered on the specific parameters defined by the criteria: (1) adults with a medical ADHD diagnosis, (2) adults with a work history, (3) adults living away from parents or caregivers, (4) adults diagnosed and history with ADHD treatment, (5) adults may or may not be currently employed, and (6) adults were either female or male. Second, reflexivity was to ensure credibility. Reflexivity refers to the process of assessing the researcher’s perceptions and beliefs about the research process (Patton, 2015). A field journal was utilized to record personal thoughts to recognize the influence of researcher bias. Additionally, member-checking strategies were employed in which the participants will verify the results to ensure accuracy.

External validity in qualitative research refers to the extent to which the results obtained from the study are applicable to groups across settings (Farrelly, 2013). Furthermore, transferability (external liability) was taken into consideration by clearly

defining the procedures related to this study as well as a population that was investigated so that the finding can be applied to other contexts (Henderson & Rheault, 2004).

Although generalizability is not expected in qualitative research, validity can be established through systematic sampling, triangulation, proper audit and documentation (Leung, 2015). Transferability was taken into consideration by clearly defining the procedures related to this study as well as a well-defined population that was investigated so that the finding can be applied to other contexts.

#### Limitations

In this study, the perceptions and lived experiences of adults with ADHD were explored. As with all studies, this study too has its limitations. First, the small sample may not be representative of the general population and, therefore, the results may not generalize to the broader population. The phenomenological research relies on the real meaning or the essence of shared experiences that can be discovered through describing rather than through analysis (Tuohy et al., 2013). Thus, the focus is on describing experiences rather than scientific accuracy. All data gathered in this study was self-reported. Therefore, it was difficult to verify independently. Howell (2013) purports that in phenomenology, consciousness and the world are not mutually exclusive and that our understanding of the world is in essence who we are through our personal experiences, culture, language, and surroundings. Also, research bias regarding interpretation and heuristics may have impacted the outcomes of this study. My cultural background, gender, and my own experiences also may have played a role in the elicited response from the participants as well as in the interpretation of the findings. Therefore,

researchers must acknowledge that their own personal, cultural, and historical background can influence the interpretation. Moustakas (1994) suggests that phenomenology seeks to eliminate everything that represents biases by setting aside beliefs from the traditions of the natural world or by knowledge derives from everyday experience. This is paramount in a phenomenological inquiry to be objective as with qualitative data, the research is filtered through a personal lens and must be acknowledged at the beginning of the research (Creswell, 2013). Through the use of reflexivity, researcher bias was addressed by self-awareness by taking into account that one's own experiences and worldview can influence interpretation.

### Significance

Most of the existing literature on ADHD is conducted on the impairments and interventions associated with children and adolescents, leaving out a significant portion of the adults diagnosed with this disorder. As children and adolescents move out of the structured environment provided by the school and home, in many cases are left without these supports as they transition into adulthood. The lack of supports and guidance with managing the symptoms of ADHD in adulthood can lead to significant problems with social and occupational functioning. One of the most significant problems associated with ADHD is the deficiencies with self-regulation. Despite the research suggesting the link between self-regulation as a salient issue for individuals with ADHD, there is little research exploring the negative impact that self-regulation has in the lives of adults. Understanding how adults with ADHD experience the phenomenon of self-regulation will provide insight, direction, and guidance for adults dealing with ADHD. This study

attempted to add to the limited body of research on adults with ADHD by providing much needed information on adults struggling with this disorder as well as the impact that self-regulation has on occupational functioning. The purpose was to help reduce the ambiguity that is currently associated with the role of self-regulation in adults with ADHD. It may be useful in clinical practice to be able to use self-regulation as a way to help identify ADHD in adults. Additionally, significance to practice, this study will help to possibly understand the types of supports that are needed for adults in the workplace. Previous studies that have examined ADHD in adulthood have not analyzed self-regulation and its impact on the various domains of impairment adults, specifically their experiences within the occupational functioning. Mitchell et al. (2012) for example, suggest that there is limited research that addresses how emotional dysregulation impacts the lives of adults with ADHD. Brod et al. (2012) found that the symptoms of ADHD continue into adulthood and that more research is needed to assess how social experiences and healthcare systems impact the burden of illness. Additionally, this research will enable adults with ADHD to contribute to the existing literature and essence of living with a disability.

The implications for social change are to fill the gap in research by understanding and depicting the experiences of adults with ADHD in the workplace as well as the impact that self-regulation has on performance in the workplace. Similarly, this research may help others with similar problems and unsure if they have this disability to seek help from professionals. Additionally, this study could potentially add to the body of literature surrounding the later-life impact involved in having ADHD so that changes can

be made in the workplace, such as more specific accommodations and supports on the job, and the treatment of ADHD in adults. Additionally, this study potentially could lead to better evaluation regarding evidence-based practices that address specific deficits when assessing ADHD in adults. Lastly, this study could also shed light on the need for changes in the DSM to include symptoms of self-regulation as well as a change in workplace policies.

### Summary

This chapter focused on the significant issues that adults with ADHD encounter, focusing specifically on the workplace, and the role of self-regulation in adults with ADHD. Furthermore, the chapter included a discussion about the lack of research focusing on adults with ADHD and specifically on their workplace experiences. The purpose of this proposed qualitative, phenomenological method is to gain insight into the role that self-regulation plays in the occupational functioning for adults diagnosed with ADHD. This study explored the thoughts, experiences, emotions and opinions of adults with ADHD. The proposed study will add to the existing body of research by exploring the experiences of adults with ADHD as well as give personal insight into the emotional and physical aspects of having ADHD in adulthood as it pertains to the workplace. The significance of this study will potentially contribute to the available research on adults with ADHD and their experiences of self-regulation in the workplace. The implications for positive social change was to increase the awareness and understanding of adults with ADHD.

Chapter 2 will explore the literature and current research describing ADHD in adulthood and how it relates to self-regulation in the workplace. This chapter will also include a brief historical background of ADHD, literature search strategies, conceptual framework, the prevalence in adulthood, self-regulation in adults, and occupational problems.

## Chapter 2: Literature Review

### Introduction

There is growing scholarly and clinical interest in adults with ADHD and the impact that self-regulation has on major life domains, including the workplace. Despite research indicating that ADHD is a long-term condition for some adolescents that lasts into adulthood, there are few transitional support services beyond high school that addresses this condition and its associated problems in adulthood (Swift et al., 2013). Thus, as adolescents with ADHD move from a highly structured, support-oriented environment while they are in school to the relatively unstructured world of work, they must rely on their own resources and self-regulation skills to succeed in sustaining gainful employment, maintaining healthy relationships with friends and coworkers, and effectively managing day-to-day tasks. Given the challenges associated with ADHD, this can have devastating consequences in the lives of these adults. One of the most devastating functional challenges for adults with ADHD is with employment (Adamou et al., 2013). In this research, I focused specifically on self-regulation and how individuals with ADHD monitor thoughts and behaviors that impede their ability to achieve standards for desirable behavior in occupational settings. For adults with ADHD, the role that self-regulation has in daily life is one of the most under-researched issues in the ADHD literature (Mitchell et al., 2012; Richard-Lepouriel, 2016; Shaw et al., 2014). Additionally, there is very little research on the effects of ADHD in the lives of adults, particularly in regard to employment; this study helps to fill that gap. Specifically, I used

a phenomenological approach to evaluate self-regulation failures and their impact on employment prospects and experiences for adults diagnosed with ADHD.

In this chapter, I reviewed the literature on adults with ADHD and its relationship to self-regulation. I used the literature reviewed in this chapter to help form the conceptual framework for this study and to develop an understanding of the lived experiences of adults with ADHD in the workplace. It is important to note that the research on adults with ADHD is very limited, which indicates the need for more research on this topic. I hoped to add to the existing literature on adults with this disorder, especially in the workplace setting. The first two sections of the following review include discussions of the search strategies I used to gather the literature and the conceptual framework for the study. I then move on to discuss the specific areas of interest regarding adults with ADHD by first exploring what the very limited literature has to say about the effects of ADHD on adults and how the characteristics may differ from children. Then I evaluate the research regarding the characteristics of ADHD in adults, followed by a discussion of self-regulation and its role in the symptoms of ADHD. Finally, I review studies pertaining specifically to occupational issues for adults with ADHD. My goal in this phenomenological study was to fill a gap in the research by exploring the lived employment experiences of adults with ADHD.

#### Literature Search Strategy

To gather literature to review, I searched Academic Search Complete, ERIC, Google Scholar, PsycARTICLES, PsycBOOKS, PsycEXTRA, PsycINFO, Proquest, SAGE Premier, Sage Research Methods Online, and SocINDEX databases for the



following search terms: *ADHD in adulthood, emotional regulation, emotional dysregulation, emotional lability, occupational problems, employment, social impairment, interpersonal impairment, quality of life, self-control, and self-regulation.*

These searches were restricted to peer-reviewed journal articles that mostly employed quantitative methods. No specific years were entered into the search criteria, however I quickly eliminated older sources, and the most current articles were utilized when appropriate.

### **Conceptual Framework**

Baumeister and Heatherton's (1996) SRT served as the conceptual framework for this study. SRT helps to explain some of the most common maladaptive behaviors and symptoms experienced by adults with ADHD and provides a lens through which to evaluate the lived experiences of these individuals. The concept of self-regulation is exactly as it sounds, it represents one's ability to modify existing behavior to reach a goal (Markus & Wurf, 1987). More formally, self-regulation is defined as effortful or voluntary control of one's behavior that enables an individual to adjust or alter responses to a particular situation or event (Retz et al., 2012; Targum & Adler, 2014). While all adults vary in their motivation and ability to modify their own behavior, the problem seems particularly pertinent to those diagnosed with ADHD. Other theorists have focused on successful self-regulation, but have not addressed when self-regulation fails, which is a long-associated symptom of ADHD (Carver & Scheier, 1981; MacKenzie, Mezo, & Francis, 2012). Behavioral inhibition is a major component of daily life for most adults, so difficulty in regulating one's behavior can, and does, prove problematic

for adults with ADHD. Thus, in this study I focused on self-regulation failure and it relates to ADHD.

### **Self-Regulation Theory**

**Model of self-regulation failure.** Many theories of self-regulation focus on the processes that support successful self-regulation among individuals. There are several theories, but they generally agree on their main components: goal selection, preparation for action, and modification of behavior to reach the goal. Carver and Scheier (1981) emphasized the feedback loop aspect of the model (comparing one's current state with the goal state and taking action to reduce the discrepancy), and Baumeister et al. (2007) added a motivation component, but by and large they agree on the basics of SRT. Problems with the self-regulatory processes are likely to occur based on the core features aligned with ADHD, particularly in adults who are held to a higher standard of behavior than children. Bruner, Kuryluk, and Whitton (2015) proposed that individuals with ADHD have poor ability to self-regulate their emotions, thus leading to impulsive behaviors when experiencing intense emotions. This theory relates best to the processes involved with self-regulation due to the core features of inattention, hyperactivity, and impulsivity that are associated with ADHD. Therefore, for purposes of this research study, I concentrated on the theory of self-regulation failure proposed by Baumeister and Heatherton (1996).

Baumeister and Heatherton's (1996) model of self-regulation failure holds that self-regulation involves behaviors, thoughts, and feelings that require effort to alter one's responses. Self-regulation failure involves two processes: underregulation and

misregulation. Underregulation takes place when one lacks clear and consistent standards (due to a lack of monitoring their actions) or lacks the power to override responses to behavior they desire to control (Heatherton & Baumeister, 1996).

Misregulation happens when one operates on false assumptions about the world and self by trying to control things out of their reach, or by conceding to their emotions instead of more important problems (Heatherton & Baumeister, 1996). Furthermore, Baumeister and Heatherton also suggested that the ability to override the impulses or responses varies according to situational factors that include fatigue, stress, and distraction. This is paramount to those with ADHD, as one of the core features of this disorder is inattention.

SRT centers on the notion that self-regulation is the control of one's behaviors, which are controlled processes that are often overridden by normal, habitual, or impulsive responses (Dale, & Baumeister, 1999). Furthermore, Dale and Baumeister (1997) proposed that self-regulation involves feedback loops in which the individual constantly compares the self to external standards to get as close to the standard as possible, repeating the process until the goal is eventually reached. Therefore, when self-regulation fails, there is a disruption of the ability to attend to or regulate behavior, leading to an unmet goal. Accordingly, self-regulation occurs when the individual compares the self to a standard and brings the self-closer to the standard until the goal is reached (Wagner, & Heatherton, 2015). Similarly, Bandura (1996) proposed that self-regulation failure is based on the negative feedback loop model in which an observed negative discrepancy between an identified feedback and personal standard triggers an adjustment to reduce the negative inconsistency.

**SRT as it relates to ADHD.** Barkley (2007) has applied SRT to ADHD and neuropsychological functioning and has surmised that deficiencies in behavioral inhibition are a major component for those with ADHD. Thus, the impairment of behavioral inhibition in those with ADHD leads to poor self-regulation. Behavioral inhibition refers to those processes responsible for inhibiting a response that gets immediate reinforcement, prohibiting of an ongoing response, and interference control (Dale & Baumeister, 1999). In individuals with ADHD, the development of these inhibitory processes is impaired, leading to disruption in successful goal-directed behavior and, ultimately, poor self-regulation skills (Dale & Baumeister, 1999).

Berger (2011) postulated that inhibitory control processes linked to executive functions known to be impaired in individuals with ADHD are responsible for a wide range of dysfunctional behavior. Additionally, self-regulation involves working memory and the focus of attention and other regulatory processes that can be automatically triggered (unconscious processes) when trying to reach a goals or intentions (Wagner & Heatherton, 2015). Therefore, the impairments associated with ADHD such as inattention, hyperactivity, and impulsivity lead to problematic self-regulation skills.

Automatic and control processes are another key concept of SRT. Automatic processes refer to the processes that control behavior efficiently and require fewer resources (Dale & Baumeister, 1999). These processes are referred to as automatic because they require little overt effort. They are adaptive in the sense that they help individuals act without having to exert much energy, but all behaviors are not appropriate in all situations at all times. Knowing when a behavior is appropriate and when it is not

regulated by control processes, which are conscious and deliberate and require our overt effort. Automatic processes are rigid and inflexible; but can be overridden by control processes (Dale & Baumeister, 1999). Correspondingly, in individuals with ADHD, the processes to override may be impaired, leading to impulsive actions or self-regulation failure. Controlled processes are inefficient and require many resources, which means that only a small portion of behaviors can be monitored at a time (Dale & Baumeister, 1999). Due to deficits in executive function and attention in those with ADHD, this could mean that they are unable to discern which behaviors to monitor, and therefore fail to regulate effectively.

Attention plays a major role in self-regulation and is the first response in a sequence of behaviors (Dale & Baumeister, 1999). Attention refers specifically to the mechanism that allows individuals to focus and manipulate information that they are presented with. It is closely associated with working memory in that one must be able to keep in mind the items to which one is attending. A lack of attention, or inability to attend is often associated with many patterns of failure in self-regulation. Berger (2011) argued that working memory is a core deficit for individuals with ADHD and that these individuals have difficulty with the storage and manipulation of information, which can lead to problems with self-regulation. Dale and Baumeister (1999) argued that problems with self-regulation are central to numerous mental, emotional, and behavioral pathologies, which could include ADHD.

Self-regulation is paramount in the investigation of ADHD. (Barkley, 2007). SRT proposes that many of the issues plagued by Western society, such as alcohol and drug

abuse, gambling, violence, child abuse, and overspending to name a few, can be explained by the failure to self-regulate emotions and behaviors (Dale, & Baumeister, 1999). Self-regulation involves the individual's efforts to override behavioral impulses, resist temptation, control one's thoughts, and alter or prolong one's emotions. Successful self-regulation is paramount for attaining goals and is associated with higher levels of psychological well-being and functioning (Baumeister, Schmeichel, & Vohs, 2007). Those with problems dealing with any of the components of self-regulation will likely face challenges in effectively engaging with the world. Berger (2011) purports that self-regulation is compromised among individuals with ADHD and has serious consequences for adults regarding social relationships, marriage, and employment. Specifically, the issues adults with ADHD have with setting and achieving goals indicates that SRT provides a framework to understand the functional impairments associated with occupational functioning adults with ADHD.

By using the conceptual framework of SRT and addressing the occupational experiences of adults with ADHD from a phenomenological perspective, this study will allow for a deeper understanding of the problems experienced by adults with ADHD. This could serve as an important starting point for thinking about ways to help adults who struggle daily with reaching occupational goals, as well as looking at ways to maintain healthy emotional functioning.

**SRT as it relates to other research.** My inquiry and research did not produce results for phenomenological studies conducted self-regulation theory and ADHD. SRT has been used in other areas of research in psychology such as in the research conducted

on sports and managing illness. The studies conducted on SRT utilizing qualitative methods did relate to my proposed study.

### **Review of Relevant Literature**

#### **ADHD in Adulthood**

ADHD is a neurodevelopmental disorder that affects an individual's ability to attend properly and behave appropriately. This disorder is characterized by inattention, hyperactivity and impulsiveness and symptoms can affect the individual throughout their lifetime. ADHD is one of the most common neurodevelopmental disorders diagnosed in childhood and is prevalent in both in both males and females; however, more males in childhood are diagnosed with the disorder. ADHD affects all races and can be seen in every country around the world (Brod et al., 2012). Many people are diagnosed and treated with medication during childhood but fail to follow through with treatment as adults (Pitts, 2014). Research suggests that ADHD symptoms continue into adulthood for about 50% of children with ADHD (Ramsay, 2010a). According to the National Institute of Mental Health (NIMH), approximately 8 million adults, or 4.1% of the adult population, are diagnosed with ADHD (Kessler et al., 2006; NIMH, 2015). However, many adults who meet the criteria are not identified or treated for adult ADHD (Barkley, Murphy, & Fischer, 2008).

Research on ADHD across the lifespan suggests that many of the children diagnosed with ADHD will continue to display symptoms into adulthood (Ramsay, 2010a). Camilleri and Makhoul (2013) found that 4-15% of those diagnosed with ADHD in childhood retain a full diagnosis in adulthood and that 50-66% are in partial

remission. Although there is evidence that some ADHD symptoms decline in adulthood, there is no evidence that the disorder fades or dissipates in adolescence and adulthood (Stein, 2008). Furthermore, there is considerable evidence that symptoms do persist in adulthood and that those symptoms have been associated with clinical and psychosocial impairments (Hall et al., 2013). Moreover, Stein (2008) found that ADHD in adulthood was associated with more marital problems, job loss, difficulties in the workplace, and higher instances of workplace absences. Despite these findings, there is a lack of research regarding the impact that the symptoms of ADHD have on adults with ADHD.

Barkley, Fischer, Smallish, and Fletcher (2002) conducted a study on the persistence of ADHD into early adulthood. The study examined 158 children diagnosed as hyperactive in childhood and a matching community sample of 81 children as a control. The children were evaluated at three separate points during the study. During the last assessment, the children had to be 19 years of age or older. The mean age at the follow-up evaluation was ( $M=21$ ). Some participants in the follow-up assessment were deceased, and the final assessment utilized 147 out of 158 children in the hyperactive group and 73 out of 81 for the control group. In the initial assessment, children were assessed according to IQ and based on referrals for child psychology services that specialized in hyperactivity. Additionally, the participants' parents were given behavioral surveys and had a teacher and parental reports of hyperactivity, poor impulse control, and poor sustained attention. In the second follow-up assessment conducted 8-10 years later, 70% of the children met the criteria for an ADHD diagnosis according to the DSM-III-R. In the final follow-up with the participants in young adulthood five years



later, the results demonstrated that a majority of the participants in the hyperactivity group outgrew their symptoms by adulthood. Only 5% of the participants in the hyperactive group reported having symptoms. However, when parents of the hyperactivity group were given the survey about their adult children, they reported symptoms that indicated 46-66% of the sample would have met the criteria for ADHD. The researchers concluded that studies that only rely on self-report data might be greatly underestimating the pervasiveness of symptoms into adulthood.

Research shows that symptoms of ADHD can develop into serious impairments for adults including poor social adjustment, substance use disorders, and psychiatric comorbidity (Sobanski et al., 2008). The research proposes that the core deficits that are involved in ADHD are associated with inattention and hyperactivity/ impulsivity (Kooij et al., 2010). However, recent literature suggests that emotional dysregulation is an essential feature of this development disorder (Barkley, 2007). Currently, the criteria for diagnosing ADHD does not include any symptoms regarding regulating emotions, despite the literature that implies there are significant impairments in self-regulation among individuals diagnosed with ADHD (Barkley, 2010; Martel, 2009).

**Characteristics of adults with ADHD.** There is extensive research that discusses the characteristics of ADHD among children. Barkley et al. (2008) suggest that many of the same characteristics seen in childhood are typically manifested in adulthood, however, with adults, comorbid and other risk factors may differ slightly from childhood. For example, symptoms of hyperactivity rapidly decline in adulthood, and other factors increase such as impulsivity, especially with verbal expression in adults. Also, there are

many inaccurate beliefs about adults with ADHD that can have implications for the perceived validity of the disorder. For example, some people believe that these individuals are more intelligent, more creative, entrepreneurial, and can handle crises, but there is not any research to date to back up these popular beliefs. Barkley, Murphy, and Fischer (2008) purport that much of the current research is subject to referral bias and other confounding variables that have nothing to do with the disorder that can further compromise the perceived validity of ADHD in adults. Also, they found that if using the current DSM criteria, approximately 27 to 30% of children would meet the criteria for ADHD in adulthood. Therefore, there is likely a high rate of children who continue to display symptoms well into adulthood. Therefore, the research concerning adults with ADHD should be separate from the research on children in terms of diagnosis, research, and treatments, rather than assuming that the criteria developed on children should relate similarly to adults with this disorder.

Although ADHD in adulthood is just beginning to gain attention in the medical community, the consequences of non-treatment of ADHD can have serious repercussions in adulthood. Pitts (2014) suggests that ADHD in adults is just beginning to be recognized by the medical community, but there is significant research that will still need to be explored. Substantial research demonstrates that ADHD in adulthood is associated with other mental health problems, this is known as comorbidity (Miranda et al., 2014). However, adult psychiatry has not followed suit in the diagnosis and treatment of adults with this disorder. Many primary care providers are inexperienced in diagnosing adults with ADHD, and diagnoses can be complicated by several factors that are innate to

the disorder. First, symptoms are often persistent and non-episodic and seem more trait like rather than symptomatic, thus the symptoms of ADHD may not be present in the office or other atypical situations and environments. Second, ADHD symptoms are present early in life usually before the age of seven. This means that unless a physician has been seeing a person since childhood they are unlikely to recognize the signs of ADHD in adults. Third, mood instability is very common among adults with ADHD, which can lead to other (perhaps incorrect) diagnoses of affective disorders or personality disorders. This does not mean that affective and personality disorders cannot affect persons with ADHD, but simply that because of the “personality like” traits of ADHD they may often be misdiagnosed (which could also contribute to underreporting).

Perhaps for reasons just explored, a new diagnosis of ADHD in adulthood is uncommon. The new DSM-5 criteria states that adults without a previous diagnosis of ADHD must have symptoms that were present before the age of 12 years, differing slightly from the other DSM which required symptoms to be present before the age of 7 (American Psychiatric Association, 2013). This is due to the fact that ADHD is considered a neurodevelopmental disorder, rather than one that develops in adulthood. Furthermore, the adult must present with symptoms in two or more areas of life, such as social, academic or occupational settings, with significant impairment or difficulty in functioning (American Psychiatric Association, 2013). Adults with ADHD have similar symptoms as children that can impact the individual cognitively and emotionally. Similar to children diagnosed with ADHD, adults may experience hyperactivity, problems with sustained attention, relationship problems, disorganization,

impulsivity, difficulty with organization, and difficulty completing tasks; all of which can lead to problems with employment and social difficulties (Barkley, Murphy, & Fischer, 2008; Camilleri & Makhoul, 2013; Miranda et al., 2014; Weiss & Murray, 2003). Weiss and Murray (2003) showed that adults with ADHD are prone to dropping out of school, have lower occupational achievement, marital problems, and lose and change jobs frequently. Additionally, adults with ADHD experience higher levels of anxiety and depression than individuals without ADHD (Weiss & Murray, 2003).

In summary, the symptoms of ADHD have been shown to continue into adulthood and have a significant impact the lives of those with this disorder. The symptoms associated with adulthood present somewhat differently from those experienced by children and need to be represented in the research separately. The research conducted on adults with ADHD is limited, but with the increased public recognition that ADHD continues into adulthood, the research should follow. Although the new DSM-5 has established separate criteria for adults with ADHD, there is still a considerable lack of research in adult populations, particularly regarding the impact of ADHD on many life domains. Of most concern is the role that self-regulation plays in adults with ADHD. Since goal attainment is a primary condition of adulthood, problems with self-regulation could produce serious maladaptive behaviors in many life domains among adults.

### **Self-Regulation in Adults with ADHD**

This section will introduce the construct of self-regulation by defining self-regulation. Additionally, this section will include the role that self-regulation has on

behavior. Finally, this section will include an in-depth review of the literature about self-regulation in adults with ADHD.

