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Maria T. Curtin-McKenna (And MotherWoman, Hadley, MA), Mothers with Attention-Deficit/ Hyperactivity Disorder (ADHD) in the First Twelve Months Postpartum: Challenges, Coping, Supports, Strengths, and Resilience

#### **ABSTRACT**

This mixed-method study was undertaken to expand the knowledge base about mothers with a diagnosis of Attention-Deficit/Hyperactivity Disorder (ADHD) in the first twelve months after the birth of a baby. Nine mothers with an ADHD diagnosis and a child under the age of 60 months were interviewed. These mothers were asked to identify experiences with challenges, coping, depression, anxiety, and support in the first year postpartum. Quantitative data contrasting pre-child and postpartum executive functioning was retrieved during the interviews using the ASRS-v1.1© (Kessler et al., 2005). This quantitative data was also retrieved from 57 mothers as one part of a larger, on-line survey of mothers who had attended MotherWoman support groups. Findings from this study concurred with research regarding vulnerability of mothers with ADHD to perinatal depression and anxiety. This study indicated that social anxiety may be a recursive risk factor exerting a negative influence on maternal identity, self-esteem, and parenting self-efficacy in mothers with ADHD. Executive functioning skills appear to be impaired for many women in the postpartum period; however, questions were raised regarding the validity of the ASRS-v1.1© for ADHD screening in the postpartum period. This study allowed the voices of mothers with ADHD to be heard, thereby enriching and expanding upon the previous knowledge base. It shed light on challenges and coping; risks of perinatal mood and anxiety disorders; strengths; and supports of mothers with ADHD that may have potential bearing on the health and well-being of the mother, infant, and infant-mother dyad relationship.

# MOTHERS WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD) IN THE FIRST TWELVE MONTHS POSTPARTUM: CHALLENGES, COPING, SUPPORTS, STRENGTHS, AND RESILIENCE

A two-part project based upon an independent investigation and an investigation at MotherWoman, Hadley, Massachusetts, submitted in partial fulfillment of the requirements for the degree of Master of Social Work.

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#### **CHAPTER I**

#### Introduction

The infant-mother dyad provides a critical lens through which to understand protective and risk factors affecting the health and well-being of mother and child. This research study sought to examine the relationship through three dimensions that had potential bearing on the infant-mother dyad relationship, and that had previously been studied separately: (a) diagnosis and treatment of Attention-Deficit /Hyperactivity Disorder (ADHD) in women; (b) the effect of perinatal (prenatal and/or postnatal) depression and/or anxiety on the mother, the baby, and the mother-baby dyad attachment relationship; and (c) the mediating effect of postpartum support on the maternal experience of postpartum depression and/or anxiety.

ADHD is considered a neurobiological, developmental disorder that begins in childhood. It was estimated to affect approximately 9% of children in the United States from 2007 to 2009 (Akinbami, Liu, Pastor, & Reuben, 2011. ¶2). Once thought to be a disorder that extinguished with adulthood, it is now recognized that ADHD symptoms, especially those related to problems with executive functioning skills, persist into adulthood (Kessler et al., 2010). The American Psychiatric Association *Diagnostic Manual of Mental Disorders* (2000, 4<sup>th</sup> ed., text rev.) states that ADHD can affect a person's ability to function in all realms of daily life, including academic, emotional, interpersonal, social, familial, and occupational experiences (pp. 85-86). ADHD has been linked to an increased risk of experiencing co-morbid disorders such as anxiety and mood disorders in adults (Kessler et al., 2006). Of particular concern is that females are diagnosed with ADHD at one half the rate as males in both childhood and adulthood

(Akinbami et al., 2011, ¶2), despite growing evidence that the female/male prevalence rate of ADHD may be similar. Thus girls with undiagnosed and/or inadequately treated symptoms of ADHD are likely to become women with a legacy of academic, social, physical, and economic consequences and to have an increased vulnerability to co-morbid disorders. Clinicians who are not sensitive to the ADHD symptom presentation in women are more likely to diagnose and treat women for co-morbid disorders than for the underlying ADHD (Wasserstein, 2005).

A great deal of research has examined the incidence of mood and anxiety disorders during the perinatal period. There is growing evidence that these disorders can also affect the fetus, the child, and the infant-mother attachment relationship (Sheridan & Nelson, 2009, p. 48; Murray, 2009, p. 193). In addition, there is a smaller body of research showing evidence that informal support (partners, family, friends) and formal support (doulas, support groups, mental health clinicians) can mediate symptoms of perinatal anxiety and depression.

There was only scant research available at the time of this study that examined the experience of mothers with ADHD in the perinatal period. Common threads in research findings indicated an increased risk of experiencing co-morbidity of maternal psychological symptoms and lower scores of maternal self-esteem, self-efficacy, and external locus of control (Banks et al., 2008; Rucklidge & Kaplan, 2000; Watkins & Mash, 2009). Thus, mothers with ADHD are a population at risk and further study is warranted. Although available research presented important quantitative findings, the voices of mothers with ADHD were not heard in them.

This mixed-method study examined two data sets, one more extensive than the other. The first was a small set of quantitative data contrasting pre-child and postpartum executive functioning as retrieved from a larger survey of women who had attended a MotherWoman support group (http://www.MotherWoman.org). This research was part of collaborative study

with Smith College professor, David Burton, PhD. as lead researcher. Brittanie Tarcynski (MSW candidate) and I were co-researchers for different parts of the survey. Our thesis advisor, Kristin Mattocks assisted extensively.

The second data set is qualitative and is the most extensive data reported in this study. It was conducted independently by this researcher. Data was retrieved from interviews with nine mothers who had an ADHD diagnosis and a child under the age of 60 months. It included the voices of mothers as they described their challenges and coping strategies of the first year postpartum, their experiences with co-morbid disorders, and the role of support in helping them through the postpartum period with their infants.

This research study did not seek to show causality. Its purpose was to illuminate the experiences of mothers with ADHD in the postpartum period. Anecdotal evidence from this research suggests that mothers with ADHD experience the postpartum period as qualitatively different from that of non-ADHD mothers. This research builds upon previous research that demonstrated the vulnerability of mothers with ADHD to developing a low sense of self-esteem, self-efficacy, and an external locus of control. Findings from this study shed light on the influence of these factors on the transition to a positive identity as a mother within a larger social context. Results of this study also showed evidence of resilience, and strength in mothers with ADHD. As social work clinicians, we are committed to understanding the global and individual ways in which symptoms, such as those associated with ADHD, anxiety and mood disorders, may affect our client. However, it is imperative that a client in the postpartum period also be viewed within the larger context of relationships that may be affected by or mediate the experience of the new mother, such as relationships with the partner, family members, and community; and even more critically within the context of the mother-infant dyad relationship.

#### **CHAPTER II**

#### Literature Review

The purpose of my study is to expand the knowledge base about women with Attention-Deficit /Hyperactivity Disorder (ADHD): specifically, their experiences with challenges and coping strategies in the postpartum period, and their risk of suffering from perinatal depression and/or anxiety. My major research question to be addressed is as follows: How do women with a diagnosis of Attention-Deficit /Hyperactivity Disorder (ADHD) experience and cope with the challenges of being a parent in the first twelve months postpartum? My secondary question is, How does perinatal depression and/or anxiety impact their experiences? My tertiary question is as follows: What role do supports play in mediating their experiences?

Attention-Deficit/Hyperactivity Disorder (ADHD) is considered a developmental, neurobiological disorder that can affect a person's ability to function in all realms of daily life, including academic, emotional, interpersonal, social, familial, and occupational (4<sup>th</sup> ed., text rev.; *DSM-IV-TR*; American Psychiatric Association, 2000; Faraone, et al., 2000; Quinn, 2005; Semple, Mash, Ninowski & Benzies, 2011; Watkins & Mash, 2009). The *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. codes ADHD according to three sub-types: Predominantly Inattentive Type, Predominantly Hyperactive-Impulsive Type, or Combined Type (p. 93). Individuals with symptoms of inattentiveness have been described as dreamy, lazy, careless, forgetful, absent-minded, and oppositional. Symptoms include being easily distracted, having difficulty with organizing thoughts and activities and with following these through to completion. Symptoms of

hyperactivity include being in constant motion and/or feeling "driven by a motor" (p.86), fidgeting, being "on the go and into everything" (p.86), and talking loudly or excessively. Symptoms of impulsivity include impatience, such as acting out of turn and interrupting others, and also engaging in risky behaviors (p. 86).

#### **Prevalence Rates of ADHD**

ADHD was first identified as a childhood disorder. Eisenberg (2007) traced the emergence of the diagnosis of ADHD from its early label of "the brain damaged child" (p. 279) in the 1950's and 1960's; conferring an organic etiology to the behaviors relieved parents from societal blame for their child's behavior. Through advocacy efforts by Eisenberg (2007) and a colleague, the American Psychiatric Association *Diagnostic and Statistical Manual* (2<sup>nd</sup> ed.; *DSM-II*; American Psychiatric Association, 1968) included the first appearance of a refined version of a set of symptoms describing a syndrome called "3.080 Hyperkinetic reaction of childhood (or adolescence)" (p. 51).

A diagnostic category of Attention Deficit Hyperactivity Disorder was included for the first time in 1980 in the third edition of the American Psychiatric Association *Diagnostic and Statistical Manual* (3<sup>rd</sup> ed.; *DSM-III*; American Psychiatric Association, 1980, pp. 41-45). It referred primarily to children, but it introduced three new concepts: (a) inattentiveness and impulsivity could be present with or without symptoms of hyperactivity; (b) gender was introduced, stating that, "The disorder is ten times more common in boys than in girls" (p. 42); and (c) a "Residual Type" (p. 44) of inattention and impulsivity was recognized as possibly extending into adulthood. However, the proviso was that hyperactivity had to have been present in childhood, but no longer present in adulthood.

The *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. further refined the diagnosis, referring to it as Attention-Deficit/Hyperactivity Disorder. It underscored three dimensions: (a) inattentiveness and hyperactivity could occur separately or together: (b) impulsivity was linked to hyperactivity, rather than to inattentiveness; and (c) all symptoms could extend into adulthood and might manifest differently in adults than in children, although descriptive information was minimal (pp. 85-93).

Prevalence rates in children. A clinical diagnosis of ADHD is usually first made in childhood. It requires that six or more symptoms included in the *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. be present prior to seven years of age in either or both categories of inattention and hyperactivity-impulsivity (p. 92) and that these symptoms be present in two or more settings. According to studies conducted by the Centers for Disease Control and Prevention (Centers for Disease Control and Prevention [CDC], 2007), and the CDC National Center for Health Statistics (CDC-NHIS) (Akinbami, Liu, Pastor, & Reuben, 2011), approximately 9% of youth ages 5-17 had a clinical diagnosis of ADHD in the United States from 2007 to 2009 (¶ 2).

Initial research focused on boys with distractibility, hyperactivity and impulsivity whose symptoms led to problematic conduct behaviors in school and at home (Akinbami et al., 2011; Eisenberg, 2007). Boys continue to be diagnosed with ADHD more frequently than girls. Akinbami et al. (2011) reported that 12.3% of boys and 5.5% of girls ages five to seventeen had been diagnosed with ADHD in the United States in 2009 (¶2). Opinions about the cause of this gender difference vary. Girls are more likely to have predominant symptoms of inattentiveness, such as forgetfulness, dreaminess, and disorganization than boys. Symptoms of hyperactivity and impulsiveness are more likely to be expressed as excessive talkativeness and emotional reactivity. As a result, it is likely that girls are not diagnosed with ADHD as frequently, but that

male/female prevalence rates are more similar to each other. (Nadeau, Littman, & Quinn, 1999; Quinn, 2005; Solden, 1995).

Prevalence rates in adults and in women. Estimates of the prevalence of ADHD in adulthood are reported to be from 2.5% (Simon et al., 2009) to 12% (Akinbami et al., 2011). Several research studies reported an average of 4.4% as a conservative estimate of adult prevalence (Kessler et al., 2006; Kessler et al., 2010; Waite, 2009; Simon et al., 2009; Watkins & Mash, 2009).

Estimates of the persistence rate of ADHD from childhood to adulthood range from 4% to as much as 70 - 75% (Hallowell & Ratey, 1994; Kessler et al., 2005; Kessler et al., 2006; Semple et al., 2011; Simon et al., 2009). Faraone et al. (2000) reported findings that persistence rates are highest when a parent or sibling also has ADHD (p. 12). Symptoms of adult ADHD are "more heterogeneous and subtle" (Kessler et al. 2010, p. 5) in adults of both genders than in children because symptoms of hyperactivity in boys generally subside in adolescence, while inattentiveness does not (Wasserstein, 2005). Symptoms of inattentiveness also continue into adulthood for women. For both men and women, inattentiveness and challenges with executive functioning are more likely to interfere with achieving academic and employment success, interpersonal relationships, and fulfilling adult responsibilities (Manos, 2010; Wasserstein, 2005). Women are reportedly more likely than men to self-refer for treatment in adulthood (Simon et al., 2009). However, women are estimated to be half as likely to be diagnosed and/or treated for ADHD (Kessler et al., 2006). Women with ADHD frequently present with co-morbid disorders such as depression and anxiety: They are treated for these conditions, rather than the underlying ADHD (Kessler et al., 2006; Nadeau, Littman, & Quinn, 1999; Quinn, 2005; Solden, 1995; Wasserstein, 2005). Women's ADHD symptoms are often overlooked and are likely under-represented in adult ADHD prevalence data.

## **Defining and Diagnosing ADHD in Adults**

The *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. was written with child behavioral symptoms in mind. The requirement that symptoms be present prior to the age of seven is problematic for adults: They may not be able to accurately recall their experience. It is especially problematic for females because symptoms that fit the *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. criteria for inattention are more likely to be reported as occurring after the onset of puberty (Nadeau & Quinn, 2002).

**Executive functioning.** Brown (2006) and Barkley (2001, 2011) posited a new definition of ADHD, not as a behavior disorder, but a neuro-developmental disorder that impairs executive functioning and self-regulation. Difficulty with executive functioning may only surface as demands on the individual increase and the externally imposed structure of school diminishes (Manos, 2010; Nadeau & Quinn, 2002). These difficulties are likely the key to understanding the challenges faced by adults with ADHD.

There is considerable debate about the definition of executive functioning and the way that the brain orchestrates its functions. Researchers have generally agreed that executive functioning refers to the brain's ability to manage and integrate a variety of cognitive functions (Barkley & Murphy, 2010; Brown, 2006; Kessler et al., 2010; Rinsky & Hinshaw, 2011; Wasserstein, 2005). Brown (2006) organized executive functioning into six "clusters" (p. 39).

"Activation: Organizing, prioritizing and activating to work

Focus: Focusing, sustaining, and shifting attention to tasks

Effort: Regulating alertness, sustaining effort, and processing speed.

Emotion: Managing frustration and regulating emotions.

Memory: Utilizing working memory and accessing recall.

Action: Monitoring and self-regulating action." (Brown, 2010, p. 39)

Barkley and Murphy (2010, p. 162) included time management as an additional executive function.

Problems with focusing and inattention that persist from childhood to adulthood are reported to be the most consistently problematic symptoms for adults. However, Kessler et al. (2010) are more specific; they posited that executive functioning difficulties are the most pervasive and continuous. Although other *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. disorders also impact executive functioning (e.g., depression), it is the continuity of these symptoms in adults with ADHD that diagnostically sets them apart (Brown, 2006; Kessler et al., 2010).

Diagnosing adults with ADHD. ADHD diagnostic tools, initially created with child symptoms in mind, are not considered as valuable for diagnosing adult ADHD: They do not fit the symptom picture described most commonly by adults. Neither do they easily fit the *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. criteria. Researchers have recommended that the *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. criteria be re-interpreted by diagnosticians to correlate more accurately with adult symptoms. Kessler et al. (2010) recorded 14 symptoms not included in the *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev., but reported by adults with ADHD. For example: they listed "trouble planning ahead, difficulty prioritizing, bores easily, trouble keeping track of things, easily overwhelmed, and sensitive to criticism" (p. 1171). Extensive interviews as well as diagnostic tools, such as those that measure executive functioning skills, which are designed specifically for adults have been strongly recommended (Kessler et al, 2010).

There is no test that can determine in absolute terms that an individual has ADHD. Thus, it presents a clinical challenge to accurately assess and fit the criteria to adults as established by

the *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. Diagnostic tools, such as the Conners' Adult ADHD Rating Scale (Conners et al., 1999), have been developed to adapt *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. criteria to adult symptoms. For example: Some adults (and some children) demonstrate problems with hypo-active energy regulatory behaviors, making it hard for them to summon the energy and motivation to begin tasks. Motor hyper-activity in childhood usually shifts to minor activities, such as fidgeting and toe-tapping; as well as feeling physically restless (Kessler et al., 2001; Wasserstein, 2005). It can also shift to internal restlessness, which is closely aligned with boredom, distractibility to sounds, or disengaging from social interactions (Kessler et al., 2010).

The World Health Organization (WHO) developed the Adult ADHD Self-Report Scale® (ASRS) as a self-screening tool. An 18-question version was then compared to a shortened version of six questions called the Adult ADHD Self-Report Scale version 1.1© (ASRS-v1.1©; Kessler et al., 2005). The first four questions address issues related to executive functioning; the last two correspond to energy regulation and impulsivity. All questions are based on the *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. criteria and terminology is consistent with its language. As a result, it may be difficult for adults to respond accurately. However, it has been validated for use with adults and considered to be a useful tool for clinical studies (Kessler et al., 2005, p. 254; ©World Health Organization (n.d.).

**Diagnosing women.** Symptoms of ADHD in women are often not identified or treated (Nadeau & Quinn, 2002; Simon et al., 2009; Solden, 2005). Although there is a lower prevalence rate reported for women as compared to men, women are more likely to receive a diagnosis for the first time in adulthood; possibly because women have comorbid symptoms that cause them to seek treatment (Rucklidge & Kaplan, 2000), or their children are diagnosed with ADHD.

# Living with ADHD – Beyond the DSM-IV-TR (2000) 4th ed., text rev.

The *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. is a boiler-plate from which clinicians make a differential diagnosis of a set of symptoms. It does not describe the impact of ADHD on living every day with its challenges. Neither does it describe the history of experiences that lead to adaptive and mal-adaptive coping by the time a person reaches adulthood.

**Experiencing the world as a girl with ADHD.** Descriptive terms are commonly assigned to girls who develop behavioral and emotional coping styles to manage their ADHD symptoms. They have both negative and positive connotations, depending on the level of interference with school, home, and social relationships. Relative to hyperactivity and impulsiveness, girls are described as: chatty, excitable, dramatic, bossy, and emotionally reactive (Nadeau, Littman, & Quinn, 1999). A "silly persona" (p. 51) has been described as one way some girls "mask disorganization, forgetfulness, and confusion" (p. 51) from peers and adults. Girls with primarily inattentive symptoms can appear to be "hypo-active or lethargic" (p. 52) and lacking in motivation. Not paying attention to directions can be the result of hyper-focusing on something else or being distracted by everything around her. Forgetfulness, and difficulty with planning, sequencing, and organization can result in not starting or completing assignments or chores. Teachers and parents may misinterpret the behavior as not caring or sloppy and be critical. Repetitions of the cycle lead to avoiding challenges, feeling easily discouraged, incompetent, and anxious about making a mistakes (pp. 51-52). In contrast, girls may mask their symptoms by over-achieving and spending exhaustive amounts of energy to keep up.

**Social interactions.** Girls with ADHD often have difficulty with social interactions, especially in groups of peers or with adults. They may have difficulty paying attention to,

interpreting, and responding to social cues in timely or appropriate ways (Robbins, 2005, p. 566). Girls may find it difficult to follow the thread of conversations: "Anxiety interrupts their concentration, temporarily reducing their capacity to both speak and listen" (Solden, 2005, p. 53).

Obsessional behaviors and sleep disturbances. Solden (2005) reports that some girls with ADHD develop obsessional behaviors to address the feeling of chaos resulting from trying to manage internal disorganization and external stimuli. The behaviors impose a sense of structure that may be rigid and difficult to maintain and that prevent her from responding in new or "creative" ways to circumstances (p. 67).

Nadeau, Littman and Quinn (1999) report that "fluctuating levels of arousal" (p. 72) frequently cause sleep disturbances in girl. It can take girls with ADHD longer to fall asleep because of difficulty in shutting off internal thoughts and the emotions of the day; leading to bedtime battles with parents and exhaustion, especially when conforming to school schedules.

Sensory sensitivity. In addition to attention and energy regulation challenges, many girls with ADHD have a "hyper-sensitive central nervous system" (Nadeau, Littman and Quinn, 1999, p. 60) that exacerbates symptoms of inattentiveness. Tactile sensitivity can manifest as difficulty getting dressed on time because clothing tags and seams irritate them. They may react to being touched and avoid gatherings of people - nearly impossible in crowded lunchrooms or hallways in school. Sensitivity to levels of sound may manifest as being irritated and distracted by "sudden loud noises," "buzzing light fixtures," and "the noise level… [of her own] thoughts" (pp. 65-67).

**Daily life challenges of women with ADHD.** The description of challenges for girls does not end with adulthood, especially for women who were undiagnosed and untreated for their symptoms in childhood. "ADHD adults have the clinical 'look and feel' of ADHD

children" (Faraone, 2004, p. 37). Diagnosis and treatment of ADHD in children has only been widely accepted in the past 20 years; and even with a diagnosis, there can be "skepticism...[and] perceptions that ADHD is not a 'real' disorder with 'real' consequences and costs" (Knouse & Safren, 2010, p. 498). Women have usually developed compensatory behaviors to manage their challenges. However, the legacy of challenges affects women in many ways. Underachievement in school closes off options for advanced academic pursuit and equal economic opportunity. Overachievement, as a compensatory tool, may open more doors academically and for employment, but the exhaustive effort can extend to multiple domains and can have physical, psychological and emotional repercussions. The emotional legacy of childhood coping with ADHD can lead to women feeling incompetent, ashamed, overwhelmed, guilty, like a failure (Solden, 2005) and like an "imposter" (p. 34).

Social relationships may continue to suffer, but now extend to partner and work relationships. Robbins (2005) reported that many women have a history of "broken relationships" (p. 566). Hypersensitivity can lead women with ADHD to over-react to nuances in social interactions. Interrupting and/or only "half listening" (p. 567) to conversations can frustrate both partners in conversation. Some women disconnect from social relationships, isolating themselves or limiting social contact with peers as a form of "self-protection" (Solden, 2005, p. 92-93). They can feel misunderstood, but have difficulty sequencing their thoughts in order to explain themselves; leading to a cycle of anxiety, shame and embarrassment, feeling misunderstood, and withdrawal (Solden, 2005, pp. 95-96). In contrast, some women are, or would like to be very social. However, difficulty with executive functioning skills, like activating energy, memory, focus, sequencing, planning, and organizing time (pp. 100-106) challenge their ability to maintain social contacts.

## Co-morbidity of Disorders with ADHD

The diagnosis and treatment of adult ADHD can be complicated by symptoms that are similar to or that are co-morbid with other *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. adult diagnoses. Symptoms of mood disorders, anxiety disorders, and substance use disorders can resemble those of ADHD. Adults with ADHD are reported to be at increased risk of experiencing psychopathologies such as anxiety, depression, substance abuse, OCD, and social phobias (Kessler et al., 2006; Ninowski, Mash, & Benzies, 2007). For example, Kolar et al. (2008) reported epidemiological data estimating that 40-60% of adults with ADHD experience anxiety disorders.

Women and Co-morbid Disorders. In comparison to men, women with ADHD experience significantly greater rates of anxiety and depression (Robison et al., 2008; Rucklidge & Kaplan, 1997, 2000). Waite (2009) reports lifetime prevalence rates for women with ADHD as follows: "depression (23%), social phobia (23%), generalized anxiety disorder (16%), panic disorder (15%), agoraphobia (9%), and obsessive compulsive disorder (7%)" (p. 186). Rucklidge & Kaplan (1997) reported that 37.3% of the women with ADHD in their study reported social anxiety symptoms (p. 171). Co-morbid symptoms of anxiety or depression in women are more likely to be diagnosed than their ADHD symptoms, although ADHD symptoms may be their core issue (Banks, Ninowski, Mash, & Semple, 2008; Kryski, Mash, Ninowski, & Semple, 2010; Ninowski et al., 2007; Quinn, 2005; Robison et al., 2008; Rucklidge & Kaplan, 2000; Semple et al., 2011; Waite, 2009; Watkins & Mash, 2009).

Possible linkages between ADHD and comorbid disorders in women. The potential factors that explain the high rate of co-morbid disorders in women have received some attention. They also lend insight into the reason why women are more likely to be diagnosed and treated

for co-morbid disorders than ADHD. Rinsky and Henshaw (2011) reported that childhood executive functioning problems associated with cognition are highly predictive of social impairment later in adolescent girls. These skills are critical to the development of emotion regulation and may be a factor in later developing mood and anxiety disorders. Stevenson and Williams (2000) reported data demonstrating that "social rejection leads to changes in the brain that can exacerbate the effects of ADHD and lead to some of the comorbid issues" (p. 414). Hormonal fluctuations, discussed later in this chapter under "Treatment Options", affect executive functioning and mood (Quinn, 2005, Stevens & Williams, 2000). It can be confusing to a woman and to her clinician to sort out symptoms that frequently shift with her monthly cycle.

Another diagnostically complicating factor for women first diagnosed with ADHD in adulthood is that they have often developed compensatory strategies to manage one of more of their difficulties. Although, these can be adaptive, such as choosing jobs in which they can use their strengths, they can also be problematic. For example: Women with ADHD often invest more time and energy to keep up with expectations at home or work. Their ADHD symptoms are kept hidden, but the consequence can be exhaustion, a sense of inadequacy, and sometimes failure (Nadeau & Quinn, 2002, Solden, 1995).

By the time girls with ADHD reach adulthood, they are likely to be "engaged more in emotion-oriented and less in task-oriented coping strategies" (Rucklidge & Kaplan, 1997). Many have developed low self-esteem, self-efficacy and an external locus of control and are at greater risk of experiencing anxiety and depressive symptoms (Manos, 2010; Nadeau & Quinn, 2002; Rucklidge & Kaplan, 1997; Simon et al., 2009; Waite, 2009). Clinicians need to be aware of the

intricacies of ADHD and co-morbid diagnoses and be willing to tease out symptoms. Otherwise, women will continue to fall through cracks and not be diagnosed.

## The Experience of Mothers with ADHD in the Perinatal Period

Pregnancy and the birth of a baby create a sense of disequilibrium in most families.

Research about the effect of ADHD on a woman's experience of motherhood in the postpartum period and on the development of the infant-mother dyad relationship is limited. Only a small number of researchers have investigated the relationship between a mother's symptoms of ADHD and her parenting cognitions and behaviors as she navigates early motherhood (Banks et al., 2008; Kryski et al., 2009; Ninowski et al., 2007; Semple et al., 2011; Watkins & Mash, 2009). Common threads in the research findings about mothers with ADHD are increased vulnerability to co-morbid maternal psychological symptoms and lower scores of maternal self-esteem and self-efficacy on assessments (Banks et al., 2008; Ninowski et al., 2007; Watkins & Mash, 2009). Vulnerabilities appear to be present in women with either sub-clinical or clinical levels of ADHD symptoms (Simon et al., 2009; Kessler et al., 2006). Additionally, researchers have documented the implications of their findings regarding the vulnerabilities of the infant, the mother, and the infant-mother relationship (Kryski et al., 2010; Semple et al., 2011; Watkins & Mash, 2009).