**Definition and role of self-regulation in behavior.** Self-regulation is defined as the set of behaviors, skills, and strategies used to adjust, monitor, control, and heighten emotional experiences to accomplish individual goals and adapt to the environment (Martel, 2009). In further review, Braet et al. (2014) suggest that emotional regulation is the process in which individuals modify their emotions or responses to situations that elicit emotions. Bram and Peebles (2014) add to this definition of self-regulation to include the ability to experience, develop, and display a range of emotions with self-control, flexibility, and resourcefulness. Thus, self-regulation of emotions is complex and dynamic and involves processes that are conscious, unconscious, contrived, and automatic. Braet et al. (2014) argues that when emotions are poorly regulated, individuals are subject to psychiatric symptoms.

Emotions play a major role in the in the way humans make decisions, behave, and how they relate to others. Also, emotions are essential to the way people derive meaning from experiences and develop relationships. Bosse, Pontier, and Treur (2007) suggest that emotions serve a specific function in facilitating decision-making, motor responses, and information exchange between the entity and the environment. They also serve a social function by providing the necessary information about the behavioral intentions and the social behavior that occurs between individuals. When an individual struggles to regulate emotions in an effective way, this can negatively impact relationships and other areas of a person's life such as occupational and educational attainment. Stein (2008)

suggests that emotional dysregulation is central to impulse control disorders as well as a host of mood and personality disorders. Consequently, ADHD has been associated with a myriad of co-occurring psychiatric disorders including, depression, anxiety, and substance abuse disorders (Barkley, Murphy, & Fischer). Thus, self-regulation is an important set of skills to develop beginning in childhood, as the ability to successfully regulate emotions can have implications through adulthood (Mitchell et al., 2012). It may be that individuals with ADHD need additional intervention not only in childhood but as they navigate the world as adults as well.

Hien et al. (2009) suggest that successful self-regulation is the ability to manage and endure stressful emotional experiences, as well as regulate the body's physiological response. Successful emotional regulation embodies the skills that enable one to respond appropriately to internal states that evoke stress in constructive ways. When an individual lacks these important skills to self-regulate emotions, it can jeopardize one's self-concept as well as increase the likelihood that the individual will seek alternative ways to handle the experience. Berking et al. (2008) conducted a study on the effects of self-regulation skills on indicators of successful emotional adjustment. The researchers found that successful self-regulation was associated with good emotional adjustment. It seems as though the skills necessary for successful self-regulation directly impact emotional adjustment, which can have consequences for the individual's well-being and is important for mental health. Additionally, successful self-regulation is thought to enable more effective development of social relationships and self-concept (Hien et. al, 2009). Therefore, the ability to successfully self-regulate emotions is important to the

maintenance of good mental health and interventions surrounding self-regulation could enhance those with deficits in emotional adjustment.

In contrast, individuals with deficits in self-regulation have difficulty in their ability to tolerate stressful emotional experiences. This can negatively affect the individual and pose problems in relationships and with the individual's self-concept (Burns & Martin, 2014). Bunford et al. (2015) explored the relationship between self-regulation, social skills, and ADHD among youth. The researcher wanted to find out if self-regulation moderates the relationship between ADHD and poor social adjustment. They found that symptoms of poor self-regulation, moderate the association between ADHD and social skills impairment among participants in the study. This research suggests that the reason many of those diagnosed with ADHD experience social skills impairment may be due to poor self-regulation.

**Research on the role of self-regulation in adults with ADHD.** The role of self-regulation among individuals with ADHD is beginning to gain attention in the research community (Martel, 2009; Nigg et al. 2004). Studies have demonstrated that children with ADHD have difficulty identifying positive and negative emotions, which can impair their ability to regulate their emotions. Furthermore, Martel, Nigg, and Von Eye (2009) suggest that regulation of behavior involves two neurological processes, "top-down" and "bottom-up". Top-down processes are responsible for inhibiting behavior in which the individual's perceptions of sensory data are influenced previous knowledge that allows a person to make inferences. Bottom-up processing occurs when the individual derives meaning from sensory input and stimuli that are pieced together and based specifically on

the data received from the senses. Both types of processes help us to manage and identify emotions in both ourselves and others, individuals with ADHD have deficiencies in both types of processing, which then inhibits their ability to regulate their emotions (Martel et al., 2008). The lack of skills in the processes associated with self-regulation means that adults with ADHD may struggle to develop relationships and attain educational and occupational goals.

Individuals with ADHD have problems with the following executive functions: working memory, self-regulation, and motor control (Barkley, 2010). Executive functions help people to connect past experiences with present actions. Barkley's model of ADHD implies that there are five major areas of executive function in people with ADHD: working memory, sequencing behaviors, internalized speech, planning and organizing, and self-regulation. Currently, literature has demonstrated the link between ADHD and deficits with executive functioning. Surman et al. (2015) showed that neuropsychological deficits, such as executive functions, are associated with regulatory deficits that may account for the impairments in self-regulation among adults with ADHD. Barkley (2010) found that self-regulation is not just an associated feature or a comorbid disorder with ADHD, but that it is a major contributor to problems associated with ADHD. The researcher argues that self-regulation should be considered in the conceptualization and diagnostic criteria for this disorder.

Studies have focused on the specific processes and skills involved in self-regulation with which individuals with ADHD struggle. For example, Stevens, Quittner, Zuckerman, and Moore (2002) investigated behavioral inhibition, self-regulation of



motivation, and working memory in children with ADHD. The study focused on 76 children diagnosed with ADHD and 76 children without ADHD. The children in both groups were given the Stop-signal Task, Digit Span Task, and the Kaufman Brief Intelligence Test. Parents and teachers were given the Connors Parent Rating Scale-Revised: Long Version, and the Connors Teacher Rating Scale-Revised: Long Version. The results revealed that the children with ADHD showed more deficits in inhibitory control, working memory, and short-term memory when compared to children in the control group. Thus, having deficits with behavioral inhibition and self-regulation can have drastic impacts on an individual with ADHD and their ability to control emotions that can impact areas such as relationships, occupations, and educational attainment.

Similarly, in a longitudinal study conducted by Wåhlstedt et al. (2008) that investigated the role of executive functions among children with ADHD found that early functional impairments were associated with later emotional behavioral problems. The study utilized 87 preschool aged children over a period of 2 years. The participants included in the study were identified as having significant levels of symptoms of ADHD and high levels of executive functional impairments. The participants were examined at two different periods to test for ADHD, executive functioning, intelligence, oppositional defiant disorder (ODD) symptoms, internalizing problems, social competence, and self-regulation. The results revealed that early executive functioning impairments were predictive of later problems with attention and hyperactivity. Those who exhibited higher levels of symptoms of ADHD were shown to have problems with social

functioning, ODD symptoms, lower levels of social competence and problems with self-regulation.

Although there is research that demonstrates the difficulty that individuals with ADHD have when they struggle with emotional dysregulation, complicating the issue is disagreement within the research community about the definition of self-regulation (and dysregulation) and the processes and behaviors with which it is associated. It would seem that while some researchers conceptualize it differently, many are referring more broadly to the same thing. Most researchers agree that emotional dysregulation points to a lack of inhibition of behaviors associated with positive and negative emotions, a lack of the ability to engage in self-regulatory actions, and an inability to organize coordinated actions into goal-directed behaviors (Barkley, 2010; Martel, 2009). Similarly, in people with ADHD, the process of inhibiting emotions is impaired as a result of deficient cognitive control (Barkley, 2010). The inability to inhibit emotions is directly related to emotional impulsivity, which is the speed at which one reacts to negative emotions in response to stimuli (Barkley, 2010). Thus, the deficit in self-regulation is a top-down process that is directly related to deficits in executive functioning (Barkley, 2010). This can directly affect the way in which individuals manage themselves as well as change behaviors. Taken together, the literature suggests that individuals with impairment in executive function have difficulty managing behaviors, and therefore self-regulation.

Research has demonstrated that one of the fundamental impairments associated with ADHD is with executive function, particularly a deficit in response inhibition (Barkley, 2005). A deficit in response inhibition leads to secondary impairments that are

interdependent upon this executive function. These secondary impairments lead to a decreased ability to moderate behavior that is directed by internally represented information and self-directed action (Barkley, 2005). Behavioral inhibition refers to three processes that may prevent a person from responding to an event; stopping an ongoing response, allowing a person to delay a reaction, or continue responding and preventing interference from competing events and responses (Barkley, 2005). One possible explanation for an inability to inhibit emotional responses is that individuals with ADHD have difficulty recalling past efforts of shaping their negative emotions into positive emotions when confronted with stress (Kearnes & Ruebel, 2011). For individuals with ADHD, negative emotional states such as anger, frustration, sadness, anxiety, and guilt are problematic due to the difficulties in creating positive conditions through self-soothing, positive self-talk, and visual imagery (Kearnes & Ruebel, 2011). It would appear that individuals with ADHD have problems inhibiting behaviors and with the implementation of self-directed behaviors. These behaviors are subject to immediate reinforcement (either positive or negative), and the previously associated attempts at self-regulation are fundamental to executive function. In other words, failures in executive function are responsible for the person's inability to learn proper emotional and behavioral regulation through experience.

Past research has demonstrated that emotional dysregulation during early childhood and infancy places children at risk for ADHD. There are many trajectories to ADHD, but one pathway seems to be that some of the behavioral characteristics of the disorder can be attributed to early signs of dysregulation in early childhood (Berger,

2011). Seymour et al. (2012) conducted a study that investigated the role of self-regulation among youth diagnosed with ADHD. The study examined 69 youth ranging in ages from 10 to 14. There was 37 youth diagnosed with ADHD and 32 without a diagnosis of ADHD. Both parent and youth ratings on emotional regulation and depressive symptoms were collected and analyzed. The results revealed that the youth with ADHD reported significantly more problems with emotional regulation and depressive symptoms compared to the youth without ADHD.

Sonuga-Barke et al. (2002) examined three components of executive functioning and individual differences in ADHD behaviors in preschool children. The researchers found that basic levels of planning, working memory, and inhibition do exist in preschool aged children. The results revealed that there was a weak relationship between inhibition and ADHD in the sample of preschool children such that those children exhibiting ADHD behaviors had lower levels of inhibition. However, there was no significant relationship between ADHD and working memory and planning. The authors concluded that problems with inhibition could later develop into problems with executive functioning when children are increasingly challenged by the demands of school and unable to develop the skills to effectively complete tasks. Thus, later on in life executive functions such as inhibition, planning, and working memory can play a major role in the way individuals behave. It could also be the case that children simply have not developed executive functions or self-regulation, making any comparison with other children insignificant. More research in this area is needed to examine the effects of

executive functioning in adults with ADHD and its impact on educational performance and behavioral adjustment, as well as the role of self-regulation in these outcomes.

So far, a plethora of research has linked ADHD with self-regulation, which suggests that treatment for ADHD should include interventions which address this problem (Jarrett, 2015). Several studies that have been conducted with children and adults with ADHD have demonstrated the link between emotional dysregulation and ADHD (Anastopoulos et al., 2011; Barkley & Fischer 2010; Barkley & Murphy 2010). Furthermore, Berger (2011) found that deficits in the frontal lobe in children with ADHD may impact their ability to inhibit negative affect as well as their ability to inhibit the response to stimuli resulting in comorbid anxiety. Thus, observed problems with self-regulation may be due to structural and functional deficits in top-down self-regulation in the areas of the brain that support goal-directed behavior. This is important regarding interventions and treatments used in adults with ADHD as problems with goal directed behavior, executive function and emotion regulation could have severe consequences, particularly with regard to finding, obtaining and maintaining a job.

Research in support of emotional dysregulation as a core deficit in ADHD comes from several sources. For example, Sjöwall et al. (2013) conducted a study that looked at several areas of deficits in children with ADHD. The study focused on 102 children ages seven through thirteen with ADHD and a control sample that matched children on age and gender but did not have an ADHD diagnoses. The study examined three separate areas of neuropsychological domains: executive functions, delay aversion, and reaction time variability as well as parents' ratings of emotional regulation and a test for

emotional recognition. The results revealed that the children with ADHD varied significantly from the controls on all measures except for delay aversion and the recognition of disgust. The researchers concluded that ADHD is related to multiple neuropsychological deficits. Thus, ADHD is heterogeneous and demonstrates both neuropsychological deficits and emotional impairments that can impact the ability to effectively regulate emotions.

Although recent research is just beginning to demonstrate emotional dysregulation and its effects in people diagnosed with ADHD, there is a lack of research that focuses on its impact on adults and their occupational functioning, which is the purpose of the current study. Deficits in self-regulation among adults with ADHD are associated with more severe levels of functional impairment that surpass the core symptoms of ADHD. Most researchers suggest that problems with self-regulation stem from a lack of inhibition of behaviors, inability to engage in self-regulatory actions, and incapacity to organize coordinated actions in goal-directed behaviors. Research has pointed out that emotion self-regulation has been problematic in many individuals with ADHD; however, there is a lack of agreement on how to conceptualize this construct. Despite differences in conceptualization, researchers appear to be talking generally about the same thing. What can be concluded from the research discussed is that no matter how it is conceptualized, defined, or studied, researchers continually find a link between executive function, self-regulation and ADHD. The lack of research on adults makes this a worthy avenue of inquiry.

## **Occupational Issues in Adults with ADHD**

ADHD results in many deficits in executive functioning and social domains, which can impact a person's ability to function and maintain employment. Research shows that individuals with ADHD face more problems maintaining employment and functioning in the workplace (Adamou et al., 2013). Occupational functioning requires adults to have a good command over executive functions such as planning, organization and responding appropriately and completely to requests. In addition to executive functions, occupational success requires employees to function adequately in a social capacity. However, the core symptoms associated with ADHD can have a negative impact on the ability to work productively and sustain employment (Lindstedt & Umb-Carlsson, 2013).

Many individuals with ADHD have on the job problems, which become a major issue with an increasingly competitive workplace environment (Adler et al., 2013). Many individuals with ADHD struggle to maintain employment due to the symptoms associated with ADHD, such as staying on task, finishing work, and focusing attention that has been associated with deficits in executive functions. Furthermore, the deficits associated motor coordination, working memory, planning, anticipation; organization, self-regulation and emotional arousal have a significant effect on individuals with ADHD and their ability to function in the workplace (Adamou et al., 2013). This can be problematic in the as some of the deficits associated with ADHD are difficult to see and are viewed as "normal" because they are experienced by everyone from time-to-time, leaving the expectation that these employees should conform to

normal expectations (Arnold et al., 2010). This treatment of individuals with ADHD, as “normal” but just need to learn some self-control, may contribute to a feedback cycle whereby adults simply feel inept. This may discourage many from seeking treatment and it is therefore crucial that further research investigates the specific problems associated with ADHD in adults so that they can be identified and treated.

Among the problems associated with executive functions are that individuals with ADHD are more likely to change employment frequently, have work instability, be fired from a job, and attain less full-time employment (Barkley et al., 2006). These problems in employments are directly linked to the core symptoms associated with ADHD, poor self-regulation and deficits in executive function. Furthermore, Kuriyan et al. (2013) found that individuals with ADHD are less likely to attain higher status employment than individuals without ADHD. Arnold et. al (2010) argued that in the majority of the cases, adults have not been diagnosed with ADHD, leaving the employer with no basis to explain behaviors and will often be viewed as lazy or lacking effort, uncooperative, and incompetent. As mentioned above, this treatment of those individuals could lead to feeling of helplessness, which may contribute to high rates of depression and anxiety in this population. Ramsay (2010b) found that individuals with ADHD earn less in salary as compared to those without ADHD. This may be due to having attained lower levels of education as well as poor work performance. Taken together, it is apparent that adults with ADHD experience issues with finding and maintain employment.

Comorbid disorders can also play a role in how the individual with ADHD performs in the workplace. Adults with ADHD are likely to have a comorbid psychiatric



disorder which can further enhance problems in occupational functioning (Sobanski, 2006). Past research has indicated that individuals diagnosed with ADHD have an elevated risk for developing a co-occurring psychiatric disorder (Clarke, Heussler, & Kohn, 2005; Kessler et al., 2006; Knouse, Zvorsky, & Safren, 2013). Consequently, the core symptoms and problems associated with ADHD along with a comorbid psychiatric disorder can complicate functioning in many areas of life (Miranda, Berenguer, Colomer, & Roselló, 2014).

Barkley, Murphy, and Fischer (2008) found that the rates of major depressive disorder were as high as 16-31% in adults meeting the criteria for ADHD. Miranda, Berenguer, Colomer, and Roselló (2014) conducted a study that investigated the impact of ADHD and comorbid problems on adaptive functioning. Seventy-seven adults with ADHD and 37 adults without ADHD were administered the Weiss Functional Impairment Scale, the Weiss Symptom Record, and Conners' Adult ADHD Rating Scale and assessed. The researchers found that the participants with the comorbid externalizing behaviors, such as Oppositional Defiant Disorder, Conduct Disorder or substance abuse endorsed more symptoms than the participants with ADHD and no comorbid disorders, consistent with similar studies. Bihlar Muld, Jokinen, Bölte, and Hirvikoski (2013) suggested that the increased risk for comorbid substance abuse disorders may be related to the core symptomology in ADHD, such as impulsivity and problems with executive function. Thus, having a comorbid disorder can further complicate the clinical picture of ADHD and how to treat adults with ADHD. In some cases, comorbid disorders may be a direct reflection of the impact of having ADHD; for example, poor work productivity

may lend itself to having depression or anxiety. Furthermore, the presence of comorbid psychiatric illness can affect how ADHD presents and the treatment for ADHD (Spencer, 2008).

The likelihood of adults with ADHD having an additional psychiatric disorder could be as high as 65-89% during a lifetime (Sobanski, 2006). Comorbid disorders among individuals with ADHD are more likely to occur and have a significant impact on academic, occupational, and social contexts (Monastra, 2008). Spencer (2008) conducted an epidemiological study that found lifetime prevalence rates of 45% for mood disorders, 59% for anxiety disorders, 36% for substance abuse disorders, 70% for impulse disorders, (such as antisocial personality, oppositional defiance/ conduct disorder, and intermittent explosive disorder), and 89% for a psychiatric disorder. In many cases, the symptoms of ADHD can be masked by the symptoms of the co-occurring disorder as well as the contrary. Klein and Manuzza (2010) suggested that comorbidity may be due to lack of specific symptoms across various diagnoses. Thus, there is a strong argument for the need to adequately diagnose, understand, and provide a practical treatment for adults with ADHD, particularly in employment settings.

There are few studies that look into the social and occupational functioning of adults with ADHD (Adamou et al., 2013). However, one study examined occupational functioning in detail. A study conducted at the University of Massachusetts (UMASS) found that participants with ADHD reported having more behavioral problems, difficulty getting along with others, higher likelihood of being fired or let go from employment, quitting a job from disinterest, and/or from disciplinary action by a supervisor than the

control group (Barkley, Murphy, & Fischer, 2008). In the same UMASS study, employers were asked to rate employees who were blind to the ADHD diagnosis. The employers reported the adults with ADHD as having more problems in the workplace, including difficulty completing assigned work, reduced pursuit of educational opportunities at work, being late to work, and problems with time management and management of daily responsibilities (Barkley et al., 2008).

Similarly, Adamou et al. (2013) argued that individuals with ADHD are at a disadvantage with employment due to poor social skills and time management. Additionally, they are more likely to be corrected or critiqued by managers in which they internalize the criticism leaving them difficult to motivate (Adamou et al., 2013; Carnes & Holloway, 2009). Individuals with ADHD also have problems with workplace relationships in which they become more volatile, hostile, impulsive, and abrasive, which can lead to lost employment. Küpper et al. (2012) conducted a study that looked the negative effects of ADHD among adolescents and adults in work productivity and occupational health. The researchers found that individuals with ADHD had higher rates of unemployment than those without an ADHD diagnosis. Individuals with ADHD who were employed in the study reported being more likely to have behavioral problems, such as irritability and lower frustration tolerance as well as low productivity. The researchers found that individuals with ADHD were more prone to workplace accidents and injuries, especially with traffic accidents than individuals without ADHD. Overall, individuals with ADHD are more likely to lose employment and suffer an economic loss due to absenteeism and lost productivity.

Executive functioning is another barrier to individuals with ADHD and their ability to function properly with employment. Very few studies focus on the long-term effects of this disorder as it relates to occupational functioning. Recent studies point to executive function deficits that interfere and prevent individuals from maintaining adequate employment. Barkley and Fischer (2011) conducted a longitudinal study that looked at executive function impairments in adults diagnosed with hyperactive ADHD as children. The study included 158 children diagnosed with hyperactive ADHD and 81 children without ADHD who acted as the control group. The participants were first assessed in 1979-1980 and were between the ages of 4 to 12 years old. Participants in the hyperactive group were assessed utilizing the Hyperactivity Index, the Revised Connor's Parent Rating Scale, and the Werry-Weiss-Peters Activity Rating Scale. Those in this group were two standard deviations above the mean in the severity of symptoms on these assessments as compared to others in the same age group. They also had to have demonstrated ADHD symptoms for at least 12 months. Other data collected include scores on the Home Situations Questionnaire, parent and teacher complaints, and descriptions of problems before age six. Children in the control group did not have hyperactivity and had no history of referral to mental health professionals and scored below 1.5 standard deviations on the Hyperactivity Index, the Revised Connor's Parent Rating Scale, and the Werry-Weiss-Peters Activity Rating Scale.

Participants were then assessed at age 27, and the hyperactive group retained 135 of the original participants, and the control group retained 75 participants. The follow-up was based on a structured interview of the DSM-IV criteria for ADHD, and participants

were considered to be ADHD if they reported having four or more symptoms of inattention or hyperactive/ impulsive symptoms. The researchers found 55 (44%) of the participants from the hyperactive group met the criteria and the remaining 80 participants did not meet the requirements. This provides strong evidence that the scales that are in use are indeed measuring similar symptoms which appear in childhood and can persist into adulthood. Additionally, the participants were assessed for executive function using both self-report and testing as well as measures of occupational functioning. The results revealed that executive deficits were more severe on all five of the executive functioning scales for those whose ADHD symptoms persisted into adulthood as compared to the control group and those participants who no longer met the requirements for ADHD. The self-reports predicted that the executive function ratings were significantly related to occupational functioning. In contrast, the executive functioning testing was not a predictor of occupational functioning. This suggests that executive functioning assessments should include different measures that incorporate other measures of daily life activities. Executive function tests do not include related work history, and the executive function ratings provide a better understanding of the deficits faced in occupational situations. Therefore, assessing adults should include more comprehensive testing to include measures for work related problems and other life impairments. It is interesting that performance on executive function tests did not predict occupational problems. This could be the result of that fact that so much research focuses on children and adolescents. Perhaps it is the case that problems with executive functioning diminish in adults, and problems emerge in other areas of life. Since executive functioning is a

feature of maturity that develops well into adulthood it could be the case that it simply is not as much of an issue for adults as it is for children with the disorder.

Adults with ADHD face many problems in the workforce. Although ADHD is not specifically listed under Title 1 of the Americans with Disability Act (ADA) of 1990, many adults may qualify for disability services because of impairments in one or more major life activities (Carnes & Holloway, 2009). Many of the courts do recognize ADHD as a disability; however, many adults are reluctant to share their disability with their employers for fear of stigmatization. Wigal (2009) suggests that there is a “gray area” regarding ADHD as a disability because although it is not specifically included in the ADA, the negative consequences and impairments that many adults with ADHD demonstrate do result in qualification for disability services. Therefore, employees with ADHD must be able to demonstrate limited functioning in major life activities as compared to how average individuals perform to receive intervention and support, which can be challenging given the stigma and fear associated with the potential lack of protection under the law.

Ramsay (2010b) suggested that it is easier to document impairments in functioning in the school setting than in workplace setting. Furthermore, individuals claiming disability for ADHD must be “otherwise qualified” and meet the “minimum requirements” for the job, which can be difficult to assess. He also suggests that employers are not required or legally obligated to accommodate individuals with ADHD, especially in the smaller business of 15 employees or less (Ramsay, 2010b).

Additionally, the researcher found that, in some cases, disclosure to employers manifested in informal accommodations and in most situations, it was after the employee was established in the job. However, for many who do not disclose ADHD to employers, accommodations are not in place and can lead to under productivity and potential job loss.

In summary, ADHD has been shown to have a negative impact on job performance and behaviors. This leads many adults with ADHD to have problems maintaining employment. Research on adults with ADHD and employment outcomes is limited; more research in the area of job performance is needed to effectively address problems in the workforce. As adolescents with ADHD graduate from high school and enter college or workforce drastic changes take place. The lack of support from school and family members tends to be discontinued into adulthood and for many individuals who continue to have persistent symptoms are left to perform without these accommodations. The implications here stretch far beyond the difficulties of a single individual. A strong and productive workforce is essential to a successful economy, and if research is an indication of prevalence, adult ADHD may prove to be a massive public health issue.