Clinical and sub-clinical levels of maternal ADHD symptoms. As noted earlier, ADHD is most often diagnosed in childhood, yet its symptoms in girls and women are often not identified or treated (Nadeau & Quinn, 2002; Solden, 2005). In addition, individuals who do not meet the minimum of six criteria for inattention can still have significant challenges in daily functioning. Egger and Angold (2009) stated that for each additional symptom that meets the *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. criteria, there is a "doubling of the probability that the child

will be impaired" (p. 287). The five studies referenced in this literature review, that specifically researched the role of ADHD in mothering an infant or young child, recruited participants who self-identified as experiencing ADHD symptoms, even if they had not received a clinical diagnosis (Banks et al., 2008; Kryski et al., 2010; Ninowski et al, 2007; Semple et al., 2011; Watkins & Mash, 2009). All of the studies included at least one screening tool to identify and measure ADHD symptoms, such as the Conners' Adult ADHD Rating Scale (Conners et al., 1999). The majority of participants were assessed at sub-clinical levels of ADHD. The researchers reported effects of ADHD symptomatology on maternal well-being and infant-mother relationship at both clinical and the sub-clinical levels of ADHD.

## **Postpartum Mood And Anxiety Disorders**

Postpartum mood and anxiety disorders have received considerable attention from researchers and clinicians. Estimates of the incidence of these disorders in the postpartum period vary by study and by point in postpartum at which they were collected.

Postpartum mood and anxiety disorders incidence for all women. The *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. criteria for postpartum depression requires that it begin within the first four weeks after the birth (pp. 422-423). Beck and Driscoll (2006) reported that 10-15% (p. 59) of all postpartum women in their research met the criteria. However, they estimated that overall rates of depression in women at 6 months postpartum were 35% (p. 65). Although 50% of women who experienced postpartum depression reported onset in the first 3 months postpartum, another 30% reported onset after 3 months (p. 64) and did not meet the *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. guidelines for postpartum depression. It is likely that later onset, sub-clinical levels, and undiagnosed postpartum depression raise these estimations.

The incidence of anxiety disorders in postpartum women has been studied less frequently than depression. Nevertheless, anxiety disorders affect many women postpartum. Wenzel, Haugen, and Jackson (2005) researched anxiety disorders in women at eight weeks postpartum. Their data included women who did and those who did not meet full diagnostic criteria for anxiety disorders. Their findings are listed here in order of descending prevalence; and recorded here as clinical / subclinical diagnosis of disorders: (a) General Anxiety (8% / 20%); (b) Social Phobia (4% / 15%); (c) Obsessive Compulsive (3% / 5%); Panic (1.4% / 0%) (p. 299). Wenzel et al. (2005) related their analysis of data of postpartum findings about social anxiety to other research findings in the general population: Social anxiety is "associated with relationship distress above and beyond depressive symptoms" (p. 310). Although only one study is included in this review, it indicated that anxiety disorders may affect many women in the postpartum period. Similarly, sub-clinical symptoms have an effect on postpartum women that may be overlooked. Although ADHD was not a component of research by Kingston, Tough, and Whitfield (2012), these researchers stated, "the current approach to the postpartum management of maternal mental health begins far too late" (p. 207).

Postpartum co-morbid disorders: ADHD mothers and executive functioning. Women with ADHD are likely to experience an exacerbation of their symptoms due to typical postpartum challenges such as loss of sleep and former patterns of daily routine; challenges that are not unique to women with ADHD. For example, Dennis and Ross (2005) studied the effect of loss of sleep and frequent infant crying on mothers' depressive symptoms. Not surprisingly, they reported that "the new onset of depressive symptoms in the first 8 weeks postpartum is strongly associated with infant sleep patterns, maternal fatigue, and sleep deprivation" (p. 191). Excessive infant crying also correlated with depressive symptoms (p. 192).

Postpartum challenges affect a mother's executive functioning skills; skills which women with ADHD already struggle to accomplish. In addition, they may have chosen to discontinue medication, which had previously supported them. Some symptoms of postpartum depression are similar to those of ADHD. For example: "psychomotor agitation observable by others (not just internal restlessness)",...[and] "diminished ability to think or concentrate or indecisiveness" (4<sup>th</sup> ed., text rev.; *DSM-IV-TR*; American Psychiatric Association, 2000, p. 369). Postpartum anxiety symptoms also overlap with ADHD symptoms, although not all of them are listed in a corresponding way in the *DSM-IV-TR* (2000) 4<sup>th</sup> ed., text rev. for ADHD, such as: "restlessness or feeling keyed up or on edge," "difficulty concentrating or mind going blank,"...[and] "sleep disturbance (difficulty falling or staying asleep)" (4<sup>th</sup> ed., text rev.; *DSM-IV-TR*; American Psychiatric Association, 2000, p. 476).

Banks et al. (2008) reported findings that both clinical and subclinical symptoms of ADHD symptoms "were related to higher comorbid maternal psychopathology" (p. 38). Higher levels of ADHD corresponded to higher levels of symptoms of anxiety, obsessive-compulsive, and hostility, but that women did not "overtly" express their feelings of hostility (p. 38). Banks et al. (2005) stated that their findings of obsessive compulsive symptoms in postpartum women with ADHD are new. They theorize that some symptoms listed on the Obsessive Compulsive Scale are similar to ADHD symptoms such as, "trouble remembering things," 'feeling blocked in getting things done,' 'trouble concentrating,' and 'your mind going blank" (p. 38). As a result, co-morbidity of ADHD and OBS may have been previously overlooked.

Most women receive a diagnosis of postpartum depression or anxiety from their obstetrical provider. These clinicians may not be aware of the intricacies of the inter-relationship of ADHD and these co-morbid disorders. Women with a diagnosis of ADHD may not be able to

adequately explain the differences and/or may not feel that their symptoms represent a co-morbid disorder. Women without a diagnosis of ADHD may be treated for the co-morbid disorder, but not for ADHD. Semple et al. (2011) recommended that pregnant and new mothers be screened at physician visits for both ADHD and postpartum depression symptoms.

Perinatal mood and anxiety disorders: Effect on the mother-baby dyad. The effect of maternal depression, anxiety and stress levels on the developing fetus is a field of research that has been investigated by multiple disciplines. Most recently, new developments in technology have made it possible to examine the role of genetics and epigenetics in gene expression of infants exposed prenatally to high maternal stress levels. Although research cannot be performed on humans, studies of animals have demonstrated that prenatal stress causes alterations in the HPA axis and brain development in the developing fetus (Sheridan & Nelson, 2009, p. 48).

The majority of research about the effect of maternal stress, anxiety and depression has been conducted through observations of mothers and babies during the postpartum period.

Postpartum stress has been shown to increase the likelihood of maladaptive coping strategies in the baby, in the mother, and in the mother-baby dyad relationship (Allen, 2001; Beck & Driscoll, 2006; Kingston, Tough, & Whitfield, 2012; Semple et al., 2011: Tronick, 2007). Kingston et al. (2012) reported findings from 18 studies that linked postpartum maternal stress with effects on infant development in four areas: "cognitive, psychomotor, behavioral, and socio-emotional" (p. 707). Weissman et al. (2006) report "children of depressed parents have higher rates of anxiety, disruptive, and depressive disorders that begin early, [and] often continue into adulthood" (p. 1389). Their research demonstrated a decrease in children's symptoms within three months, if mother's depressive symptoms were in remission.

# Mothers with ADHD: Effect of perinatal co-morbid disorders on mother-baby dyad.

The five research studies, included in this review about women with ADHD in early motherhood, included maternal screenings for comorbid risk factors. Results from the Brief Symptom Inventory (BSI-18) indicated a higher prevalence of depression and anxiety in women with symptoms of ADHD (Banks et al., 2008; Kryski et al., 2010; Ninowski et al, 2007; Semple et al., 2011; Watkins & Mash, 2009). However, these findings were factored out of the researchers' analyses, except for those of Watkins and Mask (2009): The intent of the remaining four research studies was to correlate ADHD symptoms directly with maternal cognitions and behaviors, and the possible effect on the mother-child dyad. Thus, there is very little research that investigates the link between the possible combined effect of ADHD and co-morbid disorders on the infant/mother dyad.

### Maternal Self-efficacy, Self-esteem, and Parenting Locus of Control and ADHD

Banks et al. (2008), Kryski et al. (2009), Ninowski et al. (2007), Semple et al. (2011), and Watkins and Mash (2009) reported effects of clinical and subclinical symptoms of ADHD in mothers on maternal behavior and on the infant-mother relationship. For example, Kryski et al. (2010) found that language and communication problems in mothers with ADHD created deficits in infant language acquisition. This finding lends support to findings about conversational challenges experienced by women with ADHD and extends it to the mother-infant relationship.

**Self-efficacy.** In a cross-sectional study, Ninowski et al. (2007) found that prenatal mothers with ADHD had lower positive expectations regarding the infant, their prospective maternal role, and maternal self-efficacy (p. 66). The study was not longitudinal. However it corresponded to a study of non-ADHD mothers by Pridham, Schroeder, and Brown (2000) in which data indicated that prenatal anxiety, depression, and marital conflict lowered a mother's

scores that measure self-efficacy in the prenatal period. Self-efficacy scores continued to be low in the first month postpartum, but unaffected by depression. At three months, Pridham et al. (2000) showed that the mother's sense of self-efficacy was more related to the infant's temperament than the psychosocial factors.

Leerkes and Burney (2007) noted a link between infant temperament and maternal self-efficacy amongst a sample of non-ADHD mothers. They reported that mothers' confidence erodes with babies who are easily distressed or cry for long periods of time. Mothers may react by feeling threatened or anxious and the diminished sense of self-efficacy stayed consistent from one month through three months postpartum (p. 49). Implications of these three studies by Ninowski et al. (2007), Pridham et al. (2000) and Leerkes and Burney (2007) indicate that a lower prenatal sense of self-efficacy may affect the first three months postpartum for mothers with ADHD, especially if the infant is easily distressed. Leerkes and Burney (2007) also demonstrated that the experience of parental warmth and acceptance in childhood enhanced self-esteem and self-efficacy in the prenatal period. Positive prenatal ratings of self-efficacy were strongly predictive of positive postpartum ratings of self-efficacy, thus linking prenatal self-efficacy and childhood parental acceptance to postpartum self-efficacy (p. 61).

Banks et al. (2008) correlated measures of parenting self-esteem, satisfaction, parental locus of control, and disciplinary styles with maternal ADHD symptoms. Mothers with high levels of ADHD symptoms, who had children three to six years of age, were reported to have lower scores in parenting self-esteem and parenting self-efficacy. These findings confirm those of Cutrona and Troutman (1986) in an early study of non-ADHD mothers: "low-self-efficacy leads to suboptimal performance of existing skills and a lack of persistence in problem-solving efforts ...a predominance of self-blaming...[and] higher levels of depression" (p. 1515). Watkins

and Mash (2009) studied mothers of six-month olds. They stated that "ADHD symptoms did not predict maternal self-efficacy over and above symptoms of psychological distress" (p. 80). They theorized that ADHD and psychological distress symptoms overlap, making it difficult to determine which accounts for lower scores in self-efficacy. Watkins and Mash (2009) also posited that the differences in their findings versus those of other studies about self-efficacy may be due to the use of different assessment tools. Differences in ages of children was not reported as a possible factor, but may have had bearing on the differences in findings. Watkins and Mash (2009) reported that high levels of maternal ADHD symptoms, especially of inattentiveness and forgetfulness, correlated significantly with a decrease in maternal satisfaction (p. 81).

External locus of control. Rucklidge and Kaplan (2000) found that women with ADHD or depression are more likely to view negative events as uncontrollable and global. The greater the degree of depression or ADHD symptoms, the more likely women were to have this "maladaptive attributional style" (p. 716). Although Watkins and Mash (2009) reported no correlation between ADHD and maternal self-efficacy, they did report that mothers with ADHD in their study tended to have an external locus of control - a seemingly contradictory finding.

Banks et al. (2008) stated that, "parents with an external parenting locus of control viewed their child's behavior as falling outside the reach of their parenting efforts" (p. 33). Banks et al. (2008) also reported higher scores of maternal perceptions of an external locus of control in participants with ADHD symptoms.

Maternal sensitivity and intrusiveness. Banks et al. (2008) correlated external locus of control with more coercive forms of discipline. The mothers in their study also had higher scores of inattentiveness and hostility; however, the mothers did not express hostility directly (p. 38). Semple et al. (2010) reported that higher levels of inattentiveness and sustained attention

correlated with maternal behaviors rated as less sensitive and more intrusive toward the baby. Low scores on maternal sensitivity scales were based on a "lack of behaviors requiring focused and sustained attention" (p. 467). Watkins and Mash (2009) observed an increase in "hostile-reactive behaviours in mothers of 'difficult infants'...as levels of maternal ADHD symptoms increased" (p. 82).

# **Maternal Identity Formation – Becoming a Mother**

Values and attitudes about mothering have changed dramatically in the United States over the past 50 years. The formation of maternal identity is a psychosocial-environmental construct that is recursive. Women may identify with or reject the larger social ideological construct of motherhood; but they are also judged by others and judge themselves as "good" or "bad" mothers according to it. Most research investigating the process of maternal role formation and identification in the perinatal period appears to have been published prior to the year 2000. More recent research approaches the topic from the perspective of role identification in relation to work identity.

The perinatal period and maternal identity. Mercer (2004) reviewed past research on maternal identity, previously defined as "maternal role attainment" (MRA) (p. 226). He reported that previous research attempted to assess maternal identity achievement in terms of progress in psychological and practical accomplishments during the prenatal and postpartum periods. Mercer (2004) identified the prenatal and early postpartum period as a "formal stage" (p. 227) in which the mother achieves MRA by imagining and then caring for her baby. He theorizes that mothers copy other mothers, rely on experts and view the baby as "unique" (p. 227). The mother progresses to the informal stage in which she learns to trust herself in her capacity to care for her baby. MRA was theorized to be achieved when the mother feels "a sense of harmony,

confidence, and satisfaction in the maternal role and attachment with the infant. She feels congruence of self and motherhood as she feels her performance is accepted by others" (p. 227).

Research by Pridham et al., (2000) concurred with that of Mercer. It assessed adaptiveness to mothering role in the first year postpartum and found that it was highest at four months of age. However, role adaptiveness decreased significantly and was at its lowest level by eight months. Symptoms of depression were a factor. Elek, Hudson, and Bouffard (2003) reported no increase in parenting satisfaction from 4 – 12 months postpartum, but an increase in maternal role self-efficacy. These contradictory findings may be due to the small sample sizes in each of the studies. They also impart the question: What factors accurately measure MRA?

Mercer (2004) reported that more recent studies are more nuanced. They measure the effect of depression, anxiety, baby fussiness, and support on MRA. Most significant is the study by Kretchmar & Jacobvitz (2002) that demonstrated that participants' recreated their relationships with their babies based on the participants' current relationships with their own mothers. Participants who remembered feelings of acceptance in childhood and had a current positive relationship with their own mothers were measured as being "more sensitive and less intrusive" in interactions with their nine-month old babies. In mothers with positive memories of acceptance, depression was not associated with maternal sensitivity; non-acceptance was linked to depressive symptoms.

Mercer posited that maternal role attainment is a more fluid concept than previously defined. He suggests four stages. Although he also correlated them with pregnancy and the first four months postpartum, he based the stages on factors other than measures of self-competence or self-efficacy, such as: "commitment,...attachment, learning,...physical restoration,...moving toward new normal" [for self and family, and]... "transformation of self" to include

responsibility for the baby (p. 231). He advocated for the term "Becoming a Mother" (p. 226) to define a transitional and continuous process.

Work and maternal identity. Two studies, included here, addressed the topic of mothering identity as it relates to work. Work has filtered into the psycho-social-environmental definitions of a mother's identity, with its attached labels of working mother and stay-at-home mother. Medved and Kirby (2005) reported that work/organizational language has become part of the "frame" (p. 464) in which society views the work of mothers. They argued that it creates impossible standards for mothers who are expected to meet work and family obligations and marginalizes minority mothers who do not have the same options as white, middle class mothers.

Johnston and Swanson (2006) investigated the "construction of mothering ideology" (p. 509) as it relates to work. Stay-at-home mothers, part-time working mothers, and full-time working mothers discussed their maternal identification in relation to their choice of employment status. Three concepts were investigated. (a) "Intensive mothering expectations" (p. 510), reported to be the primary ideology in North America; (b) happiness; and (c) "worker-parent identity and construction of different spheres" (p. 515). Intensive mothering expectations (IME) include the concept of mothers holding primary responsibility for the child, that the child's needs take precedence over the mother's (p. 510, and the mother will change her relationship to work in order to satisfy IME (p. 511). Overall, part-time working mothers reported satisfaction in all three areas. Stay-at-home moms reported that constant accessibility to the child was stressful: They felt incompetent, especially after losing patience with a child, and self-sacrificed rather than self-care (p. 513). They felt happy, but lonely and isolated and a loss of identity. Once the decision was made to stay-at-home, these mothers reported not feeling the tension to return to work and felt they were good mothers because caring for the child was a good opportunity for

the child (p. 515). Full-time working mothers had more difficulty with IME, such as feeling tired, rushed, that her time with children was fragmented with trying to complete household chores. However, they also framed the experience as a way to encourage independence in their child. Full-time working mothers had the lowest happiness rating. However mothers reframed this by saying that the child was better off because the mother felt better suited to work than staying home. Full-time working mothers were the only group that identified difficulty with maintaining both spheres of work and home; feeling guilty and out-of balance, but balancing over time (pp. 513-517).

Mothers with ADHD and maternal identity. Not surprisingly, no research was available about the process of transitioning to becoming a mother for women with a diagnosis of ADHD. It is likely that issues related to self-competence, self-efficacy, attachment, and societal expectations of motherhood have a similar effect on their transition to becoming a mother.

## **Attachment Theory and Maternal ADHD**

Attachment theory may provide a key lens through which to view the development of resiliency and risk factors in a child whose mother is diagnosed with ADHD. The mother-baby dyad is considered the primary attachment relationship in infancy. The parent's capacity to attend to and modulate infant emotional distress plays an important role in the development of the attachment relationship (Tronick, 2007; Zeanah & Doyle, 2009). Fonagy, Gergely, Jurist, and Target (2004) proposed that the development of the child's affective states and self-regulatory capacity are dependent on the way in which the parent communicates with him or her. In their research, Beebe et al., (2010) and Tronick (2007) viewed the infant as an active participant in a process of mutual regulation of affect and behavior.

Using dyadic systems theory, Beebe et al. (2010) examined face-to-face communication between 84 mother-infant dyads in an urban setting. Observations occurred at 4 months and 12 months of age using Ainsworth's Strange Situation model. Their observations noted a moment-to moment process of bi-directional coordination of interaction. "Affect-mirroring" (Fonagy et al., 2004, p. 8) is one pathway in which this was thought to occur. Beebe et al. (2010) examined interactive communication modes, including congruence of voice and face, proximity, touch, and gaze. Beebe et al. (2010) confirmed previous research findings by Tronick (2007) demonstrating that self-contingency and interactive contingency in the relationship "affects the infant's ability to attend, process information, and modulate behavior and emotional state" (Beebe et al., 2010, p.9). However, the research results of Beebe et al. (2010) also conflicted with some previous findings. Beebe et al. (2010) found that the degree of the mother's and the infant's self-contingency, or the "stability of one's own behavioral rhythms" (p. 113), rather than inter-active contingency, was found to be the most predictive of attachment relationship security.

Tronick (2007) described another dimension of mother-infant interaction as "interactive repair" (p. 341). As with Beebe (2010) and Fonagy et al. (2004), Tronick describe the infant-mother dyad as engaged in a moment-to-moment interactive process. However, Tronick (2007) theorized that it is the process of affective reparation in interactive relationships, rather than contingency that affects development and attachment. He described both the mother and the infant as moving from "coordinated (or synchronous) to miscoordinated states and back again over a wide affective range" (p. 341).

This dance of "mutual regulation" (p. 342) has been observed to occur in a matter of 3-5 seconds in infants less than 12 months of age (p. 203). Tronick described this interactive process as "messy" (p. 14) and that 70% of the time, most mother-infant interactions are "spent in

mismatched/ dyssynchronous states" (p. 203). Both mother and baby are involved in reparation. Tronick posited that, through a process of trial and error, each member of the dyad learned to evaluate the other's affective state by reading facial expression, tone of voice, and body language; to signal their own state effectively; and to adjust their behavior to accommodate the other (p. 342). Unrepaired mismatches or lengthy time lapses in repair were associated with negative affective states that had short and long-term consequences for each member of the dyad and in dyadic relationship. Midlevel sensitivity was associated with secure attachment relationships (p. 342).

Murray (2009) reported that infants of mothers with postpartum depression had a four-fold increase in the vulnerability of developing insecure attachment behaviors, especially of the insecure-avoidant type (p. 193). The findings of Tronick (2007) and Beebe may be one mechanism through which this occurs. Tronick (2007) noted that maternal depression was associated with withdrawal of affect from the infant-mother interaction or intrusion which disrupted the ability of the dyad to "mutually regulate" (p. 285) the interactive relationship. Murray (2009) noted that children of depressed mothers in longitudinal studies were observed to be less resilient and more vulnerable to experiencing depressive feelings themselves (p. 190). Taken together, this research suggests a potential for intergenerational transmission of maladaptive coping and depressive symptoms.

Maternal ADHD: Implications for the mother-infant attachment relationship. The research about attachment included in this review provides only a glimpse into the research that has been conducted on mother-child attachment formation. There are no studies specifically measuring contingency, affect mirroring, or dyadic mutual regulation in ADHD mothers and their infants. However, the research included here has implications for understanding the

development of an attachment relationship between a mother with ADHD and her child. For example, Semple et al. (2011) reported findings that mothers in her study with clinical and subclinical levels of ADHS symptoms scored low on maternal sensitivity scales based on a "lack of behaviors requiring focused and sustained attention" (p. 467). A mother's inattentiveness and/or intrusiveness, her difficulty with maintaining consistency in responsiveness, and her feelings of maternal self-efficacy and satisfaction may affect this dance of contingency between mother and child and affect their attachment relationship. The bi-directional relationship of these variables is an important consideration in understanding and addressing the development of a secure attachment relationship, and psychological health and well-being of both mother and child.

# **Treatment Options**

The most common and usually considered most effective treatment options for adults with ADHD are psychopharmacological (Dodson, 2005; Faraone et al., 2000; Humphreys, Garcia-Bournissen, Ito, & Koren, 2007; Kolar et al., 2008; Nadeau & Quinn, 2002; U. S. Department of Health and Human Services, National Toxicology Program [NTP] at the NTP Center for the Evaluation of Risks to Human Reproduction, [NTP-CERHR], 2005; Shields, Muza, Koski, & Willicams, 2012; Torgersen, Gjervan, & Rasmussen, 2008). A summary of medication options is followed by implications for treatment of women with ADHD in the perinatal period.

**ADHD medication options.** Stimulants, such as methylphenidate and amphetamines, are considered the first choice for most adults with ADHD (Dodson, 2005; Humphreys et al., 2007; Kolar et al., 2008; Nadeau & Quinn, 2002; NTP-CERHR, 2005; Torgersen et al., 2008). They reduce symptoms of ADHD including distractibility, impulsiveness, hyperactivity, and restlessness; and can improve working memory and other cognitive functioning (Kolar et al.,

2008; Nadeau & Quinn, 2002). A second line of ADHD medications includes: bupropion, atomoxetine, and desipramine (Kolar et al., 2011; Torgersen et al., 2008; U.S. National Library of Medicine, National Institute of Health [NLM-NIH], n.d.). They are generally prescribed for individuals who are intolerant of, or experience no relief from stimulants (Dodson, 2005; Humphreys et al., 2007; Nadeau & Quinn, 2002).

Medications for treatment of co-morbid disorders. Research available for this review on treating co-morbid disorders in adults with ADHD was very limited and relatively recent (Kolar et al., 2008; Michelson et al., 2003; Torgersen et al, 2008). It reflects the growing awareness of co-morbidity of mood, anxiety, and substance use disorders in adults with ADHD. Based on their findings, Torgersen et al. (2008), Kolar et al. (2008) and Nadeau & Quinn (2002) recommended prioritizing pharmacological and psychotherapeutic treatment for co-morbid disorders over those for ADHD in cases of active substance abuse and severe depression. However, Nadeau & Quinn (2002) and Solden (2005) also suggested that depression and anxiety may be secondary to ADHD and therefore recommend a combined treatment approach.

Non-pharmacological treatment options. Non-pharmacological treatments for ADHD have been receiving more attention recently. They include: (1) psychotherapy (Baker & Baker, 1996; Hallowell, 1994; Murphy, 2005; Solanto et al., 2010); (2) Cognitive Behavioral Therapy (CBT) (Emilsson et al., 2011; Kolar et al., 2008; Murphy, 2005; Safren, 2010; Torgersen et al., 2008); (3) Mindfulness Meditation Training and Dialectical Behavioral Therapy (Knouse & Safren, 2010); and ADHD coaching (Hallowell & Ratey, 1994; Kolberg & Nadeau, 2002; Kolar et al., 2008; Solden, 2005). Hallowell (1994) and Murphy (2005) recommended that psychotherapy be provided by a clinician knowledgeable about ADHD who can provide

psychoeducation; as well as address issues of self-esteem, marital/family conflict, and depression or anxiety.

Cognitive Behavioral Therapy (CBT). CBT is reported to have been effective in reducing core symptoms of ADHD and increasing skills such as time management, organization and planning in adults (Emilsson et al., 2011; Murphy, 2005; Solanto et al., 2010, Torgersen et al., 2008). Findings by Solanto et al. (2010), Emilsson (2011), and Murphy (2005) demonstrated that CBT training within a group setting may be more effective than individual CBT therapy. However, Murphy (2005) also cautioned that ADHD groups "can rapidly deteriorate into chaos" (p. 615) without effective leadership. CBT plus ADHD medication demonstrated the greatest positive results for management of ADHD symptoms in some studies (Knouse & Safren, 2010; Kolar et al., 2008; Safren et al., 2010; Solanto et al., 2010).

### Treating women with ADHD.

Effect of hormones. As of 2005, Quinn (2005) cited results from only two studies to date that investigated gender-specific issues in treatment of ADHD. Both studies investigated the effect of hormones on the effectiveness of amphetamines in females. Both studies presented data indicating that estrogen potentiates the effectiveness of amphetamines and that progesterone "dampened or diminished" (p. 583) the effect, even in the presence of estrogen. As a result, women with ADHD may experience cyclical differences in challenges with their ADHD symptoms and may benefit from counseling to manage their medications accordingly. Women may also experience greater difficulty with ADHD symptoms in the perinatal period, especially following the birth of the baby when estrogen levels drop precipitously (Behnke, 2003).

**ADHD** treatment options for the pregnant and/or breastfeeding mother. The U. S. Food and Drug Administration (U. S. FDA, n.d.) established "Pregnancy Categories" regarding the

safety classification of prescription medications. The FDA does not have a similar category for lactation. Most ADHD medications have been classified as Category C:

"Animal reproduction studies have shown an adverse effect on the fetus and there are no adequate and well-controlled studies in humans, but potential benefits may warrant use of drugs in pregnant women despite potential risks" (FDA, n.d.)

Some researchers have focused attention on the effect of ADHD medications on parenting and found that medication may reduce the risk of long-term negative effects of untreated ADHD on the mother, child and parent-child dyad (Chronis-Toscano et al., 2010; Chronis-Toscano et al., 2008; Chronis-Toscano & Stein, 2012). Mothers with ADHD, especially those with co-morbid anxiety and/or depression during the prenatal and postpartum period face a difficult choice: to benefit from continued ADHD medication or to take the risk of harming their fetus or child.

Counseling and Cognitive Behavioral Therapy (CBT) options. CBT may offer an alternative treatment option in the perinatal period. Two studies reported data about the effectiveness of CBT in managing symptoms of postpartum depression (PPD), but not co-morbid with ADHD. Schiller (2011) found that CBT, when used in combination with medication, is a more effective treatment for PPD, but that CBT alone was ineffective. Wylie et al. (2011) reported that CBT was equally effective to "routine primary care …non-directive counseling" (p. 53) were effective in improving infant - mother relationships; but counseling was the most effective of the three at the 18 month follow-up period. Ninowski et al. (2007) suggested that women receive psychoeducation and skill building in the prenatal period to address the "core symptoms of ADHD associated with problems with parenting" (p. 79); and that such treatment

may be able to reduce the incidence of co-morbid disorders and increase positive maternal-infant adaptation.