### **Summary and Conclusions**

In conclusion, the literature in this chapter provides a deeper understanding of the problems faced in the workplace by adults with ADHD, which has helped to determine the conceptual framework for this study. The conceptual framework was based on self-regulation theory (SRT) as proposed by Baumeister to investigate the lived experiences

of adults with ADHD as it relates to self-regulation. There are numerous ways of viewing self-regulation that has influenced the development of the theory self-regulation failure. Through the examination of SRT, the theory of self-regulation failure describes the experiences faced by adults with ADHD. Therefore, this study focuses on the theory self-regulation failure. This theory proposes that self-regulation is the control of one's behaviors that are that are often overridden by normal, habitual, or impulsive responses (Dale, & Baumeister, 1999). Self-regulation failure occurs when the control processes are compromised leading to undesirable responses in behaviors. Self-regulation is compromised among individuals with ADHD and has been shown to have significant consequences for adults regarding social relationships and employment.

Research has shown that core symptoms associated with ADHD can develop into serious impairments for adults such as poor social adjustment and issues with occupational functioning. Recent literature has pointed out that self-regulation or dysregulation is an essential feature of this development disorder; however, self-regulation is not included in the diagnostic criteria. Additionally, the literature has suggested that the symptoms associated with adulthood, present somewhat differently from those experienced by children and need to be thoroughly investigated separately from the literature conducted on children with this disorder. The research conducted on adults with ADHD is very limited. Although the new DSM-V has established separate criteria for adults with ADHD, there is still a lack of research in adults and the significant consequences it has on several life domains. Specifically, the adverse impact on major life domains and the role that self-regulation has in adults with ADHD.



Although recent research is just beginning to highlight the importance that self-regulation has on individuals diagnosed with ADHD, there is a lack of research that investigates its impact on the workplace. Research has shown that the deficits in self-regulation among adults with ADHD are associated with more severe levels of functional impairment, especially with relationships and employment. Most researchers suggest that problems with self-regulation stem from a lack of inhibition of behaviors, a failure in self-regulatory actions, and the inability to organize coordinated actions in goal-directed behaviors. Research on individuals with ADHD has suggested that self-regulation is problematic; however, there is a lack of agreement on how to conceptualize this concept. This study will fill the gap in research surrounding adults with ADHD

ADHD is a disorder that affects individuals from the time they are children all the way into adulthood. It is characterized by inattention, hyperactivity and impulsiveness. While there is a plethora of research surrounding ADHD in children, the research regarding adult ADHD is significantly more limited. Some have thought that it is a disorder that only affects children, but research has shown that those symptoms can last long into adulthood and create serious quality of life problems for those with the disorder. Estimates suggest that as many as 50% of children continue to experience symptoms into adulthood (Barkley, Fischer, Smallish, & Fletcher, 2002; Camilleri & Makhoul, 2010; Hall et al., 2013; Ramsay, 2010a).

It seems that symptoms of ADHD are slightly different for adults than for children. For example, hyperactivity declines in adulthood but is accompanied by increases in impulsivity (Barkley et al., 2008). Conceptually these two things are related

and could be the result of maturation of the adult brain. In any case, the high prevalence of symptoms in adulthood combined with evidence that symptoms vary between adults and children makes a strong argument that adult ADHD is a health issue that needs to be addressed separately. There is increasing evidence that comorbidity plays a role in the underreporting of ADHD in adults (Miranda et al., 2014). This is complicated by the fact that ADHD is considered a developmental disorder, which means symptoms must be present from an early age. This makes the new diagnoses of adult ADHD very rare, and is often masked by other comorbid disorders that it accompanies in adulthood.

Similar to children diagnosed with ADHD, adults may experience hyperactivity, problems with sustained attention, relationship problems, disorganization, impulsivity, difficulty with organization, and difficulty completing tasks; all of which can lead to problems with employment and social difficulties (Barkley, Murphy, & Fischer, 2008; Camilleri & Makhoul, 2013; Miranda et al., 2014; Weiss & Murray, 2003). Research suggests that this is likely due to problems with emotional and behavior self-regulation (Burns & Martin, 2014; Martel 2009; Nigg et al. 2004). Emotions play a major role in the in the way humans make decisions, behave, and how they relate to others. Also, emotions are essential to the way people derive meaning from experiences and develop relationships. When an individual struggles to regulate emotions in an effective way, this can negatively impact relationships and other areas of a person's life such as occupational and educational attainment. For this reason, the current study will assess the life experiences of individuals with adult ADHD through the lens of SRT. Self-regulation appears to be a core deficit in those with ADHD and SRT gives the study a framework

for organizing the data. There is some disagreement in the literature around how to define and conceptualize self-regulation and its associated problems. Despite this, it appears that while some researchers call it by different names, they are talking broadly about the same concept. This is evidenced by consistent results across studies, which show that those with an ADHD diagnosis show deficits in self-regulation. Some studies make a distinction between emotional and behavioral regulation or inhibition, but again consistently find that those with ADHD have similar patterns of behavior. This has particular implications for adults who have to function in a work environment, which makes a strong argument that occupational problems are a worthwhile avenue of inquiry.

In addition to issues with self-regulation, those with ADHD experience deficits with working memory and motor control (Barkley, 2010). These are executive functions that help adults connect past experiences with present ones. Research has shown that those with ADHD experience deficits in executive functioning, which can make adapting to new situations extremely difficult and stressful (Wahlstedt et al., 2008). One particular executive function, response inhibition, is intimately related to self-regulation and can be thought of as its behavioral counterpart. While these are treated differently in the literature they are conceptually very close to the same thing.

These psychological impairments likely translate into problems with occupational functioning for adults with ADHD, which is the subject of the current study. If prevalence estimates are correct, it is likely that thousands of adults experience negative life consequences as a result of ADHD. Some research has shown that prevalence rates are very likely low. This is because ADHD is often accompanied by increased rates of

depression and anxiety which can mask its symptoms (Barkley, Murphy, & Fischer, 2008). Issues with goal directed behavior, focus, impulsivity and social interactions all make it likely that ADHD is affecting the occupational success of adults across the nation (Lindstedt & Umb-Carlsson, 2013). While there is some research that suggests there are employment issues related to ADHD, the issue remains largely unexplored (Adamou et al., 2013). The present study aims to explore the occupational disadvantages of ADHD through the lens of SRT. This research will help to give the scientific community a better understanding of the issues faced by adults with ADHD and the specific interventions they may assist with their treatment. This study also highlights a lack of support options available to adults to experience such symptoms. Perhaps research that highlights the occupational challenges faced by adults with ADHD could spur organizations to offer more support services.

In conclusion, a qualitative phenomenological approach is the most appropriate for exploring a phenomenon, focused on the phenomena of interest from the perspective of participants who have experienced the phenomena. The participants selected for this study was limited to those participants who satisfied the inclusion criteria. There were 11 participants selected for this study, in line with the amount necessary to reach saturation within the study. The recruitment of the participants included letters and flyers posted at local mental health facilities.

Data collection was obtained through semi-structured interviews that was conducted face-to-face or through video conferencing. All interviews were audio recorded for transcription and data analysis. Data analysis consisted of NVivo 11

software and analysis was conducted utilizing Modification of the Stevick-Colaizzi-Keen method of analysis of phenomenological data (Moustakas, 1994). Issues of trustworthiness and research bias were addressed through participant selection defined by criteria, reflexivity, member checking, triangulation, and structured coherence. Ethical precautions were addressed by adhering to the guidelines of Walden's established research guidelines.

Chapter four will discuss the data and findings from this qualitative study. Chapter four will provide a description of the setting and demographics, data collection, analyses, and evidence of trustworthiness. Lastly, all results and data supporting the findings will be reported.

## Chapter 3: Research Method

### **Introduction**

The purpose of this qualitative, phenomenological study was to examine the role that self-regulation plays in the occupational functioning of adults with medically diagnosed ADHD. Investigating the role of self-reported self-regulation is important because employment can affect an individual in several capacities such as emotional and financial well-being, which in turn can impact the individual's quality of life. This research on the experiences of adults with ADHD can provide information that may assist employers working with adults with this disorder, encourage more research on employment outcomes and issues for adults with ADHD, define necessary accommodations in the workplace, and help to conceptualize the role of self-regulation in adults with ADHD. The population targeted by this study was adults with an existing diagnosis of ADHD recruited from local mental health clinics across northeast Ohio.

This chapter includes a detailed account of the research methods I used for the study. It also includes details of the study such as the role of the researcher, setting, sample, instruments, and procedures. I discuss data collection and methods and review the threats to validity, including the reliability of the instrument and data assumptions and sample size. I conclude the chapter with a brief discussion of the issues of trustworthiness and ethical considerations taken to protect the participants' rights and well-being.

## **Research Design and Rationale**

### **Research Questions**

The purpose of this qualitative, phenomenological study was to understand the role that self-regulation plays in the occupational functioning of adults with ADHD. This study adds to the limited body of research regarding ADHD in adulthood. The following research questions guided this study:

RQ1: What are the lived experiences of adults with ADHD in the workplace?

RQ2: In the experiences of adults with ADHD, how did self-regulation affect their performance in the workplace?

To address these research questions, I collected data via semi-structured interviews. The semi-structured interview method was most appropriate for this inquiry because it provided the opportunity to gain an understanding of the perceptions and lived experiences of adults with ADHD in the occupational setting.

### **Central Concepts**

In this study, I investigated the experiences of adults with ADHD and the extent to which self-regulation contributes to problems in the workplace and occupational functioning. The central phenomenon under investigation was the role of self-regulation in the occupational setting for a population of adults with a medical diagnosis of ADHD.

### **Qualitative Method**

I used a qualitative design and methodology to capture and illustrate the lived experiences of adults with ADHD. Qualitative research involves the systematic collection

of purposeful information regarding the meaning of social phenomena and experiences in their natural setting (Grossoehme, 2014).

**Phenomenology.** Phenomenological researchers attempt to gather meaning from the lived experiences of one or several individuals through in-depth interviews to access their worlds of experience. The goal of phenomenological research is to understand the way individuals experience a particular phenomenon of interest to gain an understanding of what it means to experience the phenomenon (Creswell, 2013). In my research, I gathered needed information and descriptions of how adults with ADHD experience the phenomenon of ADHD in the workplace, focusing particularly on self-regulation. Through this approach, readers will gain a better understanding of the issues and experiences faced by adults with ADHD in the workplace.

After thorough review of each qualitative approach, I deemed the phenomenological perspective most appropriate and used it for this study. Husserl believed that to obtain in-depth meaning from any phenomenon, people must clear their preconceived judgments or notions (Creswell, 2007; Husserl, 1931). Furthermore, Willig (2008) suggested that the perception of phenomena will vary depending on the perceiver's location, the viewpoint of perception, context, and perceiver's mental orientation, what he referred to as intentionality. Intentionality allows the object to appear as phenomenon and when different people experience the same phenomenon, the experience can be perceived in very different ways (Willig, 2008). The premise behind this philosophy is that there is real meaning or essence to shared experiences that can be discovered through description rather than through analysis (Tuohy et al., 2013).



Thus, I used a qualitative phenomenological method to explore the lived experiences and perceptions of occupational functioning and challenges and the role of self-regulation in the workplace from the perspective of adults with ADHD. The phenomenological method of inquiry involves four steps: epoche, phenomenological reduction, imaginative variation, and synthesis (Moustakas, 1994; Willig, 2008). Epoche is the ability to minimize all preconceived beliefs, judgments, and interpretations to see what is there in front of a person without the person's biases. According to Englander (2016), epoche is the psychological positioning that allows a person to put aside assumptions, judgments, and interpretations in order to look at the phenomenon in novel ways. For this study, I set aside preconceptions and biases with regard workplace functioning and self-regulation skills of adults with ADHD.

Phenomenological reduction refers to what is experienced in its entirety as well as the thoughts and feelings associated as one experiences the phenomenon, known as textural description (Moustakas, 1994). I set aside my feelings regarding the workplace functioning and self-regulation skills of adults with ADHD. Imaginative variation is how one experiences the phenomenon and the conditions. Willig (2008) suggested that imaginative variations involve the time, space, and social relationships or structural description associated with the experience. Both phenomenological reduction and imaginative variation are integrated to form the understanding of the core of the phenomenon. Synthesis refers to the process of bringing all the structural and textural descriptions into a succinct statement that is derived from the experiences of the

phenomenon (Moustakas, 1994). I synthesized my findings on the role of self-regulation on occupational functionality of adults with ADHD.

**Ethnography and case studies.** Ethnographic method involves case studies. Creswell (2013) noted ethnography is a process of inquiry derived from anthropology and sociology in which the researcher studies patterns of behavior, language, and actions of cultural groups over a prolonged period in their natural environment. Researchers conducting case studies can be from several disciplines. Case studies require an in-depth level of inquiry in which the researcher analyzes cases, activities, and events of one or more individuals (Creswell, 2013). Upon investigating these approaches to qualitative research, I determined they were not appropriate because it would not be possible to observe adults with ADHD in the active work setting.

**Grounded theory.** Grounded theory involves the researcher generating a theory based on the views of the participants (Creswell, 2013). This method requires multiple levels of data collection in order to develop a theory about the phenomena of interest. Grounded theory is used when there is no previous hypothesis to test, thus allowing the researcher to develop a theory or conceptual framework (Grossoehme, 2014). This method was not appropriate because my intent was not to develop a theory or conceptual framework.

**Narrative.** The narrative method of inquiry is an interpretive approach that involves storytelling. This approach involves the story becoming the object of the study from which the individual makes sense of the events that takes place in their life. Creswell (2013) noted that the narrative researcher gathers stories from one or more

individuals and then combines the interpretations from the participant and the researcher into a collaborative narrative. This approach is often best for exploring one individual or a small group of participants. Although this method closely relates to phenomenology, I did not use it because the phenomenon of self-regulation would be difficult to fully understand from the story of one individual.

### **Role of the Researcher**

There are several roles required by the researcher conducting qualitative research. Creswell (2013) suggests that qualitative research is interpretive in nature that requires continuous and intensive experience with the participants thus; the primary role of study was the interviewer of the selected participants in the study. In addition to interviewer in the study, I will take on the role of participant as observer. Creswell (2013) described the role of participant as observer, which is secondary to the role of participant in which observations are made and any unusual qualities are noted during observation.

Creswell (2013) suggested that, with qualitative research, the researcher's role poses a litany of potential ethical issues that must be addressed through reflexivity in identifying these biases such as personal history, background, gender, culture, socioeconomic status, and values that can influence interpretations within the study. One source of potential bias is my personal experiences with the ADHD and adults with this disorder. In contrast, Moustakas (1994) suggests that phenomenological inquiry requires the researcher have a personal interest in the phenomenon that is examined so that the core of the problem is brought into focus. Thus, I have interest in and experience with adults with ADHD, which was an underlying reason for pursuing this research. My

interest in adults with ADHD comes from having family members with an active diagnosis of ADHD. Additionally, I have other experience, as a former special educator with hands-on experience with children with ADHD. Another reason for pursuing this research is from the experience gained as an individual therapist in dealing with children and adults with this disorder.

Grossoehme (2014) suggests that when the researcher is part of the research process, investigator's values play a role in the inquiry process. Thus, I must address potential biases and have a good understanding of how biases can influence how I collect and analyzes data. I have a potential bias for adults with ADHD as I have personally counseled and worked with adults with ADHD. As a result, I could potentially have the tendency to see more in what they say than what is there. Therefore, it is important to address the potential for bias because what one values could play a role in what questions one asks, how one asks them, and how one respond to the participants' answers. Because I am the primary data collection instrument, it is important to recognize my role and my values to deal with any potential biases that might arise during the data collection process. Willig (2008) suggests that phenomenological researchers believe that it is not possible to eliminate all heuristics and biases from one's background. Given my personal experiences with adults with ADHD, bracketing was utilized to address researcher bias as described by Husserl. My potential bias may be from having a child with ADHD and seeing the struggles that he is faced with on a daily basis.

Bracketing refers to the process of the researcher setting aside personal and professional biases that allow the researcher to conduct research with an open mind to the

experiences put forth by the participant (Englander, 2016). This could potentially be difficult for me as I have personal experience with adults with ADHD. Another way to minimize bias is through member checking. Member checking refers to the validation process in which the interpretations are given back to the participants in the study to check and clarify the data (Creswell, 2013). There are no other potential biases or ethical concerns as the interviews did not take place at my place of work. Additionally, there were no prior personal experience with the participants in the study.

Another role that a researcher has in qualitative research is data collector. Semi-structured interviewing was utilized and is the most appropriate method of data collection to gather insight into the role of self-regulation in adults with ADHD. As data collector, the researcher must establish strict protocols for interviewing, confidentiality, security measures in the collection of data. For example, the researcher must have specific guidelines for observations, interviews, handling documents, recorded information, and storage. Creswell (2013) suggests that there are several methods for data collection and that researchers should keep a log of all data collected whether it is primary data (information gather directly from the participant) or secondary data (information gathered from others not from the participants in the study). As primary data collector, I plan to utilize audit trails to ensure that the collection of data is well organized.

In addition to data collector, another primary role will be to analyze the data.

The researcher's role in data analysis is to define all steps involved in the analysis process. Analysis for this dissertation included the NVivo software computer program.

## Methodology

### Participant Selection Logic

**Sampling population.** The sampling population selected for this qualitative study consisted of adults with a medical diagnosis of ADHD. Additionally, the sampling population consisted of these adults who are currently working or have had at least one professional working experience. The sampling approach in this qualitative research was be a purposeful sampling strategy, a process of gathering participants in non-random ways to ensure specific categories of cases are represented in the final sample, which helped attain information-rich data (Palinkas et al., 2015; Robinson, 2014). Furthermore, the premise behind using purposeful sampling is that the researcher has a conceptual understanding of the topic of research and that only certain individuals who have a unique or different perspective of the phenomena will end up in the final sample. Through purposeful sampling, all participants met the following inclusion criteria: (a) adults who have been diagnosed and have a history with ADHD treatment, (b) adults with at least one year of work experience but may or may not be currently employed, (c) adults living away from parents or caregivers, (d) female or male adults who are 18 to 70-years-old.

**Recruitment.** The sampling strategy included recruiting participants from local mental health treatment clinics from northeast Ohio. Permission was granted by the Internal Review Board (IRB) approval number: 11-16-17-0165514 to recruit participants for research purposes, I contacted the mental health treatment clinics in northeast Ohio to give them an overview of the study. Letters were sent to northeast Ohio mental health

treatment clinics, which explained the nature of the study (Appendix A). After I was approved for participation from local mental health treatment clinics in northeast Ohio, a participant recruitment letter and flyer was distributed to recruit participants for the study (Appendices B & C). The letters included the purpose, rationale, information about the study, my personal contact information, and a statement regarding the screening process. The letter also included information about confidentiality and information regarding the interviewing. These will be placed on the bulletin board in the lobby.

Adults who responded to the participant recruitment letter and flyers were contacted by the researcher either through e-mail or phone call. Once the Participants were contacted a time was set up to conduct a brief screening. For those participants who were screened and deemed eligible for the study received an overview of the study (Appendix D). Once the participant agreed to be part of the study, a time and place was set up for the interview. The participants who live in northeast Ohio that expressed a desire to conduct a face-to-face interview, the time and place was set up for the interview. For those participants who did not live in northeast Ohio, a time was be set up to interview via Skype video conferencing. All participants who set up an interview and sign the informed consent agreement were compensated with a ten-dollar gift card. After establishing an interview time and place, a follow-up phone call was made to confirm the meeting one day prior to the meeting. No identifying information was presented in the research paper to protect their confidentiality and anonymity.

**Sample size.** The target sample size for this study is approximately 11 adults with ADHD. Creswell (2013) suggests that in phenomenological research the sample

size typically ranges from 3 to 10 participants. Roberts (2013) suggested that a purposeful homogenous sample is necessary to discover themes from those who share a particular experience. Based on the criteria written above, purposeful sampling was utilized for this study to investigate 11 adults with ADHD to ensure saturation.

Saturation occurs when collecting new data, no longer provides novel information on the phenomenon being investigated. Mason (2010) suggested that saturation in studies with high levels of homogeneity in the population being studied can occur with smaller samples that will be sufficient to find meaningful themes and interpretations. Thus, the sample size of 11 participants was likely be large enough for the analysis given the homogeneity of the population under investigation.

### **Data Collection**

Research and data collection was conducted after the approval through Walden University's IRB. The participants were interviewed and audio recorded for the entire length of the interview, and the interviews then transcribed. A field journal was utilized to write down all observations made during the interview.

### **Instrumentation**

**Semi-structured interview.** The data collection instrument that was used for this qualitative study was a semi-structured interview protocol that was utilized with each participant in the study. The interview protocol (Appendices E & F) provided sufficient data that addressed all research questions utilized in this qualitative study: How does self-regulation impact occupational functioning for adults with ADHD? The questions were formulated and based on the Difficulties in Emotion Regulation Scale (DERS). Gratz



and Roemer (2004) developed the DERS assessment to evaluate emotion regulation and dysregulation in adults ages 18 to 60-years-old. The interview protocol was based also from literature findings, wherein each question made sense given where the literature on ADHD has been. Some of the specific elements used from the DERS assessment were as follows: nonacceptance of emotional responses; difficulties engaging in goal-directed behavior, impulse control difficulties; lack of emotional awareness; limited access to emotion regulation strategies; and lack of emotional clarity (Gratz & Roemer, 2004). Each of the elements evaluated how adults with ADHD self-regulate and function in the workplace. The instrument was sent for expert review. The researcher sought out three recognized experts with qualitative methodology and in the area of ADHD as well as solicit feedback on the appropriateness of the questions, both in terms of content and style.

Interviews were approximately one hour. Informed consent was distributed and obtained from each participant. All interviews were recorded with permission granted from each participant and then transcribed for analysis. All audio recordings were saved to an audio file on a password protected computer and then deleted from the audio recording device once they were transcribed.

All responses were kept confidential through password protected computer files of all transcriptions. The files of each participant were saved on a computer with password protection, flash drives, and external hard drive. Five years following completion of the study, the data collected for research purposes will be destroyed. Upon completion of the interviews, each participant received a summary of their responses

either through e-mail or U.S mail to verify this researcher's interpretations of the participant's experiences. Interpretations were verified by providing a written document through mail/email to each participant (Appendix G). If there are discrepancies in the researcher's interpretations, member checking was utilized to ensure accurate interpretations and corrections were made to researcher's interpretations. Each participant was reminded twice via email or phone call to verify the interpretations.

**Observation.** Observations are an important part gathering data during an interview. Creswell (2013) posits that field observations are useful in gathering relevant information in terms of the behaviors and activities of the participant. During the interview I made unstructured observations regarding the participant's behavior, rapport building, engagement, body language, and the setting.

### **Data Analysis Plan**

Once the data is collected, an analysis was conducted utilizing a modification of the Stevick-Colaizzi-Keen method analysis of phenomenological data (Moustakas, 1994). Each participant's interview was transcribed verbatim utilizing the NVivo 11 (QSR International, 2015) software program and placed into a Word document. I then read and re-read the information gathered to gain a better understanding. After developing a thorough understanding of the information, I clustered data into significant statements derived from the transcribed interviews and placed them into broader coding themes relevant to the research questions and literature review. Statements that pertained to the understanding of self-regulation in adults with ADHD and the experiences that are pertinent to each research question were coded. All coding was completed utilizing the

NVivo 11 software program that was developed from Qualitative Solutions and Research to analyze qualitative data. Brandão (2015) suggests that most researchers utilizing the NVivo program can code audio or video files directly, eliminating the need to transcribe the data first. Furthermore, NVivo codes the data by assigning the data to a node or data category that provides an index of the categories for retrieving and reviewing the data to develop themes (Brandão, 2015). Next, I generated textural and structural descriptions of the participants' experiences. Textural descriptions are those responses that explain what the participant has experienced, and structural descriptions demonstrate how the individuals experienced the phenomenon. After that was completed, I generated themes that incorporated the thoughts, feelings, emotions, and behaviors about how adults with ADHD experience the phenomenon. Lastly, I created a composite description of the textural and structural descriptions of adults with ADHD and the role that self-regulation plays in the occupational setting. The primary software utilized in the study will be the NVivo 11 software program and Microsoft Word. Any cases deemed to be discrepant were filtered out.

### **Issues of Trustworthiness**

Trustworthiness in qualitative research refers to the strategies employed to evaluate whether the researcher's analysis accurately reflects the lived experiences of the participants in the study (Kornbluh, 2015). Trustworthiness is essential to qualitative research inquiry and requires four aspects to assess a qualitative study (Henderson, & Rheault, 2004). Establishing trustworthiness is important, as the researcher is the instrument and the validity and reliability of the study are measured in other terms such

as credibility, transferability, dependability, and confirmability. In order to address trustworthiness of the study, the elements credibility, generalizability, transferability, dependability, and confirmability will be addressed to support the validity and reliability of the study.

### **Credibility**

Credibility is the internal validity in a qualitative study and refers to the notion that the descriptions of individual's experiences are immediately recognizable to those sharing the same experience (Cope, 2014; Henderson, & Rheault, 2004). Furthermore, Shenton (2004) suggests that credibility is one of the most important elements to establish trustworthiness because determines how confident the researcher is, concerning the study's research findings.

There are several ways to ensure credibility in qualitative inquiry. The following provisions adopted from Guba can be made to ensure that credibility is established during the research process: (a) the adoption of research methods that are well established, (b) the development of early familiarity of the culture of participating organization, (c) random sampling, (d) triangulation, (e) tactics to help ensure honesty in informants, (f) iterative questioning, (g) negative case analysis, (h) frequent debriefing sessions, (i) peer scrutiny of the research project, (j) reflective commentary; background, qualifications and experience of the investigator, (k) member checks, (l) thick description of the phenomenon under scrutiny, and (m) examination of previous research findings (Shenton, 2004).

Several of these strategies were used in this study. First credibility in this study was addressed by ensuring that the participants chosen in the study are based on the specific parameters defined by the criteria: (1) adults with an ADHD diagnosis, (2) adults with a work history, (3) adults living away from parents or caregivers, (4) adults have been diagnosed and history with ADHD treatment, (5) adults may or may not be currently employed, and (6) adults may be female or male. Second, reflexivity was used to ensure credibility. Reflexivity refers to the process of assessing the researcher's perceptions and beliefs about the research process (Patton, 2015). A field journal was utilized to record personal thoughts to recognize the influence of researcher bias. Additionally, member-checking strategies was employed in which the participants will verify the results to ensure accuracy.

### **Transferability**

The second approach to establishing trustworthiness is transferability. Transferability refers to the degree in which the reader is able to relate the findings of a study to his or her own situation that addresses whether or not the researcher can generate assertions for the relevance of their theory (Morrow, 2005). Similarly, Henderson and Rheault (2004) described transferability as the external validity which addresses whether the results obtained from the research can be generalized to other situations. Generalizability of qualitative research results has been a long-standing debate, and although the results may not be fully generalizable, the strength and utility of qualitative research lie in its ability to probe issues more deeply and to potentially serve as

beginnings for quantitative research. Shenton (2004) suggests that transferability is a demonstration of the research in question that can be applied to a wider population. Transferability was addressed by meeting the needs of the study through obtaining demographics as well as information regarding background information for comparisons. Additionally, this serves to ensure that the population being investigated is representative of the clinical population. Furthermore, the participant's exact words will be used to reinforce the development of main themes from all responses.

### **Dependability**

Dependability refers to reliability in qualitative investigations. Shenton (2004) suggests dependability is the extent to which, if the research was replicated, in the same context, with the same research methods, and the same participants, then similar results would be obtained. Again, because qualitative research is based on interview data and participant self-reports, it is understandable that replication may not always be possible. Still, that does not remove the usefulness of qualitative research and, in fact, allows the research to potentially discover new and previously unrecognized issues that could serve as a starting point for later research. Henderson and Rheault (2004) suggest the use of audit trails that incorporate material and notes used during the research process, which can be reviewed by others to examine the extent to which they elicit the same outcomes from the study. Adhering to all research methods as well as performing audit trails of the procedures and results addressed dependability. Thus, maintaining all Word document files and field journals so that someone blind to the study and research can review the audit trail.

**Confirmability**

Confirmability refers to the researcher's ability to remain objective and reduce bias within the study (Henderson, & Rheault, 2004). The purpose of confirmability is the researcher's ability to demonstrate that the data collected and analyzed will be the same if someone else collected it, and that another researcher would obtain similar results. Confirmability will be addressed by ensuring that data collection procedures eliminate bias and ensure neutrality. To address confirmability, bracketing or reflexivity was used to defer my subjective beliefs regarding the phenomenon being investigated. Field journals were utilized to make notes on personal decision and impressions that are made throughout the research process. Lastly, neutrality was addressed through the use of audit trails, which reflected each step in the data analysis process that provided a rationale for decision-making.

**Ethical Procedures**

Before proceeding with data collection, IRB approval was obtained approval number: 11-16-17-0165514. Upon approval, all voluntary participants in the study were be informed about the purpose of the study as well as the procedures for the protection of the participants (Appendix I). The voluntary participants were adults with ADHD who will be free to decide whether they would like to participate in the study. The participants were selected through purposeful sampling. After selection of the voluntary participants, each participant was given an introduction to the study and study procedures as well as the informed consent document (Appendix I). The introductory sessions were all conducted individually with the potential participants before the interview session,

which provided an opportunity for them to ask questions as well as complete the informed consent document (Appendix I). All voluntary participants were informed that they may elect to withdraw from the study at any time. This is to ensure that all participants are fully informed of their role in the study, the nature of the study, any potential risks involved, and that their participation is strictly voluntary.

**Risks.** There were no anticipated risks or potential harm to participants participating in the study. However, participation in this study may cause potential discomfort to talk about their negative experiences in the workplace. Participants could have experienced some traumatic things and bringing those up during the interview could cause some risk. The unanticipated risks and potential for harm was address by having resources available for participants following the interview. Additionally, I am a trained clinician adept in dealing with anything should it arise as a result of this study. If any information provided by the participant is indicated to be a potential harm to themselves or others, an immediate report would be made to the appropriate agencies.

**Confidentiality.** Confidentiality was maintained for all participants in the study. Participants in the study were assigned a pseudonym in place of real names for purposes of confidentiality. Participants were informed that I will be the only person to have access to personal data and responses and that all data will be kept on a password protected computer. Participants had the opportunity to review the transcribed interview to ensure fidelity in responses as well as the opportunity to withdraw responses from the transcribed interview.

Records of the study that include data, audio recordings, field journal, and



informed consent documents are kept in a locked filing cabinet. All recorded information was erased from the recording device immediately following the transcription of the interview. All written records, including the interview transcripts, are stored on a personal computer that is password protected. After a period of five years, all information and data obtained from the study will be destroyed according to Walden University's established research guidelines.

### **Summary**

This chapter presented the research methods for this qualitative, phenomenological study, which examined the role that self-regulation plays in the occupational functioning for adults medically diagnosed with ADHD. The research design, setting, sample, and instrumentation were described in detail. A demographic questionnaire was given to all participants. In addition, this chapter reviewed the issues of trustworthiness and addressed the validity of the study and findings. The reliability of the interview protocol was discussed as was the ethical issues surrounding the research process and the protection on the participants' rights, ensuring this study to be ethical and safe for all participants' well-being.

In conclusion, a qualitative phenomenological approach is the most appropriate for exploring a phenomenon, as it focused on the phenomena of interest from the perspective of participants who have experienced the phenomena. The participants selected for this study were limited to those participants who satisfied the inclusion criteria. There were 11 participants selected for this study, in line with the amount

necessary to reach saturation within the study. The recruitment of the participants included letters and flyers posted at local mental health facilities.

Data collection was obtained through semi-structured interviews that was conducted face-to-face or through video conferencing. All interviews were audio recorded for transcription and data analysis. Data analysis will consist of NVivo 11 software and analysis was conducted utilizing Modification of the Stevick-Colaizzi-Keen method of analysis of phenomenological data (Moustakas, 1994). Issues of trustworthiness and research bias was addressed through participant selection defined by criteria, reflexivity, member checking, triangulation, and structured coherence. Ethical precautions were addressed by adhering to the guidelines of Walden's established research guidelines.

Chapter 4 discusses the data and findings from this qualitative study. Chapter 4 provided a description of the setting and demographics, data collection, analyses, and evidence of trustworthiness. Lastly, all results and data supporting the findings were reported.

## Chapter 4: Results

### **Introduction**

The purpose of this phenomenological research study was to describe the lived experiences of adults with ADHD and the role that self-regulation plays in the occupational setting. I used the phenomenological method to investigate the lived experiences of adults with ADHD and sought to clarify the meanings of these experiences from their perspective. The implications for positive social change include a deeper understanding of the experiences of adults with ADHD in the occupational setting. It provides information that may assist employers working with adults with this disorder, encourage more research on employment outcomes and issues for adults with ADHD as well as defining necessary accommodations in the workplace. Additionally, it serves to help to conceptualize the role of self-regulation in adults with ADHD.

I developed the following research questions to explore the lived experiences of the participants:

RQ1: What are the lived experiences of adults with ADHD in the workplace?

RQ2: In the experiences of adults with ADHD, how does self-regulation affect their performance in the workplace?

In this chapter, I discuss the data and findings from this qualitative study. Additionally, I provide description of the setting and demographics, discuss data collection and analysis, and offer evidence of trustworthiness. Finally, I report all results.

### Setting

I conducted participant interviews at a mutually agreed upon location. Each participant in the study was given a flyer (Appendix C) with my name and contact information. Initial contact was through a personal phone conversation and a brief screening to ensure each potential participant met the predetermined criteria (Appendix G). I gave each participant a brief overview of the study and scheduled a time and location for the interview. Prior to the interviews, I gave each participant an informed consent document for their review. Each participant signed the informed consent document before I interviewed them using the semi-structured interview protocol. I notified all participants that the interview would be recorded to ensure accuracy and that I would transcribe the interview and provide them their transcript through email or U.S. mail. Each participant gave an email address and chose correspondence through their personal email. Participants were instructed that the email would contain the transcriptions from the interview. Last, I informed participants that they would be able to terminate the interview for any reason at any time.

During the interviews, I used a semi-structured interview protocol to ensure all participants were asked the main question (Appendix D). Follow-up questions were asked to clarify and elicit a deeper understanding from each participant. I thanked each participant for their participation and provided instructions regarding the transcripts. All participants from the study were given a \$10 gift card to a restaurant.

### **Data Collection**

The data collection process began by distributing flyers to clinicians to hand out to potential participants for the study. I recruited a total of 11 participants for the study. I initially contacted each participant by phone to screen and brief them on the nature of the study. All participants set up a location and time for the interview. At the interview, each participant was given the informed consent document to review and sign. Prior to the interview, I informed all participants of the study protocols, and all agreed to the audio recording of the interview. All interviews were recorded using an audio recording device. I gave all participants a \$10 gift card to a restaurant for their participation and time commitment for the interview. Only one participant requested a copy of the informed consent document.

The semi-structured interview protocol met the objectives for the study. No changes to the original interview questions were needed. However, some participants did require further explanation on some of the interview questions. Additionally, some participants required that I repeat the question for clarity or confirmation of the question. I took field notes during the interview process to record the participants' nonverbal language and my observations to aid in understanding the phenomenon. Each interview was approximately one hour in length.

I manually transcribed all interviews using the Nvivo 11 program. All transcriptions were sent to all 11 participants in the study and sent to their personal email for review prior to analyzing the collected data. Some participants gave corrective feedback to ensure transcripts were completely reflective and accurate accounts of the

interview. There were no unusual circumstances encountered throughout the data collection process.

### **Demographics**

I selected 11 participants who met the study criteria. All participants had a current diagnosis of ADHD and had at least 1 year of work experience. Participants' age range was 18-56 years old. Additional demographic information is listed in Table 1.

The study sample consisted of 8 males and 3 female participants ( $N = 11$ ). The mean age of the sample was 35.63. The participants ranged in age with youngest participant being 19 and the oldest participant being 56, which represented a range of 38 years. Five out of 11 (45%) participants were diagnosed with ADHD in adulthood and the remaining 6 (55%) were diagnosed in childhood. The participants reported having a current prescription for their ADHD diagnosis, 73% of the sample indicated that they take medication on a daily basis for the symptoms of ADHD. All participants reported that the medication for ADHD has been helpful in managing the symptoms of ADHD. However, some participants were not currently on a prescription for their ADHD condition due to various circumstances.

The participants in the study reported their marital status variously as married (9%), divorced (27%), and single or never married (73%). Three participants (27%) reported that they had children. All participants graduated from high school, and six (55%) of the participants had 2 years of college. Two participants (18%) held master's degrees, and three participants (27%) reported no college or vocational training.

The study's participants shared several common characteristics. They were adults with a current diagnosis of ADHD, had at least one year of job experience, and had multiple jobs. Participants had diverse occupational experiences. Three participants were self-employed. Three participants worked in construction. Two participants worked in retail, and two participants worked in healthcare. One participant was a manager and one participant worked in an office. One participant was a former educator but was currently unemployed. The participants' years of experience varied. The mean years of experience was 13.88. The participants reported the number of jobs held, which ranged from 2 to 27 years, with a mean number of 9.36. Table 1 provides demographic information about the participants' age, gender, marital status, number of children, years of employment, number of jobs, and whether they have a prescription for their ADHD diagnosis (See Table 1).

Table 1

*Participant Demographic Information*

Participant	Gender	Age	Marital status	Children	Medication	Number of jobs held	Years of employment
Alex	Male	27	Single	No	No	4	9
Annie	Female	36	Single	Yes/ 1	Yes	10	15
Charles	Male	57	Divorced	No	Yes	9	29
Elizabeth	Female	39	Single	No	Yes	20	15
Jack	Male	34	Single	No	Yes	10	8
Kyle	Male	27	Single	No	No	10	6
Michael	Male	42	Divorced	No	Yes	5	20
Michelle	Female	22	Single	Yes/ 2	Yes	8	7
Ryan	Male	55	Single	No	Yes	10	20
Sam	Male	19	Single	No	Yes	2	3
Thomas	Male	34	Married/ Divorced	Yes/ 4	No	15	20



## **Data Analysis**

I used a modified Stevick-Colaizzi-Keen method of qualitative analysis to examine the collected data in this phenomenological study (see Creswell, 2013). The steps of analysis in the modified Stevick-Colaizzi-Keen method involved first bracketing my own experiences, known as epoche. Next, I read all of the transcripts and listed all significant statements related to phenomenon under study. This process is called horizontalization. After gathering all the significant statements, I clustered all relevant statements into units of meaning and themes. Last, I developed a composite description or the essence of the experiences of the research participants.

### **Epoche**

Epoche or bracketing of the researcher's own experiences is essential to the validity of the study (Chan, Fung, & Chien, 2013). Epoche refers to the process in which the researcher takes inventory of their own experiences and knowledge of the phenomenon being researched. I sought to eliminate personal biases by providing a full description of my own personal experiences in order to give way to those beliefs and experiences of the participants. Thus, allowing this researcher to investigate the phenomenon with a clean slate.

As a former special education teacher and mother of a child with ADHD, I have personal experiences with phenomenon. Therefore, I had to bracket these experiences in order to have an unbiased perspective that allowed the experiences of the participants to be the focus of attention during the analysis process. I was able to compartmentalize my experiences and refrained from making any comparisons to participant's experiences or

reflecting those biases during the interview process. The next step in the analysis process was horizontalization.

### **Horizontalization**

Horizontalization of the data was completed with each interview transcript in which each statement was considered with respect to its significance in describing the phenomena. Each statement was then assigned equal weight from the verbatim transcript and every expression was listed that depicted a separate thought. A list was generated of each non-repetitive or overlapping statement, leaving only the invariant constituents. Invariant constituents refer to the statements that contain an element of the experience that is pertinent in understanding the phenomena. The horizons, or meanings of units of the experience which remained were the invariant constituents of the experiences.

The invariant constituents were then clustered and identified as core themes of the phenomena under investigation. Each invariant constituent and accompanying theme were checked against each participant's transcript. This step was employed to ensure invariant constituents and themes were explicitly expressed in the transcripts. If the invariant constituents were not explicit in the transcripts, they were eliminated. Ten themes were identified that were representative of the essence of the participant's experience. The themes that were identified from the interview data. Additionally, all themes are reviewed and represented in this chapter by using quotation marks. During the analysis process, it was determined that there were no discrepant cases were found in the data from the phenomenon under investigation.

## **Textural Descriptions**

The textural descriptions were constructed into themes from the remaining invariant constituents of the experiences of self-regulation in the workplace for each participant. These descriptions recounted the participant's experiences in the workplace and depicted detailed picture of what occurred during the experiences that were recalled. The participant's accounts of are presented using his or her own words and ways of expressing meaning from their point of view. Moustakas (1994) purports that the essence of textural description is the process of illustrating the phenomenon by which every perception is weighted equally and then connected thematically to formulate a complete description of the phenomenon.

## **Structural Descriptions**

Structural descriptions were developed through imaginative variation or the researcher for each participant. Each textural description served as the base, the descriptions provided an account of the experience. Structural descriptions attempt to explain the "how" the thoughts and feelings of the participant's experience were connected in order to derive at the "what" of the experience. Moustakas (1994) defines imaginative variation as approaching the phenomenon from different perspectives and varying frames of reference in order to deduce descriptions into structural description of the experience. This allows the researcher to take a step back and view all possible meanings and perspectives that help to develop the structural description.

## **Textural-Structural Description**

Textural-structural description refers to a description of the meaning derived from the essence of experience of the participant. This step in the analysis process involved the integration of both the textural and structural descriptions, in which a synthesis of the meanings and experience are constructed. This researcher synthesized the experiences

and perceptions of the participants while taking into consideration the structural descriptions in order to construct synthesized description of the phenomenon.

### **Composite Structural Description**

The last step in the analysis process is to formulate a concise composite structural description derived from the textural-structural descriptions of each participant's descriptions of self-regulation in the workplace. Composite structural descriptions were developed from the textural-structural descriptions, which provide the essence of experiencing that informs the audience of "what" the participants experience as well as "how" the participants experience the phenomenon. Through thorough examination of the essence of the participants' experience allowed for a deeper investigation of the meaning, thus providing a synthesis of meaning of the phenomenon. Each theme was explored and received support from the participants' responses, therefore providing evidence that situation has occurred. The composite structural descriptions provided meaning for how adults with ADHD self-regulate in the workplace. The composite structural description will be provided in Chapter 5.

### **Evidence of Trustworthiness**

As with all research, establishing trustworthiness is extremely important to the integrity of the study. According to Newman and Clare (2016) trustworthiness can be achieved through credibility, dependability, transferability, and confirmability. Throughout the study techniques were employed during data collection and analysis. Creswell (2013) suggests using multiple validity strategies is imperative to establishing trustworthiness and to the researcher's ability to assess the accuracy in the findings. The

specific techniques employed were member checking, identifying biases, audit trails, and through the use of thick-rich descriptions.

### **Credibility**

Establishing credibility is one of the most important components in qualitative research that assures the readers that the findings are true and representative. Diane (2014) suggests that credibility can be established by the utilization of detailed analysis and repeated review of the transcripts and employing strategies to enhance credibility. Member-checks were employed toward the end of the data collection phase of research. Member-checking was conducted by emailing the verbatim transcripts to each participant in the study. Two of the participants did not complete the member checking by responding to the email notifications. If participants noted any misrepresentations in the transcripts, corrections were made to the transcripts according to the participants' comments. Two participants made minor corrections to the transcripts regarding clarification of what was said during the interview. Furthermore, there were no major changes other than one word that was incorrect in the transcripts which was made aware in their feedback from reading the transcripts. All corrective feedback was changed prior to analyzing the data.

### **Transferability**

Transferability implies that methods used by the researcher are consistent throughout the entire study (Creswell, 2013). Additionally, transferability demonstrates that the study could be applicable to other contexts, situations, and populations (Morse, 2015). The researcher properly examined each transcript and consistently coded data.

The primary goal of the research was to investigate how adults with ADHD self-regulate in the workplace. The use of thick-rich description is instrumental in phenomenological research, especially with transferability. Creswell (2013) suggests that thick rich descriptions can help the reader relate to the experiences conveyed by providing a context of the shared experiences that provide a more realistic and richer results. Therefore, transferability was addressed through the use of thick-rich descriptions of the participants' experiences, developing information rich themes that address self-regulation in the workplace among adults with ADHD.

### **Dependability**

Dependability is the evaluation of consistency and reliability of the qualitative study. The goal of dependability is to verify that the findings are consistent with the data that has been collected. Diane (2014) purports that dependability can be achieved through the use of decision trails to ensure consistency of the data over similar conditions in the research process. Dependability was achieved through an audit trail that was employed throughout the entire data analysis process. The researcher provided an audit of the information collected, the analysis process, and throughout theme development. The audit trail consisted of records that were kept from the field notes, data collection, and analysis decisions that led to the findings from the study.

### **Confirmability**

Confirmability assumes that the research brings their own perspective regarding the phenomena. Thus, confirmability requires that the findings from the study be an accurate representation of the participants' account of the phenomena, rather than the

researcher conducting the study. Diane (2014) suggests that confirmability can be established through the researcher's descriptions of how the findings and interpretation were established and from showing that the conclusions were derived from the data, not from the researcher's biases or viewpoint. The researcher accomplished confirmability through verbatim transcripts and direct quotes from the participants as well as field notes regarding the participants reactions and expressions. Additionally, confirmability was established by an audit trail, thorough record keeping. Furthermore, all data, audio recordings, field journal were stored in a locked filing cabinet that only the researcher could access.

## **Results**

In a phenomenological study, the researcher illustrates what the participants' experience are and seeks to describe of the phenomena being experienced to clarify the meaning (Creswell, 2013). In the current study, the researcher conducted interviews on 11 participants that examined the lived experiences of adults with ADHD and how they regulate their emotions in the workplace. Several themes emerged from the interviews that coincided with the following research questions: What are the lived experiences of adults with ADHD in the workplace? And, in the experiences of adults with ADHD, how does self-regulation affect their performance in the workplace? The four emerging themes were as follows: essential descriptions of adults with ADHD in the workplace, difficulties in processing emotions, emotional-regulation strategies, and medication benefits and challenges. Several subordinate themes that emerged from the interviews.

The verbatim transcribed quotes from all participants in the study provided the support for each theme.

**Theme 1: Essential descriptions of ADHD in the workplace.**

Adults with ADHD often describe their experiences in the workplace as difficult in both their personal life and in the workplace. Previous research points out that adults with ADHD often will experience significant functional abnormalities that have an impact on the individual's ability to function properly at work (Nadeau, 2005). The first theme effectively describes the participants' initial description of experiences in the workplace. All participants described having difficulties in the workplace as it relates to the symptoms of ADHD. Many of the participants viewpoint of ADHD is both positive and negative at times. The following excerpts from the participants demonstrate the experiences of having ADHD in the workplace:

- Michael: “ADHD is hands-down the catalyst for frustration and that is both internal and external. meaning relationships with others, especially employees, especially employees that say they are competent that exhibit nothing near competence.”
- Ryan: When I think of ADHD, it’s almost like deciphering, like what you need to cut out, in regards to your multitasking of so many tasks. The symptoms of that is just like..you just really want to your... Your activity can be out of order because it’s like ADHD just seems like how hyper you’re getting in regards to having so much stuff to do.



- Michelle described her experiences both positively and negatively. She stated, Positively because I am able to get a couple different things done at once, but then negatively if.. for the forgetfulness. Like, if somebody told me to do something, or I will forget to complete a task, but having energy sometimes does help to get things done.
- Elizabeth also described her experiences with ADHD as both positive and negative. She stated, “I think It’s been very difficult, I wouldn’t wish on anybody. The stuff I’ve had to deal with, but at the same time, it’s made me stronger both who I am today and a... I feel like I’m finally doing it. Standing up for myself and making it in a job.”
- Annie described her experiences as energizing and a need to keep moving. She added, “Um.. I don’t even know how to explain it. It’s good. It’s a constant movement, you could say. You’re not really stuck in one spot and every day is different. I don’t know what to expect. As long as you keep going, you’re okay but then you get distracted very easily. It’s hard because you’ll be focused on one thing and then all of the sudden you are pull to another thing.”
- Charles described his experiences as a constant rush. He stated, “And the problem is...the one problem with me is... When I have to think, It’s running your brain. It’s running around, a mile a minute. That’s why I used to stutter because I have so many things going through my head. That I can’t get out.

That's one thing, I don't like about ADD is that you're... You know my mind is absolutely rushing and I want to do something.... And then you know work but it's like your mind in this isn't biggest thing. I think it's terrible your mind rushes around like a mile a minute, you can't calm down so it's like...Someone has their foot on the gas pedal and they're not taking it off."

- Thomas described his experiences as constantly having to question himself. He added, "So, it's the best way I can explain it. Like, as soon as I clock in, I have to be professional me, so I have to go in and be professional, but my mind is in a million places all of the time. It's, like looking and evaluating jobs and stuff like that, it's the way I have to look at it in my mind. It's just ten million places, what can I do, what will go wrong, what won't go wrong. How can this kill me, will it kill me! ... Do I have to do this; Do I have to do that? It's just like 50,000 side missions going on. It's like a terrible video game.. that is what it is."
- Alex described his experiences with ADHD as frustrating at times. He stated, "My experiences have been okay, but there are certain times where I get frustrated a little bit. Just feeling overwhelmed, just because I kind of get thrown into everything. Like, I'm the kind of person that wants to help everybody. So, and like the problem is.. I can't say no! So, I mean just, there are times when I get frustrated."

- Lastly, Jack described his experiences with ADHD as extremely difficult to focus and maintain his attention on one task. He added, “Prior, I was... I would probably say, I was a little scattered but it all made sense. So, it would seem that I was the guy that was constantly on the go, because I really was. And it really made sense, but inside my head it was just totally trying to.. a.. like, like those bingo balls I was like trying to like slow everything down. And once I was able to get a little bit of medication, that started slowing down and I could be more focused on the task at hand. So, I would be talking to say a coworker and um.. They would have a question and I would answer the question, but I might be thinking about 10 other things that I have going on. Or it might seem that I was like ignoring them... the question would get answered, but it wasn't the type of empathy in that would be for that certain situation.”