Silver (2010) recommends that women pro-actively educate everyone who may be affected by her decision to discontinue ADHD medication during the perinatal period (¶ 2). Relationships at home and work may be affected and specific support may be requested in that context. Forewarned may mean being better understood when symptoms recur.

#### **SUPPORT**

Postpartum depression and anxiety symptoms have been demonstrated to decrease in women receiving social support (Dennis & Letourneau, 2007; Leahy-Warren, McCarthy, & Corcoran, 2011; Wylie et al., 2011). Leahy-Warren et al. (2011) also reported findings that postpartum social support, especially from family and friends, increased scores of maternal parental self-efficacy. Cutrona and Troutman (1986) posited that social support can decrease a woman's risk of postpartum mood and anxiety disorders by positively influencing her sense of confidence and self-efficacy (p. 1515).

Partner support. Séjourné, Vaslot, Beaumé, Gourtausier, and Chabrol (2012) found that fathers who attended the baby's birth were more involved in infant care. Mothers' perceptions of fathers' involvement was strongly correlated with lower depression scores at two months postpartum. Séjourné et al. (2012) reported data showing that "lack of involvement in infant care increased the intensity of maternal depression" (p.135). Their study confirmed previous research about the inter-relationship between postpartum depression, maternal perception of lack of social support, and maladaptive cognitions about maternal role, such as self-efficacy. Risk and protective factors for developing maternal depression in relation to maternal fatigue in the first year postpartum were investigated by Wade, Giallo, and Cooklin (2012). Three out of four of the

key mediating factors were related to support, especially partner support: maternal fatigue and levels of "parenting stress, support need, support satisfaction and relationship quality" (p. 286) were linked to maternal depressive symptoms.

Inversely, Mercer (2004) reported findings that a mother's positive sense of self-efficacy in caring for her infant was related to marital and maternal role satisfaction. Mothers referred to a "conspiracy of silence" (p. 230) about the postpartum period that they felt they could not have managed without the partner's "physical help and confidence building" (p. 230). In a study of 2,172 parents, mutual relationship supportiveness was highest immediately after the birth but then declined (Howard & Brooks-Gunn, 2009, p. 137). The researchers theorized that "euphoria.... [and] the 'magical moment" (p. 137) after the birth subsides as life intervenes, thereby contributing to fluctuating levels of marital satisfaction.

Family support. There is growing evidence that ADHD has a genetic as well as environmental etiology (Simon et al., 2009, p. 204). It is likely that unrecognized and untreated ADHD in girls and/or parents results in family conflicts and strained relationships. However, Psychogiou, Daley, Thompson, and Sonuga-Barke (2008) reported data that support the concept of "similarity-fit" (p. 132) between a parent and child who both have ADHD and which may serve as a protective factor. The ADHD parents (mothers or fathers) in their study showed more empathy and understanding and had a more positive effect on their ADHD children than on their non-ADHD children, thereby lending support to the intergenerational transmission of acceptance and positive mother-infant interaction behaviors as described by Kretchmar and Jacobvitz (2002). Although ADHD can raise havoc in a family, it is also possible that a mother with ADHD may have a parent and/or siblings who understand her and can be uniquely supportive as she adjusts to becoming a parent.

**Professional support.** Couple/marital relationships are often strained when one or both members have ADHD: Couple/marital counseling is generally recommended (Baker & Baker, 1996, p.8; Nadeau & Quinn, 2002, p. 422). Women with postpartum depression were reported to have a significant decrease in symptoms after attending a therapeutic support group; partner involvement in the group enhanced their improvement (Wylie et al., 2011). However, it is likely that mothers with ADHD, in the first year postpartum, would find it challenging to attend group support meetings consistently.

Research appears not to have been conducted about the possible effect of support on the experiences of mothers with ADHD during the postpartum period.

### **Discussion**

I was able to locate only five peer-reviewed research studies for this literature review that specifically investigated the relationship between a mother's symptoms of ADHD and her parenting cognitions and behaviors as she navigates early motherhood (Banks et al., 2008; Kryski et al., 2009; Ninowski et al., 2007; Semple et al., 2011; Watkins et al., 2009). The researchers appeared to have broken new ground in choosing to study this topic. The reference lists supplied by each research article contained references to studies that are relevant to this topic, such as women with ADHD, perinatal mood disorders, and parenting a child who has ADHD.

The research articles were all written as collaborative efforts in variable combinations by the same eight authors and published from 2007 - 2010. They all drew their research participants from the same geographic audience and used similar recruitment methods. Differences in ethnicity, age, gestation, income or employment status (Ninowski et al., 2007) were found to be not significant. The participants were mostly white, middle-to-upper class, married women with

some university education. The studies were informed, as with this literature review, by previous research on topics, such as women with ADHD, attachment, and parenting. The researchers determined a set of variables by which to evaluate some aspects of the experience of ADHD mothers and parenting. Three of the studies were quantitative (Banks et al., 2008; Ninowski et al., 2007; and Watkins & Nash, 2009). Kryski et al. (2009) and Semple et al. (2010) conducted mixed method studies that included the use of video-taped sessions. However, none of these research studies included the voices of mothers with ADHD in their findings, as they tell their stories about their experiences with the postpartum period.

Further research that looks at protective and risk factors pertaining specifically to mothers with ADHD in the perinatal period is much needed. This information is critical to understanding women with ADHD and to providing informed treatment, when needed. My research study explored the lived experiences of mothers with ADHD in the postpartum period. Findings from this research included the richness of their stories. It added a dimension to understanding women's experiences that appears to have been missing from research up to this time. The information gained from my research study may be of interest to mothers with ADHD, to their support persons, and to the mental health and obstetrical professionals who care for them. It may provide direction for interventions that could reduce the challenges and support the strengths of mothers with ADHD. Thus, findings from this research have the potential to have long-term effects on the lives of mothers with ADHD, their children, and their families. Findings from this research also point to directions for further research.

The next chapter describes this research study's design and method, recruitment process, and data analysis methods.

#### **CHAPTER III**

### Methodology

The purpose of my research study is to expand the knowledge base about women with Attention-Deficit/Hyperactivity Disorder (ADHD): specifically, their experiences with challenges and coping strategies in the postpartum period, and the possible risk of suffering from perinatal anxiety and/or depression. My major research question is as follows: How do women with a diagnosis of Attention-Deficit /Hyperactivity Disorder (ADHD) experience and cope with the challenges of being a parent in the first twelve months postpartum? My secondary question is, how does perinatal anxiety and/or depression impact their experiences? My tertiary question is as follows: What role do supports play in mediating their experiences?

### **Method of Inquiry**

Very little research has been conducted about women with ADHD and even less about the effect that ADHD symptoms may have on a woman's experience of parenting her new baby. Thus far, research has been quantitative in design and indicates that women with ADHD may be at higher risk for experiencing postpartum depression and/or anxiety Banks et al. (2008). Data from the research questionnaires lend themselves best to deductive analysis. Previous surveys did not easily allow for the "aspects of human lives...[that are]...messy, interconnected, and ever-changing" (Padgett, 2008, p.6) for which qualitative research is better suited. Minimal qualitative data has been reported in research studies to date.

I chose to use a mixed methods research design including narrative interviews and an internet survey, to explore the experiences of women with ADHD in the postpartum period. A description of the quantitative study methods portion of this research is followed by a description of qualitative study methods. Quantitative and qualitative data were analyzed separately. They converged in the summary of my findings (Angell & Townsend, 2011). For ease of reference, the two portions of this research are referred to as "quantitative study" and "qualitative study" throughout the remainder of this document.

### **Quantitative Study Methods**

My initial research plan was to create a multivariate, mixed-methods survey to be operationalized through Survey Monkey© (http://www.surveymonkey.com) and completed by mothers with a child between 2–36 months old, inclusive of participants who did and did not have a diagnosis of ADHD. My plan was modified when I was offered the opportunity to work collaboratively with an organization called MotherWoman (http://www.motherwoman.org) on a survey tool they hoped to develop to evaluate their support groups for mothers.

MotherWoman is a non-profit organization serving the needs of mothers and families in Western Massachusetts. One of its aims is to improve quality of care for women who are struggling with perinatal emotional complications (e.g., depression and anxiety) and address barriers to care at the individual, provider, system, and policy levels. They train women to facilitate peer-led, women's support groups using a strengths-based model designed by MotherWoman. The groups offer social support for mothers across the lifespan, although the vast majority of the women are moms who have children under the age of 2 years. Two of the groups are focused on postpartum emotional complications.

MotherWoman chose Smith College faculty member, David Burton, PhD, to be the lead investigator of the research. I was invited to add some of my research questions to the survey (see Appendix A: Quantitative Study Permission to Locate Research @ MotherWoman). We designed a cross-sectional internet survey using literature-based questions to measure factors, such as support and depression (see Appendix B: Quantitative Study Literature-based Questions for MotherWoman Survey) for the purpose of: (a) evaluating the relationships between the literature-based questions and (b) assisting MotherWoman in developing a needs assessment based on experiences of recent and current participants. Dr. Burton submitted the Human Subjects Review (HSR) Application to the Smith College Human Subjects Review Committee.

Nature of participation and inclusion/exclusion criteria. All survey participants were women who had been or were currently involved with MotherWoman groups at some point in the past 13 years. They had to be on MotherWoman's extant email list of prior or current participants. They had to have access to computers where they could answer the survey questions in relative privacy. They had to be able to read English. Women who were currently pregnant with a first child were excluded from participation.

Inclusion/exclusion criteria were listed at the beginning of the Internet survey. If the person self-assessed that she did not qualify, she was sent to a "Thank You But You Do Not Qualify Or Are Not Interested" page. A qualified participant then proceeded to the Informed Consent and clicked "agree". If she did not consent, she was again sent to a "Thank You" page. No responses were saved from participants who chose to withdraw from the study before electronically submitting the survey. After answering questions related to the literature-based measures, the participant was asked to answer brief, salient, demographic questions. Anonymity of participation was ensured in accordance with HSR guidelines.

Respondents were offered a choice of five incentive gifts after electronically submitting their survey. They were invited to follow a link to a secondary Survey Monkey© survey in which they could enter their name, address, and choice of incentive gift. The investigators sent a list of names and incentive choices to MotherWoman staff and Deans Beans© (http://www.deansbeans.com) (one of the incentives) every week during data collection. A simple Thank You card was mailed with the incentive to the participant. A link to the survey response database and the gift response database was separated and kept confidential. The gift database was destroyed on April 30, 2013.

Timeline and recruitment process. The Human Subjects Review Committee (HSR) granted approval for the research on March 1, 2013 (see Appendix C: Quantitative Study HSR Approval Letter). MotherWoman staff emailed the first study invitation to all past and current group participants on March 21, 2013 (see Appendix D: Quantitative Study MotherWoman Survey Invitation). Second and third reminder invitations were sent within 7-14 days of each other, on March 28 and April 11, respectively. As the surveys were anonymous, all potential participants received all three invitations. No one was forced to participate and there were no consequences for not participating. Out of 218 invitations mailed, 62 responses accepted and completed the survey for a response rate of 28.4%.

**Data collection.** Participants were given the option to respond to four sets of survey questions related to this research study about mothers with ADHD. Questions 16 and 17 are related to an ADHD diagnosis by a physician, psychologist or mental health professional. Three response choices were offered: "Yes", "No", or "No, but I suspect I had/have ADHD" (See Figure 1. Quantitative Study ADHD Diagnosis Questions). This last response option was included in recognition that: (a) females are diagnosed with ADHD at less than half the rate of

males in childhood (Akinbami et al., 2011); (b) some women are diagnosed in adulthood, but at half the rate as men (Kessler et al., 2006); and (c) women with low incomes may not be able to afford to be accurately assessed for ADHD.

- Question 16 Prior to or during your attendance at MotherWoman groups, did you have a diagnosis of Attention Deficit/Hyperactivity Disorder from a physician, psychologist or other mental health professional?
- Question 17 Do you currently have a diagnosis of Attention Deficit/Hyperactivity Disorder from a physician, psychologist or other mental health professional?

Figure 1. Quantitative Study ADHD Diagnosis Questions.

Response choices: "Yes", "No", or "No, but I suspect I had/have ADHD".

Changes in executive functioning from pre-pregnancy to post-birth were measured using the ASRS-v1.1© Symptom Checklist (Kessler et al., 2005) (see Figure 2. ASRS-v1.1© Adult ADHD Screening questions). The first four questions of the ASRS-v1.1© address executive functioning; the last two questions address activity level. However, the entire ASRS-v1.1© was included for potential screening validity and also for comparison purposes. The purpose of the scale was not identified to participants completing the survey. Participants were prompted to answer the six-question checklist two times. Question 18 prompted the participant to recall her experience before she was pregnant or had a child. Question 19 asked about her experience since the birth of her first child.

Data analysis: Aggregate versus individual analysis. Responses to the ASRS-v1.1© questions (Kessler et al., 2005) were aggregated and scored according to the screening criteria established for a positive screening for a potential diagnosis of ADHD (http://www.addcoach4u. com/adultaddtest.html). Responses to each question were given a numerical score of 1 (Never)—5 (Very often). The total responses that met the ASRS-V1.1© criteria for a positive or negative score per question were added together and each question received a rating of meeting or not

meeting the ASRS-V1.1© criteria. For example, the number of respondents who answered "1" or to "2" to Question 1 were added together for a total negative score; those who answered "3", "4", or "5" were added together for a positive score. The aggregated results of all questions determined if the aggregated group of all respondents met or did not meet the ASRS-v1.1© criteria which requires that at least four out of the six questions receive a positive score. Prechild and post-birth responses were compared per question and as a total score.

Question 18 – Before you were pregnant or had children...

Question 19 – Since your first baby was born...

How often did you (before children) /do you (currently)....

- 1. Have trouble wrapping up the final details of a project once the challenging parts are done?
- 2. Have difficulty getting things in order when you had to do a task that required organization?
- 3. Have problem remembering appointments or obligations?
- 4. Avoid or delay getting started when you had a task that required a lot of thought?
- 5. Fidget or squirm with your hands of feet when you had to sit down for a long time?
- **6.** Feel overly active and compelled to do things, like you were driven by a motor?

Figure 2. Adult ADHD Self-Report Scale (ASRS-v1.1©) Questions (Kessler et al., 2005). Response options to the ASRS-v1.1© were designed according to a likert scale in ascending order of difficulty with the experience (1-5): "Never", "Rarely", "Sometimes", Often", "Very often". The ASRS-v1.1© was used in the quantitative study as part of the MotherWoman (MW) questionnaire. It appeared as questions #18 and #19 near the beginning of the MW questionnaire. Participants in the qualitative study were also asked to respond to the ASRS-v1.1 questions, but at the end of the narrative interview sequence.

Limitations to data analysis. Due to the overall length of the survey, open-ended, qualitative questions were not posed that specifically asked a woman with a diagnosis or suspected diagnosis of ADHD about her experience with the support group. Likewise, open-ended questions were not asked about experiences related to challenges with executive functioning for women with or without an ADHD diagnosis.

### **Qualitative Study Methods**

I designed a parallel process for my research study that simultaneously pursued qualitative data independently from the quantitative collaborative research with MotherWoman. I

was unable to locate research studies that included the voices of mothers who have a diagnosis of ADHD as they tell their stories about their experiences with the first year postpartum. The goal of narrative interviews was to explore women's experiences with challenges, coping strategies and support.

Nature of participation and inclusion/exclusion criteria. For practical and ethical reasons, and on the advice of my advisor, this study was limited to participation only by women who had already received a diagnosis of ADHD from a physician, psychologist or other mental health professional. Sample eligibility criteria were open enough to allow diversity of experience, but limited some variables that might otherwise have broadened the findings too much to make useful comparisons (e.g., adoptive mothers) (see Figure 3. Qualitative Study Inclusion/Exclusion Criteria).

Inclusion criteria

- Participant self-identifies as having a diagnosis of ADHD from a psychologist, a doctor or a mental health practitioner Participant is 18 years of age or older.
- Participant has at least one child between 2 60 months of age at the time of the interview. (Initially set at 2-36 months to minimize recall bias. Once recruitment began, an HSR addendum was approved to raise the age to 60 months due to concern about too severely limiting the pool of participants.)
- Participant has given birth to this child.
- Participant is a member of any race or ethnic group.
- Participant is 18 years of age or older
- Participant is able to read and speak English.

Exclusion criteria

Anyone who does not meet the inclusion criteria

Figure 3. Qualitative Study Inclusion/Exclusion Criteria.

**Timeline and recruitment process.** I submitted a Human Subjects Review (HSR)

Application to the Smith School for Social Work only for the qualitative study portion of my

research (see Figure 4. Qualitative Study HSR Approval Timeline). Final approval was received on February 18, 2013 (see Appendix E: Qualitative Study HSR Approval Letter).

January 8, 2013: Qualitative Study research proposal – Submission of Human Subjects

Review (HSR) application to Smith HSR Committee

February 3, 2013: HSR Committee requested revisions be made. February 15, 2013: Revisions submitted to HSR Committee.

February 18, 2013: Research proposal approved.

March 1, 2013: HSR Amendment request made to HSR Committee.

March 5, 2013: Amendment approved.

Figure 4. Qualitative Study HSR Approval Timeline

**Recruitment.** The following is a summary of recruitment efforts undertaken to enlist individuals, agencies and programs in assisting me with participant recruitment. It is followed by a summary of participant recruitment efforts.

Support for recruitment efforts: February 24 – April 4, 2013. Individuals, agencies, and programs in Western Massachusetts supported my efforts to recruit participants for this study. The initial HSR application included nine letters of support. After further evaluation, it was clear that a study amendment should be submitted to expand the inclusion criteria. An Amendment Request to the HSR committee was approved for the following changes: 1) Support letters from new recruitment sites could be submitted after completion of the project rather than waiting for HSR approval before making use of a site's resources; 2) The age of the child was raised up to 60 months from the original 36 months in the recruitment inclusion criteria (see Appendix F: Qualitative Study HSR Amendment Approval).

Efforts to solicit support from new recruitment sites included visiting potential sites, attending networking meetings, emailing contacts, and cold calls. I created an informational letter about the research that could be left at sites for later follow-up, and another letter that could be emailed to professionals. A generic letter of support form that included options for support

that could be checked off and signed immediately facilitated the process (see Appendix G: Informational Letter for Potential Recruitment Sites; Appendix H: Email Informational Letter for Professionals; Appendix I: Generic Recruitment Site Support Letter Form).

Twenty-one sites agreed to assist in participant recruitment efforts (see Appendix J: Recruitment Sites: List of Signed Letters of Support). Nine potential sites declined. I received the last agreement on March 25, 2013. Assistance from recruitment sites included: (a) posting flyers in their locations; (b) sending flyers and informational paragraphs to potential participants and professional contacts via established email list serves; (c) posting flyers or informational paragraphs about the research project on websites and face-book pages; and (d) permitting me to make presentations at meetings (see Figure 5. Qualitative Study Summary of Recruitment Site Efforts to Recruit Study Participants). I remained in contact with recruitment supporters, following-up on recruitment efforts through April 4, 2013.

Post Paper Flyers Post Email Flyer Email list serves Websites Facebook© Tweet Presentations – Professionals Presentations to Families	19 sites 10 sites 10 sites 10 sites 6 sites 1 site 2 meetings 5 events	Extensive list serves Extensive contacts Extensive contacts Extensive contacts 15 Agencies present 57 Families present
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Figure 5. Qualitative Study Summary of Recruitment Site Efforts to Recruit Study Participants. "Sites" refers to recruitment sites, such as agencies, organizations, family centers. Professional presentations were made at meetings of the Hampshire County Perinatal Task Force and the Franklin County Perinatal Task Force. Presentations to families were conducted at recruitment sites, such as family centers and events at childrens' libraries.

Participant recruitment: February 24 – April 15, 2013. I created the following participant recruitment materials to be used by recruitment sites: Recruitment Flyer (see Appendix K); Description of Research for Email, Websites and Facebook® Accounts (see

Appendix L); and Recruitment Presentation Script (see Appendix M) that I used at sites that offered me the opportunity. Inclusion criteria and my contact information were included in all recruitment materials. A cell phone number was purchased for the length of the project and disconnected when research was completed. I used my Smith College email address.

More than 50 paper flyers were posted on community bulletin boards in Hampshire, Hampden and Franklin counties at sites such as libraries, community centers, shopping areas, and coffee shops. I presented information about the study at two meetings of professionals who work with women in the perinatal period in Hampshire and Franklin Counties. An additional five presentations were made to parents attending family centers and children's library programs (see Appendix N: Recruitment Presentations and Community Bulletin Boards).

Electronic media was the most effective method of recruiting this population of women. Most potential participants indicated they had received recruitment information via websites and Facebook© postings, or from friends who had been contacted through electronic media sources. Several women had seen the information in more than one location. Two women were referred by professionals who had received the information via professional email list-serve postings. A woman living in Florida saw the posting via a link from website she frequents to a website of one of the support resources for this research.

Participant contact/ Ethics and safeguards: March 6 – April 15, 2013. No effort was made to recruit participants from the MotherWoman survey respondents. The two parts of my research may have intersected with shared participants, but anonymity of the survey responses and respect for confidentiality prohibited me from accessing this information.

Contact with potential participants was limited to describing the study (e.g., purpose, length of interview, taping interview, confidentiality), listing eligibility criteria, and scheduling

the interview. Further descriptive information was emailed to a few women at their request. Fifteen women responded to the recruitment postings. Of these women, nine were included in the study and interviewed. All email addresses and phone numbers that I received from interested persons who were not interviewed, were destroyed on April 15, 2013.

Interview locations were chosen in accordance with HSR guidelines to ensure safety and confidentiality. Three interviews took place on the Smith College campus. Five interviews were held in participants' homes for reasons such as social anxiety, transportation, and cost of childcare. Three children under the age of three were present during parts of 2 interviews. Children over the age of three were at home during one of the home interviews, but the discussion paused when they were present. Transcriptions do not include conversations of any individuals other than the participant and me. I established an account with Skype<sup>TM</sup> (http://skype.com) in order to interview a participant living in Florida.

Pre-interview procedure. An Interview Procedure was created to ensure that the sequence and all parts of the interview would happen consistently with each interview. The Informed Consent was created in accordance with HSR guidelines (see Appendix O: Informed Consent). Four participants received copies of the Informed Consent in advance of the interview, but it was reviewed with all participants at the time of the interview. I relied on participants to self-screen for eligibility; no verification was required. Their signature on the Informed Consent indicated that they agreed that they met the criteria. Two copies of the Informed Consent were signed by both parties and the participant received one copy.

Participants were provided with resource lists of area mental health and support resources related to ADHD, postpartum, anxiety and depression (see Appendix P: Resource Lists for Participants). Participants were given a \$15 gift card to Target® immediately after signing the

Informed Consent. They were told that they could keep the gift card, even if they chose to withdraw from the interview at any point thereafter. The offer of a gift card was included in recruitment materials.

All interviews were recorded with a personal recording device. The audio recorder was started after the Informed Consent was signed. It was paused and resumed during three interviews at the participant's request. Interviews lasted between 60 - 90 minutes long.

Interviews that exceeded 60 minutes were continued only with the participant's permission.

The Florida participant's interview was arranged for the day after she contacted me. I emailed the Informed Consent form to her. We reviewed it on Skype<sup>TM</sup>. She signed her copy in my view and showed it to me over the Skype<sup>TM</sup> broadcast. She scanned the Informed Consent and emailed it to me. I mailed her a copy with my signature and her Target Gift Card.

Data collection. Narrative data was collected using a flexible, open-ended interview guide (see Appendix Q: Interview guide). The Interview Guide began with an initial question sufficiently open to interpretation to address the exploratory nature of the study. Follow-up probes were used to encourage participants to elaborate on issues they had raised. I also used follow-up probes to guide participants to address specific issues related to my research questions. The literature review, in addition to my background as an educator of women in the perinatal period, informed my decisions regarding follow-up probes.

Embedded in the interview process was a self-developed, 2-part "Coping with Challenges Scale". (See Figure 6. Coping with Challenges Scale.) I introduced the scale at the start of the interview. As I listened to the participant speak, I wrote an identified challenge on one of the papers. The participant rated her experience of the degree of challenge according to a likert scale and then rated the way she felt she coped with the challenge according to another likert scale.

Each challenge identified by the participant was rated on a separate paper and coded to correspond to the participant for later reference.

How much of	f a chall	enge was it for you?		
1	2	3	4	5
Little bit		A lot		Huge
How do you	feel you	coped with it?		
1	2	3	4	5
Coped well		Coped, but it was hard		Overwhelmed

The ASRS-v1.1© (Kessler et al., 2005) was completed twice by each participant at the end of the interview regarding her experience with symptoms: (a) before she was a mother and (b) in the first year after her baby's birth (see Figure 2. Adult ADHD Self-Report Scale (ASRS-v1.1©), p. 43). Salient informational and demographic questions were requested at the end of the interview (see Appendix R: Informational and Demographic Questions).

Limitations. One complicating factor in data collection was that five of the participants had more than one child. Participants were asked to consider the youngest child when answering questions to minimize recall bias, especially if the youngest child was more than one year old. However, as interviews proceeded, mothers often compared their experiences with each child and the result was usually a richer, more complex narrative than would have been achieved if I had been rigid in my expectation.

The Coping with Challenges Scale presented problems with interpretation of the term "coping." Data collected is a mix of coping strategies and attitudes or emotional consequences of

coping with challenges. This distinction was not always explicitly made on the paper copies or in narratives.

**Completion of interview.** At the close of the interview, the mother was thanked for her participation. I reminded participants that they had the right to contact me by April 20, 2013 to request that all or part of the interview be excluded from this study. None of the participants contacted me to request this.

All recordings were downloaded to my computer. I chose to transcribe interviews thoroughly in order to have access to all aspects of the interviews for data analysis. Names and locations and other identifying information were disguised to protect confidentiality. Audio recordings and transcriptions were removed from my hard-drive upon completion and stored on CD's. All materials generated from the interviews are stored in a secure, locked location.

Informed Consent forms are stored in a separate, secure location.

**Data analysis.** Elements of two qualitative approaches to data collection and analysis were used for analysis of the qualitative study: grounded theory and Interpretative phenomenological analysis.

Grounded theory. Modified grounded theory was used as one method of data gathering and analysis for this study. Using the constant comparison aspect of grounded theory (Padgett, 2008, pp. 32-33), interview questions were modified slightly as the interviews progressed. For example, the "Coping with Challenges" scale presented difficulty with interpretation starting with the first interview. The term "coping" was open to interpretation: immediate coping vs. retrospective coping and strategic coping vs. emotional coping. With each subsequent interview, I refined the interpretation of coping using what previous respondents had suggested. I offered all those interpretations, but asked respondents to interpret it as they wished. Some women used

all comparisons in all questions, while others limited it depending on the challenge identified.

Data analysis of "coping" is muddy because of this. Data analysis of "coping" involved the use of narrative responses to supplement the "Coping with Challenges" scales. Had there been more interviews, this may have resulted in greater consistency and usefulness.

Narrative transcriptions were reviewed using grounded theory to organize for themes. A list of over 15 major themes and an additional 10-15 subthemes per major theme were generated and evaluated. With the assistance of my thesis advisor, these were collapsed into 5 themes and an attempt was made to do line-by-line analysis of the themes using non-interpretative analysis.

Interpretative phenomenological analysis. A major difficulty arose in the analysis in the recognition of overlapping themes. A challenge raised by a participant could have several equally salient thematic codings. For example: participants who identified being late for appointments, related this challenge to difficulties with executive functioning, exhaustion, partner relationships, and/or social anxiety. It was difficult to determine if my codes should relate to the challenge itself or to my interpretation of it and into which category it belonged. My interview questions had placed the participant in the role of expert and encouraged participants to reflect on their experiences. Although I had only conducted a single interview with each participant, each interview had yielded a rich description of experiences (Padgett, 2008, pp. 35-36). As a result, I chose to focus on elements of interpretative phenomenological analysis for the majority of the analysis. Coding of themes was based on inductive analysis using the participants' identification of challenges rather than on my interpretation of the challenge as it would fit into a set of ADHD-related symptoms, such as executive functioning. Themes were related directly to the research question, but I chose to "seek out idiographic meanings in an

attempt to understand the individual" through the narrative (Finlay, 2009, p. 9). Thus, verbatim responses were preferenced rather than interpretations and generalizability of findings is limited.

Analysis of responses to the ASRS-v1.1© (Kessler et al., 2005). Data collected from participant's responses to the ASRS-v1.1© questions were analyzed according to the same method detailed in the quantitative study. Results were individualized per participant. Pre and post-baby comparisons were noted. Results were also aggregated for a total response rate of participants, as was done in the quantitative study.

#### Limitations and biases.

Sample size. In spite of extensive recruitment efforts through resource supports, the sample size (N=9) was less than the recommended size for qualitative research. Recruitment was restricted geographically to western Massachusetts due to time and resource constraints. Many recruitment supports were generous with their resources, but the audience was circumscribed by the choice and availability of recruitment sites and potential participants' access to the media used to recruit, especially electronic media such as web sites, Facebook (http://www.facebook.com).

The eligibility criteria were a limiting factor to achieving the optimal *N*=12-15 participants. Raising the criteria of the upper age of the child from the initial 36 months to the later 60 months allowed eligibility for two of the participants. However, recall bias presented a complicating factor for women whose child was older than two years of age. Interviewing mothers with multiple children presented some challenges in analysis of data because they did not remain consistent in referring to the experience of the youngest child. However, their perspectives added dimensions to the interviews that would have been missing if only mothers with one child were included in the sample.

Choice of interview questions. The tone of the interviews was flexible and exploratory in nature. However, my professional background in working with women in the perinatal period influenced the subjective choice of language that was introduced to participants (i.e. "challenges", "coping", "strengths", "support"). It may have prevented alternative possibilities from being raised and examined throughout the interviews. For example, meaning-making bias was imposed by ascribing labels to the numbers on the Coping with Challenges likert scale. Due to the small number of participants and weaknesses in the design, the scales cannot be used to quantify and compare participants' responses to each other. However the scales were very useful in helping participants focus on self-identified important issues in the interviews and examine them. The scales assisted me in understanding the relative impact of the challenging experiences as identified by a participant. They provided a common language for talking about them and comparing them.

ASRS-v1-1© (Kessler et al., 2005) questions. Participants in the qualitative study were given the opportunity to comment on their reasons for choice of responses to the ASRS-v1.1© questions. These comments indicated the level of interpretation that respondents may use to answer these questions. Some questions are compound questions and participants found it difficult to answer with a single response. The choice to place these questions at the end of the interview may also have biased responses because participants had had an opportunity to identify and comment on challenges that were also asked within the ASRS-v1-1© questions.

### Merging Quantitative and Qualitative Studies

The difficulty in doing a mixed method study is in wedding two very different philosophical bases of research design: the deductive, quantifying nature of quantitative research and the inductive, thematic, observational nature of qualitative research. However, the very small

response rate of women with ADHD in both the quantitative and the qualitative studies limited the scope of comparison appreciably (Padgett, 2008, p. 233).

Despite the small data sets, the mixed method design of my research offered the opportunity to compare ASRS-v1.1© scores between the quantitative and the qualitative studies. The aggregated scores of each study were compared to each other (p. 233). As a result, a comparison of scores between a majority of women without a diagnosis of ADHD was compared to a group of women with an ADHD diagnosis. Their pre- and post-baby scores were compared to each other. Data from the results are included in the findings chapter.

The next chapter is an analysis of findings from both the quantitative and qualitative portions of this research study. In addition, a possible comparison of the two data sets is considered.

#### **CHAPTER IV**

#### **Findings**

The purpose of my research study is to expand the knowledge base about women with Attention-Deficit/Hyperactivity Disorder (ADHD): specifically, their experiences with challenges and coping strategies in the postpartum period, and the possible risk of suffering from perinatal anxiety and/or depression. My major research question is as follows: How do women with a diagnosis of Attention-Deficit /Hyperactivity Disorder (ADHD) experience and cope with the challenges of being a parent in the first twelve months postpartum? My secondary question is, how does perinatal anxiety and/or depression impact their experiences? My tertiary question is as follows: What role do supports play in mediating their experiences?

This study made use of both quantitative and qualitative methods and used two samples. Sample characteristics of the quantitative study's findings will be followed by those from the qualitative study.

#### **Sample Characteristics**

Quantitative Study. A total of 65 women (29.8%), out of 218 women who were sent invitations, completed the MotherWoman survey. All respondents in the quantitative study had attended a MotherWoman support group within the last 13 years. The majority of respondents (91%) indicated that they began attending MotherWoman groups when their first or second child was between 0–11 months of age. Respondents were not asked the age of the youngest child at the time of completing the survey, but only 19 of them (33.9%) were still attending a group.

Fifty-nine (90.7%) out of the 65 respondents to the survey answered the demographic question regarding annual income as follows: < \$50,000 (28.9%); \$50,000-\$100,000 (50.8%); and >1\$100,000 (20.3%). Fifty-nine (90.7%) out of the 65 respondents to the MotherWoman survey answered the questions related to this study's research topic: Questions 16, 17, 18, and 19.

Survey Questions 16 and 17 - ADHD diagnosis. Responses to survey questions 16 & 17 regarding an ADHD diagnosis are summarized as shown in Table 1. The majority of respondents denied an ADHD diagnosis prior to the birth of their first child; the number of women suspecting a diagnosis and having a diagnosis was equal. After the birth, the number of respondents who reported a diagnosis of ADHD decreased by one person and those without a diagnosis increased correspondingly; while those women suspecting a diagnosis remained the same. No qualitative data was requested for these questions; thus there is no explanation for this difference.

Table 1

Quantitative Study ADHD Diagnosis Questions 16 & 17

	Respondents to question n= n (%) as compared to total survey n=65	Diagnosis type out of respondents to question $n = n(\%)$ out of 57 total $(n=57)$
#16 ADHD Diagnosis before pregnancy of 1 <sup>st</sup> child	59 (91)	a. n=3 (5.1) b. n=3 (5.1) c. n=53 (89.8)
#17 ADHD Diagnosis since child's birth postpartum	59 (91)	a. n=2 (3.4) b. n=3 (5.1) c. n=54 (91.5)

Note: a. = ADHD Diagnosis; b. =Suspected ADHD Diagnosis; c. = No Diagnosis or Suspected

Insufficient response rate. The overall response rate to the MotherWoman survey (29.8%) and of the sample size for the ADHD questions (N=59) is not significant for further statistical analysis. Although the distribution of women with and without ADHD in this sample corresponds to the estimated national distribution of all adults with ADHD of 2.5% (Simon et al., 2009) to 12% (Akinbami et al., 2011), it cannot be assumed that this is accurate for all

MotherWoman group participants. No conclusion can be made about the relationship between ADHD and perinatal emotional complications; nor can one be made about the relative benefit of MotherWoman groups for women with ADHD. The sample size is also insufficient for further detailed comparative analysis between the three diagnostic groups of respondents according to other variables measured in the questionnaire.

Qualitative study sample characteristics. The qualitative sample consisted of nine mothers (*N*=9), all of whom identified as having an ADD or ADHD diagnosis. As shown in Table 2, the average age of participants was 35 years with a range of 26–45 years. The average age of the youngest child was 21 months, with an age range of 3-47 months; however the majority of children were 18 months or younger (67%). Just over half of the participants also had older children (56%). The majority of participants were currently married (N=8; 89%) and one was separated, however, one married participant was undergoing a trial separation.

The majority of participants had advanced degrees (66%). One participant had not completed high school. Income was equally split in each range of income on the demographic questionnaire; four participants (44%) had incomes of ≤\$50,000 and five (56%) had incomes greater than \$50,000. Most participants were White (44%). Two participants indicated that they identify as White-Hispanic (22%) and two participants identified as African American (22%). One participant identified as White-"Anunnaki"; not part of an ethnicity or race of this world. Due to the confidential nature of the quantitative survey, it is not possible to know if there is an overlap of participants in both quantitative and qualitative studies.

Table 2

Qualitative Study Participant Sample Characteristics

	All participants			
	(n=9) n (%)	Range		
Characteristic	when applicable	(when applicable)		
Age (mean)	35 years	26–45 (median=35)		
Race				
White	4 (44)			
African American	2 (22)			
White/Hispanic	2 (22)			
White / "Anunnaki"	1 (11)			
Age of youngest child (mean)	21 months	3-47 months (median=10 months		
Child ≤ 18 months	6 (67)			
Other children <18 years				
# Participants with other	5 (56)			
# other children (mean)	2	1-6 children (median=2)		
Marital status				
Never married	0 (0)			
Currently married	8 (89)	including 1 trial separation		
Separated/divorced	1 (11)			
Education				
<high school<="" td=""><td>1 (11)</td><td></td></high>	1 (11)			
Technical school	1 (11)			
College graduate	3 (33)			
Graduate school	3 (33)			
Income (in \$1,000)				
<20	2 (22)			
20 - 50	2 (22)			
50 - 75	2 (22)			
75 - 100	2 (22)			
>100	1 (11)			

As shown in Table 3, participants in the qualitative study had been diagnosed with ADD or ADHD at between 5-42 years of age, but the majority had been diagnosed between the ages of 25–35 years. The diagnosis of ADD or ADHD was relatively new for the majority of women. Six women had been diagnosed within the last 10 years, four of whom were diagnosed within the last four years. All women were diagnosed before the birth of their youngest child. Three women had additional children and two of these women were diagnosed after the birth of a previous child.

Table 3

Qualitative Study Participant Diagnosis of ADHD

	Mother's current	Age at diagnosis	Years elapsed	Age of youngest	Ages of other	Mother's Diagnosis	ADHD Classification
	age		since diagnosis	child (months)	biological children	made by	
1	31	6	25	3 months	2 years	Psychologist	Inattentive
2	35	32	3	5m	0	Psychologist	Combined
3	32	28	4	6m	0	Psychologist	Inattentive
4	29	26	3	9m	0	Psychologist	Combined
5	45	35	10	52m	8 years	Psychologist	Combined
6	37	15	22	18m	4 children (5 to 10)	Neurologist	Inattentive
7	26	5	21	48m	0	Psychologist	Combined
8	44	42	2	10m	4years	Psychologist	Combined
9	36	27	9	42m	5years 5 children (6 -18)	Psychologist	Inattentive

## **Comparative Findings of the Quantitative and Qualitative Studies**

Although the bulk of this chapter will detail the findings from the qualitative sample, there are several findings of note from the 59 respondents to the quantitative survey. Participants in both the quantitative and qualitative portions of this research responded to the ASRS-v1.1© (Kessler et al., 2005) which screens for a possible ADHD diagnosis (see, Figure 2. Adult ADHD Self-Report Scale (ASRS-v1.1©) Questions). Responses to four out of six questions must meet the ASRS-v1.1© threshold for the person to be screened-in for a possible diagnosis, as shown in Table S1 (see Appendix S: Scoring Rubric of Adult ADHD Self-Report Scale ASRS-v1.1© Symptom Checklist).

Participants were prompted to respond to the ASRS-v1.1© questions twice: (1) as they remembered their experience "before you were pregnant or had children," and (2) "since your first baby was born." Data from the responses were quantified and reported as the number and percentage of women who met the screening threshold per question and overall. The two sets of

data were compared to each other within each study and data from both studies were compared to each other.

Results of the ASRS-v1.1© survey questions (Kessler et al., 2005). Findings from the quantitative study are presented. It is followed by findings from the qualitative study and a short comparison of findings from each study.

Quantitative Study. Fifty-nine out of the 65 total survey respondents (N=59) answered all ASRS-v1.1© questions (Kessler et al., 2005) as shown in Tables T1 and T2 (see Appendix T: Quantitative Study Scoring of ASRS-v1.1© [Kessler et al., 2005). The aggregated responses regarding experiences prior to the birth or pregnancy of children did not meet the ASRS-v1.1© threshold of four questions to meet the criteria for a possible ADHD diagnosis, as shown in Table U1 (see Appendix U: > 50% of Aggregated Scores That Met ASRS-v1.1 Threshold for Possible ADHD Diagnosis). After the birth of the baby, the first four questions met the threshold. Thus, as an aggregated group, the respondents did meet the criteria for a possible ADHD diagnosis. These four questions assess difficulty with executive functioning and time management and respondents reported a marked increase in difficulty with all four of the questions. They reported minimal change in the last two questions that assess problems with regulation of energy.

Qualitative Study. Evaluated individually, seven of the participants in the qualitative study met the ASRS-v1.1© criteria both before and after the birth of a child; two participants did not. Individual participants demonstrated variability in the degree of difficulty with each item being measured. Overall, participants felt more challenged after the birth. Some felt no change or less challenged in response to a particular question based on new strategies. For example, some

respondents said they developed a "do it now" strategy, but if the baby distracted them they would still forget.

The ASRS-v1.1© was administered at the close of the interviews. Findings were mostly consistent with participants' narrative descriptions of the difficulties they felt were the root causes of their challenges with accomplishing tasks, such as prioritizing, organizing, focusing, procrastinating, and summoning energy or motivation. If the scores had been based solely on narrative responses, all participants would have screened in individually for ADHD. For example: Participant 1 had two children under two years of age did not meet the ASRS-v1.1© criteria. She said she "never" avoided or delayed starting tasks (Question 4), but she was moving in three days and had not yet started packing.

The aggregated responses for the qualitative study regarding experiences prior to the birth or pregnancy of children met the ASRS-v1.1© criteria for five out of six of the questions but only 44.4% of respondents met the criteria for the sixth question, as shown in Table V1 (see Appendix V: Qualitative Study Scoring of ASRS-v1.1© [Kessler et al., 2005). Many participants hesitated upon hearing the phrase "driven by a motor" (Kessler et al., 2005). After the birth, all six questions met the threshold to screen in for a possible ADHD diagnosis, as shown in Table V2 (see Appendix V: Qualitative Study Scoring of ASRS-v1.1© [Kessler et al., 2005). There was minimal change in aggregated scores for most questions as shown in Table U2 (see Appendix U: > 50% of Aggregated Scores That Met ASRS-v1.1 Threshold for Possible ADHD Diagnosis). Question 5 showed the greatest change (22%) indicating less difficulty with fidgeting or squirming. However, due to the small *N* (*N*=9) for the qualitative study, the change in a rating for 1 or 2 participants is not significant.

# Comparison of ASRS-v1.1© findings in quantitative and qualitative studies.

Comparisons of aggregated results in both studies indicate that women might screen positively for a possible diagnosis of ADHD after the birth of a baby due to increased difficulty with executive functioning-related challenges such as organizing, planning, and task completion as measured by the ASRS-v1.1© (Kessler et al., 2005). The respondents in the quantitative study demonstrated a significant shift in increased difficulty. The ASRS-v1.1© indicated that respondents in the qualitative study were already demonstrating difficulty in executive functioning prior to the birth of the baby. Individually, some of them showed increased difficulty with some issues after the birth and less difficulty with other issues. However, as an aggregated group, the degree of change appeared to be much less than that in the quantitative study.

The qualitative study provided women with the opportunity to comment on their rationale for responses and insight into their challenges. Many of their comments are included throughout this chapter. The next chapter (Chapter V: Discussion) addresses the possible problems with the validity of using the ASRS-v1.1© as a screening tool for executive functioning in postpartum women.

The remainder of this chapter details findings from the qualitative study.

### **Identity as a Person with ADHD**

The DSM-IV-TR only recognizes the diagnostic label of Attention-Deficit/Hyperactivity Disorder (ADHD), but it specifies three sub-types: (a) primarily inattentive type, (b) primarily hyperactive type, and (c) combined type. However, when I asked participants to identify their diagnosis during the narrative portion of the interview, all women specified that they had either "ADD" or "ADHD." Their responses correlated with their answers on the demographic questionnaire at the close of the interviews (see Table 3: *Qualitative Study Participant Diagnosis* 

of ADHD). Five women who said they had a diagnosis of "ADD" checked off "Inattentive type" and four women who responded "ADHD" checked off "Combined type." Some women made a clear distinction or preference for the diagnostic label. For example, Participant 1 said, "I don't like when they put them together [on medical forms]. ADD, ADHD - It's not the same!" All participants personalized the diagnosis by referring to it as "my ADD" or "my ADHD" at points in the interview. All women expressed mixed attitudes about themselves in relation to their identification with the diagnosis:

"I've always seen it as a blessing because it's given me the opportunity to be creative and to do a lot of things, And to just kind of be ok doing those things.... So yeah. I've always enjoyed my ADHD." (Participant 4)

"The hyperactive for me can seem like a positive thing, but the inattentive never feels positive." (Participant 8)

All participants ascribed ADHD symptoms to one or more personal attributes that they felt had a negative impact on their lives, for example, "self-centered" and "selfish" (Participants 2 & 7).

One woman referred to her experience of ADD after the birth of her children by saying, "It's been rearing its ugly head." (Participant 6)

### **Challenges Of Being A Mother In The First Twelve Months Postpartum**

Participants identified discreet challenges in the narrative interviews which reflect the ways in which participants describe the influence of ADHD-related symptoms on becoming a mother. At the beginning of the interview, participants were presented with a "Coping with Challenges Scales" that I had created. (See Figure 6. Chapter III, p. 50). Participants responded in both narrative and numerical forms. However, I referred to the scale inconsistently throughout

the interviews. Many challenges were identified, but not rated. With the exception of references within participants' quotes, the data from the scales is infrequently referenced in this chapter.

Six major categories of challenges with being a parent in the first twelve months postpartum were reported by participants in this study: (1) baby care, (2) self care, (3) household responsibilities, (4) getting out of the house with the baby, (5) relationships with partners, and (6) transitioning identities.

**Baby care challenges.** Participants identified sleeping, crying, feeding, and creating routines as baby care challenges in the first year.

**Baby care: Sleeping and crying.** Five women had babies who did not sleep well initially. Two of the women had babies who woke frequently at night for the first 5 - 12 months after birth and these women reported that it affected their cognitive functioning and decision-making.

"I think I was...'OK, she has to, I have to bounce her [to sleep each time]...because that's what it is...I've become very OCD for a bunch of things in my life because that works, and that's how it works for me." (Participant 1)

Four participants cited the sound of their baby's cry as creating a significant challenge to their ability to think, to focus, and to complete tasks. Participant 8 reported that she wears earplugs during the day.

*Baby care: Feeding the baby.* All of the participants cited breastfeeding as a beneficial way to manage ADD/ADHD-related memory and logistical challenges they might otherwise have encountered with bottle-feeding. One mother of three children stated:

"I'm a big nurser, mostly 'cause I, feeding them food is more challenging.... It's not that I'm such a like, you know, "momma". It's really that I find it like logistically easier. I mean I start feeding my kids [solid food] kinda late, like 7 or 8 months." (Participant 8)

However, she and four other participants reported breastfeeding as challenging. They described feeling bored and having difficulty with sitting for long periods. Participant 8 described the experience as "painful" because she has to be physically still while her mind is planning to accomplish tasks.

Baby care: Routines. Creating routines for the baby was expressed as a mixed challenge by most women. Seven participants described eventually following the baby's cues rather than creating routine and said that they felt "fine" about it. One of the women also reported that her need for strict organization to cope with her own needs prevented her from "listening to her [baby] as much as I should." Two participants expressed recognition that they might have difficulty with creating routines as the baby got older. Participant 9, whose first baby was born when she was a teenager, described imposing a bedtime routine early based on her mother's encouragement and role-modeling, but she also struggled with wanting there to be flexibility so that she could take her baby out with her in the evening. Three women judged themselves poorly for not having any routine or not a particular routine with the baby, such as a bedtime routine. However, all women identified at least one routine with feeding, sleeping, or bathing. Bathing the baby was the most frequent routine reported in the first year, although the timing of it was not always routinized. It was described as a task that began soon after the baby's birth and was shared between the mother and partner, or was done by a grandparent who provided childcare.

"It's totally challenging to come up with the routines [but] bathing the baby was a priority from the beginning." (Participant 3)

Five women said having no routine was stressful, but they did not know how to create one.

"I can't get a routine together. Everything is random all the time. And it's very stressful."

(Participant 6)

**Baby care: Keeping track.** Eight women cited challenges related to memory, distraction, and cognitive processing as having an impact on caring for their child. Participant 7 said that she was "always running out to get more diapers." Participant 1 reported:

"Some...a lot of times I over-change them [diapers] because I can't remember if I change them already. It's mind-boggling. How can I not remember what I did 5 minutes ago?"

However, Participant 4 stated that her memory had improved: She felt responsible for her child and did not procrastinate, "When it comes to my son, you know, things have to get done."

Participant 2 described her ADHD-related symptoms, said cognitive processing and procrastination challenged her ability to follow through with an alternative vaccination schedule she had chosen for her child.

"I'm like beating myself up because I'm not dealing with it because it's this huge thing. It's like another little life that's dependent on me." (Participant 2)

Self care challenges. Participants identified five specific self-care challenges that concerned them in their baby's first year: sleep, exercise, eating, and general health care. Participants also re-framed baby care challenges, presented in the *Baby Care* section of this chapter, in terms of positive or negative impacts on the participant's ability to care for herself or to meet her own needs. As a result, baby care issues frequently reflected self-care challenges. All of the self-care challenges were expressed in terms of balancing baby, self, home, and/or work responsibilities. Mothers compared themselves to their peers who do not have ADHD. They qualified statements and verbalized that they were grappling with whether their self-care challenges were actually different. For example, Participant 3 described her partner as having "ADD by proxy" by being around her. Most women reported that prioritizing one or more areas

of self-care had been an issue before the baby was born, but that it was a much greater issue afterwards.

*Self-care: Sleep.* Participants reported that insufficient sleep affected their ability to organize themselves, to make decisions, and to problem-solve in general and to develop alternative solutions to sleep issues.

"It's not like ADD affected that way the sleep directly, it's just how I organized my life to deal with my ADD affected how I deal with my sleep with my baby." [Participant 1] In contrast, three women reported that their babies slept well from early infancy. One of the women said that her memory was "still a mess", but she could not blame inadequate sleep on it:

"It's just because we're working so hard to like keep up with life during the day. By the end of the day,...I don't, I can't, like I just can't [emphasis added] make one more decision." (Participant 3)

Five of the women co-slept with the baby for part or all of the first year. Two of these women also said that, even though co-sleeping facilitated breastfeeding, the baby's presence kept them from sleeping soundly due to co-morbid sensory sensitivities. Two women expressed ambivalence about co-sleeping. For example, one woman said co-sleeping prevented her from getting distracted and staying up too late, and going on the computer, which she "craved."

Self care: Exercise. Six women reported they wished they could exercise regularly – or even at all. Three mothers reported that they had major health issues that regular exercise would benefit, but they did not get any exercise. Women reported that they spend a lot of time thinking about how to accomplish it, but found it difficult to set priorities and manage competing tasks, such as work, and childcare.

Self care: Meal preparation. Most of the participants had some help with meal preparation right after the baby's birth from partners, parents, and friends. However, when those supports were not present, four participants reported difficulties with preparing food throughout the first year. Participant 8 said, "I think I was hungry and dehydrated most of the time." One woman said, "I don't care if I'm eating; I care if I'm feeding her." She described learning to cook one-handed and fast because she could not figure out how to put the baby down and would get distracted. Participant 3 described rarely cooking in the first couple of months and said, "It was pretty bad." She and her partner preferred the distraction of playing with the baby and ordered-out rather than prepare food. Two participants reported that they had "let go" of their healthy eating habits after the baby's birth because it was too difficult to plan, organize, shop for, or prepare the food.

Self care: Taking care of health care needs. All of the participants mentioned health care issues that they felt were impacted by symptoms of ADD or ADHD after the birth of the baby. One participant said that she felt she had developed a major health problem because of internalizing the stress of trying to manage her ADHD symptoms within her household. All of the women stated that they prioritized scheduling the baby's medical appointments and rarely forgot them. However, they had either forgotten one of their own or had not scheduled dental and/or medical appointments in the first year.

# Self care: Taking care of mental health needs.

"I was so overwhelmed that the idea of going to a therapist or something was just like something to add to my day that I didn't see how I could possibly do." (Participant 5)

Of the seven participants who reported experiencing postpartum anxiety or depression, only one woman said that she had regular visits with a therapist. Two women were diagnosed

with ADD or ADHD after the birth of one of their children. One woman said her therapist knows about the diagnosis, but is not an ADD coach and that she only sees her "erratically". Three women cited transportation as a limiting factor because they relied on public transportation. Having more than one child was cited as an additional factor.

The challenges of managing household responsibilities. One of the areas of challenge identified as being especially impacted by difficulty with logistics and time management was household management after the birth of the baby.

*Managing household responsibilities.* All participants reported that managing household responsibilities prior to the baby's birth had been problematic for one or more tasks, such as bill-paying and laundry. After the birth of the baby, the difficulty increased, as did their stress levels.

"(Bills) are totally, it's freakin...uh bills are *often* on my mind. And I know what to do but I never think of it when it needs to be done." (Participant 3)

Household Disorganization. Organizing a household schedule and completing household tasks after the baby's birth were identified as major challenges by eight of the participants. All participants reported that the baby distracted them from accomplishing tasks. Some participants described having made conscious decisions to prioritize interacting with the baby over completing household tasks. Three women said they could not figure out how to put the baby down, awake or asleep, and/or accomplish tasks for up to six months. Four of the women reported that they had not had role models for household organization in their childhood because their mothers also had ADHD symptoms. In addition to distraction, the participants reported feeling that the baby's presence exacerbated other ADHD symptoms and made household organization difficult, such as: planning, memory, and logistics.

Three women identified difficulty with regulating their motivation and energy as a factor in completing tasks.

"The balance, the rationing of energy is what um. So what happens is.....I rev up for a ½ hour and then I'm like a turtle for an hour." (Participant 8)

Difficulty with starting a project was also described as being influenced by energy regulation, and/or perfectionism.

"Unless I can vacuum the floor and pick up all the furniture and get the edges, like, I won't vacuum! Then I won't do it because I'm like I can't do it perfectly." (Participant 2) One woman said that impulsiveness had already resulted in negative repercussions for her and her baby. Her decision not to be impulsive led to not starting tasks.

"I would just jump...and mess it up and now, No. I need to think that through and spend all my time thinking it through and not doing it." (Participant 7)

Sensory sensitivity to sound was cited as a major challenge for three participants since the birth of the baby. They explained that the noise of the baby affected their ability to organize the household, and that household disorganization affected their sensory sensitivity.

"The mess in the house, it hurts my brain....I feel physically uneasy when the house is a mess or the socks aren't in the right place. It's probably a little of OCD." (Participant 8)

All of the women described the impact on themselves of trying to manage one or more household task after the baby was born in terms, such as: "constant struggle", "exhausting", "breaking", "just short of overwhelming", and "overwhelming".

"I...feel paralyzed....I don't even want to go there thinking about what I have to do cause it's just like too heavy and then you know, the tape playing of like, 'I can't do it. I'm dysfunctional." (Participant 6)

The challenge of getting out of the house with children. The challenge of getting out of the house with a baby is a challenge that all participants identified. Themes included, being on time for appointments, managing logistics for getting out, and caring for a baby in public.

Being on time. There were mixed responses to the question about getting to appointments or obligations on time. All participants reported difficulty in the first few months. After the newborn period, five participants said that they were generally on time and felt good about that. However, this statement was qualified as pertaining only to the baby's appointments or getting to work. Two participants said they coordinated the baby's appointments with that of a friend's baby and the friend drove them, which prevented them from being late. When they had to rely on their own car or on public transportation, they said they were usually late for appointments.

Four women said they continued to be late throughout the baby's first year and reported that lateness was, on average, by between 15 minutes to more than an hour. On a scale of 1-5, these participants rated the difficulty of this challenge as "5" or "huge" after the birth of the baby: "I mean, do you have "12" there?" (Participant 1) Many mothers said, although they were relatively on time for the baby's doctor appointments, they continued to be late for social activities, such as meetings with friends and playgroups. As a consequence of being regularly late, the women reported judging themselves with statements such as: "I'm so embarrassing", "I'm horrible", "I'm awful".