The workplace can be an overwhelming and stressful place for many people in the workforce. Consequently, having ADHD on top of the daily stressors of the workplace can prove challenging for those with compromised abilities to sustain attention, organize and impulsivity. Many of the participants in the study described having the core symptoms of ADHD and how these core symptoms can drastically affect performance in the workplace.

Beliefs of not being normal. Many of the participants described their feelings in the workplace as feeling frustrations with themselves as well as others. Stein (2008) purports that many of the symptoms associated with ADHD can have significant impact

on individuals in the workplace. Many participants often have feeling of not being normal and feel overlooked at times in the workplace.

- Michael described feeling abnormal until he was given a test for ADHD and being diagnosed with the disorder. He reports, “I was diagnosed with the age of 14 or 15 that I had attention deficit, not ADHD I don’t know when all this became....it’s been studied for a long time. But it has come to its fruition, specifically the DSM. But when my mental health professionals got together to talk. They said, maybe we should give him the test. It’s probably the first A+ I ever got in my life. I answered all 37 questions correctly. That’s when they decided to put me on the medication. And through the diagnoses I realized, ‘wow this this explains a lot!’ I never thought of it, you know a fish does not know it’s wet! I think of that, as human beings we don’t understand, you don’t know, you don’t know, stupid people don’t know their stupid! I did not know that about myself. It’s totally different than when I woke up in a cold sweat 14 years ago, saying I’m mentally ill. know something, I know, I just know ADHD didn’t come to me that way.”
- Additionally, Charles felt abnormal due to having ADHD. He stated, “No, it hasn’t been positive at all. It has been terrible... I wish.. I was like a normal human being.”
- Charles added further descriptions of feeling out of place. He stated, “I realize that I want to be...intelligent, I want to be... I want to be like that

person who is detailed..who is...has their ducks in a row. And be that person who, who has everything together and who is organized. And sometimes for me to try to organize, it is impossible, but I realized.. Well listen, I have to do this because it's what normal people do. When you're not."

- Annie described feeling frustrated at times because she is different. She added, "I mean.. As long as you are open and honest about it with the main people you work with, that know that you can get overwhelmed at times, that know when I just need to walk away. That's a big thing because if they don't understand what's going on with, or why you are overwhelmed or was causing you to get overwhelmed... It can be a negative thing, because they think can handle the job. Where in reality is just.. your head is just going in five different directions and you just need to stop...and walk away, take a couple deep breaths, take a break, give yourself time out is how I put it! So that way you can regroup, refocus on what you need to do versus getting frustrated and angry because people just don't understand."
- Elizabeth her feelings of being abnormal as not quit fitting in with others. She stated, "I think it's...because I know I am outspoken. But I also think it's made me hold back again. It made me feel less than, small! Like I don't fit in!"

Many of the participants in the study described an overwhelming feeling of being abnormal as compared to those individuals without ADHD. Some reported that they have always felt different and most described feeling incompetent until they were diagnosed with ADHD, which seemed to quell those thoughts. However, in some cases they still have those feelings of being abnormal despite the diagnosis of ADHD.

**Feeling inadequate.** Many of the participants in the study reported feeling inadequate to complete workplace demands as well as academically. Many of the participants in the study felt inadequate that has led to having low self-esteem. Some of the participants in the study felt that they were passed over for promotions, underpaid, or unfairly treated in the workplace due to the symptoms associated with ADHD. Newark et al. (2016) suggest that individuals with ADHD are often subject to negative life outcomes and underachievement due to the neuropsychological deficits, which often lead to negative beliefs about the self and their own competence.

- Charles: reported that he often had to reframe his thinking patterns due to feeling inadequate. He stated, Yeah, sometimes I have thought that I am under qualified because of my ADD. I feel like I am not worth the job because my ADD. I feel like I'm not worthy to be the good mate because of my ADD. And those are areas that I have to "what's it called" I just listened to this DVD. I have to reframe. And because even other people have to ask themselves this question even if you have ADD, people who have ADD, do they have good jobs? Yeah, some of them do. Do they have a good spouse? Yeah, some of them do. Do they have a good life? Yeah,

some of them do. So, I guess I have to start reframing my mentality.

That's something and I'm trying to do that.

- Annie reports that she often feels people have lower confidence in her abilities. She added, "No, you just kind of think about the situation and it actually almost kind of drives you more to finish this because this person said that I can't. That kind of thing."
- Elizabeth had similar feelings of inadequacy and how it has impacted her self-esteem. She stated, "Oh yeah! Feeling inadequate, self-esteem, a big issue. Always feeling less than is a very big issue."
- Charles felt low self-esteem and competence trying to do things for himself. He stated, "And it is just a pain because when you are trying to do stuff yourself, where you don't have much experience there has to be trial and error. And, you have to realize that OK that... With that being done. You have to give yourself some kind of allowance, like for ADD, it says if you have ADD, you can't always get down on yourself for something."
- Elizabeth reported to have low self-esteem as a result of having ADHD, She added, "Self-esteem has always been an issue. Oh, and I know a big part of that.. a very part of that is because when you use 'I statements.' I am always corrected, all the time...by mom, by school, so when I am constantly corrected, I am constantly told that I am doing something that I

shouldn't be doing. It's hard, it became personal. You know it's just ADD! It sucks!”

Life satisfaction. Functional impairment and quality of life among adults with ADHD has been shown to be significant factor among adults with ADHD. Many of the participants in the study reported lowered life satisfaction as a result of difficulties functioning in the workplace. Lensing et al. (2013) report that adults with ADHD were more likely to have lowered satisfaction in life compared to adults without ADHD, especially for those adults with ADHD, who were unemployed. The following excerpts from the participants demonstrate the challenging experiences of having ADHD in the workplace:

- Ryan reported his feelings of dissatisfaction with his current situation. He added, “Gosh! I just never imagined to be only here at this point. I had high expectations of myself. And in terms of, not being where I want to be, honestly. That’s a real reality!”
- Similarly, Michael also reported feeling dissatisfied with life prior to being on medication. He reported, “So, I’ve always expected the best out of myself to reach my potential and never satisfied myself that one Lamictal helped. But in a year ago, it was actually year ago this week that I started that medication for ADHD, that all changed.”
- Michael shared some dissatisfaction is his ability to relate with others. He stated, “That it makes me super awesome and I don’t know it’s ah... I do



look at it as both a blessing and curse. A blessing because I think it in a ‘bizarre way’ I think it adds to my abstraction. I think it complements my abstraction, my abstraction complements it. A curse, I think the curse has to do what I just said about the interactions employees and that is how I look at it.”

- Annie described her dissatisfaction as being frustrated and tired. She shared, “I sleep mostly! It drains you! It drains you, emotionally, mentally, physically, you are just exhausted because everything is finally like.. you’re done for the day and you’re able to calm down and it’s just..you are just exhausted. You just want to sleep or relax. But then I go home to my son who has ADHD too.”

Life satisfaction for individuals with ADHD can be challenging for some. Many participants report an overall dissatisfaction because they not exactly where they thought that they would be in life.

**Workplace challenges.** All participants in the study endorsed some type of challenges in the workplace as a result of their ADHD diagnosis. Stein (2008) suggests that the symptoms of ADHD in adulthood encompass more domains and can have serious consequences on those individuals in the workplace. The following excerpts from the participants demonstrate the challenging experiences of having ADHD in the workplace:

- Kyle reported to have significant challenges with organization. He stated, “Like, I’m not very organized or the most organized person, but I’m like the least most organized person, ever! The only reason.. I know where

certain important papers that I have, is because they are in this one drawer that I have. It's like.. I don't.. I am so unorganized. but I feel like this type of places is where I need to be organized.”

- Charles reported having problems in the workplace related to his levels of professionalism. He added, “Without the medicine or incorrect medicine because I was on other stuff that was crap. Anyhow, prior to the medication I violated probably, if I work for somebody else I would have been fired. Uh, not showing up to work on time, quite often leaving early, making excuses to leave early, denominator in all the lack of professionalism was ‘excuses,’ that was the tie that bound. There was always an excuse and I don’t have to make those anymore.”
- Similarly, Elizabeth had issues in the workplace related to professionalism. She added, “Most of my job.. my main issues are my mouth, keeping my mouth shut, saying things that I shouldn’t say. Um.. or saying things at the wrong time, social awkwardness..always feeling like I don’t fit. Like people are talking about me or somethings wrong with me. I always seem to be the center of the drama whether I want to be or not! Timeliness, cleanliness, like self-care is an issue.”
- Michelle described her difficulties in the workplace that related to maintaining her focus. She stated, “Well I have to take my medication. Because the girls in my office will notice when I don’t take my

medication, they will come to me and they will talk to me, and they will say ‘seriously.. you are looking at the ceiling or you are looking to the complete left, or your eyes are rolling around in your head and you aren’t even paying attention to me. Did you take your medications today.’ Because they can tell. My thoughts would be racing so fast, the place.”

- Annie reported having difficulties with communication and getting others to understand her in the workplace. She stated, “I try to be more understanding. I mean is just...because even though somebody may not understand what you’re doing, you have to try to help them understand what you are doing or what’s going on. I am just communicating with them, “this is what we need to do.”
- Thomas reported having difficulty trusting himself and constantly questioning his capabilities. He added, “Like I said, there’s things that that I am really good, and I don’t have to question, and I just jump in and do it... You know, I can do it and then there’s things that I’m not sure about, that I am just constantly questioning and then it gets me! I just start questioning my capability and then I always have to go back and then I second-guess myself, a lot! Sometimes it’s good that I do, because I do miss things.”

Many of the participants in the study reported to have significant challenges in the workplace as it relates to the symptoms of ADHD. Nadeau (2005) suggests that adults

with ADHD have significant difficulty with inattention and distractibility, time management, and organization related to executive functioning that have a direct effect on workplace performance. Many of the participants reported many of the symptoms associated with deficits in executive functioning with often led some of the participants to have difficulty maintaining a job, underemployment, and feeling less satisfaction with the job.

**Theme 2: Difficulties in processing emotions.**

Emotional regulation is a complex process that involves initiating, inhibiting, and moderating behaviors in a particular situation. Emotions are essential in the way individuals derive meaning and interpret experiences. Ramos-Quiroga et al. (2012) suggest that in addition to the symptoms of ADHD, such as inattention, hyperactivity, and inattention, adults with ADHD often experience mood instability and low frustration tolerance. Thus, when emotions are improperly processed it can negatively impact the individual's ability to adjust, monitor, and control emotional experiences and adapt to the environment. The following excerpts from the participants demonstrate the difficulties in managing emotions, emotional awareness, issues with self-control and impulsivity.

**Difficulties managing emotions.** Many of the participants in the study reported having difficulty managing their emotions in the workplace. Shaw, et al. (2014) suggest that in adults with ADHD, the processes in managing emotions, such as selecting, attending, and appraising emotional stimuli is impaired, leading to emotional dysregulation. Furthermore, the dysregulation of emotions can lead to excessive overreactions in relation to social norms and context, poorly controlled rapid shifts of

emotion, and abnormal attention to stimuli (Shaw, et al., 2014). The following excerpts from the participants demonstrate the difficulties in managing emotions in the workplace:

- Michael shared some of his problems that he experienced managing his emotions in the workplace. He stated, “The difficulty now has been diminished because of the medication. But prior to that, geez! I don’t think that I manage them at all, they managed me! Depression was always to follow.. and self-doubt, low self-esteem, worthless!”
- Kyle reported that his biggest problem in the workplace was communication with other people in the workplace. He stated, “My biggest problem is like, opinions and stuff like that. People giving opinions when I didn’t ask for an opinion, it makes me just want to turn around and say, ‘shut the fuck up!’”
- Michelle felt that other people have an influence on her emotions in the workplace. She stated, “So, it’s entirely environmentally based. So, If the people around me.. there emotions affect mine in conclusion. How other people’s emotions, like if everybody’s in a shitty mood, when I try to bring them in a better mood, but if that doesn’t work is actually going to drag me down by the end of the day. I’m going to be in a bad mood with them!”
- Elizabeth reported feeling overwhelmed with emotions when being corrected. She stated, “I definitely had difficulty managing my emotions..

Uh, recently it's so much better now but I would cry, at a drop of a hat.

Anytime I get pulled in the office which would seem to be a lot.. I cry, I have a temper... Sassy, sometimes talk back, defensive, that's the word I am looking for, defensive. It's a very big issue."

- Annie reported having difficulties with her emotions when she felt confined in the workplace. She stated, "I was overwhelmed because I couldn't move. You almost feel confined and then you mind just gets going and it doesn't stop!"
- Jack shared his experience with managing his emotions in the workplace. He stated, "So, if I did have a breakdown, or if I needed a day off.. With logistics and like brokerage end, they were really good, that was a positive thing. A lot of times they would let you take a personal day. Like, if you are having a bad day or something, Say, like you broke up with your girlfriend or something like, that they would tell you, 'hey you can be on the phone.' If you're sobbing your eyes out or whatever. So, I kinda would say, 'hey I need a personal day today,' or if I like I had cry for instance, I would wait for lunch and then I would just leave the office. I never really showed too many emotions in the office that wasn't work related."
- Alex shared that he would get angry and then it would take him longer to complete his job. He stated, "I wouldn't say that I have problems. Like I

mean, I still get them done, it may just take me a little longer and I may be in a pissed off mood. I may have trouble completing the goals or whatever... But, wouldn't, I wouldn't say it keeps me from accomplishing the goals."

- Michelle felt overwhelmed with stress and then became emotional at work. She stated, "Over reactive, in a way to where I would beat myself up or get too upset. Like, if I was too stressed out at one of my previous jobs, like if it would get slammed in really busy and I would have a bunch of tables. I would get frustrated because things were going wrong, people would be complaining, everything was falling apart. I remember there were two or three times I would just cry, I would have to leave and smoke a cigarette."

Managing emotions can be challenging for some for individuals with ADHD. Many participants report becoming overwhelmed with emotions after being under too much stress or having a bad day at work.

Emotional awareness. Emotional awareness refers to the individual's ability to attend when processing emotions. Factor et al. (2013) suggest that emotional awareness allows the individual to accurately and effectively interpret emotional stimuli within a given context and is a core element of emotional regulation. Shaw et al. (2014) suggest that abnormal allocation of attention to emotional stimuli is a major contributor of emotional dysregulation among individuals with ADHD and the levels of dysregulation

are dependent upon the level of impairment in the neural networks. The following excerpts demonstrate emotional awareness from the participants while in the workplace:

- Sam shared how he is aware of his emotions in the workplace. He stated, “I can tell sometimes, but I usually like, like... can read myself sometimes. But there are sometimes where I can’t really read what I’m getting off to somebody. There have been times when people tell me, ‘you really happier than you think you seem.’ And I was just like, ‘what do you mean?’ They said, ‘sometimes we just think, you know, when you come in like something,’ If they like see me for example, but there have something like clicks in you when you walk in the door.”
- Michelle gave an example of another person in the workplace displaying emotions and how that affects her. She stated, “Okay, I am very affected by the people. I’m surrounded by my environment. So, if I notice a coworker is being frustrated for example we have a coworker who likes to moan and grunt a lot, and when she gets frustrated, she likes to bang on things like her computer. So, when I hear that, my anxiety goes through the roof and I start to get tense and I started to freak out, ‘like what is happening.”
- Additionally, Michelle shared how things outside of work can impact her emotions. She stated, “I am able to do it situationally based. Like at work, Like I said, I am going to bring in emotions or stress from the outside world or even in the work field. I’m not going to let it lash out on me and



I'm not going to act a certain way that will be unprofessional or lead to conflict between me and my coworkers. I will either (a) talk to the person directly or save my frustration and anger whatever it may be for a later time or depending on the situation."

- Ryan shared how he is aware of his emotions in the workplace. He stated, "I got emotional because sometimes, I'm like okay, you know... Like I can't be in one place, you know I can't be at all places at all times. And so that emotionally affected me. But the way I dealt with it was just.. Just start taking time management courses that were offered."
- Kyle shared his emotional awareness as when looking a certain way. He stated, "I am horrible at it! I am really bad at it. I really got to... You can tell just by the look on my face when I get irritated or when I get annoyed, I am very, very bad at it. I've got the shortest fuse out of anybody I know."
- Michael reported being aware of his emotions when becoming frustrated by others in the workplace. He shared, "As far as the anger is concerned, but the ADHD really comes through when I'm staccato in delivering tasks and it's because of that staccato form of brain activity and translation through words and structure, that they can't or are unable to follow these tasks. And I have found one person out of maybe 100 people work who

have worked for me that can follow it. And always thought the problem was theirs, not thinking problem is actually mine.”

- Elizabeth shared how being aware of her emotions is sometimes difficult. She added, “It’s been very difficult, but I try to remind myself...when it’s mine and when it’s not! What part of it is mine and what part of it is not. Knowing that is not about me, taking the steps by writing it down. Letting supervisor or another supervisor know that I’m writing it down, so they take me serious.”
- Alex shared how he is aware of his emotions in the workplace. He shared, “I just kind of get upset and then I talked down on this person. I wouldn’t say ‘talk down on them.’ I was like, I could feel myself getting angry and like I said, I had to slow down. I had to actually talk to them and tell them “everything is going to be fine.” Like I’m talking to them, but, really I am I’m talking to myself, ‘everything’s going to be fine, and I’ll figure out just you need to give me 5 to 10 minutes.’ I’m going to do one thing at a time. Such as, get the lunch served first and then I’ll worry about your issue.”
- Annie shared her emotional awareness when getting frustrated with herself: She added, “The goals are pretty much, you just want to try to focus on what you can, and handle what you can. You have to learn not to take on so much. It gets frustrating because.. You are trying to complete

something and you just can't complete it. And you have this whole, 'you got to do this, you got to do this is, and it's like it just gets blown out and you don't feel like you've accomplished anything.' It's hard, because you bounce."

- Thomas shared his experiences of emotional awareness while in the workplace. He shared, "I spin off into side projects. Like, I'll be working on something and I'll start to get really frustrated or something.. or something bothers me, I'll drift elsewhere. And eventually drift back to what I was doing. It, it's learned behavior, because when you work retail you have to learn that you can't let people see you get irked, so you gotta be able to that do that kind of thing, it sucks! You gotta be able to vent without venting, you gotta kinda contain it and wait until you're at a place that's appropriate to vent. It's kinda like, if you feel like you're going to be sick, you can't get sick, you know you have to vacate the premises. You know it's one of those kind of things, you just kinda sorta hang onto it for a minute and go somewhere else."
- Charles reported that he is sometimes aware of his emotion, but sometimes ignores those warning signs. He stated, "I take two or three hours trying to figure out where I put this part. On the road trying to find it. And stuff like that like, realizing that, if I'm going to do something if I get a secondary judgment call. That okay I'm going to.. Uh, warning! If you do this, you might do this, chances are the it might come true ninety-nine

percent of the time. So, you better do this, I have to listen to those silent voices in my head, because I will forget that it is, that with the way it is with ADD.”

Awareness of one’s emotions can be challenging for some for individuals with ADHD. Many participants report having difficulty recognizing their emotions as well as accurately interpreting their emotions before emotions became too difficult to adjust or manage.

Issues with self-control or impulsivity. Many of the participants in the study reported to have significant difficulty controlling impulses and regulating emotions in the workplace. Barkley (2015) posits that core symptoms in ADHD such as, inattention, hyperactivity, and impulsivity plays a major role in emotional regulation. Lopez et al. (2015) suggests that there are four traits associated with impulsivity in adults with ADHD: a tendency to act rashly when faced with negative emotions, difficulty considering the consequences of behaviors, difficulty staying on-task when bored or lack of perseverance, and sensation seeking (propensity for excitement and stimulation). The following excerpts from the participants demonstrate the challenging experiences with self-control and impulsivity in the workplace:

- Kyle reported having difficulty controlling his impulses in the workplace. He stated, “Even on my meds, I’m always going to say what’s on my mind regardless if it hurts other people. Like if they don’t like it or they don’t agree with it I’m just gonna say it!”

- Michael shared some of his experiences controlling his impulses in the workplace. He shared, “With interpersonal relationship frustration, because I’m scared about being in special education because I was stupid! I am not. I will humiliate them intellectually, I don’t care if it is about architecture, art, literature, geography, politics; I know little bit you know more than a little bit so I will... Medicine, psychology, I don’t care, I will humiliate them! Whereas in the past, I just started that. There’s reason why, but prior to that, it would be violence....So there’s violence, people knew not to mess with me. You know! That was a coping mechanism.”
- Ryan shared that he difficulty controlling his impulsivity as work. He stated, “I do a little bit of hollering, I try and be by myself, in terms of, going off and venting.”
- Sam reported having difficulty controlling what he says at times. He added, “I guess since I am in the workplace and there are situations where I kinda have to watch what I say, it might offend another person. But then again, that’s life, you know. You always have to deal with what you say because there’s something or someone with something with a difference on every corner and it’ll hit you right then and there. And someone will say all that wasn’t cool!”
- Michelle reported having problems controlling her impulses by saying whatever is on her mind. She shared, “I think of something and I say it

immediately. I always want to be go-go going and it will frustrate me if somebody doesn't want to go do something with me. Because I am like a free spirited, risk taker, and I get bored very easily."

- Elizabeth shared some of her problems with impulsivity in the workplace. She added, "That's always been a struggle, um.. because it would just like pop out, I am very reactive, I am definitely very reactive! So, having to learn not to be reactive, not to take things personally, write things down, to be proactive..... That sort of thing... But I do react, I get pissy, I slam things a little bit you know. Little tantrums!"
- Additionally, Elizabeth added, "Alright, I've lost a friend because I've said something I shouldn't have.. But it wasn't anything that I have meant to do."
- Thomas reported always being impulsive and that this has had significant consequences for him in the workplace. He stated, "I get off track very easily. I guess I have always been impulsive. The more that I think about it!.... Oh...I'm a dick! I'm passive-aggressive. I make snarky comments. If nobody is around I throw stuff, I break things. Sometimes I try to find glass to shatter, I mean, I go up on the roof and I throw rocks. I ..yeah..I have access to my entire workplace, so I'm on the roof a lot, that's where I go."

- Annie reported having problems with impulses in the workplace: She added, “More than anything it’s just..you have to learn to just focus on what you’re doing versus what you want to do, so the impulses aren’t as bad!”
- Charles stated that he would have difficulty controlling his impulses after becoming angry at work. He shared, “She didn’t give a single raise in three years at that time so at that time. well she gave a raise to me the first year, but to nobody else after that for the past two years and so I basically reached a boiling point, so I went off on her.”
- Jack shared similar problems controlling his impulses at work. He stated, “There was one day where everything was kind of going haywire and I was doing 8000 different things. And I was getting yelled at by someone who is actually below me on the food chain. But, I was like best friends with my boss and I went to lunch instead of blowing up at work. But then I just never came back, I just said, ‘okay I’m going to lunch,’ and I cash my check and I just didn’t come back.”
- Jack gave an additional example of his difficulty controlling his impulses in the workplace. He shared, “I remember there is a particular customer who went over my head because she messed up on some paperwork, to talk to the vice president of Colsen. To try to get me into trouble, which didn’t work because I’m a subcontractor anyway. And I ended up sending

her, I want to say about 30 e-cards, saying, “thanks for helping me succeed.” Because she did, and I just cut ties. I guess that would be an explosion. I don’t know... it was my killing them with kindness.”

Many of the participants in the study reported to have significant challenges in the workplace with self-control and controlling their impulses. The participants in the study report that controlling their impulsivity was extremely difficult and often led to job losses or being reprimanded by an employer.

### **Theme 3: Emotional regulations strategies.**

Several factors can contribute toward problematic interactions within the workplace, such as, effectively dealing with emotional responses criticism and low frustration tolerance, which can have an impact on the development of effective coping skills. Robbins (2005) suggests that individuals with ADHD have challenges with emotional reactivity and tend to be overly sensitive leading to outbursts and moodiness. Furthermore, individuals with ADHD are easily irritated or offended due to physically and emotionally responding to minor changes in the environment, experiencing things differently than way others typically respond. Thus, it is extremely important for adults with ADHD to develop coping skills and strategies to deal with emotional reactivity when regulating emotions. Many of the participants in the study shared both maladaptive and adaptive coping strategies. Many of the maladaptive coping strategies identified by some of the participants relate to substance abuse.

**Coping strategies.** Safren et al. (2010) suggest that many of the medications are helpful in controlling the symptoms of ADHD, however, medication typically only



reduces the core symptoms approximately 50 % or less leaving residual symptoms to continue. Although the medication can assist with some of the symptoms it does not provide the individual with the skills and strategies needed to assist with the residual symptoms, thus it is often recommended that these individuals receive psychosocial treatments in tandem with the medication (Safren et al., 2010). Many of the participants in the study do receive psychosocial interventions and shared some of the adaptive coping skills that have been effective in reducing the symptoms of ADHD.