Logistics with the baby. All participants described the strain of trying to go out with the baby, whether for a set time or in general. Even for the women who were able to get to appointments on time, this challenge was framed in terms of time management and logistics, Three women described having set aside the entire morning to be able to leave the house, but not being able to hold all the logistics in mind.

"I could get up *five hours* [emphasis added] earlier and I can't know, what am I doing with my time? It disappears....And everything distracts me - all the time. I can't keep track of what I did before so I do something else....And that's my life every day."

Most participants described not having a system for leaving the house. Worries about forgetting to bring what was needed delayed leaving and, in several cases, prevented them from leaving.

"I get very deterred with having to like, I think a lot of it is, what do I need? The time it takes to get ready to go outside is so overwhelming." (Participant 6)

Several of the participants described being distracted by the child and having to make multiple trips. "And then one like loud burst of noise and I'm back to square one." (Participant 8)

Logistics of caring for a baby in public. Seven women reported challenges with caring for the baby in public. They specified two issues: "keeping track" of the baby and/or baby's things and managing more than one child. They linked both of these challenges to difficulties with focusing attention and with organization.

"Keeping track" of the baby and the baby's things in public. Fear of becoming distracted and/or overwhelmed was reported as a deterrent to venturing out with the baby in public.

"Like you're carrying 3 [baby, diaper bag, purse] things and like each of those 3 things is something that you're keeping track of in your head. But then I bump into something and that sort of that becomes like a 4<sup>th</sup> thing. OK now I've got to keep track of that space and if it's too crowded a place and I'm carrying enough things..." (Participant 5)

"I felt afraid of my own getting distracted and.... I'm not going to pay attention to what's in front of me. Like I'm gonna trip over something." (Participant 7)

Caring for more than one child in public. Managing the care of a baby and an older child in public was also complicated by problems with dividing focus of attention. Women described

being able to focus on only one child or the other. This was further complicated by attempts to socialize. Two women described the challenge as either "hyper-focusing" on conversations and losing track of children, or not participating in social conversation in order to ensure the safety of the older child.

Transitioning identities. All of the participants referenced challenges with transitioning identities in the first year after the birth of the baby. However, only one mother framed the challenge specifically in those terms. The remainder of the participants spoke about the challenge of feeling "satisfied" or "settled" in their new role as a mother. Balancing multiple demands and roles were frequently cited as a challenge to the participant's sense of competence as a mother. In addition, they reported that having multiple roles taxed their relationships within each role.

"I've got to be all of these people and I can only be one at a time....Without a shadow of a doubt I was overwhelmed." (Participant 4)

The most salient topics related to the challenge of forming a satisfying identity as a mother were defined in relationship to the baby, to work, to other mothers, and to self.

The challenge of creating an identity as a mother and relationship to baby. The interview questions did not explicitly ask participants if they perceived the relationship with the baby as an ADHD-related challenge in itself. However, each participant included both positive and negative feelings about themselves as mothers based on their relationships with their babies. A few women reported that having ADHD made them well suited to being a mother of an infant, such as:

"This is an *express* time in our life when I can deal with exactly what's in front of me, which is *great*! Like that's, that's a really good thing for me." (Participant 2)

Regarding her first child, who was born when she was a teenager, Participant 9 said,

"My oldest son saved my life.... He kept me really grounded and you know I could hyper-focus on him and like being a parent for him and being there for him."

Eight of the participants breastfed their baby. Although breastfeeding was challenging, participants reported feeling good about themselves as mothers because they had chosen this option. Three women described holding the baby "all the time" because they could not figure out how to put the baby down, but also attached positive meaning to it in their role as a mother.

Two participants reported only positive feelings toward the baby; one of them was diagnosed with primarily inattentive ADHD and the other with the combined type. Both of these participants felt comfortable with their identity as a mother. Six women reported having ambivalent feelings toward the baby: (N=4) with inattentive subtype; (N=2) with combined type. However, the ambivalence only extended to their sense of identity as a mother if they did not feel they could manage logistics or lack of sleep. Two of them reported blaming the baby. Participant 8 reported "kicking a wall" as a response to feeling "pushed too far" when the baby cried and then feeling she was "robbed of feeling good about myself as a parent." Five mothers reported that they loved being a mother; one of whom also referred to her children throughout the interview as "this one" and "that one". Another participant said she did not like to hold her babies and wanted them "off of her" as soon as they finished breastfeeding. However, she also felt that she was being a good mother because she was consciously fostering independence in her children.

"The moment I was able to put him in daycare, I put him in daycare. And people were like, 'really?' and I'm like, 'yes' because I want to do nothing. I want to have nothing to do with children during the day." (Participant 9)

All six of these participants expressed awareness that they felt that their needs were pitted against the baby's needs and felt that this internal conflict reflected poorly on them as a mother.

"If the kids start making noise,...I start feeling assaulted and start kind of acting erratically.... And this is the kind of parenting [sic] I am. I'll be the greatest mom in the world for 45 minutes. And suddenly I'm cranky and barking at them....I don't know why I take it so personally....Maybe it just brings attention to my deficits." (Participant 8)

One of the women expressed regret for not having fully identified with her role as a mother. She reported having lost full custody of her baby because she had chosen to allow the father's parents to care for the newborn for several weeks at a time while she took a break.

Five of the participants reported that they felt "bored" with the baby at times. Two of them had the combined type of ADHD. They worried that feeling bored reflected badly on them as mothers. One of them was concerned that feeling bored might also have affected the bonding relationship with her child. Four of the five participants who reported being bored with the baby said that, when they "gave up" trying to multi-task and "sat with the baby and made faces", they felt more positive about their role as a mother and more connected to the baby.

The challenge of creating an identity as a mother and relationship to school and work.

The majority of participants had been working in professional positions prior to the birth of the baby. Two participants were still attending high school at the time of their (first) child's birth.

The teen mothers both cited inadequate support from the school and family for them to be both a mother and student. One mother dropped out of high school. The other participant reported attaching part of her positive identity as a mother to breastfeeding her baby, in spite of the challenge of trying to manage it as a student.

"I had teachers yelling at me because I was like, 'I have to go home and nurse my son'.

And they would be like, 'Whoa you missed another class." (Participant 9)

She stated that she was in the process of completing a college degree, but cited difficulty balancing being a mother and student and difficulty focusing attention as reasons that she has been "sitting on an incomplete paper" for a year and a half.

Transition to being a "stay-at-home mom". The challenge of letting go of a former professional identity in order to stay at home was identified by four participants who felt that they had had satisfying careers. Only one of them reported having merged her professional identity with being a mother. Participant 1 stated that she is a chef who knows "how to cook long and complicated things" and had taught herself, out of necessity, how to make healthy meals that only required 3-4 steps after the baby's birth. Most of the women reported that work had helped them to organize their time and tasks and gave them a sense of accomplishment that was missing at home. Two women had contrasting opinions.

"It's just me and my son which is a wonderful blessing but it has taken a lot of getting used to." (Participant 4)

"It's very clear that your input is getting a positive output. There's a structure to it. It's not abstract, I mean....So I think on another level actually parenting, as hard as it is for me, I think that's the part I love." (Participant 8)

Redefining being a stay-at-home mother into a working identity was discussed by a few women.

Two women described trying to be perfect at everything.

"I think that my ADHD has a lot to do with my intense perfectionism....You know I'm going to be the best mother I can be....I'm going to be the best housewife I can be. This house has to be clean! And I'm going to be the best wife I can be!" (Participant 4)

Four women said they would like to home-school their child. Participant 2 said that she would have to "reformat my brain if I had to stay at home." She stated that she believed she could home-school her child because she was a teacher and because "the baby would be a little bigger...and perhaps more exciting."

Transition to working outside the home. Two participants returned to work after maternity leave. Both of them said they were satisfied with their decision to work, but that it was not without challenges. Breastfeeding was one way that they balanced their work-mother identities. Both of them said that medication had been effective in helping them manage their ADHD symptoms prior to the baby's birth. However, they had stopped taking medication in order to conceive and would not take medication again until they finished breastfeeding. As a result, they reported an extended period of difficulty with managing their work responsibilities and work spilled into home.

"My coworkers can tell the difference on a day to day basis whether I'm medicated or not. They said that I'm a different person. (Sighs) I don't remember that person right now because it's been like a year! (Sighs)....I don't ever have that, 'OK now I can handle my day feeling." (Participant 3)

Four out of nine of the participants were actively pursuing changes in careers and/or work, including work that could be done at home. Although their stated reasons were different, two common themes were: (1) aligning work responsibilities with their ADHD symptoms and (2) fulfilling the desire for stimulation not being met by staying at home.

The challenge of creating an identity as a mother and relationship to other mothers.

Interspersed throughout the interviews, participants compared themselves to other mothers. All participants stated that, by comparison, they felt less competent than other mothers, especially if

they felt that their ADHD symptoms were a factor. Participant 3 qualified her challenges, saying "Well everybody who has a baby has a lot more to do, but with ADD...."

One of the mothers, who reported feeling bored with her baby, wondered,

"I would imagine that most parents or some parents, probably other parents could be bored with their kids, right? Like that's not just, like just for ADD people - maybe it's heightened." (Participant 2)

Two participants reported that their peers compared themselves to them favorably. One of the participants explained she had developed a positive reputation for a fully stocked diaper bag.

Comparisons with other mothers were especially prevalent after the newborn period.

Attending playgroups and other activities raised expectations, especially for stay-at-home mothers, that they found difficult to meet.

"Sometimes I think I cannot do enough....Now that I'm a *mom* [emphasis added] and they do so many stuff [sic] with their kids and - it's how can they do it? You know? How can they find the time to do everything? I can't. (Participant 1)

Being with other mothers: Feeling misunderstood, self-isolating and finding a good fit.

Five women reported that, although they valued being with other mothers, they felt especially incompetent in groups of mothers. Participants reported often feeling "incompetent", "embarrassed", "alienated", and "misunderstood" as a mother as a result of socializing with peers. Three women referred to their difficulty with following the thread of conversations.

However, some participants reported having found groups of peers that were affirming and strengthened their sense of identity as a good and/or competent mother. (Additional data about support groups and isolation are included in later sections in this chapter entitled: "Impact of Motherhood on Depression and Anxiety", and "Support".)

Identity as a mother and relationship to self. Eight out of nine participants referenced challenges related to trying to maintain their individual identity and/or losing their identity after becoming a mother. The majority of them had been diagnosed with ADHD in adulthood. They all described having developed coping strategies to manage their challenges throughout their lives and that these served as part of their identity. Lost identity was usually framed in terms of ADHD-related symptoms that participants had enjoyed or felt defined them prior to the baby's birth which they did not feel they could indulge in as a mother. They reported ways in which this conflict had an impact on how satisfied they felt as a mother.

The need for "down-time" or "me-time" away from the child(ren) was referenced by all eight of these participants. However, the purpose of down-time was varied. Two women, who both reported having sensory sensitivity to sound, said that they needed the time to replenish energy and reduce overwhelm. One mother said that "down-time" had to be completely quiet, and without it, she could not think or form memories. Participant 8 explained that she had learned to pace her energy through the day prior to having children. Having to attend to children all day on their schedule and with the noise meant that she felt overwhelmed and like a "terrible" mother and an incompetent person.

The need for "me-time" was also expressed in terms of the drive to satisfy a desire for stimulation. Participant 9 reported having worked hard to have "me-time" as a young mother in order to maintain her social identity with her friends.

"I could put him to bed and he would stay asleep for the night and I could throw a party at my house or like go out and have a sitter come and know that like my kid was ok....I knew I needed [it] in order to be ok as a mom."

She also reported that, after the birth of more children, she stopped going out, "I kinda lost myself in the whole wife mother" which she felt contributed to poor health and depression.

Two participants with the combined type of ADHD also described loss of self in terms of the absence of "me time" for stimulation. They reported that their drive for stimulation and their impulsiveness were a part of their identity that they liked, but which they felt they had to stifle after the baby's birth. For example: Participant 2 reported actively controlling her desire to hyper-focus and lose herself on the internet; an activity that had been very satisfying and which she felt had contributed to her positive self-identity prior to the baby.

"It felt like renewing....I really like details and I like to be an expert about things and if I find something, I'm going to 'Google' it and I'm not just going to like check out a little bit about it -Hah!- I'm gonna like cross-reference it and.... and I can't do that anymore." She reported that not being able to satisfy this desire created a conflict in her satisfaction with her role as a mother. Participant 4 said, "You know one of the paramount signs of [my] ADHD is that I'm always looking for a new high," and that she needs "a lot going on". She described herself as "living for the thrill", and having been known as the "eccentric friend" who could be counted on to dye her hair "every color in the crayon box" prior to the baby's birth.

"I love tattoos, love them [emphasis added]. I've got 8 of them so far and I haven't gotten one in 3 years. And my husband wants me to wait until I'm done nursing until I get my next one. So I feel, a lot times I just feel like I have lost - what it is that made me Me." She reported that, although she had no problem putting her son first, it was a "huge" challenge to her ability to define herself as a mother.

"It's really hard when I know that I've got someone that's defenseless depending on me....[but] right now my job as being [my son's] mother is intensely permanent and I

need to make sure that I'm here for him.... And so I would be depressed or sad about it and I wouldn't know why."

The three participants who had more than two children, reported that their sense of personal identity had been lost because of feeling isolated and more limited to staying home. One woman said that she had traveled to another country and taught a class with her partner and child after the birth of one of her children; since the births of subsequent children, she held activities in her home in an attempt to re-define her identity beyond that of mother, partner and housewife. Participant 8 summarized her challenges of transitioning identities, as a woman with ADHD, in relationship to the baby, work, and the self as follows:

"I thought of how sometimes I'm sitting with the baby and like and I'm looking out the window and I feel like some sort of uncomfortable security guard. Like someone who has a really boring job but they *have* to stay there and looking out the window kind of want to go out there but I don't want to either get the baby dressed or the baby has a nap or it's too much work to get the baby where I want to go.... And it's almost physically uncomfortable because I can't respond to my body. It wants to go space out and look at the perennials or something, you know?"

#### **Coping With Challenges In The First Twelve Months Postpartum**

After participants identified a challenge they had experienced in the first year postpartum, they were asked a follow-up question: How do you feel you coped with the challenge? Some of the coping strategies and feelings about coping are included in the data previously reported within this chapter. The following data are a summary of themes that arose from the participant narratives about coping. Participants identified three categories of coping: strategies, emotions or attitudes, and strengths as a mother with ADHD.

Coping strategies. Participants reported purposely creating some strategies to manage challenges and that other strategies "just happened" without their noticing: "You just kind of got into a comfort zone." [Participant 4] Some participants focused on fitting strategies to the baby's needs, some focused on an aspect of the mother's ADHD symptoms. The majority of the participants reported that the immediacy of the baby's needs led to a decision to prioritize the baby over other tasks and that this helped them to organize their day, at least in the early months. One woman wondered if this strategy prevented her from balancing multiple needs.

"Is it...[because]...I get stuck in the moment of whatever the baby needs in that moment and I can't think, I can't really think and plan the day?" (Participant 8)

Two participants stated that, as the baby grew older, the immediate needs became more complex: They struggled to find suitable strategies, especially for managing challenges out of the house. However, the women who had more than one child, also said that their coping strategies had improved over time. For example, Participant 8 reported she developed a "predictive skill" after the third child which allowed her to pre-plan some coping strategies: "OK, by 4:00, [I know] things are gonna [sic] start to fall apart."

**Practical strategies.** Strategies were primarily practical and were reported as either very structured or very loose. For example, bedtime routines were either strictly adhered to, as described previously with Participant 9, or participants said they followed the baby's lead. Even if the strategy was not working, participants reported that having a strategy gave them the sense that they were "doing something".

Three participants described that one of their coping strategies for balancing multiple needs was to use, what they credited to an ADHD-related ability to "hyper-focus" on one aspect

of organization while they multi-tasked. However, Participant 8 also described this as an imperfect solution "I was chronically multi-tasking and that can be really painful with babies." Three women reported creating strategies to accommodate "OCD-like" symptoms and this helped them feel good about themselves. For example, four participants cited organizing the diaper bag as an important strategy for addressing multiple challenges and reducing anxiety.

"Because doing some like organizing the diaper bag before we went would be just another challenge, I kept like a *perfectly* [emphasis added] organized diaper bag,"

(Participant 5)

Cognitive strategies. Six women said they developed a strategy which some referred to as "now and later" thinking. When a new task needed to be done, it was prioritized. Even if the task was not always completed, participants felt positive about the strategy. Participants reported that difficulties with cognitive processing, memory, motivation and energy regulation had an impact, not only on the ability to meet identified challenges, but also to diverge from less than satisfying solutions. Many participants described solutions that they felt reflected on them poorly, but still worked.

"About as organized as I get is I make a list of everything I have to do and then I give it to my husband and I say, 'Number it for me,' because I can't prioritize." (Participant 6) However, once the list was prioritized, she said she could follow it and often get the task done. Two participants reported that having ADHD made them more flexible problem solvers, as reported by Participant 3:

"One of the things that happens for me with the ADD....is my ability to kind of go with whatever's coming at me. I'm really good at problem-solving on the fly."

Pre-baby planning strategies. Eight women made reference to having developed coping strategies after many years of struggling with ADHD-related symptoms. Opinions varied about whether strategies were actually successful after the birth of the baby. Three women were frustrated that they could not use some of their previous coping strategies to take care of their needs and could not work out new ones. Six women felt that some of the strategies helped them feel more capable of managing some of the post-baby challenges. Participant 2 said: "Had I not been an organizational disaster, I wouldn't have found "Flylady.com," an on-line organization coach.

Technology as a coping strategy. Four participants referenced using technology as a strategy to cope with the challenge of balancing their needs with those of the baby's. Participant 9 used her cell phone to stay connected to her friends, stating, "My social life is very important to me." Two participants reported discovering that they could use technology while breastfeeding the baby; easing their sense of boredom and isolation.

"The iPad became my best friend. I could be nursing and "swipe" and...so I do double-task with the iPad....If I lay down I can prop up the iPad and still nurse. I try not to do it all the time though because I feel like the baby knows, you know?" (Participant 4)

Participant 5 described turning the sound off and using the iPad as a way to decompress from the stress and noise level of her children: "I'm playing a game it's just quiet."

### Attitudes and emotional consequences of coping with challenges.

"[You] come up with coping strategies and have probably some positive and some negative...Yeah, mostly Not coping strategies. Well coping strategies are, even if they're not positive,...[they are] a coping method. (Participant 6)

Attitudes toward coping varied widely between individuals and each of them reported consequences, both positive and negative, based on their attitude. All of the participants reported feeling nearly or completely "overwhelmed" by one or more challenges they experienced in the first year postpartum. Although participants were not asked to make a global assessment of coping, three women reported that they had had difficulty coping for the full twelve months.

"It's just that feeling, that kind of desperate, silent struggle that probably women with ADD have, which is that I really, really don't work that way. So other mothers complain about it, but I really feel it's the opposite of me...to try to do these things." (Participant 8) Two participants felt very positive about their overall coping in the first year, even with their ADHD symptoms. They attributed this to their general attitude about being able to cope.

"I feel like moms kinda have this get stuff done genes [sic] ...because we get things done because we have to." (Participant 4)

Ratings on the Coping with Challenges scale. There were wide variations in congruence and discrepancy between how participants rated the degree of challenge with an experience and how they felt they coped with it; narrative statements did not always match the way that they chose to rate the experience on the "Coping with Challenges" scales. For example, a participant may have reported that a challenge "wasn't so bad" in conversation, and then rated it as a "5" or "huge" on the scale. The ratings of degree of a challenge and of degree of coping on the scale were sometimes similar to each other and sometimes very different. When discrepancies occurred, the challenge was almost always rated on the scale as more difficult than how the participant felt she had coped with it. Participants explained these differences in terms of perseverance, acceptance, rationalization, and reduced expectations. Although there is overlap in all of these attitudes, a few examples of each follow.

An attitude of perseverance and acceptance. One theme that ran through many of the interviews was the statement, "I just didn't cope." However, each time that statement or a similar one was made, participants followed it with details of how they had continued to try - often by using the same strategy. If they did not succeed, the participants reported feeling exhausted as well as frustrated with themselves. If it did succeed, participants rated their sense of coping as "3" or "coped but it was hard".

"I guess I would maybe call it a "5" then and a "3" now maybe. I could do it. It was hard, but I coped with it. He did always have his gloves and his hat. I didn't have little old ladies chasing me down the street saying, 'Where's that baby's hat?" (Participant 5) In contrast, Participant 1 rated the *challenge* of getting to appointments on time as "5" or "huge"; and on the *coping* scale, she reported that she felt she had "coped well" with this challenge and gave it a "1" because it didn't bother her anymore and "eventually we do leave the house."

Two participants rated all of their challenges high on the scale. They described acceptance of the difficulty with coping as a means to coping.

Rationalization as an attitude for coping. Most self-evaluations of emotional coping were mixed. Depending on interpretations of the question, some participants offered more than one response. Some participants made distinctions between coping with a challenge as it happened and as they reflected on it. For example, Participant 4 reported the challenge of creating a new identity as a mother was "huge", in part because she had not yet come to terms with her ADHD diagnosis, but therapy had given her perspective on how she had coped with it. "I guess I didn't really handle that as well as I could have. But now I know why." Three participants reported that the challenge of remembering to pay bills was "huge". Participant 3 said that it was

"overwhelming" to cope with it. However she also coped with the overwhelming feeling by stating, "We'd rather have a baby (laughs)....than have me be able to pay bills and whatever."

Reducing expectations as an attitude for coping. Reducing expectations was identified as means of coping emotionally. All of the participants reported difficulty coping with some challenges because of trying to meet high expectations they had placed on themselves or felt other people had placed on them. Five participants attributed some of their difficulty with coping to the added strain of their ADHD symptoms. All of the participants reported lowering some expectations. Some participants expressed ambivalence about the decision; others came to terms with the choice.

"I can also get to a place where I'm just like, [exercise] is not gonna happen and I'm not going to think about it. But I would really like to...exercise." (Participant 2)

"I can be vigilant [outside] with kids, but it has a huge cost....I dropped my expectations tremendously. I do spend a lot of time at home with the kids cause I just find it so hard to get out. Which is good and bad." (Participant 8)

"Her having clothe diapers isn't really gonna [sic] affect her development and her positive sense of self. But having face time with somebody who's loving and smiling at her is." (Participant 3)

Strengths as a mother with ADHD – A special attitude for coping with challenges.

All of the interviews included many moments of laughter as participants discussed their challenges and their feelings about coping with them. Participants offered humor as a balance to the degree of challenge they experienced as mothers with ADHD. This attitude extended into their responses to the question: 'As a mother with ADHD, what are the strengths that you feel you bring to your role as a mother to this child?'

Thinking ahead: Will my child have ADHD? Although participants were not asked if they were concerned about a possible diagnosis of ADHD in their child, all of them answered the question about strengths by reporting having thought about it. All their responses were light-hearted.

"During the pregnancy [I] would joke about with my wife like when I was having like a particularly ADD day and I would just look at her and say, 'You're gonna [sic] have two of...us around you. You're in so much trouble." (Participant 3)

Five participants had a parent with an ADHD diagnosis or probable signs of it. They reported that their ability to cope with their ADHD-symptoms was enhanced by that connection and this attitude of coping extended to their anticipation of being able to cope with a child's possible diagnosis.

"The funny moments in my life with my mom has been because of her ADD. So I think that's a like a fun thing. I mean it's challenging but I don't think it's crippling. And I think it can be so much fun – funny!" (Participant 1)

Participants whose parents did not have ADHD reported being misunderstood by parents. They planned to use that experience to be more accepting of their child.

Strengths: Reframing ADHD for the benefit of child. In this part of the interviews, all participants re-framed their ADHD-related challenges as strengths and coping capacities that could be used to benefit their child. Difficulty with regulating focus of attention was re-framed as being able to focus on the child.

"I can focus on my son while focusing on other things. I don't have to shut out the rest of the world in order to feel like I'm giving him my undivided attention. Because I'm so good at splitting my attention and so I never feel like I'm slighting him." (Participant 4)

"I guess my ability to hyper-focus can sometimes favor my children...I will lose time. I'll sit down and make a fort with them and I'll be completely there because I can't be anywhere else." (Participant 8)

Impulsiveness and difficulty with planning and organization was reframed as being able to "go with the flow", "creativity" and "being in the moment."

I'm like, "OK, like let's see where we're all at today and how we can do this,...and let's make it fun!' So I think that's a strength too." (Participant 2)

"I think part of having ADD is like that instant gratification and she is *full* of those moments. It's so awesome." (Participant 3)

All participants spoke positively about planning to pass on strategies to their child, such as organization and structure, which they had learned for managing their ADHD symptoms; whether or not the child was later diagnosed with ADHD. Five of the mothers who were diagnosed later in life, stated that they planned to use the coping and compensatory strategies they had struggled to develop, in order to make their child's life easier. However, Participant 3 also stated:

"And so you know, you don't wish a struggle on anybody, especially your kid. It would be *awesome* [emphasis added] if she didn't have it."

## Perinatal Depression and Anxiety in Participants with ADHD: The Qualitative Study

My research question asks, 'How does perinatal depression or anxiety impact the experience' of mothers with ADHD? Participants were asked if they had experienced perinatal depression or anxiety. Participants were not asked if or how they felt they felt the diagnoses affected their experience as mothers with ADHD. However, many participants reported the inter-

relationship of the diagnoses. Data reporting the frequency of symptoms and of diagnoses are followed by some data narrative reports of the relationship of ADHD and co-morbid diagnoses.

Symptoms versus diagnoses of anxiety and/or depression in the perinatal period. The majority of participants (77.8%; N=7) reported symptoms of depression and/or anxiety during pregnancy and/or postpartum for one or more babies as shown in Table W1 (see Appendix W: Qualitative Study Co-morbidity and ADHD Medication). Of the participants reporting co-morbid symptoms, 72% of them reported symptoms during pregnancy and 100% during postpartum. A majority of participants reporting symptoms of postpartum depression (N=4) had the inattentive form of ADHD (75%; N=3) than women with the combined type (25%; N=1). The opposite was true of participants with symptoms of postpartum anxiety (N=5): the majority of them had the combined type of ADHD (80%; N=4) as compared to the inattentive type (20%; N=1). Postpartum anxiety was more prevalent than depression. One woman reported the following reason that anxiety began, for her, after the first three of months

"I didn't have the energy in the first three months to be anxious. It takes too much energy." (Participant 8)

postpartum:

Women were more likely to receive a diagnosis of depression or anxiety during postpartum (86%; N=6) than during pregnancy (50%; N=3). One participant was diagnosed with anxiety, although she said she also had symptoms of depression during postpartum. Although one participant reported having experienced postpartum anxiety with all five children, she was only diagnosed with it after the third child. Neither was she diagnosed with postpartum depression after her first two children, although she had symptoms. Two women (22.2%; N=2)

had been diagnosed with bipolar disorder prior to pregnancy, only one of whom described experiencing depression during pregnancy.

The most common reason cited for not having a perinatal diagnosis of depression or anxiety was that the participant "didn't think to seek" one. Participant 5 said that the postpartum screening questions "didn't always kind of work" for her. She reflected on her experience:

"And now when I look back on how depressed I still was, and how anxious and how overwhelmed I felt, I'm really sorry that I didn't get some kind of help for it sooner"

Interrelationship of ADHD and perinatal depression and/or anxiety. The narratives include limited reports of participant awareness of the possible inter-relationship of their ADHD diagnoses with that of depression and/or anxiety. Participants cited very few ways in which they felt ADHD challenges were affected by perinatal depression and/or anxiety. However, the inverse relationship was more frequently referenced; ways in which they felt ADHD symptoms may have had an impact the experience of depression and/or anxiety.

Impact of perinatal depression and/or anxiety on ADHD-related challenges. Two participants reported the impact of postpartum depression on ADHD behaviors. Participant 9 said that she had managed her ADHD symptoms by adhering to a strict bedtime for her children, breastfeeding her baby, and doing laundry in a particular way: She stopped all of it when she became depressed.

"I wasn't doing the bedtime routine. I was barely doing dinner.... I kind of fell out of [doing laundry]... I remember at one point, my husband threw all this laundry at me and was like, 'What the f---? Go on anti-depressants, something.' He was so upset with me, ...at that point, he kind of took over laundry."

Participant 1 reported being vigilant and "constantly scared" that she would develop severe postpartum depression due to a co-morbid diagnosis of bipolar disorder. She reported that mild depression and the child's sleeplessness stressed her ADHD-related challenges, such as difficulty focusing, organizing, and diverging from routinized strategies that no longer worked.

### Impact of ADHD-related challenges on perinatal depression and/or anxiety.

"All these emotions set in all these negative voices and that brings me down even more. But is it the logistics that set me off first? Or is it the emotions? I think the logistics are the first thing because...emotions don't start from nothing." (Participant 6)

All of the participants with postpartum depression and/or anxiety gave examples of the ways in which they felt ADHD-related challenges led to feelings of "sadness", "depression", or "anxiety". They reported that challenges, such as difficulty organizing, planning, starting and completing tasks, and focusing, made it difficult for them to feel good about themselves. Coping strategies previously reported in this chapter such as acceptance, rationalization, persistence, and decreasing expectations helped women to feel better about themselves. However, participants reported that those strategies came after having struggled and having felt overwhelmed and exhausted in the process of "constantly having to work against type." (Participant 8) The following are a few examples of ways in which women specifically reported that ADHD symptoms affected their experience of depression and/or anxiety.

"I was at the point of overwhelmed [with dealing with logistical challenges]. I think it was beyond that. I remember there was so much more you know you know depression and anger and lashing out and I just have dealt with that for so many years and it's heightened postpartum." (Participant 6)

"I get derailed [by kids' distraction]. ... I really don't like that feeling...of feeling overwhelmed and forgetting where I'm going, you know....I think it makes me feel lost and afraid.... Just the whole, the loss of control....because I'm just reacting to them all day. It feels like the ground is shifting under me....It feels unsafe." (Participant 8)

*Isolation: The confluence of ADHD and social anxiety symptoms.* All nine participants reported experiencing social anxiety and/or social anxiety symptoms during postpartum which they attributed to ADHD challenges. Five women said that they had experienced social anxiety prior to having children, but work and other obligations kept them from becoming isolated. For example, Participant 4 said,

"I think that there have been times in my life when I just have not wanted to get out and do stuff, but because I've always had my hand in so many different fires it was never really an option...And once [my son] was born I could lean on him. 'Well I don't want to go anywhere today. I'm going to just sit with [my son] for a little bit....I don't think [my son is] feeling well."

A few women referenced a direct connection between anxiety, social isolation, and ADHD.

"With my ADD I have a tendency to either go totally like...um...hermit or hyper-social. It's either one or the other. And so when I'm home a lot which I was with her, I tend to go in towards the hermit side of things." (Participant 3)

Although, the majority of women did not specifically state that ADHD was the reason for having social anxiety symptoms, they referenced the ADHD-related symptoms and behaviors. Five women referenced embarrassment about being late.

"I think some social anxiety can spring up around it cause you're late and discombobulated and that's hard." (Participant 8)

Five women reported anticipatory anxiety related to challenges with focusing on, following, and contributing to conversation. In addition, four women reported that their thinking process is different than that of some peers, as summarized by this statement by Participant 5:

"So there's this feeling of incompetence and then isolation...just the fact that like I'm limited in my abilities to socialize properly because I can't take in too much at once and I drop 3 things and I've got to pick them up (laughs)."

Additional reasons given for feeling anxious about going out in public with the baby included: anxiety about being in unknown and/or non-baby-friendly spaces; fear of embarrassment due to mismanaging logistical problems, such as the baby carriage or keeping track of the baby's things; and anticipation of being overwhelmed by the sensory overload in public. In addition, participants reported feeling judged and/or misunderstood by peers and choosing to isolate themselves as a response.

"For me scheduling [is hard] and [other moms] would think, 'OK maybe she's depressed because she's not leaving the house more often.' and it 's really that I just find it overwhelming to leave the house." (Participant 8)

"I [internalize my frustration with myself and] just get...withdrawn....I like cut people off ...I don't want to have to keep telling the same damn story over and over. Like I wanna [sic] get a group of my friends together, sit them down and be like, 'This is the story. Now you all know. OK." (Participant 9)

## Medications Prescribed for ADHD, Depression, and/or Anxiety: Qualitative Study

There is very little data to report regarding prescription medication used by participants to treat symptoms of ADHD, depression, or anxiety, as seen in Table W2 (see Appendix W: Qualitative Study Co-morbidity and ADHD Medication). The majority of participants stated that

they had taken prescription medication to treat ADHD symptoms at some point prior to conception and stated that it had been helpful; three reported discontinuing it due to unwelcome side effects. The majority of participants did not take any medication from the point of planned conception through the breastfeeding period on the advisement of their obstetrical or psychiatric provider. One participant reported taking anti-depressant medication during postpartum, but only after the third child's birth. One participant reported smoking pot to manage anxiety symptoms during pregnancy and postpartum

Accurate diagnosis and medication. All of the women who had been diagnosed as adults said that they had developed coping skills as a result of having to struggle for many years with symptoms. The ADHD diagnosis allowed them to feel better about themselves. Women who had chosen to take ADHD medication reported that it reduced their symptoms of anxiety and/or depression. Four women reported that, although the decision to discontinue medication in the perinatal period was not difficult, not taking the medication was difficult because it contributed to symptoms of anxiety and/or depression. Participant 8 reported taking Ritalin to manage depression during her third pregnancy and postpartum. She reported being told that she was "resistant to treatment" because many types of therapy and medications for depression had not been successful for her earlier in her adulthood. She stated that, between her second and third pregnancy, at age 42, she was diagnosed with ADHD. She stated that it boosted her self-esteem to have a context for understanding her challenges.

"My emotions could come off as I have a mood disorder, because it does affect my mood. but I think it's actually based in the ADHD symptoms or struggles."

She reported significant depression during the third pregnancy and resumed taking Ritalin under the advisement of a researcher at a Boston hospital and her obstetrician [names not provided]. The mother explained the way in which she felt depression and ADHD were inter-related and mutually treated by Ritalin. She had experienced nausea throughout her pregnancy.

"So I get depressed because I'm physically ill and then I have a basically obsessive overwhelming thought, negative thoughts. And so the Ritalin helped me feel more in control of my brain. Because without it, I feel like I'm just being attacked by - like I'm chum and there's sharks coming in saying, like, 'Oh you're never gonna be happy....You're too old,' or you know, whatever the depression was in the pregnancy. The Ritalin helped me feel... a kind of power of just being able to...consciously stop going there."

## **Support for the Mother with ADHD in the First 12 Months Postpartum**

Participants reported having supportive people in their lives as well as actively seeking out support, with mixed results. Three areas of support were recorded during interviews: partner and family support, community support, and support from friends.

**Partner and family support.** Partners and family members were the primary sources of support reported by participants. Support was mixed, but primarily helpful both practically and emotionally. In some cases partners and family addressed ADHD related challenges directly. The type of support and timing of it was reported more frequently than the amount of support.

Partner support. All of the participants had partners at the time of their youngest child's birth and felt that their partners influenced their ability to manage challenges related to their ADHD symptoms. The unmarried participant reported that her partner had not been helpful. The majority of them said that their partners recognized their ADHD challenges and made accommodations for them after the baby's birth; but one partner had not done so. One woman

reported that her ADHD diagnosis, received between the births of her second and third child, was beneficial to her and her partner: They addressed challenges differently after the third child.

"I think he really adapted practically now. I think he really got the idea that some things were never gonna [sic] get that much better for me in terms of it." (Participant 8)

Four couples went to couple's counseling prior to the birth of the baby due to problems with the participant's ADHD-related symptoms. They reported that counseling had helped them prepare for the birth and that they had not gone back since then. Two couples went to counseling before an ADHD diagnosis had been made. These participants described the partner's response to the new diagnosis positively. In contrast, three women described their partners as not understanding the diagnosis. Their partners made, what the participants perceived as negative judgments about ADHD symptoms. Two of the participants reported exerting more energy and vigilance to prevent symptoms from "spilling over" into the relationship after the baby's birth.

"I don't really talk about that a lot with him because we've just...you know like I feel like we're working really well as a team right now." (Participant 2)

All married participants described concerns about the stressful impact of their ADHD-related symptoms on the partner after the birth of the baby. Six women said that the partner did "basically everything else" other than childcare because she could not manage. Some partners assumed tasks that they also found difficult. Three participants felt that their partners may have undiagnosed ADHD or other diagnoses. One woman said that she felt that her ADD symptoms were creating "ADD by proxy" in her partner.

When comparing themselves to peers, participants reported that daily tasks were more difficult for them to manage and for a much longer period than for their peers. By extension, the majority of participants reported that this created a heavier "burden" on their partners and on the

couple's relationship than that of their non-ADHD counterparts. Participant 3 stated that her partner started to take anti-depressant medication "to handle my not-medicated self". Another mother said, "My husband doesn't want to have any more kids because that was just a lot for him." (Participant 4)

Two participants reported that their partners helped them to come up with new ways of coping with challenges; sometimes through modeling, but usually by problem-solving with them. For example, Participant 8 said that her husband problem-solved with her to find a way to balance her fluctuating energy through the day; and that he provided "steady" and "consistent" emotional support for her as well as their children.

*Family support.* Family support was reported as more mixed than partner support. One young woman said that her partner's family took advantage of her request for help and of her impulsivity, anxiety and depression. They encouraged her to leave the child with them, eventually suing for and receiving primary custody of the child.

The most helpful family support was described as coming from parents who also had ADHD symptoms. Three of these participants reported receiving practical as well as emotional support. Participant 4 said that her mother did not accept the participant's diagnosis of ADHD, but still supported her in ways that addressed the ADHD symptoms. In particular, her mother pushed her to get out of the house.

"That last week [Mom] was here she said I had to leave the house. I didn't want to leave the house. I was starting to kinda fall into that, a little bit of PPD and she made me get out of the house and I had to go to a breastfeeding support group...so I could learn how to use the stroller in public and you know get used to driving....She wanted me to be able to

do this when she wasn't here....So while I was not all that thrilled with her, during the process I 100% credit her with helping me with that, definitely."

Participant 2 said that her mother took care of her baby while she worked. Her mother did laundry and provided adult social support when she came home, which the participant craved.

"I like have to pump. And pumping is like so boring. And so I usually like, my mom is pretty easy....I know how to get her to stay so I'll just ask her questions and get her talking. So then I can talk with her and before I know it, I'm done pumping and it's good! So yes....I think that just having her in our lives and having her be so involved has been immensely helpful and not just...that she's taking care of the baby, but...it's kind of like made our relationship stronger, too."

Participant 5 said that neither parent had ADHD. However, they encouraged her to go to their house when they were away. Their house was quiet and neat which gave her a valuable reprieve.

**Community support.** Three types of community support were identified: informal support, facilitated support groups, and professional support.

*Informal support – searching for a "good fit."* Seven mothers reported searching for mother/baby friendly places and then using those places as a secure destination. Three women said that the anxiety of not knowing if they would find such a place contributed to their tendency to isolate themselves, as stated by Participant 3:

"When I know that these like welcoming [baby-friendly] spaces are there, I'm much more likely to venture out into the sort-of like unknown....For me, ADD... comes with some anxiety around going places that I've not been before."

Two women referred to informal support groups as emotionally very helpful. In addition to a group of friends who met in childbirth class, Participant 4 reported:

"I've got some groups on Facebook that are also supportive of local moms in the area and that's helped as well."

Another mother found a support group of women who also have children with special needs.

"I have a group of friends who, when I say, "You know what? There's too much going on in here and I have no idea what you're saying to me and they just laugh and...we go somewhere quieter and talk or they say, 'OK I'll tell you later.' (Participant 5)

Participant 4 reported having lived in a different religious communal setting with each child. She said she had a "really strong community of built-in support" and she felt accepted and did not experience postpartum depression in the settings that had felt like a good fit. However, she reported that it did not lessen her experience of social anxiety.

Formal support groups. Five women reported having attended formal support groups for mothers that were facilitated by professional facilitators. None of the groups were designed specifically for mothers with ADHD. Two of them referenced difficulty with getting places on time as a deterrent to attending: not wanting to be embarrassed about being late. Their evaluations about the benefits of the groups referenced goodness of fit and the skill of the facilitator. Three women felt that, even though they had enjoyed being with people, their issues were different from those of other group members and so they stopped going. Two of them said that, even if they had felt like they were doing fine, listening to the issues raised by other mothers made them feel "insecure" and anxious and that they were not the issues they wanted to talk about. However, one woman said that social anxiety prevented her from asking her questions and that she did not feel she could have listened to the answer. Two women said that their distractibility made it difficult for them to focus in the group.

Facilitators were reported as having made the difference, for three women, in how supported they felt in the group and what they gained from it. One woman said that the facilitator's "energy and the way she holds space" in the group was beneficial and that the group kept her "above water a lot." (Participant 9). Another participant said that she felt the structure of the group she attended helped make it possible for her to take advantage of it.

"We socialized but you gave us [structure]....It wasn't just a free-for-all. So it had the soothing effect of kind of knowing what to expect and if I were tired, cause I get tired from socializing...So it was a nice combo of structure and a little bit of networking... But networking in a way that I didn't have to be kind of be on...for an hour because people asked questions...and the social part...was brief and organized in a way."(Participant 8)

Professional support for ADHD: Obstetrical and pediatric caregivers. The original interview guide did not include a question about whether the participant had told their obstetrician or midwife, their child's pediatrician and/or their therapist about their ADD or ADHD diagnosis. However, the question was added after some participants offered the information; seven of the women were asked the question or offered the answer spontaneously. Only one woman had informed the pediatrician. Two of the participants said that they did not tell their obstetrician or midwife of their diagnosis. One woman said, "In the beginning years, it wasn't even on my radar....I was so in denial." (Participant 6) Three women told their obstetrician or midwife. One woman said, "I might have mentioned it to my midwife, but not as a diagnosis. It's not in my chart. I kind of mentioned it in passing." (Participant 4) Another woman said that her obstetrician and therapist became very involved with the diagnosis because a decision needed to be made about ADHD medication during pregnancy and postpartum. One woman stated her reasoning for telling her doctor was wanting to be understood:

"...[But] people don't really know the intricacies of ADHD. So it doesn't really have the effect I want. They don't understand all my struggles but I want them to know that I'm struggling." (Participant 8)

Imagining the Perfect Support. Participants were asked the question: If you could imagine the perfect support for you as a mother with ADHD in the first year postpartum, what would it be? Some participants identified support that they were already receiving that was perfect for them, such as: "my mom," "my partner", and "Fly-lady.com." A wish list was generated with the following practical items: "help with bill-paying" and "time management," and "a maid." Participant 8 offered this wish:

"It would have been nice to sit down and really work out....practical things that might seem obvious to them, that are hard for me. Like just getting out of the house once a day or twice a day,...well let's sit down and really figure out how to make that happen."

The same participant said that a perfect form of supportive therapy would include the following:

"Any kind of structure....Anything my head, my brain could grab onto. Now I'm remembering that crushing fatigue and it really makes everything so much worse. So anything vague or anything abstract is not gonna stick in my brain...I really need someone bossier than talk therapy....Like that's too open-ended when you're tired"

Three participants wished for an ADD coach or ADHD support group. The desire to be with

people who understood them was expressed by five of the participants. Two participants felt that they had already experienced such support.

"Having like-minded moms around the same-not even the same age, just you know kind of you know trying to go on the same journey is hugely helpful." (Participant 4)

"I remember finally meeting someone else who like had the same, felt the same way about it, and feeling like I had met my long lost sister." (Participant 5)

"People who have [ADHD], feel really good when they're with the same people who say

The next chapter brings together the findings from this research with the survey of research in the literature review. It addresses the ways in which the findings may support or be in conflict with previous research in each area outlined in the literature review. It addresses implications of this research for social workers in clinical, research and advocacy roles.

I the same things...they're in the same tribe." (Participant 4)

#### **CHAPTER V**

#### Discussion

The purpose of my research study is to expand the knowledge base about women with Attention-Deficit/Hyperactivity Disorder (ADHD): specifically, their experiences with challenges and coping strategies in the postpartum period, and the possible risk of suffering from perinatal anxiety and/or depression. My major research question is as follows: How do women with a diagnosis of Attention-Deficit /Hyperactivity Disorder (ADHD) experience and cope with the challenges of being a parent in the first twelve months postpartum? My secondary question is, how does perinatal anxiety and/or depression impact their experiences? My tertiary question is as follows: What role do supports play in mediating their experiences?

Literature has been available about research that documents three factors: (1) females are diagnosed with ADHD much less frequently than males, and females are more likely to be diagnosed first in adulthood; (2) women with ADHD have a high rate of co-morbidity with mood and anxiety disorders; and (3) there are potentially long-term negative consequences of maternal mood and anxiety disorders on the growing fetus and infant. There is very little research that has attempted to combine this knowledge and assess risk to mother, baby and mother-baby attachment relationship when the mother has ADHD symptoms. To my knowledge, this research study is the first to ask mothers to tell their stories about their experiences with ADHD in the postpartum period. My research is not an attempt to show causality. A control group was not included by which narrative responses might have been compared. However anecdotal evidence

from this research suggests that mothers with ADHD experience the postpartum period as qualitatively different from non-ADHD mothers.

This chapter reviews key findings and opens up these findings to a discussion in a broader context. It is presented in the following order: (1) key findings as compared to the previously reviewed literature; (2) implications for social work practice; and (3) directions for future research. Findings from the quantitative portion of my research are very limited. As a result, the majority of this chapter is devoted to a discussion based on the interviews of nine mothers (N=9) who have a diagnosis of ADHD.

## **Key Findings**

Getting a diagnosis of ADHD. In 2006, the average age of first-time mothers in the United States was 25 years (http://www.cdc.gov). Given that many females with symptoms of ADHD are not diagnosed until adulthood, it is very likely that many women give birth before they have been diagnosed. They do not have an opportunity to plan for the birth in a way that accommodates their challenges. Although the qualitative portion of this study used a convenience sample of women who had already been diagnosed with ADHD, it confirms previous research about the timing of the diagnosis. The majority of participants (*N*=6 out of 9) were diagnosed in adulthood, at an average age of 32 years (ages 29 – 45 years). They had been living with the diagnosis for an average of only 5 years (2-10 years). Two of the women were not diagnosed until after the birth of one of their older children. In other words, they had slipped under the radar during childhood right through early adulthood and were still coming to terms with their diagnosis. Of the remaining women, one was diagnosed in adolescence and primarily for inattentiveness, also affirming previous literature demonstrating that symptoms of inattentiveness often do not surface sufficiently for a diagnosis in girls until after puberty. This

study was not designed to solicit experiences prior to pregnancy, but these six participants expressed regret for having a delayed diagnosis. In spite of achieving college and graduate degrees, they revealed struggles with academics and social relationships, confirming research by Manos (2010) and Wasserstein (2005). In other words, they lived for many years without a context to understand themselves or to be understood by others.

Identification with ADHD. In spite of a growing awareness of ADHD in the general public, the name carries a historically negative connotation by being associated with boys who have conduct problems. The diagnostic label "ADHD" may be a deterrent to women seeking a diagnosis and/or accommodations to address their challenges in adulthood. They may also not "see" themselves in the label. This study confirmed research by Kessler et al. (2010) that "hyperactivity" is more subtle in adulthood and seems to be highly integrative with other ADHD symptoms, such as distractibility. Difficulty in regulating energy and impulsiveness appeared to be related to participants' challenges in executive functioning. For example, one woman described inertia that came from the weight of trying to figure out where to start (referring to herself as a "bump on a log"); and other times multi-tasking in a frenzy to get things done.

The label attention "deficit" has negative connotations. Women with ADHD have difficulty managing attention. Lending support to Nadeau, Littman, and Quinn's research (2002), some women in this study described distraction due to a "hypersensitive nervous system" (p. 72) that was triggered by the sound of the baby's cry (N=4; e.g., wearing ear plugs all day), by the sensation of the baby's weight (N=3; e.g., holding the baby only as long as it took to breastfeed), and, by the sound of the mother's own thoughts (N=6). One woman described distraction as "staring at a wall for a half an hour looking at nothing", but thinking of everything. Mothers also talked about hyper-focusing (e.g., surfing the internet for hours at a time on the computer).

Women in this study with the "inattentive sub-type" (*DSM-IV-TR*, 2000, p. 93) (*N*=4) were very clear that they had "ADD" not "ADHD". Although the *DSM-5* (2013) still does not make this distinction, popular literature, such as books and internet resources that reach out to women, promote their services by using just ADD or both ADHD and ADHD in their titles, such as Quinn and Nadeau's website entitled ADDvance (http://www.addvance.com). Since the majority of adults retain symptoms of inattentiveness, sensitivity to the label of ADHD versus ADD may encourage more women to seek support.

Challenges of postpartum: Different or similar to non-ADHD moms? Every mother experiences challenges when a baby is born. Parenting an infant is a tough job and the challenges to everyday life are substantial. There is a plethora of baby books and web sites that attempt to help new mothers solve their parenting problems. The ADHD mothers in this sample identified the same categories of challenges as most mothers: baby care, self care, household responsibilities, getting out of the house on time and with the baby, relationships with partners and friends, transitioning to a new identity as a mother, and balancing all of the multiple demands in the same amount of time as prior to the birth. So what is different? The expression of executive functioning challenges and energy and impulse regulation may be the key factors.

Is it about executive functioning? Anecdotal observations of and by women in postpartum suggest that a mother's executive functioning (EF) skills are challenged after the birth a baby. In comparison to non-ADHD mothers in the quantitative study, ADHD mothers struggled with EF skills, and energy and impulse regulation challenges long before the baby's birth. The typical challenges of new motherhood, factors such as lack of sleep and too much to do, ratchet up their level of impairment. Thus, non-ADHD mothers and ADHD mothers cannot

be assumed to experience the challenges of postpartum equally. The continuity of symptoms from childhood to adulthood is likely what sets them apart (Brown 2006, Kessler et al., 2010).

With few exceptions, mothers in this study did not name "executive functioning" as a challenge in postpartum. However, their narratives were filled with references to aspects of EF that challenged them, as summarized in the six clusters of executive functioning skills organized by Brown (2006). A list of EF skills does not describe outcomes. Women in this study identified difficulty with short-term memory and memory retrieval, distraction, and cognitive processing as having an impact on paying bills on time and on caring for children. Challenges with planning, prioritizing, organizing, focusing, logistics, and awareness of time were factors in not being able to prepare meals for themselves, create routines for their babies, and get out of the house on time. These and other challenges to executive functioning had secondary consequences, such as "being hungry and thirsty most of the time", being late for appointments, and spending more time alone. For example, one woman described the stress and frustration of trying to maintain an alternative vaccination schedule for her child:

"I'm freaking out about it and I'm not dealing with it but I'm like beating myself up because I'm not dealing with it because it's this huge thing. It's like another little life that's dependent on me."

In short, mothers with ADHD experience fluctuating levels of chaos and its consequences every day. So how do they cope?

Coping and its emotional consequences. Mothers with ADHD manage their challenges. They get to appointments; they eat; they pay their bills; and they bathe their children and put them to bed. On the surface they manage just as non-ADHD mothers do: they get by. Look below the surface and "managing" or "coping" likely looks very different. Since this research did

not include a comparative group of non-ADHD mothers, it is not possible to verify this supposition. Both "challenges" and "coping with challenges" are conceptual constructs that I introduced to participants in order to explain the purpose of the research. As such, it may have biased their narratives. It may or may not have reliability or validity for research on this topic. However, talking about coping became a way for mothers to identify what they did in response to their challenges. It provided a common language from which to jump into their daily lives. The concept of coping became a very personal way for mothers to deepen their reflections on their experiences The mothers delineated two types of coping: strategic and emotional. I have relabeled them here as "strategic coping" and "emotional consequences of coping".

Strategic coping. A baby cries; summoning for help to deal with needs that she is incapable of meeting on her own. Babies are notoriously unable to wait. As such, parents learn to jump quickly to soothe. In the first year, with the aid of attuned and timely responses of parents, babies develop a sense of self and other that allows them to feel secure in knowing that help will arrive. However, a baby's cry can mean anything: hunger, discomfort, loneliness, boredom and over-stimulation. Many ADHD mothers are ideally suited to dropping everything to respond to a baby's immediate, practical needs. As one participant said, "This is an express time in my life when I can deal with exactly what's in front of me!" Breastfeeding is an example of strategic coping that weaves a baby's needs and mother's strengths together. It was chosen by many mothers (N=8) for its benefits to the baby, but also because mothers knew they would have had trouble with the logistics of bottle-feeding which requires organizing, planning, and memory.

Practical strategies to deal with challenges appeared to fall into two categories: repetitive versus random, and short-term versus long-term. Repetitive strategies that became routinized included positive, easy-to-remember routines that had immediate results, such as bathing the

baby every day; an enjoyable and regulating activity for both of them. Other mothers described being stuck in response patterns that worked eventually, but from which they did not know how to extricate themselves, such as bouncing a baby to sleep for hours around the clock. The routinized behaviors solve a problem, but, as Solden (2005) described, they are also difficult to maintain and prevent the mother from responding in new ways, especially as circumstances change (p. 67). Other mothers described living with no routines, living on the spur of the moment. To avoid being late for appointments, mothers described spending an entire day planning and organizing to get out, and still being late. In contrast, some women used creativity to enlist the EF skills of other people to help them. For example, one woman organized her baby's appointments to coincide with that of a non-ADHD friend's baby; she relied on the friend to get her there on time. Although these descriptions may sound typical of the newborn period, or even the first six months of postpartum for most mothers, participants in this study who had children older than 12 months of age described that their response patterns had not changed. Immediate needs were still present, but became more complex and harder to solve as babies became mobile. Participants described this as strategically and emotionally very challenging.

Strategic coping is much more difficult for mothers with ADHD to manage when there are multiple demands on their energy and EF skills. The immediacy of meeting the baby's needs preclude her ability to care for herself or her household, to meet her work obligations, to engage in social activities, or to sustain a mutually positive relationship with a partner. EF capacity is over-stressed. Previous management of these needs was described as difficult, but women had developed strategies. The strategies were gone or severely truncated after the birth of the baby.

*Emotional consequences of coping.* This study did not measure levels of ADHD symptoms, as did previous research. It cannot confirm or disprove findings by previous

researchers linking maternal ADHD with lower measures of parenting satisfaction, self-esteem, parental locus of control, and with co-morbid disorders (Banks et al., 2008;Kryski et al., 2010; Ninowski et al, 2007; Semple et al, 2011; Watkins & Mash, 2009). However, the participants' narratives describe the emotional impact of trying to manage challenges and may provide greater insight into previous research findings.

"All these emotions set in all these negative voices and that brings me down even more.

But is it the logistics that set me off first? Or is it the emotions?....I mean I think the logistics are the first thing because otherwise what triggers the emotions?

The emotions don't start from nothing." (Participant 6)

There is an emotional legacy from a childhood spent coping with ADHD. Sensitivity to the judgments by others that one is not measuring up to standards is internalized. It can lead to women coping by avoiding challenges, feeling easily discouraged from even trying, and fearful of making mistakes (Nadeau, Littmena, & Quinn, 1999, p. 51-52). Women with ADHD carry their remembered experiences of feeling incompetent, ashamed, overwhelmed, guilty, and like a failure into motherhood (Solden, 2005). The cycle is repeated as women try to measure up to impossible standards of motherhood (Medved & Kirby, 2005).

Even if a problem appears to be resolved, strategic coping exerts an emotional, physical, psychological, and social toll on women with ADHD. Banks et al., (2008) and Semple et al. (2010) correlated high levels of ADHD, especially of symptoms of inattentiveness with an external locus of control, lower sense of parenting self-efficacy and higher rates of intrusiveness and hostility. These factors were not measured in this study, however two women with the inattentive form of ADHD and one with the combined form spoke about their relationship with

their baby in ways that suggested some hostility and a sense that they could not control their own lives.