**Adaptive coping strategies.** Adaptive coping strategies refer to those strategies used in order to deal with daily stressors from the environment. Young (2004) posits that the deficits with cognitive deficits with attention and impulsivity leave individuals diagnosed with ADHD limited abilities to cope with stressful life events. Furthermore, these attentional deficits make it difficult for individuals with ADHD to cognitively reappraise situations and events or employ adaptive coping strategies. Many of the participants in the study did endorse some adaptive coping mechanisms. The following excerpts from the participants demonstrate the experiences of adults with ADHD coping in the workplace:

- Michelle reported that she will often listen to music and reducing substance use. She stated, “Okay.. Um... ask for help, talking, music. I quit drinking because that has not helped at all. So, I haven't drank in a month. I think that was the biggest thing before, I use to cope with coming home a couple days at work and I wind down with a glass of wine

or a few beers. But now I'm actually handling my emotions and situations and working well since I'm not drinking."

- Additionally, Michelle relies on her support system to help with stressful events. She added, "Usually talking to somebody, my mom who is my biggest support system. So, she put things in perspective for me as well. And gets me to calm down, she also does relax methods with me over the phone."
- Ryan relies on exercise to cope with daily stress. He stated, "I take it out on the tennis court."
- Sam tends to cope by listening to music. He added, "If like, maybe I might be having a rough day or something, I guess, I put ..I would probably pop in my earbuds in and listen to my music. Music is my life!"
- Michael prefers to cope with humor. He stated, "Early on in the emergency room, difficult, at 19 years old you don't understand life let alone death. That was difficult to cope with.. I, uh comforted myself through very dark humor but also found that everybody else did it too. So, it was a coping mechanism."
- Elizabeth uses adaptive coping skills by taking frequent breaks and utilizing breathing techniques. She added, "I try to do a lot of breathing. At times I have learned to do that a lot more. Usually on my break I will call my mom. She's a minister too.. And a crisis responder and she knows,

she just knows the right things to say. You know, I'm usually looking for to be coddled and she's not necessarily coddler, but I know she makes sense. I say, 'I know you are right!' She caudles in her own way! But yeah, it works."

- Annie copes by talking with others who understand her. She stated, "I talk to somebody who understands you. Like somebody who understands how you think, your thought process, and how you are. The best one is like a coworker that I am good friends with and who has seen me when I am not on Adderall. Who knows how I am on it and off of it."
- Thomas will cope by meditation. He added, "Oh, I take a deep breath! I hang onto it until I can go somewhere and drink. Or just I hold onto it in until I am an appropriate place to vent, really!"
- Charles tends to cope with stress by watching movie. He stated, "Watch a movie something like that, try to just relax so."
- Jack likes to cope by channeling his energy through writing. He added, "I usually try to channel it into some... I used writing for the most part. Be it, I write kids' books as well. I would write a story or a poem, or there's that old thing, I can't remember what it's called. Practice where you write something down and burn it, or whatever. Before."
- Alex tends to cope by looking forward to relaxation. He added, "I just pray for the weekend! I try not to get too overwhelmed. I just tell myself,

much. So, like, ‘don’t sweat the small stuff.’ I just try to stay away from getting overwhelmed, so I just take it one day at a time. I try like, ‘you can only do so I always heard that, like, don’t sweat the small stuff.’ So, like, if it’s small stuff, I try to just let it go. I am always looking forward to the weekend!”

Many of the participants in the study reported to have learned some skills in dealing with their emotions. Some of the participants reported that they have learned to self-regulate their emotions, but when under stress, these adaptive skills are often not utilized in the workplace.

**Maladaptive coping strategies.** Maladaptive coping strategies refer to those strategies used to escape or avoid stressful situations. According to Young (2004) individuals with ADHD are more likely to use maladaptive coping skills in challenging situation. Consequently, the tendency for these individuals to be impulsive in nature in which they tend to respond by aggressively or defensively or avoid coping by refusing to deal with the problem. Many of the participants in the study tend to avoid the problems and gravitate toward maladaptive coping strategies. The following excerpts from the participants demonstrate the experiences of adults with ADHD maladaptively coping in the workplace:

- Kyle reported using tobacco to cope with stress in the workplace. He stated, “I just try to get out of the office when I get overwhelmed. I just get aggravated, I try to go outside and smoke a cigarette.. take my mind off of it.”

- Thomas copes with stress by thinking about alcohol. He added, “I think about alcohol! No, when I’m at work. I guess that I walk around, I might go sit down in the break room for a minute, or get myself something to eat, or I’ll think about alcohol, or I’ll think about going home and burning one!”
- Additionally, Michael deals with stress in the workplace with alcohol. He added, “Heineken! You know that’s it! At the of a stressful day, that helps! Oh, and another thing is fatigue. To overcome that I bust my culo, I go home tired. You know! And beer takes the edge off.”
- Jack tends to avoid the stress by sleeping. He stated, “Depending on how stressful, there’s been times, I’ve been so mentally exhausted where I’ve had to sleep. Then there was times where I’ve had.. years ago, I was really bad, I go to a bar! I was an alcoholic, so I would just drink, drink, drink, drink and then it would get to the point where I was so stressed and drink till I passed out ... Rinse, lather, repeat! Especially when I was young. It was so stressful, I was 21, making some pretty decent money and that’s in most people’s party stage and it definitely was mine so...”
- Alex also uses tobacco to deal with stress in the workplace. He stated, “I chew. So, if I get stressed out I will throw a dip in. Like I said, “I’ll just turn some music on and I will always have music on.” space out a little bit. Yeah, that’s what I do is my release, I guess, music.”

- Elizabeth tends to avoid the stress by shopping. She added, “I shop! Which is horrible. When I get stressed out, I do stress shopping sometimes. Sometimes I won’t even buy anything, but just feel like I have to. Or buying candy.”

Many of the participants in the study reported to have significant challenges in the workplace and endorsed both adaptive and maladaptive coping strategies to deal with stressors from the environment. Young (2004) suggest that personality may play a role in the way individuals with ADHD cope with stress and often based upon the resources available to them.

#### **Theme 4: Medication challenges and benefits**

Research shows that the combination of medication and psychotherapy can be very effective in the treatment of ADHD in adults (Monastra, 2008; Dittner, Rimes, Russell, & Chalder, 2014; Knouse, & Safren, 2010). Stimulant medication is usually the first-line treatment for adults with ADHD and has been shown to be effective in controlling the core symptoms inattention, hyperactivity, impulsivity, emotional regulation, and other executive function associated with ADHD (Ramsay & Rostain, 2016; Dodson, 2005). Many of the participants in the study revealed that the medications are extremely useful. Some of the participants in the study have difficulty obtaining the prescription from doctors. Others have stated that the prescriptions are too expensive to remain on the prescription. The following excerpts from the participants demonstrate the medication challenges and benefits and challenges of adults with ADHD:

- Kyle reported to have a positive experience when he was on the medication when he was on the prescription. He stated, I just feel like when I was on the meds, I was just more determined to do things. With not being on Adderall, I just don't care unless it's physically going to affect me, the people around me, anything like that I just shrug it off. I don't let it bother me, it doesn't matter to me! Adderall .. I am into everything. I don't care enough about it, but when I am on ADHD medication, I'll even if I'm getting overwhelmed. I will complete things before I start anything else and they helped me a lot in school.
- Similarly, Michael reported to have good experiences with the medication for his ADHD symptoms. He added, Nothing I would say that is remarkable. Since I went on that one medication, two years ago, which was a year before the ADHD medication. I did notice that I was more patient, that this is good, this is good.
- Michelle stated that the medications are very helpful to her in the workplace. She stated, Like when people say, "did you take your meds because you're not being able to focus" So, in certain aspects it does, but when you put a label on something people kind of view you differently. So, people would ask I don't let, I just get irritable and I can just lash out or just stop I can go from bubbly to not talking or just everything "did you take your meds," had they not known that I have ADHD, they probably

would not have asked “did you take your medication.” They would just think I’m being goofy or weird or it was just my personality.

- Annie reported to have a positive experience from her medication and that her medication is not as effective, but her doctor will not increase her prescription. She added, The best one is like a coworker that I am good friends with and who has seen me when I am not on Adderall. Who knows how I am on it and off of it, Yes, you can see a difference, I am not scatterbrained as bad I guess you say. I still am because I don’t think that my medication is I don’t get angry and exactly where it needs to be. My doctor is just refusing to adjust it. So, it’s just hard! When I first started, I was like dead on focused and I was able to just go.
- Thomas reported having a positive experience when he was on the medication, but due to his other medication. It was impossible to get the doctor to prescribe him the medication due to it being a controlled substance: He reported, the medications are expensive and very difficult to get because of the other medications that I take. Doctors don’t like prescribing multiple controlled substances. The state of Ohio is trying to limit prescribing doctors, to prescribe one control substance per patient per Doctor. So, if I want to go to a psychiatrist and get an Adderall prescription, I couldn’t! Because my insurance wouldn’t cover it, but that’s another story. I know taking the medication does help. It helps me get the things done and focus, it doesn’t make me a spastic and twitchy. I



can afford it. I guess. I can't function as it sits, it's just if things distract me, I am over there and I'm over there, I'm over there. I would rather sleep at night than be awake and It works but it doesn't, I have to make it work. The medication was great when I could get it, but now that I can't it's like a... I didn't go through withdrawals when I stopped taking.

- Jack reported to have positive experiences with his medication for ADHD. He added, I talked to the psychiatrist about it, and told them I want a micro dose. I don't even want to take the dose children take. I take about 10 - 20 mg a day, at the most 30 mg. So, I take minimalistic as possible, some days I might need a little extra, some days I don't. But once that kicked in, it was like my brain still races. Obviously, but I've got a lot more control of my temper, I've calmed down. My outburst, everything, even mood, even with the bipolar shifts. I don't crash as hard, I will crash but I won't go up either.
- Lastly, Alex reported that he was able to function better in the workplace while on the medication. He reported that the medication is difficult to get as an adult from the prescribing doctors. He stated, I know what I was like when I was on medication. I can perform better when I'm on the medication.

Many of the participants in the study were on some form of ADHD medication.

Many of the participants feel that the medication was helpful to them when performing

their job. A few people reported to have difficulty obtaining a prescription from a prescribing doctor. Safren et al. (2010) suggest that medication may assist with many of the core deficits associated with ADHD. Consequently, many of the adults treated with medication continue to residual symptoms. Safren et al. purport that along with the medications used to treat ADHD, it does not provide the individual with skills and strategies to cope with additional symptoms.

### **Summary**

The purpose of this qualitative phenomenological inquiry was to gain a better understanding of how adults with ADHD regulate their emotions in the workplace. The interview participants revealed patterns of meaning in their responses about self-regulation in the workplace. Participant responses were summarized in detail which led to four significant themes: essential descriptions of adults with ADHD in the workplace, difficulties in processing emotions, emotional-regulation strategies, and medication benefits and challenges. The modified Stevick-Colaizzi-Keen method was employed to analyze data from the interviews, which included bracketing the researcher's own experiences, horizontalization of the data, developing textural and structural descriptions of the participant's experiences, and developing composite structural descriptions of the overall experiences of the participants in the study.

Chapter 5 provides the interpretation of the findings, limitations of the study, recommendations, and the social change implications.

## Chapter 5: Discussion, Conclusions, and Recommendations

### **Introduction**

The purpose of this phenomenological study was to examine how adults with ADHD effectively self-regulate emotions in the workplace. There has been little research pertaining to how adults with ADHD self-regulate emotions (Mitchell et al., 2012; Richard-Lepouriel, 2016; Shaw et al., 2014). Understanding how adults with ADHD self-regulate emotions can lead to more interventions targeted at preventing individuals from acting on impulses that lead to negative outcomes. In this chapter, I provide my interpretation of the findings, identify limitations of the study, offer recommendations, and discuss implications for positive social change.

### **Interpretation of the Findings**

In this section, I present the findings in accordance with the peer-reviewed literature as described in Chapter 2. I reviewed the existing literature related to ADHD in adulthood, the role of self-regulation in adults with ADHD, and occupational issues in adults with ADHD. Researchers have demonstrated that adults with ADHD have difficulties with their ability to self-regulate emotions, which lead to impulsive behavior when experiencing intense emotions (Bruner, Kuryluk, & Whitton, 2015). However, there is still a lack of research on how adults with ADHD effectively self-regulate their emotions in the workplace. Therefore, I sought to address the gap in the existing literature on adults with ADHD. The findings from this phenomenological inquiry emerged from the lived experiences described by the 11 participants in the study. I identified four major themes during data analysis: essential descriptions of adults with

ADHD in the workplace, difficulties in processing emotions, emotional-regulation strategies, and medication benefits and challenges. The existing literature was reviewed as it relates to the negative impacts that poor self-regulation has in the lives of adults. Researchers have pointed out that one of the most significant problems associated with ADHD is the ability to self-regulate emotions (Shaw et al., 2014). What remains to be known is how self-regulation impacts the various life domains of adults with ADHD, specifically their experiences with occupational functioning. In what follows, I thus address the gap in research and consider previous research in the interpretation of the findings.

### **Theme 1: Essential Descriptions of ADHD in the Workplace**

Participants in the study described their experiences in the workplace as difficult due to the symptoms associated with ADHD. Many of the participants described difficulty completing workplace tasks due to having difficulty maintaining and sustaining attention, confusion over the task, disorganization, getting distracted easily, feeling overwhelmed, and difficulty regulating emotions. Many of the participants described having both positive and negative experiences. Some of the positive experiences included the ability to do more than one task at time, having more than the normal amount of energy, and the ability to think in different or complex ways. Some participants described their experiences as negative at times due to feeling overwhelmed, frustrated, easily distracted, and unable to maintain focus. Research on ADHD has shown that the core symptoms of ADHD, if left unmanaged, can lead to significant problems in the workplace and social relationships (Nadeau, 2005).

The participants in the study described having difficulty with their self-concept, including beliefs of not being normal. Michael described his beliefs of not being normal and never truly reaching his potential. Many of the participants described growing up knowing that there was something wrong with them, or feeling like they were different from their peers. Elizabeth described feeling inadequate all the time, which she reports led to issues with low self-esteem. Lopez (2018) suggested that the repeated consequences and frustrations of having ADHD often leads to issues with a poor self-concept and low self-esteem, which in turn lead to the formation of negative beliefs about the self. A poor self-concept and low self-esteem have been associated with the development of other disorders such as depression and anxiety. Research has indicated that individuals with ADHD have an elevated risk for developing a co-occurring psychiatric disorder (Clarke et al., 2005). Adults with ADHD are at an increased risk for developing a co-occurring mood disorder (Kessler et al., 2006; Knouse et al., 2013; Clarke et al., 2005).

In addition to feeling inadequate or believing that there is something wrong, many of the participants reported feeling overlooked by supervisors and coworkers. Many of them reported never receiving raises or being promoted in the workplace. Kuriyan et al. (2013) found that individuals with ADHD are less likely than individuals without ADHD to attain higher-status employment. Charles described feeling underqualified for the job due to the symptoms of ADHD. Others reported feeling underappreciated with respect to the job being completed and overall as an employee.

Poor life satisfaction has been a significant factor associated with quality of life.

Many of the participants in the study revealed that they were dissatisfied with their current position in life. Ryan thought that he should be further along in life, that he had higher expectations of where he should be versus where he currently exists. Others reported being constantly tired and exhausted, which makes it difficult to function in other areas such as home life. Stein (2008) suggested that quality of life is strongly influenced by impairment and can negatively impact the individual across several domains of daily life including social and occupational domains. Furthermore, the symptoms associated with ADHD in adulthood encompass more domains and can have negative consequences in the workplace.

Previous literature has demonstrated that adults with ADHD have more difficulty in their ability to function and maintain employment due to the core symptoms of ADHD (Lindstedt & Umb-Carlsson, 2013). Researchers have suggested that ADHD in adulthood was associated with more instances of unemployment, more workplace problems such as decreased productivity, and behavioral issues such as irritability and low frustration tolerance (Kupper et al., 2012). Many of the participants in the study reported having had multiple jobs. Six out of the 11 participants reported having 10 or more jobs throughout their work history. Some of the participants reported being fired from their jobs, and in some instances they left because they were bored or felt unappreciated by their employer. Michelle reported going through 8 different jobs in her young work history. She reported that her difficulty in maintaining employment was due to her lack of concentration and other symptoms of ADHD.

Organization is a core symptom of ADHD. Many of the participants in the study reported difficulties in the workplace due to organizational issues stemming from ADHD. Kyle reported becoming frustrated with his lack of organizational skills and how poor organization led to his getting emotional and irritable. Elizabeth reported having more difficulty controlling her impulses, such as control of the things that she would say in the workplace. Thomas described preferring to work alone because of all of the distractions and because working with others can be frustrating for him. Charles described his difficulties on the job as prioritizing, forgetfulness, and becoming overwhelmed. In conclusion, the thoughts and feelings as well as the symptoms of ADHD have demonstrated to have negative impacts of job performance and behaviors in the workplace.

## **Theme 2: Difficulties in Processing Emotions**

The ability to regulate emotions involves the behaviors, skills, and strategies used to adjust and monitor or control emotional experiences in order to accomplish individual goals (Martel, 2009). When an individual has difficulty regulating emotions effectively, it can have negative impacts on relationships and self-concept as well as other areas of a person's life such as occupational and educational attainment (Burns & Martin, 2014). Research has demonstrated that executive functions associated with self-regulation are impaired for individuals with ADHD. Researchers have pointed out that problems with emotional self-regulation is a struggle throughout the lifespan for individuals with ADHD, which can lead to impairments with social relationships, and negatively impact occupational and educational attainment (Shaw et al., 2014).

Many of the participants in the study reported having significant problems managing their emotions, especially in the workplace. Some participants described losing their emotions after being reprimanded by a boss or coworker. Some participants described becoming emotional after feeling overwhelmed in the workplace. Michelle described feeling overwhelmed at work and having difficulty managing her emotions after being around others in a high emotional state. Kyle described a situation in the workplace when he had difficulty regulating his emotions after a perceived negative exchange with coworker. Hirsch et al. (2018) argued that emotional dysregulation is a core symptom of ADHD that contributes to the impairment in many life domains.

Emotional awareness is the ability to recognize one's own emotions as well as those emotions experienced by others. Having good emotional awareness is important in the ability to communicate effectively, make good decisions, and understand others. Cote (2017) suggested that emotional awareness is crucial in an individuals' the abilities to change their emotional states. Furthermore, recognizing emotions can lead to having problems controlling emotions as well as understanding others. Ryan reported that it was sometimes difficult to recognize his emotions and that he would become overwhelmed, leading to a breakdown in communication. Sam described sometimes having difficulty recognizing his emotions and the emotions of others. Michelle described difficulties with recognizing her emotions and that her emotions sometimes lead to being unprofessional or offensive to others. Thomas described having problems recognizing his emotions, which has led to impulsive behaviors in the workplace. Charles reported that judging his own emotions was difficult and that he would often recognize his emotions only after



reaching his boiling point. Some participants reported having a lack of emotional clarity. Alex reported that he would be upset at work, but it would not be until much later that he recognized that he was angry about something.

One of the most prominent issues associated with the symptoms of ADHD is the lack of impulse control. Impulsivity is the hallmark symptom associated with ADHD. In adults with ADHD, having impulsivity control issues can have devastating consequences in several life domains. One of the most significant life domains is in the workplace, where impulsivity can lead to serious economic issues. Robbins (2005) suggested that individuals with ADHD have challenges with emotional reactivity and tend to be overly sensitive, leading to outbursts and moodiness. Furthermore, they are easily irritated or offended due to physically and emotionally responding to minor changes in the environment, experiencing things differently than way others typically respond.

Impulsivity can impact the logical brain centers that allow an individual to stop and think before acting; however, in individuals with ADHD these centers in the brain can be a challenge. Adamou et al. (2013) suggest that adults with ADHD experience problems with self-regulation of emotional arousal that leads to significant functional impairments in occupational, educational, relationship, and daily functioning. Many of the participants in the study report significant problems with both verbal and physical impulsivity. Many participants report venting and having difficulty watching over what is said in the workplace. Thomas reports screaming, breaking glass, and throwing things in the workplace. Kyle reports that he will say what is on his mind, regardless of the

consequences to follow. Charles reports getting frustrated to the point of “going off” on others in the workplace.

Self-talk refers to one’s inner voice that can sometimes be helpful in accomplishing personal goals. However, in some instances the self-talk can be negative and harmful in some ways. Lopez (2018) suggests that negative thoughts about the self can cause significant stress and lead to poor self-concept and low self-esteem. Many of the participants in the study reported engaging in negative self-talk at times. Elizabeth reported feeling inadequate about herself which had led to low self-esteem and confidence issues. Thomas reported having negative self-talk that often leads him to question his abilities.

### **Theme 3: Emotional regulations strategies.**

Emotional self-regulation is a complex process that involves initiating, inhibiting, and moderating behaviors in particular situations. Emotional self-regulation can impact one’s thoughts, feeling, and behavioral response both physiologically and emotionally. Emotional regulation involves a person’s ability to focus attention to activities and tasks. In addition, emotional self-regulation plays a role in a person’s ability suppress inappropriate behavior. Individuals with deficits in emotional self-regulation have difficulty in their ability to tolerate stressful emotional experiences that can negatively affect the individual and pose problems in relationships and with self-concept. Hien, et al. (2009) suggest that successful emotional regulation is the ability to manage and endure stressful emotional experiences as well as physiological response. For individuals

with ADHD, successful emotional self-regulation is often difficult and may arise due to the deficiencies in recognizing and allocating attention (Shaw et al., 2014).

Previous studies have demonstrated children with ADHD have difficulty identifying and negative emotions, which can impair their ability to regulate their emotions.

Although recent research is just beginning to address the emotional dysregulation in people diagnosed with ADHD, there is a lack of research that focuses on its impact on adults. Shiels and Hawk (2010) suggest that the symptoms of ADHD that contribute to behavioral dysregulation may a consequence of the deficits in self-monitoring and controlling behaviors. Thus, individuals with ADHD have difficulty with self-monitoring and controlling behaviors due to the inability to monitor, evaluate, and adjust behaviors. Therefore, learning appropriate skills and strategies to deal with these deficits are important in successfully regulating emotions.

The findings indicate that there are several different strategies reported by the participants in the study. Many of the participants reported both maladaptive and adaptive coping skills when trying to self-regulate their emotions. First, some of the participants revealed some of the adaptive coping skills that have been successful for them in the workplace. Many of the participants in the study revealed that taking a time out was useful, breathing techniques, talking to others, sleeping, writing, watching movies, meditation, exercise, and listening to music. Jack, Sam, and Alex report that when they are having difficulty regulating their emotions, they would put in their headphones and listen to music. Charles reports that he would sing affirmations to

himself. Michelle and Elizabeth report that talking to her mother helps her reorganize her thoughts. Annie reports that talking to people who understand her has been helpful.

Many of the participants in the study reported having maladaptive coping skills that they use on a daily basis, especially when experiencing difficult or strong emotions. Some of the maladaptive coping skills have been associated with substance abuse with tobacco and alcohol. One of the most frequent comorbid disorders with ADHD is substance abuse. Sobanski (2006) suggests that in several research studies, the comorbidity rate for substance use can be as high as 50% in adults. Adults with ADHD are more likely to use substances at earlier age, use substances longer, and have a lower rate of remission than adults without ADHD (Faraone, et al., 2007). Furthermore, Faraone et al. suggests that overall late and early onset of ADHD have a higher prevalence of substance use. Bihlar et al. (2013) suggest that the increased risk for a comorbid substance abuse disorder may be related to the core symptomology in ADHD, such as impulsivity and problems with executive function. Thus, having a comorbid disorder can often complicate the clinical picture of ADHD.

The findings indicate that some of the participants often cope with the symptoms of ADHD with the use of tobacco. Annie reports that she has trouble coping in positive ways, she will often have a cigarette to calm down. Similar for Kyle and Alex, they will use tobacco as a means to calm down in stressful situations. Michelle and Thomas report that they will often drink after a long day at work to decompress from the challenges of difficult day at work.

**Theme 4: Medication challenges and benefits.**

The treatment of ADHD in the literature demonstrates to be effective in children; however, effective treatment among adults remains largely under researched. Resnick (2000) suggests that the treatment of ADHD in adults frequently involves intermittent treatment as new issues and challenges occur throughout a lifetime. Once the diagnosis is made, a treatment plan should be in place that effectively addresses the individual needs of the adult with ADHD. The normal treatment modality for ADHD in adults usually involves a combination of medication, education, and psychotherapy.

Research shows that the combination of medication and psychotherapy can be very effective in the treatment of ADHD in adults (Monastra, 2008; Dittner, Rimes, Russell, & Chalder, 2014; Knouse, & Safren, 2010). Stimulant medication is usually the first-line treatment for adults with ADHD and has been shown to be effective in controlling the core symptoms inattention, hyperactivity, impulsivity, emotional regulation, and other executive function associated with ADHD (Ramsay & Rostain, 2016; Dodson, 2008). Adults are prescribed stimulants to relieve the symptoms of ADHD, which are similar to the symptoms seen in children, namely inattention and impulsivity (Schatzberg & DeBattista, 2015). Furthermore, Schatzberg and DeBattista (2015) suggest that stimulants prescribed to adults are underused. Swift, Sayal, and Hollis (2014) suggests that part of the problem for adults obtaining stimulant medications is in difficulties faced in the transition of services for adults with ADHD.

Many of the participants in the study were currently on a prescription for their ADHD diagnosis. Many participants believe that the medication is helpful with

controlling the symptoms of ADHD. Many participants report that taking medication has helped them to maintain employment and is an essential part of the morning routine. Some have described improved productivity and attention to details. Michelle reports that she relies on her medication to get things done. Thomas reports that the medication is expensive and that they are already on a controlled substance, so having a prescription for ADHD would not be possible, even though the medication is helpful, especially in the workplace.

### **Conceptual Framework**

The results of the study validated the conceptual framework of the study and provided a deeper understanding of the research questions in the overall investigation of adults with ADHD in the workplace. This phenomenological study was based upon the framework of the self-regulation theory (SRT) as proposed by Baumeister and Heatherton (1996). The SRT suggests that successful regulation is the ability to modify behavior to reach one's goal (Markus & Wurf, 1987). More specifically, self-regulation is defined as effortful or voluntary control of one's behavior that enables a person to modify or change their responses to a particular situation or event (Retz et al., 2012; Targum & Adler, 2014). However, in adults with ADHD, successful self-regulation is difficult, making it problematic for these adults to regulate their behavior. Thus, this study focused on self-regulation failure.

Self-regulation failure as develop by Baumeister and Heatherton (1996) posits that control of attention is pertinent to self-regulation and the loss of attentional control often leads to a break down in the capacity to regulate oneself. A major component

involved in self-regulation is the control process that allow individuals to attend and monitor information that one is presented with. When self-regulation fails there is a disruption in the ability to attend to these control processes and self-regulate behaviors.

The participants in the study revealed several stressors in their day-to-day job duties and essential roles in the workplace. As a result, many of the participants had difficulty regulating their emotions, thus leading to self-regulation failure. Participants often have difficulty recovering from stressful emotional events which would often lead to overreactions in emotions and behaviors. When participants endorsed being stressed or fatigued, they often had failures in self-regulation. Many of the participants in the study tended to underregulate, because they lacked clear and consistent goals. The lack of consistent goals led the participants to have difficulty when overriding responses to various stimuli they desired to control. The participants in the study often operated in the workplace with false assumptions about the self and world, leading to misregulation from attempting to control things that cannot be controlled or giving into emotions. Many of the participants had difficulty with self-regulation by effectively managing the situation by considering the long-term consequences for their actions.

### **Limitations of the Study**

This research study provides a valuable addition to the existing literature on adults with ADHD. However, as will all research, this research inquiry into the lives of adults with ADHD has its limitations. First, the small sample size was due to the limited number of adults in the community willing to participate in the study. All of the participants in the study were from two mental health clinics in northeast, Ohio, which

eliminated those potential participants with ADHD that do not receive services for their ADHD condition. Therefore, the results in the study may not be representative to the general population. Another limitation of this study is from the self-reported data. In some instances, participants may refrain from portraying themselves in a negative light. Instead, reporting more socially acceptable accounts of their job experiences. The researcher attempted to limit this through assuring that all interviews and data are confidential throughout the entire research process.

Another potential limitation to the study was from the lack of clarity of whether the participants knew the type of medication that was prescribed to the participant for their ADHD condition. Some of the participants in the study may have been prescribed an off-label prescription for ADHD and some participants may not be aware of that the medication prescribed was not typically used in the treatment of ADHD. Another potential limitation is researcher bias. My gender, cultural background, and experiences may have potentially influenced the research project. I have a background as Special Education teacher in the public schools of whom many of the students in the classroom had a diagnosis of ADHD. Additionally, I currently work as a clinician in the community, working with several adults with ADHD and other diagnoses. Credibility was exemplified by reflexivity in recognizing that this researcher's cultural background, language, surroundings, and personal experiences can influence interpretations. Additionally, a field journal was utilized during the study recording personal thoughts and worldviews. Lastly, member-checking was utilized to minimize personal bias with



participant interviews and to ensure participant responses were an accurate reflection of the participant.

### **Recommendations**

This phenomenological inquiry focused on adults with ADHD in the workplace, specifically how these adults self-regulate their emotions. Most of the literature has been conducted on children and adolescents with this disorder, leaving out adults with this disorder. Furthermore, one of the most significant issues identified with ADHD is the deficiencies with self-regulation. Despite, recognition of the research as self-regulation being a prominent issue for those with ADHD, there is little research that explores the negative impact of self-regulation in adults with ADHD. Therefore, this study was conducted to address the gap in research on adults with ADHD in the workplace and the negative impacts of self-regulation on occupational functioning. This study contributed to filling the gap by examining the lived experiences of 11 adults diagnosed with ADHD and how they self-regulate emotions in the workplace.

The research criteria limited the criteria to only adults with ADHD and did not include children and adolescents with ADHD. The focus on adults with ADHD was simply due to the focus on workplace experiences and inquiry on the negative impacts of self-regulation has in the lives of adults. Consequently, children and adolescents were left out of this research project. Therefore, more research could be conducted on the impacts on self-regulation in children and adolescences. Studying children and adolescents would be important from a conceptual framework, especially in a long-term

study that investigates how children self-regulate their emotions through the different stages of development into adulthood.

Additionally, it would be beneficial to have research conducted on the transition from childhood and adolescence into adult services with academics, workplace, and the healthcare systems. The lack of proper guidance to manage symptoms of ADHD in adulthood could lead to more significant problems with social, educational, and occupational functioning (Goodman, 2009). Furthermore, more research on the role of self-regulations in adults with ADHD could lead to direction, insight, and guidance on dealing with the symptoms of ADHD.

Significant to practice this research may add to the limited body of research that can help conceptualize the role of self-regulation in adults with ADHD. Additionally, it may be useful to use self-regulation as a way to help identify ADHD in adults. Furthermore, this research may assist in the understanding of the types supports that are needed in the workplace. Lastly, the contributions made by the participants in this study may assist other adults diagnosed with ADHD by learning from their personal experiences.

## **Implications**

### **Positive Social Change**

The finding from this phenomenological inquiry into adults with ADHD have the potential to create positive social change in individual, organizations, and communities by providing additional knowledge of the occupational experiences and self-regulation shared by adults with ADHD. The insight gathered from the experiences of adults with

ADHD shed light on how adults effectively self-regulate in the workplace. The participants in the study indicated that self-regulation is extremely difficult in certain situation, especially for those adults in stressful conditions. Therefore, an implication for social change is identifying the challenges and in monitoring their actions that contribute toward poor self-regulation. Additionally, for adults with ADHD, identifying the necessary to discover the areas where these individuals lack the strength to override their responses that need to be controlled. Lastly, it would be beneficial for adults with ADHD to identify the false assumptions about the self and world that result in self-regulation failure.

Additionally, the implications for social change include adding to the body of literature of the later-life impacts of ADHD, so that changes can be made in the workplace. Specifically, adding to the body of literature by identifying the necessary areas for improvement in the workplace regarding accommodations and supports on the job. Furthermore, this research could assist in identifying issues involved in the treatment of adults with ADHD. Additionally, this research could lead to identifying better evidence-based practices that address the highlighted deficits when assessing and treating ADHD in adults. Finally, this research can provide further evidence on the need for changes to the DSM, that include the symptoms emotional dysregulation and well as changes in workplace policies that reflect ADHD in the workplace. Currently there is no criteria listed in the DSM regarding the difficulties of managing frustrations and modulation of emotions despite the research supporting the difficulties in managing and controlling emotions among those with ADHD (Brown, 2014). Additionally, ADHD

falls under the Americans with Disabilities Act, however, many of those diagnosed with ADHD will not qualify. Patton (2009) suggest that there are many challenges faced for those requesting accommodation for their disability at work due to ambiguity in the current laws regarding ADHD as a disability.

### **Theoretical implications.**

To assist in furthering the conceptual framework of the self-regulation theory (SRT) as proposed by Baumeister and Heatherton (1996) that proposed that the control of attention is salient feature of self-regulation and the inability to control the attentional processes often leads to failure in the capacity to regulate oneself. The SRT purports that control of attention processes are germane to self-regulation and the disruption in the attentional processes often lead to a break down in the capacity to regulate oneself. The participants in the study described several examples in the failure to self-regulate and the consequences that the dysregulation had on job performance. In addition to the examples provided regarding the failure to self-regulate, the participants in the study gave several examples of the coping skills used when effectively self-regulating their emotions. Previous research on self-regulation have demonstrated the difficulties faced by adults with ADHD in controlling and regulating emotions (Hirsch, 2018). Thus, the implication for this study is that identifying self-regulation skills in adults with ADHD can add to the theoretical concept of SRT. The theory can be used in quantitative research to further demonstrate the need to reevaluate the DSM criteria to include emotional dysregulation.

**Recommendations for practice.**

This study obtained valuable information regarding self-regulation in the workplace among adults diagnosed with ADHD. These unique insights gained from the 11 participants in this study provided knowledge to other individuals with ADHD, family members, clinicians, coworkers, and employers on the difficulties in self-regulation among adults with ADHD. Furthermore, the insights gathered from the participants in this study can provide additional avenues of exploration of additional research to enhance the lives of adults with ADHD. Additionally, the insights from the participants can assist further research into therapeutic interventions by targeting successful self-regulation skills.

**Conclusion**

This qualitative, phenomenological inquiry examined the role that self-regulation among adults diagnosed with ADHD. This research sought to effectively describe the personal accounts and meaning derived from each experience. The qualitative, phenomenological approach was most appropriate for examining the phenomenon, as it focused on the phenomena of interest from the perspective of the participant. Thus, the experiences of adults with ADHD was explored as well as the phenomenon of self-regulation in the workplace. The participants' thoughts, experiences, emotions, and opinions of adults with ADHD were explored. The purpose of this study was to fill the gap in the existing research as it pertains to the role that self-regulation plays in the occupational functioning of adults diagnosed with ADHD.

The findings from this study were consistent with the existing literature that supports that problems with self-regulation is a pervasive issue in the lives of adults diagnosed with ADHD. Furthermore, the problems with self-regulation are consistent with the literature that demonstrates that difficulties self-regulation among adults with ADHD can have a devastating impact in the workplace. Through in-depth semi structured interviews, the participants provided personal accounts of their experiences of self-regulating in the workplace, resulting in a deeper understanding of the role of self-regulation in adults with ADHD, particularly those experiences in the workplace.

There were many similarities among the participants in the study. Many of the adults revealed that their experiences have been both positive and negative in the workplace. Self-regulation was a significant and salient issue in many of the reported experiences in the workplace. Many participants often have feeling of not being normal and feel overlooked at times in the workplace. Others reported having difficulty with their self-concept and beliefs of not being normal.

Self-regulation was a significant and salient issue in many of the reported experiences in the workplace. Participants described their experiences and difficulties self-regulating emotions that involved initiating, inhibiting, and moderating behaviors in various workplace situations. Emotions are essential in the way individuals derive meaning and interpret experiences. The participants in the study reported experiencing mood instability and low frustration tolerance that led to having emotions that were improperly processed. Some participants gave accounts of significant impairments related to adjusting, monitoring, and control emotions in the workplace.

Many of the participants reported both maladaptive and adaptive coping skills when trying to self-regulate their emotions. Some of the adaptive coping skills were common for most of the participants in the study. All of the participants were able to describe adaptive coping skills that work for them in the workplace. In contrast, some of the participants in the study reported having maladaptive coping skills. Some of the maladaptive coping skills have been associated with substance abuse. Many of the participants revealed that in addition to their diagnosis of ADHD, they have a comorbid mood disorder. Additionally, the use of substances was calming for them in stressful situations and in many accounts, it provided incentive at the end of the work day.

Many of the participants in the study reported to have some difficulty obtaining a prescription for their ADHD condition. Many participants were currently on a prescription for their ADHD diagnosis. All participants believed that the medication is helpful with controlling the symptoms of ADHD. Many participants report that taking medication has helped them to maintain employment and function better in their jobs. Some reported that the medications were expensive and that being prescribed a stimulant was difficult to obtain from a doctor. Some of the participants in the study reported that psychotherapy played an extremely important role in helping with their condition. For those who mentioned that therapy has been a beneficial form of treatment, they have been in therapy for extended periods of time and endorsed having additional diagnoses other than ADHD.

The personal accounts from the participants in the study were in line with the conceptual framework of the self-regulation theory (SRT) as proposed by Baumeister and

Heatherton (1996), which suggests that control of attention is major component of self-regulation and the inability to control the attentional processes often leads to failure in the capacity to regulate oneself. The self-regulation failure provided the lens necessary for evaluating the experiences of adults with ADHD in the workplace.

This study accomplished the purpose of exploring the role that self-regulation plays in the occupational functioning for adults medically diagnosed with ADHD, which provided significant insight into the lives of adults with ADHD. This study sought to understand the role of self-regulation among adults with ADHD, specifically how they regulate emotions in the workplace. Most importantly, the information provided by the 11 participants is hopeful that it will contribute toward the existing literature on both adults with ADHD and self-regulation.



## References

- Adamou, M., Graham, K., MacKeith, J., Burns, S., & Emerson, L. (2016). Advancing services for adult ADHD: The development of the ADHD Star as a framework for multidisciplinary interventions. *BMC Health Services Research*, 16, 1-6.  
doi:10.1186/s12913-016-1894-4
- Adler, L. A., Dirks, B., Deas, P., Raychaudhuri, A., Dauphin, M., Saylor, K., & Weisler, R. (2013). Self-reported quality of life in adults with attention-deficit/hyperactivity disorder and executive function impairment treated with lisdexamfetamine dimesylate: A randomized, double-blind, multicenter, placebo-controlled, parallel group study. *BMC Psychiatry*, 13(1), 107-127.  
doi:10.1186/1471-244X-13-253
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5*. Washington, D.C: Author.
- Anastopoulos, A. D., Smith, T. F., Garrett, M. E., Morrissey-Kane, E., Schatz, N. K., Sommer, J. L., Kollins, S.H, & Ashley-Koch, A. (2011). Self-regulation of emotion, functional impairment, and comorbidity among children with ADHD. *Journal of Attention Disorders*, 15(7), 583-592. doi:10.1177/108754710370567
- Bandura, A. (1996). Failures in self-regulation: Energy depletion or selective disengagement? *Psychological Inquiry*, 7(1), 20-24.  
doi:10.1207/s153227965pli0701\_3
- Barkley, R. A. (2015). Emotional dysregulation is a core component of ADHD. In R. A. Barkley (Ed.), *Attention-deficit hyperactivity disorder: A handbook for diagnosis*

*and treatment* (pp. 81-115). New York, NY: Guilford Press.

Barkley, R. A., Murphy, K. R., & Fischer, M. (2008). *ADHD in adults: What the science says*. New York: Guilford Press.

Barkley, R., Fischer, M., Smallish, L., & Fletcher, K. (2002). The persistence of attention-deficit/hyperactivity disorder into young adulthood as a function of reporting source and definition of disorder. *Journal of Abnormal Psychology*, *111*(2), 279-289. doi:10.1037/0021-843x.111.2.279

Barkley, R. A. & Murphy, K. R. (2010). Deficient emotional self-regulation in adults with attention-deficit/hyperactivity disorder (ADHD): The relative contributions of emotional impulsiveness and ADHD symptoms to adaptive impairments in major life activities. *Journal of ADHD and Related Disorders*, *1*, 5-28. doi:10.1176/appi.ajp.2010.10081172

Başerler, D. D., Başerler, Z., & Tüfekçi Akcan, A. (2016). Ethical principles and violations in academy: A qualitative study. *Journal Of Higher Education and Science/ Yükseköğretim Ve Bilim Dergisi*, *6*(2), 242-251. doi:10.5961/jhes.2016.160

Baumeister, R. F., Schmeichel, B. J., & Vohs, K. D. (2007). Self-regulation and the executive function: The self as controlling agent. In A. W. Kruglanski, E. T. Higgins, A. W. Kruglanski, E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles*, 2nd ed (pp. 516-539). New York, NY: Guilford Press.

Berger, A. (2011). Illustrating a developmental pathology of self-regulation: The case of ADHD. In *Self-regulation: Brain, cognition, and development* (pp. 105-132). Washington, DC: American Psychological Association. doi:10.1037/12327-006

- Berking, M., Orth, U., Wupperman, P., Meier, L. L., & Caspar, F. (2008). Prospective effects of emotion-regulation skills on emotional adjustment. *Journal of Counseling Psychology, 55*(4), 485-494. doi:10.1037/a0013589
- Bihlar Muld, B., Jokinen, J., Bölte, S., & Hirvikoski, T. (2013). Attention deficit/hyperactivity disorders with coexisting substance use disorder is characterized by early antisocial behaviour and poor cognitive skills. *BMC Psychiatry, 13*(1), 1-21. doi:10.1186/1471-244X-13-33
- Bosse, T., Pontier, M., & Treur, J. (2007). A dynamical system modeling approach to Gross' model of emotion regulation. In *Proceedings of the 8<sup>th</sup> International conference on cognitive modeling, ICCM* (Vol. 7, pp. 187-192). Taylor and Francis/Psychology Press, Oxford, UK.
- Braet, C., Theuwis, L., Durme, K., Vandewalle, J., Vandevivere, E., Wante, L., Moens, E., Verbeken, S., & Goossens, L. (2014). Emotion regulation in children with emotional problems. *Cognitive Therapy & Research, 38*(5), 493-504. doi:10.1007/s10608-014-9616-x
- Bram, A. D., & Peebles, M. (2014). Emotional regulation: Balance and effectiveness. In *Psychological testing that matters: Creating a roadmap for effective treatment* (pp. 141-207). American Psychological Association. doi:10.1037/14340-006
- Brandão, C. (2015). Review of qualitative data analysis with NVivo (2nd ed.). *Qualitative Research In Psychology, 12*(4), 492-494. doi:10.1080/14780887.2014.992750

- Brod, M., Pohlman, B., Lasser, R., & Hodgkins, P. (2012). Comparison of the burden of illness for adults with ADHD across seven countries: a qualitative study. *Health and Quality Of Life Outcomes*, 10(1), 47. Doi :10.1186/1477-7525-10-47
- Brod, M., Schmitt, E., Goodwin, M., Hodgkins, P., & Niebler, G. (2012). ADHD burden of illness in older adults: A life course perspective. *Quality Of life research: An international journal of quality of life aspects of treatment, care & rehabilitation*, 21(5), 795-799. doi:10.1007/s11136-011-9981-9
- Brown, T., (2014). *Smart but stuck: Emotion in teens and adults with ADHD*. San Fransisco, CA Jossey-Bass
- Bruner, M. R., Kuryluk, A. D., & Whitton, S. W. (2015). Attention-Deficit/Hyperactivity Disorder symptom levels and romantic relationship quality in college students. *Journal Of American College Health*, 63(2), 98-108. doi:10.1080/07448481.2014.975717
- Bunford, N., Evans, S. W., Becker, S. P., & Langberg, J. M. (2015). Attention-deficit/hyperactivity disorder and social skills in youth: A moderated mediation model of emotion dysregulation and depression. *Journal Of Abnormal Child Psychology*, 43(2), 283-296. doi:10.1007/s10802-014-9909-2
- Burns, E., & Martin, A. J. (2014). ADHD and adaptability: The roles of cognitive, behavioral, and emotional regulation. *Australian Journal Of Guidance And Counselling*, 24(2), 227-242. doi:10.1017/jgc.2014.17
- Bihlar Muld, B., Jokinen, J., Bölte, S., & Hirvikoski, T. (2013). Attention deficit/hyperactivity disorders with coexisting substance use disorder is

characterized by early antisocial behaviour and poor cognitive skills. *BMC*

*Psychiatry*, 13(1), 1-21. doi:10.1186/1471-244X-13-336

Bruner, M. R., Kuryluk, A. D., & Whitton, S. W. (2015). Attention-deficit/hyperactivity disorder symptom levels and romantic relationship quality in college students.

*Journal Of American College Health*, 63(2), 98-108.

doi:10.1080/07448481.2014.975717

Camilleri, N., & Makhoul, S. (2013). ADHD: From childhood into adulthood. *Malta*

*Medical Journal*, 25(1), 2-7.

Carnes, B., & Holloway, M. (2009). Attention deficit hyperactivity disorder (ADHD) in the workplace. *Graziadio Business Report*, 12(2), 1-6.

Carver, C. S., & Scheier, M. F. (1981). *Attention and self-regulation: A control-theory approach to human behavior*. New York: Springer-Verlag.

Carver, C. S., & Scheier, M. F. (2002). Control processes and Self-organization as complementary principles underlying behavior. *Personality and Social Psychology Review* (Vol. 6(4), 304-315. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Chan, Z. C., Fung, Y., & Chien, W. (2013). Bracketing in phenomenology: Only undertaken in the data collection and analysis process. *The Qualitative Report*,

18(30), 1-9. Retrieved from [http:// nsuworks.nova.edu/tqr/vol18/iss30/1](http://nsuworks.nova.edu/tqr/vol18/iss30/1)

- Clarke, S., Heussler, H., & Kohn, M. R. (2005). Attention deficit disorder: not just for children. *Internal Medicine Journal*, 35(12), 721-725. doi:10.1111/j.1445-5994.2005.00987.x
- Cope, D. G. (2014). Methods and meanings: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum*, 41(1), 89-91. doi:10.1188/14.ONF.89-91
- Cote, S. (2017). Enhancing managerial effectiveness via four core facets of emotional intelligence: Self-awareness, social perception, emotion understanding, and emotion regulation. *Organizational Dynamics*, 46(3), 140-147.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches (2nd ed.)*. Thousand Oaks, CA: Sage.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*, 4th Edition. Los Angeles, CA: Sage Publications.
- Creswell, J.W. (1998). *Qualitative inquiry and research design. Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Dale, K. L., & Baumeister, R. F. (1999). Self-regulation and psychopathology. In R. M. Kowalski, M. R. Leary (Eds.), *The social psychology of emotional and behavioral problems: Interfaces of social and clinical psychology* (pp. 139-166). Washington, DC, US: American Psychological Association. doi:10.1037/10320-005
- Diane G., C. (2014). Methods and meanings: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum*, (1), 89. doi:10.1188/14.ONF.89-9

- Dittner, A. J., Rimes, K. A., Russell, A. J., & Chalder, T. (2014). Protocol for a proof of concept randomized controlled trial of cognitive-behavioural therapy for adult ADHD as a supplement to treatment as usual, compared with treatment as usual alone. *BMC Psychiatry*, *14*, Article ID 248.
- Dodson, W. (2008). ADHD: Not just a childhood disorder--a discussion of evaluation, diagnosis, and treatment. *Exceptional Parent*, *38*(10), 74-75.
- Eklund, H., Cadman, T., Findon, J., Hayward, H., Howley, D., Beecham, J. ... & Glaser, K. (2016). Clinical service use as people with Attention Deficit Hyperactivity Disorder transition into adolescence and adulthood: a prospective longitudinal study. *BMC Health Services Research*, *16*1-11. doi:10.1186/s12913-016-1509-0
- Englander, M. (2016). The phenomenological method in qualitative psychology and psychiatry. *International Journal Of Qualitative Studies On Health & Well-Being*, *11*1-11. doi:10.3402/qhw.v11.30682
- Factor, P.I., Rosen, P.J., & Reyes, R. A. (2013). The relation of poor emotional awareness and externalizing behavior among children with ADHD. *Journal of Attention Disorders*, *XX*(X), 1-10. doi:10.1177/1087054713494005.
- Farrelly, P. (2013). Issues of trustworthiness, validity and reliability. *British Journal Of School Nursing*, *8*(3), 149-151.
- Fleming, C., & Snell Jr, W. E. (2008). Emotional intelligence in adults with ADHD. *Psi Chi Journal Of Undergraduate Research*, *13*(2), 86-95.

- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology & Behavioral Assessment*, 26(1), 41-54.
- Goodman, D. W. (2009). ADHD in Adults: Update for clinicians on diagnosis and Assessment. *Primary Psychiatry*, 16(11), 38-47.
- Grossoehme, D. H. (2014). Overview of qualitative research. *Journal Of Health Care Chaplaincy*, 20(3), 109-122 14p. doi:10.1080/08854726.2014.925660
- Hall, C. L., Newell, K., Taylor, J., Sayal, K., Swift, K. D., & Hollis, C. (2013). 'Mind the gap' - mapping services for young people with ADHD transitioning from child to adult mental health services. *BMC Psychiatry*, 13(1), 1-8. doi:10.1186/1471-244X-13-186
- Hansson Halleröd, S. L., Anckarsäter, H., Råstam, M., & Hansson Scherman, M. (2015). Experienced consequences of being diagnosed with ADHD as an adult -- a qualitative study. *BMC Psychiatry*, 15(1), 1-13. doi:10.1186/s12888-015-0410-4
- Heatherton, T. F., & Baumeister, R. F. (1996). Self-regulation failure: past, present, and future. *Psychological Inquiry*, 7(1), 90.
- Henderson, R., & Rheault, W. (2004). Appraising and incorporating qualitative research in evidence-based practice. *Journal of Physical Therapy Education*, 18(3).
- Hien, D., Litt, L., Cohen, L. R., Miele, G. M., & Campbell, A. (2009). Emotion regulation. In *Trauma services for women in substance abuse treatment: An*



*integrated approach* (pp. 55-74). Washington, DC, US: American Psychological Association. doi:10.1037/11864-004

Hirsch, O., Chavanon, M., Riechmann, E., & Christiansen, H. (2018). Emotional dysregulation is a primary symptom in adult attention-deficit/hyperactivity disorder (ADHD). *Journal Of Affective Disorders*, 23241-47.  
doi:10.1016/j.jad.2018.02.007

Howell, K.E. (2013). Aspects of phenomenology. In *An introduction to the philosophy of methodology* (pp.55-74). London,: SAGE Publications Ltd doi:  
10.4135/9781473957633.n4

Husserl, E. (1931). *Ideas: General introduction to pure phenomenology*. (D. Carr Trans.). Evanston, IL. Northwestern University Press.