The predominant emotional themes included some positive emotional consequences of coping. Although eight of the women reported being happy with their role as a mother at least part of the time, themes related to expressions of difficulty with coping were present in all of the narratives. The stated intent of this study, with its question of challenges and coping, may have biased women to speak in those terms. However, the depth of emotion that was expressed belies the fact that women with ADHD do experience negative consequences from trying to cope with challenges and lends confirmation to previous research. Their narratives included these phrases: "Coping? I just didn't;" "suffered;" "overwhelmed;" "exhausted;" "lonely;" "bored;" "vigilant;" "afraid;" and "perfectionist." Self-judgments included: "incompetent;" "embarrassed;" "alienated; "misunderstood" "terrible;" and "horrible." They were describing feeling low self-esteem, low self-efficacy, and symptoms of anxiety and depression.

# Co-morbid Depression, Anxiety and Social Isolation

Postpartum depression has been studied extensively in the general population of mothers and is estimated to occur in 10-15% of mothers (Beck & Driscoll, 2006, p. 59). Postpartum depression in women with ADHD is less researched, but evidence, such as that from Banks et al. (2008), indicates high levels of maternal co-morbidity in women with both subclinical and clinical symptoms of ADHD. In this convenience sample of women with ADHD, three women (N=3) reported symptoms of depression. In contrast, six women (N=6) reported symptoms of anxiety; four of them had a diagnosis of anxiety. This finding lends support to that of Wenzel, Haugen, & Jackson (2005) who reported that postpartum anxiety may be more prevalent than

depression in new mothers. Banks et al. (2008) also correlated higher levels of ADHD symptoms (i.e.: clinical versus subclinical levels) with higher rates of anxiety.

Symptoms of depression and anxiety can overlap those of ADHD, especially EF challenges, and confound diagnosis of either. The majority of the participants had a diagnosis or symptoms of depression or anxiety (two of them had pre-existing bipolar disorder). In addition, participants had the following symptoms of disorders: OCD (N=2); sensory sensitivity (N=3); and possible autism spectrum (N=1). This study was not designed to extricate the co-morbidity factors from the experience of ADHD or to ascribe causation. It notes that challenges with ADHD may be compounded by the co-morbid disorders and that co-morbid disorders are likely to be part of a woman with ADHD's postpartum experience.

Social anxiety and isolation as an outcome of executive functioning challenges. One of the most striking findings of this study is the experience of these mothers reported with social isolation. It confirms and surpasses Rucklidge and Kaplan's (1997) findings of a high incidence of social anxiety in women with ADHD, especially if they were not diagnosed in childhood. As a single factor, social isolation encompassed many of the challenges previously described. It may elucidate findings by Wenzel, Haugen, & Jackson (2005) and Banks et al. (2008) that report clinical and subclinical symptoms of social anxiety are "associated with relationship distress above and beyond depressive symptoms" (Wenzel et al. 2005, p. 310). Part of a new mother's identity is formed in the company of other new mothers. Attending childbirth classes, formal postpartum baby groups (e.g., Mommy & Me [http://mommyandme.com], baby swim classes), and informal gatherings such as on playgrounds and playgroups have become an expectation of middle class America. The groups provide opportunity for new mothers to kvetch about the challenges of being a new mother and share solutions and support.

Consider what is entailed in getting to a play group: It takes forethought, memory, initiation, planning, management of distraction and energy, prioritization of resources, and organizational logistics for a mother to get out of the house with both her and her baby fully dressed. To be on time, she needs to have active awareness of time and the ability to predict how long it will her efforts will take. Once out the door, she needs transportation, keys, a diaper bag, a snack for herself (and her older child) and directions. At the playgroup, she needs to be able to manage multiple distractions, shift her focus of attention to be able to attend to both adults and child, and sustain her energy. She needs to be able to regulate her nervous system such that she can selectively attend in an environment that may have a cacophony of sound and movement (Nadeau et al., 1999, p. 60). She also needs to have acquired communication skills for a positive social interaction to be achieved.

Now consider a mother with ADHD who is challenged by many of the EF skills required to get out of the house, on time, and prepared. All nine mothers (N=9) reported symptoms of social anxiety during postpartum and attributed it to their ADHD symptoms. Although each of the mothers had varying levels of difficulty with each of the tasks of EF, as a whole, the challenge of being with other new mothers was daunting. The onset of the anxiety varied, some felt it within the first three months, and others felt it after attempts had failed. One woman was helped by her mother to navigate the challenge until she could do it herself.

The experience of these mothers supports research by Nadeau et al. (1999) and Rinsky and Henshaw (2011) that girls with ADHD become hypersensitive to criticism and develop gaps in social and communication skills. Mothers in this study described feeling inept and embarrassed in front of other mothers. Some mothers said that they felt they could not keep up with conversations or contribute to them, thus supporting work by Robbins (2005) and Solden

(2006). Attending to conversations in support groups received mixed reports. Women wanted to be present, but were too distracted to listen or the topics created more anxiety. Confirming findings by Solden (2005), the majority of mothers (N=7) withdrew from attempts to join social gatherings as a form of protection. They were not able to enjoy the benefits of social interaction, such as engaging in new ideas for managing challenges. Thus, their repertoire of skills was limited to their own resources. Three mothers later found groups of women with whom they felt understood them without judgment. One exception to this portrayal is the decision made by one mother to prioritize her social life. As teenager with her first child, she initiated a bedtime routine for her infant and adhered to it so that she could go out and party.

# Becoming a Mother: Melding the Pre-Baby Identity With Motherhood.

Successfully negotiating the expectations of motherhood helps women to make the transition to motherhood identity that is inclusive of the previous identity and the new. Social gatherings are part of the construction of motherhood, especially of the concept of "intensive mothering expectations" (IME) described by Johnston and Swanson (2006). Six mothers (N=6) were stay-at-home mothers in this group. They described self-sacrifice and being constantly on-call, supporting the concept that mothering identity of stay-at-home mothers is closely aligned with IME (Johnston & Swanson, 2006). However, ADHD mothers are also at risk of feeling incompetent if they cannot fully engage with activities like other mothers at their level.

Contradicting the assertion by Johnston and Swain (2006) that stay-at-home-mothers do not feel the tension to return to work once they have made a decision (p. 515), these mothers reported conflicting feelings. However, it is not clear if it was the stimulation and regularity of work that supported their ADHD symptoms that they missed or their former identity.

Two mothers worked full-time. One of them was satisfied with her mothering identity. The other mother experienced a high degree of conflict due to self-described perfectionism in both home and work environments. Her description of her relationship with her baby was one in which she loved and resented the demands. She could not manage the tasks in each realm given her challenges with executive functioning skills. Her narrative supports the description by Solden (2005) that some women, who appear to be high-functioning, hide their challenges through a supreme amount of effort. Both of these mothers described the difficulty of trying to balance work and home while not taking ADHD medication in order to breastfeed.

# Partners And Family: Meaningful Support For An ADHD Mother And Her Baby

Mothering an infant is not designed to be done alone. Spouses are often expected to be the key support resource for mothers in the postpartum period. They are often just as inexperienced and overwhelmed as the mother, but their support can be critical to lowering the incidence and severity of maternal postpartum depression in ADHD and non-ADHD mothers alike. (Sejourne et al., 2011, p. 135). The mothers in this study reported varying levels of involvement from their partners. Most partners accommodated the mother's challenges by taking on one or more tasks that women could not manage due to their ADHD symptoms, such as: bill paying and childcare of the older child. It was well received by some mothers and criticized by others. The mothers also reported concern about their partners, many of whom had EF challenges related to lack of sleep, good self care, and possibly undiagnosed ADHD or other disorders. Despite the intention of this research to elucidate the mediating effects of support on the experience of postpartum depression or anxiety, the methodology did not contain any way to factor these into a credible analysis. Narratives from a small sample size of well-educated

women are not generalizable, nor can they conclude that partners mediate the effect of ADHD on depression or anxiety.

Similarity of fit – like mother like child. There is growing evidence that ADHD has a genetic as well as environmental etiology (Czobar et al., 2009, p. 204). Mothers with ADHD may have a parent with ADHD. This study appears to support this: the most helpful family support was described as coming from parents who also had ADHD symptoms (N=3). The participants in the study experienced this support as warm and accepting and fit their unique needs. This finding appears to support that of Pscychogiou et al. (2008) which demonstrated that ADHD parents show empathy and understanding toward their ADHD children (p. 132).

Goodness of fit was much more evident and hopeful as mothers discussed their strengths as a mother with ADHD. In spite of narratives filled with discussions of challenges and difficulties with coping, these mothers spoke with warmth, empathy, and humor about how they might handle ADHD in their child. Despite having difficulty creating structure and routine for their babies, they were remarkably hopeful of being able to do so as their children grew.

# **Implications For Social Work**

The psycho-social-emotional health of a mother and her baby are intertwined beginning in pregnancy. Women may have developed co-morbid symptoms that hide ADHD as the underlying cause, and complicate a differential diagnosis. Clinicians need to be aware of the intricacies of ADHD and co-morbid diagnoses and be willing to tease out symptoms. Even in this convenience sample of well-educated women, the majority of them had not received an ADHD diagnosis until their mid 30's. Advocacy for equal access to quality diagnostic services is needed for all females, but especially for girls and women who are economically, socially, and

academically less advantaged. Otherwise, women will continue to fall through cracks and not be diagnosed.

It is critical that the mother be diagnosed before she becomes a mother. Life is much more challenging afterwards. Treatment methods that include medication and cognitive behavioral therapy may reduce symptoms of inattentiveness and increase skills such as time management, organization and planning and reduce symptoms of postpartum depression (Schiller 2011). As a woman prepares to have a baby, and confronts the decision about whether or not to continue medication, she will likely benefit from counseling to help her sort out the benefits and risks; social workers may serve an adjunct role to medical prescribers by examining the issue with the mother from a wider psycho-social, emotional, economic, and cultural lens.

In order for a couple's partnership to work well, Baker and Baker (1996) and Nadeau and Quinn (2002) advocated that couples receive marital counseling to educate themselves about ADHD and to work out conflicts prior to the baby's birth. Four of the married couples received counseling prior to pregnancy and found that couples' counseling helped them to feel better prepared for the baby's birth. Social workers are in a position to provide such support.

Some of the mothers experienced a sense of loss of identity because the ADHD symptoms they loved were put aside, like impulsivity and creativity, in order to devote themselves to the baby. Social support is critical for a new mother to create her sense of identity as a mother that encompasses all of herself, including her ADHD symptoms. Social workers can address the potentially high risk of social anxiety in mothers with ADHD in advance. They can help create a plan that addresses practical as well as emotional aspects of the challenge of getting out of the house with a new baby. Although not a substitute, technology allows women access to information and social connections, even while breastfeeding. It is an important resource to

suggest to women with ADHD who struggle with the challenges of sitting for long hours feeding the baby. Guidance, not judgment can be offered so that mothers can learn to balance the mother's needs with the baby's.

Finally, social workers are trained to look at the full picture: economic, race, psychological, social, and emotional factors that are woven into the experience of the mother, her infant, her family, and her community. Social workers can advocate on all of these fronts for earlier diagnosis and evidence-based treatments for girls and women with ADHD.

#### **Limitations and Research Recommendations**

Although the ASRS-v1.1© 1 (Kessler et al., 2005) has been validated for use as a screening tool with adults, it appears to have limitations for use with postpartum women. For example, positive responses may have been due to competing demands for a mother's time or due to symptoms of anxiety or depression, rather than being an accurate measurement of executive functioning. In addition, "qualitizing quantitative data is not the mirror image of quantifying qualitative data (Padgett, 2008, p. 233). As a result, a comparison of results from using the ASRS-v1.1© in both the quantitative portion and qualitative portion in this study may be interesting and intriguing, but is likely misleading.

One possible exception is the comparison of findings between the qualitative and quantitative studies as participants recalled the time prior to having children. Since the quantitative group did not reach the threshold for a possible diagnosis of ADHD, it is possible that the ASRS-v1.1© might be valid during the early prenatal period. Women often see a medical provider on a regular basis for the first time during pregnancy. A screening tool that would help identify previously undiagnosed ADHD in a woman could be a valuable tool for validating her experiences and helping her make meaningful preparations for possible challenges

of becoming a mother, including possibly decreasing her risk of experiencing mood and anxiety disorders. Further research of the ASRS-v1.1© and perhaps modifications to it that lead to the development of a ADHD screening tool during the perinatal period would fill a void in obstetrical and social work practice.

Research that focuses on the strengths and risk factors in the development of an ADHD mother-infant dyad's attachment relationship is much needed. One direction for assessing this might be through observations of the process of "mutual regulation" (Tronick 2007, p. 342) of affect and contingency in mothers with ADHD and their babies.

Further research that assesses the risk of ADHD medications on the growing fetus and in breastfeeding would help mothers better assess the benefits and risks. Finally, research that evaluates models of cognitive behavioral therapy designed specifically for the postpartum period might enhance a mother's sense of self-efficacy, thereby having a positive effect on the mother, the baby, and the mother-baby dyad relationship.

#### Conclusion

This research provided one frame for understanding the effect of the birth of a baby on executive functioning skills in mothers who had an ADHD diagnosis as compared with mothers who did not have ADHD. More significantly, this research provided a glimpse into the lives of nine women with ADHD through their stories of coping with the challenges of motherhood in the postpartum period. Although the findings are not generalizable, this research study gave voice to the intricacies of these mothers' experiences of ADHD, their challenges, as well as their strengths. As many of the mothers said, participating in this research study was "validating". No one had ever asked them before about their experiences with being a mother who has ADHD. Based on this study, it appears likely that the experiences of mothers with ADHD is qualitatively

different from that of mothers who do not have ADHD. Further research is needed to develop better screening tools for ADHD; effective treatment modalities for ADHD in the perinatal period that might help to reduce the risk of co-morbid disorders; and guides for meaningful support for partners, family, and the professional community. Such research may help to enrich the lives of women with ADHD and the lives of their babies. It could assist them in developing strong, secure, mother-infant dyad attachment relationships that have long-lasting benefits.

#### References

- Abell, N., Jones, B. L., & Hudson, W. W. (1984). Revalidation of the index of self-esteem. Social Work Research Abstracts, 20(3), 11-16. doi: 10.1093/swra/20.3.11
- Quily, Pete (2013). Adult ADHD Self-Report Scale (ASRS-v1.1) Symptom Checklist Instructions. Retrieved from http://www.addcoach4u.com/documents/adultadhdscreenertest1.pdf
- Akinbami, L. J., Liu, X, Pastor, P. N., & Reuben, C.A. (2011). Attention deficit hyperactivity disorder among children aged 5–17 years in the United States, 1998–2009. *National Center for Health Statistics*, 70 [Data brief]. Hyattsville, MD: National Center for Health Statistics. Retrieved from http://www.cdc.gov/nchs/data/databriefs/db70.htm
- Allen, J. G. (2001). *Traumatic relationships and serious mental disorders*. West Sussex, England: John Wiley & Sons, Ltd.
- The American Psychiatric Association. (1968). *Diagnostic and statistical manual of mental disorders* (2<sup>nd</sup> ed.). Retrieved from http://www.scribd.com/doc/14532307/dsmii
- The American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Retrieved from http://www.scribd.com/doc/96984697/DSM-III
- The American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> ed., text revision). Washington, DC. Author.
- The American Psychological Association (2010). *Publication manual of the American Psychological Association* (6<sup>th</sup> ed.). Washington, DC. Author.
- Angell, B., & Townsend, L. (2011). Designing and conducting mixed methods studies. Institute for Health, Health Care Policy and Aging Research of Rutgers, Rutgers School of Social

- Work. Retrieved from http://www.sswr.org/Designing%20and%20Conducting%20Mixed %20Methods%20Studies.pdf
- Baker, H. S., & Baker, M. N. (1996). Self-psychological approach to Attention Deficit/
  Hyperactivity Disorder in Adults: A paradigm to integrate the Biopsychosocial model of psychiatric illness. Progress in Self Psychology, 12, 1-10. Retrieved from http://ehis. ebscohost.com/eds/detail?sid=b3f2cea8-9106-45d5-...
- Banks, T., Ninowski, J. E., Mash, E. J., & Semple, D. L. (2008). Parenting behavior and cognitions in a community sample of mothers with and without symptoms of Attention-Deficit/Hyperactivity Disorder. *Journal of Child & Family Studies, 17*, 28-43. doi: 10.1007/s10826-007-9139-0
- Barkley, R. A. (2001). The executive functions and self-regulation: An evolutionary neuropsychological perspective. *Neuropsychology Review, 11*:1, 1-29. ISSN: 1040-7308 (Print) 1573-6660 (Online)
- Barkley, R. A. (2011). Attention-deficit/hyperactivity disorder, self-regulation, and executive functioning. In K. D. Vohs, & R. F. Baumeister (Eds.), *Handbook of self-regulation:*\*Research, theory, and applications (2<sup>nd</sup> ed.) pp. 551-563. New York, NY: Guilford Press.

  \*Retrieved from http://ehis.ebscohost.com.libproxy.smith.edu
- Barkley, R. A., & Murphy, K. R. (2010). Impairment in occupational functioning and adult ADHD: The predictive utility of executive function (EF) ratings versus tests. *Archives of Clinical Neuropsychology*, 25, 157-173. doi: 10.1093/arclin/acq014
- Beck, C. T., & Driscoll, J. W. (2006). *Postpartum mood and anxiety disorders: A clinician's guide*. Sudbury, MA: Jones & Bartlett Publishers, Inc.

- Beebe, B., Jaffe, J., Markese, S., Buck, K, Chen, H., Cohen, P.,...Feldstein, S. (2010). The origins of 12-month attachment: A microanalysis of 4-month mother-infant interaction.

  \*Attachment & Human Development, 12(1), 3-141. doi: 10.1080/14616730903338985
- Behnke, A. (2003). The physical and emotional effects of postpartum hormone levels.

  \*International Journal of Childbirth Education, 18:2, 11-14. Retrieved from http://www.encognitive.com/files/The%20Physical%20and%20Emotional%20Effects%20of%20Post partum%20Hormone%20Levels 0.pdf
- Biederman, J., Faraone, S. V., Spencer, T., Wilens, T., Mick, E., & Lapey, K. A. (1994). Gender differences in a sample of adults with Attention Deficit Hyperactivity Disorder.

  \*Psychiatry Research, 53, 13-29.
- Brown, T. E. (2006). Executive functions and Attention Deficit Hyperactivity Disorder:

  Implications of two conflicting views. *International Journal of Disabitty, Development and Education*, *53*:1, 35-46. doi: 10.1080/10349120500510024
- Centers for Disease Control and Prevention. Percent of youth ever diagnosed with Attention

  Deficit / Hyperactivity Disorder: National Survey of Children's Health 2007 [Data file].

  Retrieved from Centers for Disease Control and Prevention website: http://www.cdc.gov/ncbddd/adhd/prevalence.html
- Chronis-Tuscano, Rooney, M., Seymour, K. E., Lavin, H. J., & Pian, J. (2010). Effects of maternal stimulant medication on observed parenting in mother-child dyads with Attention-Deficit/Hyperactivity Disorder. *Journal of Clinical Child & Adolescent Psychology*, 39(4), 581-587. doi:10.1080/15374416.2010.486326
- Chronis-Tuscano, A., Seymour, K. E., Stein, M.A., Jones, H. A., Jiles, C. D., Rooney, M. E.,...Robb, A. S. (2008). Efficacy of Osmotic-Release Oral System (OROS)

- Methylphenidate for mothers with Attention-Deficit/Hyperactivity Disorder (ADHD): Preliminary report of effects on ADHD and parenting. *Journal of Clinical Psychiatry*, 69(12), 1938-1947. doi: 10.488/JCP.v69n1212
- Conners, C. K., Erhardt, D., Epstein, J. N., Parker, J. D. A., Sitarenios, G., & Sparrow (1999).

  Self-ratings of ADHD symptoms in adults: Factor structure and normative data. *Journal of Attention Disorders*, *3*(3), 141-151. doi: 10.1177/1080705479900300303
- Cutrona, C. E. & Troutman, B. R. (1986). Social support, infant temperament, and parenting self-efficacy: A mediational model of postpartum depression. *Child Development*, *57*, 1507-1518. doi: 10.2307/1130428
- Dahlem, N. W., Zimet, G. D., & Walker, R. R. (1991). The Multidimensional Scale of Perceived Social Support: A confirmation study. *Journal of Clinical Psychology*, 47(6), 756-761. doi:10.1002/1097-4679(199111)47:6<756::AID-JCLP2270470605>3.0.CO;2-L
- Dennis, C-L. & Letourneau, N. (2007). Global and relationship-specific perceptions of support and the development of postpartum depressive symptomatology. *Social Psychiatry and Psychiatric Epidemiology*, *42*, 389-395. doi:10.1007/s00127-007-0172-5
- Dennis, C-L, & Ross, L. (2005). Relationships among infant sleep patterns, maternal fatigue, and development of depressive symptomatology. Birth, 32:3, 187-195. doi: 10.1111/j.0730-7659.2005.00368.x.
- Diener, E., Emmons, R. A., Larson, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale.

  \*Journal of Personality Assessment, 49(1), 71-75. doi: 10.1207/s15327752jpa4901\_13

- Dodson, W. (2005). Pharmacotherapy of Adult ADHD. *Journal of Clinical Psychology*, 61(5), 589-606. doi: 10.1002/jclp.20122
- Egger, H. L., & Angold, A. (2009. Classification of psychopathology in early childhood. In C. H. Zeanah Jr. Editor (Ed.), *Handbook of infant parent mental health* (3<sup>rd</sup> ed.) (pp. 285-300). New York, NY: The Guilford Press.
- Elek, S., Hudson, D. B., & Bouffard, C. (2003). Marital and parenting satisfaction and infant care self=efficacy during the transition to parenthood: The effect of infant sex. Issues in Comprehensive Pediatric Nursing, 26(1), 45-57. doi:10.1080/01460860390183065
- Eisenberg, L. (2007). Commentary with a historical perspective by a child psychiatrist: When "ADHD" was the "Brain-damaged" child. *Journal of Child and Adolescent Psychopharmacology*, 17:3, 279-283. doi: 10.1089/cap.2006.0139
- Emilsson, B., Gudjonsson, G., Sigurdsson, J. F., Baldursson, G., Einarsson, E., Olafsdottier, H.,
  & Young, S. (2011). Cognitive behavior therapy in medication-terated adults with ADHD
  and persistent symptoms: A randomized controlled trial. *BMC Psychiatry*, 11:116. doi: 10.1186/1471-244X-11-116
- Faraone, S. V. (2004). Etiology and pathophysiology of adult Attention Deficit/Hyperactivity Disorder. *Primary Psychiatry*, 11:7, 28-40. Retrieved from http://www.primary psychiatry.com/aspx?articledetailid=770
- Faraone, S. V., Biederman, J., Soencer, T., Wilens, T., Seidman, L. J., Mick, E., & Doyle, A. E. (2000). Attention-Deficit/Hyperactivity Disorder in adults: An overview. *Biological Psychiatry*, 48:1. 9-20. doi: 10.1016/S0006-3223(00)0889-1
- Finlay, L. (2009). Debating phenomenological research methods. *Phenomenology & Practice*, 3(1), 6-25. Retrieved from phandpr.org/index.php/pandp/article/download/40/80

- Fonagy, P., Gergely, G., & Targe, M. (2007). The parent-infant dyad and the construction of the subjective self. *Child Psychology and Psychiatry*, 48:3-4, 288-328. doi: 10.1111/j.1469-7610.2007.01727x
- Gjerdingen, D., Crow, S., McGovern, P., Miner, M., & Center, B. (2009). Postpartum depression screening at well-child visits: Validity of a 2-Question Screen and the PHQ-9. *Annals of Family Medicine*, 7(1), 63-70. doi: 10.1370/afm.933
- Hallowell, E. M., & Ratey, J. (1994). Driven to distraction: Recognizing and coping with

  Attention Deficit Disorder from childhood through adulthood. New York, NY: Pantheon Books.
- Howard, K. S., & Brooks-Gunn, J. (2009). Relationship Supportiveness During the Transition to Parenting Among Married and Unmarried Parents. *Parenting: Science & Practice*, 9(1/2), 123-142. doi:10.1080/15295190802656828
- Humphreys, C., Garcia-Bournissen, F., Ito, S., & Koren, G. (2007). Exposure to attention deficit hyperactivity disorder medications during pregnancy. *Canadian Family Physician*, *53*, 1153-1155. Retrieved from http://www.cfp.ca/content/53/7/1153.full.pdf+html
- Johnston, D. D., & Swanson, D. H. (2006). Constructing the "Good Mother": The experience of mothering ideologies by work status. *Sex Roles*, *54*:7-8, 509-519. doi: 10.1007/s11199-006-9021-3
- Kessler, R.C., Adler, L., Ames, M., Demler, O., Faraone, S., Hiripi,...Walters, E. E. (2005). The World Health Organization Adult ADHD Self-Report Scale (ASRS): a short screening scale for use in the general population. *Psychological Medicine*, *35*(2), 245-256. doi:10. 1017/s0033291704002892

- Kessler, R. C., Adler, L., Barkley, R., Biederman, J., Conners, K., Demler, O.,...Zaslavsky, A.
  (2006). The prevalence and correlates of ADHD in the United States: Results from the
  National Comorbidity Survey Replication. *American Journal of Psychiatry*, 163(4), 716-723. doi:10.1176/appi.ajp.163.4.716
- Kessler, R. C., Green, J. G., Adler, L. A., Barkley, R. A., Chatterji, S., Faraone, S. V., Van Brunt, D. L. (2010). Structure and diagnosis of adult Attention Deficit/ Hyperactivity
  Disorder: Analysis of expanded symptom criteria from the Adult ADHD Clinical
  Diagnostic Scale. Archive of General Psychiatry, 67(11), 1168-1178. doi: 10.1001/
  archgenpsychiatry.2010.146
- Kingston, D., Tough, S., & Whitfield, H. (2012). Prenatal and postpartum maternal psychological distress and infant development: A systematic review. *Child Psychiatry and Human Development*, 43, 683-714. doi: 10.1007/s10578-012-0291-4
- Knouse, L. E., & Safren, S. A. (2010). Current status of Cognitive Behavioral Therapy for Attention Deficit Hyperactivity Disorder. *Psychiatric Clinics of North America*, 33:3, 497-509. doi:10.1016/j.psc.2010.04.001
- Kohlberg, J. & Nadeau, K. (2002). *ADD-Friendly ways to organize your life: Strategies that work from a professional organizer and a renowned ADD clinician*. New York, NY: Brunner-Routledge.
- Kolar, D., Keller, A., Golfinopoulos, M., Cumyn, L., Syer, C., & Hechtman, L. (2008).

  Treatment of adults with attention-deficit/hyperactivity disorder. *Neuropsychiatric Disease and Treatment*, *4*:2, 389-403. doi: http://dx.doi.org/10.2147/NDT.S6985

- Kretchmar, M. D., & Jacobvitz, D. B. (2002). Observing Mother-Child Relationships Across Generations: Boundary Patterns, Attachment, and the Transmission of Caregiving.