Jarrett, M. A. (2015). Attention-Deficit/Hyperactivity Disorder (ADHD) symptoms, anxiety symptoms, and executive functioning in emerging adults. *Psychological Assessment*, doi:10.1037/pas0000190

Kearnes, T. B., & Ruebel, J. B. (2011). Relationship between negative emotion and ADHD among college males and females. *Journal Of Postsecondary Education And Disability*, 24(1), 31-42.

Knouse, L. E., Zvorsky, I., & Safren, S. A. (2013). Depression in adults with attention-deficit/hyperactivity disorder (ADHD): The mediating role of cognitive-behavioral factors. *Cognitive Therapy And Research*, 37(6), 1220-1232.  
doi:10.1007/s10608-013-9569-5

- Kooij, S.J., Bejerot, S., Blackwell, A., Caci, H., Casas-Brugué, M., Carpentier, P.J. ... & Asherson, P. (2010). European consensus statement on diagnosis and treatment of adult ADHD: The European network adult ADHD. *BMC Psychiatry*, 10, 67-90. doi:10.1186/1471-244X-10-67
- Kornbluh, M. (2015). Combating challenges to establishing trustworthiness in qualitative research. *Qualitative Research In Psychology*, 12(4), 397-414. doi:10.1080/14780887.2015.1021941
- Küpper, T., Haavik, J., Drexler, H., Ramos-Quiroga, J., Wermelskirchen, D., Prutz, C., & Schauble, B. (2012). The negative impact of attention-deficit/hyperactivity disorder on occupational health in adults and adolescents. *International Archives Of Occupational And Environmental Health*, 85(8), 837-847. doi:10.1007/s00420-012-0794-0
- Kuriyan, A. B., Pelham, W. J., Molina, B. G., Waschbusch, D. A., Gnagy, E. M., Sibley, M. H. ... & Kent, K. M. (2013). Young adult educational and vocational outcomes of children diagnosed with ADHD. *Journal Of Abnormal Child Psychology*, 41(1), 27-41.
- Lensing, M. B., Opjordsmoen, S., Zeiner, P., & Sandvik, L. (2013). Quality of life in adults aged 50+with ADHD. *Journal Of Attention Disorders*, 19(5), 405-413.
- Lindstedt, H., & Umb-Carlsson, Ö. (2013). Cognitive assistive technology and professional support in everyday life for adults with ADHD. *Disability And Rehabilitation: Assistive Technology*, 8(5), 402-408. doi:10.3109/17483107.2013.769120

- Lopez, P. L. (2018). Cognitive-behavioural interventions for attention deficit hyperactivity disorder (ADHD) in adults. *Cochrane Database Of Systematic Reviews*, (3), doi:10.1002/14651858.CD010840.pub2
- Lopez, R., Dauvilliers, Y., Jaussent, I., Billieux, J., & Bayard, S. (2015). A multidimensional approach of impulsivity in adult attention deficit hyperactivity disorder. *Psychiatry Research*, 227(2-3), 290-295.  
doi:10.1016/j.psychres.2015.03.023
- MaCkenzie, M.B., Mezo, P.G., & Francis, S.E. (2012). A conceptual framework for understanding self-regulation in adults. *New Ideas in Psychology* 30(2):155-165.  
doi: 10.1016/j.newideapsych.2011.07.001
- Markus, H., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology*, 38, 299-337.  
doi:10.1146/annurev.ps.38.020187.00150
- Martel, M. M. (2009). Research review: a new perspective on attention-deficit/hyperactivity disorder: emotion dysregulation and trait models. *Journal of Child Psychology Psychiatry* 50, 1042–1051. doi: 10.1111/j.1469-7610.2009.02105.x
- Martel, M. M., Nigg, J. T., & Von Eye, A. (2009). How do trait dimensions map onto ADHD symptom domains? *Journal Of Abnormal Child Psychology*, 37(3), 337-348. doi:10.1007/s10802-008-9255-3
- Mason, M. (2010). Sample size and saturation in Ph.D. studies using qualitative interviews. *Forum: Qualitative Social Research*, 11(3), 1-19.

- Miranda, A., Berenguer, C., Colomer, C., & Roselló, R. (2014). Influence of the symptoms of attention deficit hyperactivity disorder (ADHD) and comorbid disorders on functioning in adulthood. *Psicothema*, 26(4), 471-476.
- Mitchell, J., Robertson, C., Anastopolous, A., Nelson-Gray, R., & Kollins, S. (2012). Emotion dysregulation and emotional impulsivity among adults with attention-Deficit/Hyperactivity Disorder: Results of a preliminary study. *Journal Of Psychopathology & Behavioral Assessment*, 34(4), 510-519. doi:10.1007/s10862-012-9297-2
- Monastra, V. J. (2008). Special issues in the treatment of adults with ADHD. In , *Unlocking the potential of patients with ADHD: A model for clinical practice* (pp. 211-225). Washington, DC, US: American Psychological Association. doi:10.1037/11665-012
- Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal Of Counseling Psychology*, 52(2), 250-260. doi:10.1037/0022-0167.52.2.250
- Morse, J. V. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research*, 25(9), 1212-1222. doi:10.1177/1049732315588501
- Moustakas, C. E. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- National Institute of Mental Health (2013). Attention-deficit Hyperactivity Disorder Among Adults. Retrieved November 9, 2016, from

<https://www.nimh.nih.gov/health/statistics/prevalence/attention-deficit-hyperactivity-disorder-among-adults.shtml>

Nadeau, K. G. (2005). Career choices and workplace challenges for individuals with ADHD. *Journal Of Clinical Psychology*, (5), 549.

Newark, P.E., Elasser, M., Stieglitz, R. (2016). Self-esteem, self-efficacy, and resources in adults with ADHD. *Journal of Attention Disorders*, 20(3), 279-290. doi: 10.1177/1087054712459561

Newman, D. S., & Clare, M. M. (2016). School psychology as a relational enterprise: The role and process of qualitative methodology. *Contemporary School Psychology*, 20(4), 327-335. doi:http://dx.doi.org.ezp.waldenulibrary.org/10.1007/s40688-016-0090-1

Nigg, J. T., Goldsmith, H. H., & Sachek, J. (2004). Temperament and attention deficit hyperactivity disorder: The development of a multiple pathway model. *Journal Of Clinical Child & Adolescent Psychology*, 33(1), 42-53. doi:10.1207/S15374424JCCP3301\_5

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health*, 42(5), 533–544. <http://doi.org/10.1007/s10488-013-0528-y>

- Patton, E., (2009). When diagnosis does not always mean disability: The challenge of employees with attention deficit hyperactive disorder (ADHD). *Journal of Workplace Behavioral Health*, 24(3), 326-343. doi:10.1080/S155550903176161.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4<sup>th</sup> ed). Thousand Oaks, CA: SAGE Publications, Inc.
- Pitts, M. (2014). Attention deficit hyperactivity disorder in adults. *Nurse Prescribing*, 12(1), 18-23.
- Prevatt, F., & Levrini, A. (2015). An overview of ADHD. In *ADHD coaching: A guide for mental health professionals* (pp. 9-24). Washington, DC, US: American Psychological Association. doi:10.1037/14671-00
- QSR International. (2015). NVivo 11 for Windows. Retrieved from <http://www.qsrinternational.com>
- Ramos-Quiroga, J. A., Kuepper, T., Haavik, J., Drexler, H., Antoni Ramos-Quiroga, J., Wermelskirchen, D. ... & Schauble, B. (2012). The negative impact of attention-deficit/hyperactivity disorder on occupational health in adults and adolescents. *International Archives Of Occupational And Environmental Health*, 85(8), 837-847.
- Ramsay, J. R. (2010a). ADHD in adulthood. In *Nonmedication treatments for adult ADHD: Evaluating impact on daily functioning and well-being* (pp. 9-35). Washington, DC, US: American Psychological Association. doi:10.1037/12056-001

- Ramsay, J. R. (2010b). Career counseling and workplace support. In *Nonmedication treatments for adult ADHD: Evaluating impact on daily functioning and well-being* (pp. 77-90). Washington, DC, US: American Psychological Association. doi:10.1037/12056-004
- Ramsay, J. R., & Rostain, A. L. (2016). Adult attention-deficit/hyperactivity disorder as an implementation problem: Clinical significance, underlying mechanisms, and psychosocial treatment. *Practice Innovations*, 1(1), 36-52.
- Rawana, J. S., Flett, G. L., McPhie, M. L., Nguyen, H. T., & Norwood, S. J. (2014). Developmental Trends in Emotion Regulation: A Systematic Review with Implications for Community Mental Health. *Canadian Journal Of Community Mental Health*, 33(1), 31-44. doi:10.7870/cjcmh-2014-004
- Retz, W., Stieglitz, R., Corbisiero, S., Retz-Junginger, P., & Rosier, M. (2012). Emotional dysregulation in adult ADHD: What is the empirical evidence?. *Expert Review of Neurotherapeutics*, 12(10), 1241-1251. doi:10.1586/ern.12.109
- Resnick, R. J. (2000). ADHD through the life span. In, *The hidden disorder: A clinician's guide to attention deficit hyperactivity disorder in adults* (pp. 11-25). Washington, DC, US: American Psychological Association. doi:10.1037/10351-002
- Richard-Lepouriel, H., Etain, B., Hasler, R., Bellivier, F., Gard, S., Kahn, J. & Henry, C. (2016). Similarities between emotional dysregulation in adults suffering from ADHD and bipolar patients. *Journal Of Affective Disorders*, 198230-236. doi:10.1016/j.jad.2016.03.047

- Roberts, T. (2013). Understanding the research methodology of interpretative phenomenological analysis. *British Journal of Midwifery*, 21(3): 215–218, doi: <http://dx.doi.org/10.12968/bjom.2013.21.3.215>
- Robinson, O. C. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research In Psychology*, 11(1), 25-41. doi:10.1080/14780887.2013.801543
- Safren, S.A., Sprich, S.E., Cooper-Vince, C., Knouse, L.E., & Lerner, J.A. (2010). Life impairment in adults with medication-treated ADHD. *Journal of Attention Disorders*, 13(5), 524–531. doi: 10.1177/1087054709332460
- Schatzberg Alan F., M., & DeBattista Charles, D. M. (2015). *Manual of Clinical Psychopharmacology*. American Psychiatric Publishing. doi:10.1176/appi.books.9781615370047
- Seymour, K., Chronis-Tuscano, A., Halldorsdottir, T., Stupica, B., Owens, K., & Sacks, T. (2012). Emotion regulation mediates the relationship between ADHD and depressive symptoms in youth. *Journal Of Abnormal Child Psychology*, 40(4), 595-606 12p.
- Shaw, P., Stringaris, A., Nigg, J., & Leibenluft, E. (2014). Emotional dysregulation and attention-deficit/hyperactivity disorder. *The American Journal of Psychiatry*, 171(3), 276–293. <http://doi.org/10.1176/appi.ajp.2013.13070966>
- Shaw, P., Stringaris, A., Nigg, J., & Leibenluft, E. (2015). Emotion dysregulation in attention deficit hyperactivity disorder. *Focus*, 14(1), 127-144.



- Shenton, A. K., (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education For Information* 22(2),63-75
- Shiels, K., & Hawk, L. J. (2010). Self-regulation in ADHD: The role of error processing. *Clinical Psychology Review*, 30(8), 951-961.  
doi:10.1016/j.cpr.2010.06.010
- Sjöwall, D., Roth, L., Lindqvist, S., & Thorell, L. (2013). Multiple deficits in ADHD: Executive dysfunction, delay aversion, reaction time variability, and emotional deficits. *Journal Of Child Psychology And Psychiatry, And Allied Disciplines*, 54(6), 619-627. doi:10.1111/jcpp.12006
- Skirrow, C., & Asherson, P. (2013). Emotional lability, comorbidity and impairment in adults with attention-deficit hyperactivity disorder. *Journal Of Affective Disorders*, 147(1-3), 80-86. doi:10.1016/j.jad.2012.10.011
- Sobanski, E. (2006). Psychiatric comorbidity in adults with attention-deficit/hyperactivity disorder (ADHD). *European Archives Of Psychiatry & Clinical Neuroscience*, 256i26-i31. doi:10.1007/s00406-006-1004-4
- Sobanski, E., Brüggemann, D., Alm, B., Kern, S., Philipsen, A., Schmalzried, H., Hesslinger, B., Waschkowski, H., & Rietschel, M. (2008). Subtype differences in adults with attention-deficit/hyperactivity disorder (ADHD) with regard to ADHD-symptoms, psychiatric comorbidity and psychosocial adjustment. *European Psychiatry: The Journal Of The Association Of European Psychiatrists*, 23(2), 142-149.
- Stein, M. A. (2008). Impairment associated with adult ADHD. *Primary Psychiatry*, 15(Suppl. 4), 9-11.

- Stevens, J., Quittner, A. L., Zuckerman, J. B., & Moore, S. (2002). Behavioral inhibition, self-regulation of motivation, and working memory in children with attention deficit hyperactivity disorder. *Developmental Neuropsychology*, 21(2), 117-139.
- Surman, C. H., Biederman, J., Spencer, T., Miller, C. A., Petty, C. R., & Faraone, S. V. (2015). Neuropsychological Deficits Are Not Predictive of Deficient Emotional Self-Regulation in Adults With ADHD. *Journal Of Attention Disorders*, 19(12), 1046-1053. doi:10.1177/1087054713476548
- Surman, C.B., Biederman, J., Spencer, T., Yorks, D., Miller, C.A., Petty, C.R., & Faraone, S.V. (2011). Deficient emotional self-regulation and adult attention deficit hyperactivity disorder: A family risk analysis. *American Journal of Psychiatry*, 168, pp. 617–623
- Surman, C.H., Biederman, J., Spencer, T., Miller, C., McDermott, K., Faraone, S. (2013). Understanding deficient emotional self-regulation in adults with attention deficit hyperactivity disorder: A controlled study. *ADHD Attention Deficit Hyperactivity Disorder.*, 5(3):273–81. doi: [10.1007/s12402-012-0100-8](https://doi.org/10.1007/s12402-012-0100-8)
- Swift, K. D., Hall, C. L., Marimuttu, V., Redstone, L., Sayal, K., & Hollis, C. (2013). Transition to adult mental health services for young people with attention-deficit/hyperactivity disorder (ADHD): a qualitative analysis of their experiences. *BMC Psychiatry*, 13(1), 1-11. doi:10.1186/1471-244X-13-74
- Swift, K. D., Sayal, K., & Hollis, C. (2014). ADHD and transitions to adult mental health services: a scoping review. *Child: Care, Health & Development*, 40(6), 775-786. doi:10.1111/cch.12107

Targum, S. D., & Adler, L. A. (2014). Our current understanding of adult ADHD.

*Innovations In Clinical Neuroscience*, 11(11/12), 30-35 6p.

Tuohy, D., Cooney, A., Dowling, M., Murphy, K., & Sixsmith, J. (2013). An overview of interpretive phenomenology as a research methodology. *Nurse Researcher*, 20(6), 17-20.

Wagner, D. D., & Heatherton, T. F. (2015). Self-regulation and its failure: The seven deadly threats to self-regulation. In M. Mikulincer, P. R. Shaver, E. Borgida, J. A. Bargh, M. Mikulincer, P. R. Shaver, J. A. Bargh, Borgida, E., Bargh, J.A., Mikulincer, M., Phillip R., Shaver, E., Borgida, J. A., *APA handbook of personality and social psychology, Volume 1: Attitudes and social cognition* (pp. 805-842). Washington, DC, US: American Psychological Association.  
doi:10.1037/14341-026

Wåhlstedt, C., Thorell, L. B., & Bohlin, G. (2008). ADHD symptoms and executive function impairment: early predictors of later behavioral problems. *Developmental Neuropsychology*, 33(2), 160-178.  
doi:10.1080/87565640701884253

Wigal, S. (2009). Efficacy and safety limitations of attention-deficit hyperactivity disorder pharmacotherapy in children and adults. *CNS Drugs*, 2321-31. Retrieved from Academic Search Complete database.

Willig, C. (2008). *Introducing qualitative research in psychology: Adventures in theory and method*. Maidenhead, England: McGraw-Hill/Open University Press.

### **Appendix A: Letter of Cooperation**

Dear xxxxxxxx,

This letter confirms that I, as an authorized representative of Name of Organization., allow Kristine Barnett (principal investigator) access to conduct study related activities at Name of Organization, as discussed with the principal investigator and briefly outlined below, and which may commence when the principal investigator provides evidence of IRB approval for the proposed research study.

Purposes of study: The purpose of this proposed qualitative, phenomenological method is to understand the role that self-regulation plays in the occupational setting for adults diagnosed with ADHD. A significant number of studies have assessed ADHD in the adult population. However, the experiences of adults with ADHD in the workplace represent a gap in existing literature. This research will provide insight into the experiences of adults with ADHD and the role of self-regulation. Additionally, this study potentially could lead to better evaluation regarding evidence-based practices that address specific deficits when assessing ADHD in adults. Another purpose is to complete a doctorate dissertation in partial fulfillment of requirements associated with a doctorate degree with Walden University.

Study Activities: Structure of the interview sessions: The structure of the participant interview sessions are as follows: Overview of the informed consent document, initial interview (approximately 60 minutes). Interviews will be audio recorded and handled in a

professional and confidential manner. After the interview is transcribed, all interviews will be copied and returned to the participants for review. Participants will be asked to review the transcription for accuracy. Should the participant find a discrepancy in the transcribed interview, they will be asked to make the corrections on the provided transcription.

**Participant Recruitment:** Clinicians will distribute the flyer/invitation to potential participants. All participants will be screened by the researcher according to the inclusion criteria as follows: adults who have been diagnosed and have a history with ADHD treatment, adults with at least one year of work experience but may or may not be currently employed, adults living away from parents or caregivers, female or male adults who are at least 18 years of age and older. A mutual time for the participant and the principal investigator will be arranged by the researcher. All interviews will be conducted on-site. All participants in the study will receive a ten-dollar gift card for compensation for time and inconvenience for their participation in the study.

**Site Support:** All interviews will be arranged by the researcher. A room will be provided on-site to conduct all interviews that will ensure confidentiality. Should a participant be at risk for harm, the on-site supervisor will be notified to help resolve the crisis.

**Data Management:** All materials for the study will be provided by the principal investigator. Any information participants provide will be kept confidential. The

researcher/interviewer will not use participant's personal information for any purposes outside of this research project. Additionally, the researcher will not include participant's name or any identity information provided in the study reports. Data will be kept secure by using pseudonyms in the transcripts for all names of participants in the study. Furthermore, transcripts will remain in the researcher's possession, and all transcription files will be password protected. Digital audio files, consent forms, and participant information sheets will remain in a locked storage box. Data will be kept for a period of at least 5 years, as required by Walden University.

Dissemination of the research finding will be made available to all agencies and participants in the study. Participants will either be emailed or sent a copy of the finding through U.S. mail. All agencies will be given a copy of the results from this study in person. Select verified transcribed interview data will be used in the dissertation. Other possible uses of the interview data may include conference presentations, articles, and books.

We understand that this site's participation will only take place during the study's active IRB approval period. All study related activities must cease if IRB approval expires or is suspended. I understand that any activities involving Personal Private Information or Protected Health Information may require compliance with HIPPA Laws.

Our organization agrees to the terms and conditions stated above. If we have any concerns related to this research project, we will contact the Principal Investigator. For concerns regarding IRB policy or human subject welfare, we may also contact:

Regards,

Kristine Barnett, M.A.

Signature of research site Authorized Representative:

---

Job Title of Authorized Representative \_\_\_\_\_

Date \_\_\_\_\_

Full Name of Research Site \_\_\_\_\_

## Appendix B: Recruitment Letter for Individual Clinicians

Dear (Name of Clinician),

My name is Kristine Barnett and I am a doctoral candidate at Walden University. I am conducting dissertation research on the perceived impact of self-regulation in adults with ADHD in the workplace. A significant number of studies have assessed ADHD in the adult population. However, the experiences of adults with ADHD in the workplace represent a gap in existing literature. This research will provide insight into the experiences of adults with ADHD and the role of self-regulation. Additionally, this study potentially could lead to better evaluation regarding evidence-based practices that address specific deficits when assessing ADHD in adults.

All participation in the study is voluntary. The inclusion criteria are as follows: adults who have been diagnosed and have a history with ADHD treatment, adults with at least one year of work experience but may or may not be currently employed, adults living away from parents or caregivers, and female or male adults who are at least 18 years of age and older.

Your assistance in conducting this important research is vital to recruiting potential adults with ADHD who would be willing to participate in the study. Your role will be to distribute the flyer/invitation to potential participants. The researcher will contact these individuals to undergo a brief screening. Once identified, the researcher will discuss the overview of



the study and participation. If potential participants agree to participate in the study, the researcher will schedule a time to meet with the participant on-site.

During the interview participants will be given an overview of the study as well as an explanation of the informed consent document. Participants will then be asked to sign the informed consent document and will be interviewed, and audio recorded for approximately 60 minutes. All participants in the study will receive a ten-dollar gift card for compensation for time and inconvenience for their participation in the study.

After the interview is transcribed, all interviews will be copied and returned to the participants. Participants will be asked to review for accuracy. Should the participant find a discrepancy in the transcribed interview, they will be asked to make the corrections on the provided transcription.

All materials for the study will be provided by the principal investigator. Any information participants provide will be kept confidential. The researcher/interviewer will not use participant's personal information for any purposes outside of this research project.

Additionally, the researcher will not include participant's name or any identity information provided in the study reports. Data will be kept secure by using pseudonyms in the transcripts for all names of participants in the study. Furthermore, transcripts will remain in the researcher's possession, and all transcription files will be password protected. Digital

audio files, consent forms, and participant information sheets will remain in a locked storage box. Data will be kept for a period of at least 5 years, as required by Walden University.

Please feel free to contact me to discuss any questions that you may have concerning this study and your part in identifying research participants. I can be reached at:

Thank you for your consideration.

Kristine Barnett M.A., Doctoral Candidate

Walden University

## Appendix D: Participant Interview Protocol For

Research Project: A Phenomenological Investigation of ADHD and Self-Regulation in the Workplace

Date of the interview: \_\_\_\_\_ Time of interview: \_\_\_\_\_

Location of interview: \_\_\_\_\_

Participant: \_\_\_\_\_

Interviewer/Researcher: \_\_\_\_\_

Age: \_\_\_\_\_ Gender: M / F

Marital status: Single, Married, Divorced, In a relationship

How many marriages?

How long have you been in your current relationship?

Children:

Children's ages and gender:

\_\_\_\_\_  
\_\_\_\_\_

College/ Vocational Training:

How many years of vocational training or college have you completed? \_\_\_\_\_

Did you graduate? \_\_\_\_\_

Occupation:

Type of Employment/Industry: \_\_\_\_\_

How many years of employment? \_\_\_\_\_

How many months/years at current job? \_\_\_\_\_

How many jobs have you had? \_\_\_\_\_

What/how long is the longest job held? \_\_\_\_\_

Medication:

Are you prescribed medication for your ADHD condition?

How often do you take the medication?

Do you feel that the medication helps you manage in the workplace better with the symptoms of ADHD?

## Questions

1. How would you describe your employment experiences?
2. What type of experience have you had managing your emotions in your occupational experiences?
3. How would you describe your standards of behavior in the workplace?
4. How would you describe your ability to monitor your thoughts and situations that impede achieving the standard of behavior? (monitor, moods, feelings, and emotions). (such as, difficulty in engaging in goal directed behaviors, accomplishing tasks when experiencing negative emotions)
5. Can you describe a situation in which you lost control of your emotions at work? (have you ever lost control after becoming angry, fearful, or frustrated)
6. How do you override or alter your responses to negative emotions in the workplace?
7. How do you recover after experiencing a perceived emotionally stressful event in the workplace?

8. When you have difficulty concentrating, focusing, getting things completed how do you manage your emotions?
9. How do you manage your frustrations when you feel overwhelmed?
10. Has ADHD influenced how you see yourself?
11. How has ADHD influenced how you express yourself in the workplace?
12. How has ADHD influenced your relationships at work? (coworkers, supervisors)
13. What else would you like to share with me as it relates to having ADHD in the workplace?

(Thank the individual for participating in the interview and study. Review next steps and assure him or her of the confidentiality of responses.)

## Appendix F: Participant Screening Questions

14. Do you have a current diagnosis of ADHD?
15. Do you have a history of ADHD treatment?
16. Are you at least 18-years-old?
17. Are living away from parents or caretakers?
18. Do you have at least one year of work experience?