  Family Process, 41(3), 351-374. doi: 10.1111/j.1545-5300.2002.41306
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: The validity of a brief depression severity measure. *Journal of General Internal Medicine*, *16*(9), 606-613. doi: 10.1046/j.1525-1497.2001.016009600.x
- Kryski, K. R., Mash, E. J., Ninowski, J. E., & Semple, D. L. (2010). Maternal symptoms of Attention-Deficit Disorder and maternal language: Implications for infant language development. *Journal of Child & Family Studies*, 19, 270-277. doi:10.1007/s10862-009-9294-6
- Leahy-Warren, P., McCarthy, G., & Corcoran, P. (2011). First-time mothers: social support, maternal parental self-efficacy and postnatal depression. *Journal of Clinical Nursing*, *21*, 388-397. doi:10.1111/j.1365-2702.2011.03701.x
- Leerkes, E. M., & Burney, R. V. (2007). The development of parenting self-efficacy among new mothers and fathers. *Infancy*, 12(1), 45-67. doi:10.1080/15250000701298964
- Lester, S. (1999). *An introduction to phenomenological research*. Taunton, UK: Stan Lester Developments. Retrieved on January 15, 2013 from www.sld.demon.co.uk/resmethy.pdf
- Logsdon, C. M., Usui, W., Birkimer, J. C., & McBride, A. B. (1996). The Postpartum Support Questionnaire: Reliability and validity. *Journal of Nursing measurement*, 4(2), 129–142.
- Manos, M. J. (2010). Nuances of assessment and treatment of ADHD in adults: A guide for psychologists. *Professional Psychology: Research and Practice*, *41*:6, 511-517. doi: 10.1037/a0021476

- Medved, C. A., & Kirby, L. K. (2005). Family CEO's: A feminist analysis of corporate mothering discourses. *Management Communication Quarterly*, *18*:4, 435-478. doi: 10.1177/0893318904273690
- Mercer, R. T. (2004). Becoming a mother versus maternal role attainment. *Journal of Nursing Scholarship*, 36:3, 226–232. doi: 10.1111/j.1547-5069.2004.04040.x
- Michelson, D., Adler, L., Spencer, T., Reimherr, F. W., West, S. A., Allen, A. J., ...& Milton, D. (2003). Atomoxetine in Adults with ADHD: A randomized, two placebo-controlled studies. *Biological Psychiatry Journal*, 53(2), 112–120. doi:10.1016/S0006-3223(02) 01671-2
- Murphy, K. (2005). Psychosocial treatments for ADHD in teens and adults: A practice-friendly review. *Journal of Clinical Pscyhology*, *61*:5, 607-619. doi: 10.1002/jclp.20123
- Murray, L. (2009). The development of children of postnatally depressed mothers: Evidence from the Cambridge longitudinal study. *Psychoanalytic Psychotherapy*, *23*(3), 185-199. doi: 10.1080/02668730903227289
- Nadeau, K.G., Littman, E. B., & Quinn, P. O. (1999). *Understanding girls with AD/HD*. Silver Spring, MD: Advantage Books.
- Nadeau, K. G. & Quinn, P. O. (2002). *Understanding women with AD/HD*. Washington D.C.: Advantage Books.
- Ninowski, J.E., Mash, E. J., & Benzies, K. M. (2007). Symptoms of Attention-Deficit/
  Hyperactivity Disorder in first-time expectant women: Relations with parenting
  cognitions and behaviors. *Infant Mental Health Journal*, 28(1), 54-75. doi:10.1002/
  imhj.20122

- Padgett, D. K. (2008). *Qualitative methods in social work research* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Pridham, K. F., Schroeder, M., & Brown, R. (1999). The adaptiveness of mother's working models of caregiving through the first year: Infant and mother contributions. Research in Nursing & Health, 22(6), 471-485. doi: 10.1002(SIC)1098-240X199912)22:6<471::AID-NUR5>3.0.CO;2-P
- Psychogiou, L., Daley, D., Thompson, M. J., & Sonuga-Barke, E. J. S. (2008). Do maternal Attention-Deficit/Hyperactivity Disorder symptoms exacerbate or ameliorate the negative effect of child Attention-Deficit/Hyperactivity Disorder symptoms on parenting?

  \*Development and Psychopathology, 20, 121-137. doi:10.1017/S0954579408000060
- Quinn, S. (2005). Women with Attention Deficit Disorder: Embrace your differences and transform your life. Nevada City, CA: Underwood Books.
- Rinsky, J. R., & Henshaw, S. P. (2011). Linkages between childhood executive functioning and adolescent social functioning and psychopathology in girls with ADHD. *Child Neuropsychology*, *17*(4), 368-390. doi: 10.1080/09297049.2010.544649
- Robison, R. J., Reimherr, R. W., Marchant, B. K., Faraone, S. V., Adler, L. A., & West, S. A. (2008). Gender differences in 2 clinical trials of adults with attention-deficit/hyperactivity disorder: A retrospective data analysis [Abstract]. *Journal of Clinical Psychiatry*, 69(2), 213-231. doi:10.4088/JCP.v69n0207
- Robbins, C. A. (2005). ADHD couple and family relationships: Enhancing communication and understanding through imago relationship therapy. *Journal of Clinical Psychology/In Session*, 61:5, 565-577. doi: 10.1002/jclp.20120

- Rubin, A., & Babbie, E. (2013). *Essential research methods for social work* (3<sup>rd</sup> ed). Belmont, CS: Brooks/Cole, Cengage Learning.
- Rucklidge, J. J., & Kaplan, B. J. (1997). Psychological functioning of women identified in adulthood with attention-deficit /hyperactivity disorder. *Journal of Attention Disorders*, 2(3), 167-176. doi:10.1177/108705479700200303
- Rucklidge, J. J., & Kaplan, B. J. (2000). Attributions and perceptions of childhood in women with ADHD symptomatology. *Journal of Clinical Psychology*, *56*(6), 711-722. doi:10. 1002/(SICI)1097-4679(200006)56:6<711::AID-JCLP2>3.0.CO;2-B
- Safren, S. A., Sprich, S., Mimiaga, M.J., Surman, C., Knause, L., Groves, M., & Otto, M. W. (2010). Cognitive Behavioral Therapy vs relaxation with educational support for medication-treated adults with ADHD and persistent symptoms: A randomized controlled trial. *Journal of the American Medical Association*, 304(8), 875-880. doi:10.1001/jama. 2010.1192
- Schiller, C. E. E. (2011). The hormonal withdrawal hypothesis of postpartum depression: A translational approach. *Dissertation University of Iowa*. Retrieved from http://ir.uiowa.edu/etd/1261
- Schumm, W. R., Nichols, C. W., Schectman, K. L. & Grigsby, C. C. (1983). Characteristics of responses to the Kansas Marital Satisfaction Scale by a sample of 84 married mothers.

  \*Psychological Reports, 53, 567-572. doi: 10.2466/pr0.1983.53.2.567
- Séjourné, N., Vaslot, V., Beaumé, M., Gourtausier, N., & Chabrol, H. (2012). The impact of paternity leave and paternal involvement in child care on maternal postpartum depression. *Journal of Reproductive and Infant Psychology*, 30:2, 135-144. doi:10. 101080/02646838.2012.693155

- Semple, D. L., Mash, E. J., Ninowski, J. E., & Benzies, K. M. (2011). The relation between maternal symptoms of Attention-Deficit/Hyperactivity Disorder and mother-infant interaction. *Journal of Child & Family Studies*, 20(4), 460-472. doi:10.1007/s10826-010-9413-4
- Sherer, M., & Adams, C. H. (1983). Construct validation of the self-efficacy scale.

  \*Psychological Reports, 53, 899-902. doi: 10.2466/pr0.1983.53.3.899
- Sheridan, M., & Nelson, C. A. (2009). Neurobiology and fetal development: Implications for infant mental health. In C. H. Zeanah Jr. Editor (Ed.), *Handbook of infant parent mental health* (3<sup>rd</sup> ed.) (pp. 40-58). New York, NY: The Guilford Press.
- Shields, N., Muza, R., Kosky, C., & Willicams, A. J. (2012). Clinical study: An investigation into the use of stimulant therapy during pregnancy. *Sleep Disorders*, 2012, 1–8. doi:10. 1155/2012/308952
- Silver, L. (2010). ADHD treatment for new mothers: What's safe, what's not. *ADDitude*Magazine. Retrieved from http://www.attidudemag.com/adhd/article/print/3991.html
- Simon, V., Czobor, P, Bálint, S., Mészáros, A., & Bitter, I. (2009). Prevalence and correlates of adult attention-deficit hyperactivity disorder: meta-analysis. *British Journal of Psychiatry*, 194, 204-211. doi:10.1192/bjp.bp.107.048827
- Solanto, M. V., Marks, D. J., Wasserstein, J., Mitchell, K., Abikoff, H. A., Alvir, J. M. J., & Kofman, M. D. (2010). Efficacy of meta-cognitive therapy for adult ADHD. *American Journal of Psychiatry*, *167*(8), 958-968. doi:10.176/appi.ajp.2009.09081123
- Solden, S. (2005). Women with Attention Deficit Disorder: Embrace your differences and transform your life (10<sup>th</sup> ed.). Nevada City, CA: Underwood Books.

- Stevenson, J. C., & Williams, D.C. (2000). Parental investment, self-control, and sex differences in the expression of ADHD. *Human Nature*, 11(4), 405-422. doi: 10.1007/s12110-000-1010-6
- Torgersen, T., Gjervan, B., & Rasmussen, K. (2008). Treatment of adult ADHD: Is current knowledge useful to clinicians? *Neuropsychiatric Disease and Treatment, 4*(1), 177-186.

  Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2515909/pdf/ndt-0401-177.pdf
- Tronick, E. (2007). The neurobehavioral and social-emotional development of infants and children. New York, NY: W. W. Norton & Co., Inc.
- U. S. Department of Health and Human Services, National Toxicology Program(NTP) at the NTP Center for the Evaluation of Risks to Human Reproduction (NTP-CERHR). (2005).
  NTP-CERHR Monograph on the potential human reproductive and developmental effects of Methylphenidate (NIH Publication No. 05-4473). Retrieved from http://ntp.niehs.nih. gov/ntp/ohat/stimulants/Methylphenidate/MethylphenidateMonograph.pdf
- U. S. Food and Drug Administration (n.d.). FDA Pregnancy categories. Retrieved May, 15, 2013 from http://depts.washington.edu/druginfo/Formulary/Pregnancy.pdf
- U.S. National Library of Medicine, National Institutes of Health. (n.d.). *DailyMed: Current medication information*: Atomoxetine. Retrieved February 4, 2013 from http://dailymed.nlm.nih.gov/dailymed/lookup.cfm?setid=309de576-c318-404a-bc15-660c2b1876fb
- U.S. National Library of Medicine, National Institutes of Health. (n.d.). *DailyMed: Current medication information: Bupropion*. Retrieved February 4, 2013 from http://dailymed.nlm.nih.gov/dailymed/lookup.cfm?setid=d0a209f9-0406-4868-89f6-fe864ccc5d7d

- U.S. National Library of Medicine, National Institutes of Health. (n.d.). *DailyMed: Current medication information: Desipramine*. Retrieved February 4, 2013 from http://dailymed.nlm.nih.gov/dailymed/lookup.cfm?setid=3433c754-cc2e-4e72-bd82-16ed4af3144d
- U.S. National Library of Medicine, National Institutes of Health. (n.d.). *DailyMed: Current medication information: Methylphenidate*. Retrieved February 4, 2013 from http://dailymed.nlm.nih.gov/dailymed/lookup.cfm?setid=ecd88778-0540-4f6f-9bbd-61d42f1a9515
- U. S. Policy, Management and Budget Offices, Office of Civil Rights (2005). *Ethnicity and race identification*. (U. S. Office of Personnel Management guide to personnel data standards, Standard Form 181, 42 U. S. C. Section 2000e-16, NSN 7540-01-099-3446). Retrieved from http://www.doi.gov/pmb/eeo/index.cfm
- Wade, C., Giallo, R., & Cooklin, A. (2012) Maternal fatigue and depression: Identifying vulnerability and relationship to early parenting practices. *Advances in Mental Health*, 10(3), 277-291. doi:10.5172/jamh.2012.10.3.277
- Waite, R. (20009). Women with ADHD: It is an explanation, not the excuse du jour.

  \*Perspectives In Psychiatric Care, 46(3), 182-196. doi:10.1111/j.1744-6163.2010.00254.x
- Wasserstein, J. (2005). Diagnostic issues for adolescents and adults with ADHD. *Journal of Clinical Psychology*, 61:5, 535-547. doi: 10.1002/jclp.20118
- Watkins, S. J., & Mash, E. (2009). Sub-clinical levels of symptoms of Attention-Deficit/
  Hyperactivity Disorder and self-reported parental cognitions and behaviours in mothers
  of young infants. *Journal of Reproductive and Infant Psychology*, 27(1), 70-88. doi:10.
  1080/02646830801918448

- Weissman, M. M., Pilowsky, D. J., Wickramaratne, P. J., ... Rush, A. J.; for the STAR\*D-Child Team (2006). Remissions in maternal depression and child psychopathology: A STAR\*D-Child Report. *Journal of the American Medical Association*, 295(12),1389-1398. doi:10.1001/jama.295.12.1389
- Wenzel, A., Haugen, E., & Jackson, L. C. (2005). Anxiety symptoms and disorders at eight weeks postpartum. *Journal of Anxiety Disorders*, 19:3, 295-311. doi: 10.1016/j. janxdis. 2004.04.001
- Westhuis, T., & Thyer, B. A. (1989). Development and validation of the Clinical Anxiety Scale:

  A rapid assessment tool for empirical practice. *Educational and Psychological Measurement*, 49(1), 153-163. doi: 10.10.1177/0013164489491016
- ©World Health Organization (n.d.) Adult ADHD Self-Report Scale (ASRS-v1.1): Symptom

  Checklist from WHO Composite International Diagnostic Interview. Retrieved from http://www.hcp.med.harvard.edu/ncs/index.php
- Wylie, L., Hollins Martin, C. J., Marland, G., Martin, C. R., & Rankin, J. (2011). The enigma of post-natal depression: an update. *Journal of Psychiatric and Mental Health Nursing, 18*, 48-58. doi:10.1111/j.1365-2850.2010.01626.x
- Zeanah, C. H. & Doyle, P. (2009). The scope of infant mental health. In C. H. Zeanah Jr. Editor (Ed.), *Handbook of infant parent mental health* (3<sup>rd</sup> ed.) (pp. 40-58). New York, NY: The Guilford Press.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, *52*(1), 30-41. doi:10.1207/s15327752jpa5201 2

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. In R. Okada, (Ed.), *Psychological Tests for Student Use*.

Retrieved from http://www.yorku.ca/rokada/psyctest/

## Appendix A

## Quantitative Study Permission to Locate Research @ MotherWoman

January 31, 2013 Smith College School for Social Work Lilly Hall Northampton, MA 01063 To Whom It May Concern: MotherWoman gives permission for Dr. Burton to locate his research in our organization. We do not have a Human Subjects Review Board and, therefore, request that Smith College School for Social Work's (SSW) Human Subject Review Committee (HSR) perform a review of the research proposed by Dr. Burton. MotherWoman will abide by the standards related to the protection of all participants in the research approved by SSW HSR Committee. We are honored that Dr. Burton has chosen to collaborate with MotherWoman on this research project. Sincerely, Beth Spong **Executive Director** Suite 202 PO Box 2635 Amherst, MA 01004

Appendix B

Quantitative Study Literature-based Questions for MotherWoman Survey

	Scale or Index	# of questions
1	Adult ADHD Self-report Scale (ASRS-v1.1 ©) (Kessler et al., 2005)	6
2	Multi-dimensional Support Scale (MDSS) (Zimet, Dahlem, & Farley, 1988; Dahlem, Zimet, & Walker, 1991)	12
3	Patient Health Questionnaire 9 for Depression (PHQ-9) (Kroenke, Spitzer, & Williams, 2001; Gjerdingen, Crow, McGovern, Miner, & Center (2009)	9
4	Mother to Infant Bonding Scale (MIBS)	10
5	Kansas Marital Satisfaction Scale (Schumm, Nichols, Schectman, & Grigsby, 1983)	3
6	Clinical Anxiety Scale (CAS) (Westhuis, & Thyer, 1989)	25
7	Index of Self Esteem (ISE) (Abell, Jones, & Hudson, 1984)	25
8	Satisfaction with Life Scale (SWLS) (Diener, Emmons, Larson, & Griffin, 1985)	5
9	Self Efficacy Scale (SES) (Sherer, & Adams, 1983)	30

## Appendix C

## Quantitative Study Human Subjects Review Committee Approval Letter



School for Social Work Smith College Northampton, Massachusetts 01063 T (413) 585-7950 F (413) 585-7994

March 1, 2013

David L. Burton, MSW, Ph.D. Smith College School for Social Work Lilly Hall 302 Northampton, MA 01063

Dear David,

Thank you for your revisions for your MotherWoman proposal. It looks like a straightforward needs assessment/program evaluation as you have now revised it, so it isn't clear why you didn't just frame it that way in the first place. Was there some reason you didn't want to make this a program evaluation? With that question in mind, you have satisfied the Committee with your revisions. Please submit a clean copy with accepted track changes. You are approved for moving ahead with your project. I hope it provides MotherWoman with helpful information.

Please also put the acronym "HSR" in the subject line of ALL emails of HSR business to me (mpruett@smith.edu) and Laura Wyman (lwyman@smith.edu) so that we can quickly sort and respond to them. Thank you for your attention to the details and If you have any questions, please email me directly (mpruett@smith.edu).

Sincerely,

Marsha Kline Pruett, M.S., Ph.D., M.S.L.

Vice Chair, Human Subjects Review Committee

## Appendix D

## Quantitative Study MotherWoman Survey Invitation

## Get a small gift for helping the MotherWoman Research Project!

Dear MotherWoman prior or current support group participant,

As you are already aware, we work tirelessly on policy, community change and helping mothers like you. Knowing more about postpartum experiences and about women who have had children is critical to our efforts. Dr. David Burton from Smith College is helping us understand women we have and are serving, in greater detail. With this information he will provide us with reports and analysis that can help us better understand you, if we have been helpful to you, and what we might do in the future to help women and their families.

This is a request for **you** to take a survey on your emotions and feelings about your baby and life and to give you a chance to give us feedback on the group(s) you have or are participating in. The survey takes about 20 minutes.

To participate in this study you must be on MotherWoman's email list of prior support group participants, you must have attended at least one MotherWomen support group, you must have access to a computer where they can answer the survey(s) in relative privacy and you must be able to read English. If you are currently pregnant you cannot participate.

We really appreciate your help with this project and are able to offer these small gifts (some are limited in number). All that you need to do is to click on the link at the end of the survey and tell us what you want sent to you.

- 1 hour massage certificates
- "Moms are Worth a Million" T- shirts OR onesies
- A book about motherhood entitled "One Mom's Journey To Motherhood" about infertility, complications and post partum depression signed by the author Ivey Shih Leung OR a book entitled "Keeping Your Child in Mind" about overcoming behavior problems signed by author Claudia Gold M.D.
- A gift certificate to Spoleto Restaurants
- A certificate for 1 bag of Dean's Beans cocoa, coffee, or chocolate covered espresso beans

Click here for link to the survey!

MotherWoman

Mailing Address: PO Box 2635 Amherst, MA, 01004

Office location: 220 Russell Street Suite 200 Hadley, MA 01035

Office: (413) 387-0703 Fax: (413) 306-3175 info@motherwoman.org

## Appendix E

## Qualitative Study Human Subjects Review Committee Approval Letter



School for Social Work Smith College Northampton, Massachusetts 01063 T (413) 585-7950 F (413) 585-7994

February 17, 2013

Maria Curtin-McKenna

Dear Maria.

Thank you for making all the requested changes to your Human Subjects Review application. Your project is now approved by the Human Subjects Review Committee.

Please note the following requirements:

Consent Forms: All subjects should be given a copy of the consent form.

Maintaining Data: You must retain all data and other documents for at least three (3) years past completion of the research activity.

In addition, these requirements may also be applicable:

Amendments: If you wish to change any aspect of the study (such as design, procedures, consent forms or subject population), please submit these changes to the Committee.

Renewal: You are required to apply for renewal of approval every year for as long as the study is active.

Completion: You are required to notify the Chair of the Human Subjects Review Committee when your study is completed (data collection finished). This requirement is met by completion of the thesis project during the Third Summer.

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Good luck with your project.

Sincerely,

Marsha Kline Pruett, M.S., Ph.D., M.S.L.

Acting Chair, Human Subjects Review Committee

CC: Kristin Mattocks, Research Advisor

### Appendix F

## Qualitative Study HSR Amendments Approval

March 5, 2013 Email from Laura Wyman

Hello Maria,

Your amendment has been approved by the Human Subjects Review Committee

Regards, Laurie

March 1, 2013

## **Summary of 3 Amendments**

#### **Amendment 1**

## **Characteristics of the Participants**

• Age range for the child of the participant has been changed from 2-36 months to the new range: 2-60 months of age.

### **Amendment 2**

### The Recruitment Process

Participant recruitment sites approved in HSR application may assist in recruiting additional sites by forwarding information about this research study to other potential sites. The following paragraph has been added to correspondence with recruitment sites to accommodate this:

Note to professionals and agency representatives: Thank you for your interest in assisting me
with recruitment of participants for this research project by offering to distribute recruitment
materials at your site. Please contact me to notify me of your name and agency name. A
Letter of Support Form will be emailed to you for your completion and signature as required
by the guidelines of the Smith School for Social Work Human Subjects Review Committee.

### **Amendment 3**

#### The Recruitment Process

Expediting assistance from new recruitment sites not previously approved in HSR application.

- Generic Recruitment Site Support Letter form
- Copies of support letters from these recruitment sources will be submitted to the HSR Committee when all recruitment is completed.
- Copies of support letters from all recruitment sources will be included in the final thesis.

## Appendix G

### Informational Letter for Potential Recruitment Sites

Hello,

My name is .... I am a graduate student at Smith College School for Social Work. I am sending this to you to inform you about a research study that I am doing toward my completion of my thesis and ask if you might be able to assist me with recruiting participants.

### **Research Summary**

I am conducting research about mothers with Attention-Deficit Disorder (ADD) or Attention-Deficit/Hyperactivity Disorder (ADHD). I am looking for mothers who are interested in talking with me about what their experiences were like during their baby's first year and adding their voices to this research. My study involves meeting with women who have a diagnosis of ADHD and also have a child between the ages of 2 - 60 months of age. There is very little research that has been done about their experiences, but the research so far indicates a higher risk of depression and anxiety. The research study went through a rigorous application process and has been approved by the Human Subjects Review Committee (HSR) at Smith College.

Mothers will be asked questions about challenges they experienced, coping strategies, and support they received. The interview will last no more than 1 hour. It will take place at a time and location convenient to both of us. If the participant lives more than 50 miles from Northampton, a phone or Skype interview can be arranged. All information will be confidential. A \$15 Target® gift card will be provided to each participant as a small thank you for her time.

To be eligible to participate, the participant must be at least 18 years old and have a diagnosis of ADD or ADHD by a physician, a psychologist or another mental health professional. She must have given birth to a child who is now 2-60 months old. She must be able to speak and read English. Participation closes as of April 15, 2013.

It would be wonderful if you would be willing to help me with recruitment. Individuals, practices, agencies and groups have chosen from a variety of ways. For example:

- Posting a flyer on a bulletin board of your office or leaving flyers available
- Referring mothers who might qualify.
- Sending an email to other professionals or to women who might participate
- Posting information on a web page or Facebook page

If you are interested in helping in any of these ways, I would ask you to complete a Letter of Support Form as required by the guidelines of the Smith School for Social Work HSR Committee. I would supply you with the Support Form, with recruitment flyers and/or with information for email, web page, or Facebook postings. Please feel free to contact me with questions or concerns.

Thank you very much for your time and attention. I look forward to working with you. Sincerely yours,

I have been working with parents and their babies and children in western Massachusetts for nearly 30 years as an educator and support group facilitator. I look forward to learning about this under-researched issue and am willing to share results upon completion of this study.

### Appendix H

#### **Email Informational Letter for Professionals**

Hello,

My name is .... I am a graduate student at Smith College School for Social Work and am researching the experiences of women who have ADHD as they adjust to life with a baby. I am in the recruitment phase of the research.

It would be wonderful if you would be willing to help me with recruitment. Individuals, practices, agencies and groups have chosen from a variety of ways. For example:

- Posting a flyer on a bulletin board of your office or leaving flyers available
- Referring mothers who might qualify.
- Sending an email to other professionals or to women who might participate
- Posting information on a web page or Facebook page

If you are interested in helping, please contact me to notify me of your name and agency name. A simple Letter of Support Form will be emailed to you for your completion and signature as required by the guidelines of the Smith School for Social Work Human Subjects Review Committee.

Written below is a summary of the project. Thank you for your time. Sincerely,

. . .

#### Research Summary

I am conducting research about mothers with Attention-Deficit Disorder (ADD) or Attention-Deficit/Hyperactivity Disorder (ADHD). I am looking for mothers who are interested in talking with me about their experiences during their baby's first year and adding their voices to this research. My study involves meeting with women who have a diagnosis of ADHD and also have a child between the ages of 2 - 60 months of age. There is very little research that has been done about their experiences, but the research so far indicates a higher risk of depression and anxiety. This research study went through a rigorous application process and has been approved by the Human Subjects Review Committee at Smith College.

Mothers will be asked questions about challenges they experienced, coping strategies, and support they received. The interview will last no more than 1 hour. It will take place at a time and location convenient to both of us. If the participant lives more than 50 miles from Northampton, a phone or Skype interview can be arranged. All information will be confidential. A \$15 Target® gift card will be provided to each participant as a small thank you for her time.

To be eligible to participate, the participant must be at least 18 years old and have a diagnosis of ADD or ADHD by a physician, a psychologist or another mental health professional. She must have given birth to a child who is now 2-60 months old. She must be able to speak and read English. Participation closes as of April 15, 2013.

If you know of someone who might be interested or would like more information, contact me at (phone) or email me at (email address)

#### Thank you!

... has worked with mothers and their babies in western Massachusetts for nearly 30 years as an educator and support group facilitator.

## Appendix I

## Generic Recruitment Site Support Letter Form

Smith College
School for Social Work
Lilly Hall Northampton, MA 01063
Northampton, WA 01003
Today's Date:
On behalf of my organization or practice or group, I agree to support Maria Curtin-McKenna's effort to recruit participants for her research study of mothers who have ADHD. I give her permission and will assist her in disseminating recruitment materials, including the following methods as indicated below. (Please check those that apply.)
Posting and/or distributing paper recruitment flyers at our/my site(s)
Posting an electronic version of the recruitment flyer and/or a summary of recruitment information via our/my web site
Posting an electronic version of the recruitment flyer and/or a summary of recruitment information via our/my email list serves
We/I have been informed by (MSW student) that this research study has been reviewed and approved by the Smith College for Social Work's (SSW) Human Subject Review Committee (HSR). We/I will abide by the standards related to the protection of all participants in the research as approved by the SSW HSR Committee.
Signature,
Agency/Individual's name
Name of person completing this letter of support
Your Position
Mailing address
Email address
Telephone

Appendix J

Recruitment Sites: List of Signed Letters of Support

	Signed Letter	Signature	Position	Recruitment Site
1	11/18/2012	Swansea Benham-Bleicher	Director	Northampton Parents Center
2	12/8/12	Vicki Elson	Educator/Doula	Private practice
3	12/9/12	Binda Coleman	Psychotherapist	Private practice
4	12/17/12	Karen Bayne	President	Green River Doula Network
5	12/17/12	Sienna Wildfield	Director	Hilltown Families
6	12/18/12	Jodie Castanza	Owner	Cradle
7	12/28/12	Arden Pierce	Owner	Yoga for Well-Being
8	1/3/2013	Michelle Esperanza	Owner	Warm Welcome Birth Services
9	1//13	Liz Friedman	Program Director	MotherWoman
10	3/1/13	Nora Hanke	Pediatric Physician	Private Practice
11	3/1/13	Lynne Guyette	Coordinator	Easthampton Family Center
12	3/6/13	Kim Kociela for Kim Brewer	Practice Admin	Northampton Area Pediatrics
13	3/6/13	Sujata Rege Konowitz	Office/Music teacher	Montessori School of Northampton
14	3/7/13	Erika Loper	Lead Teacher	Amherst Family Center
15	3/7/13	Gail Fries	Dir. Parent Support	Berkshire Children & Families
16	3/8/13	Killeen Perras	Community Coord.	Hampshire & Franklin County WIC
17	3/8/13	Kristin Peterson	Assoc. Programs Dir.	Greenfield Community Action
18	3/13/13	Elizabeth Dlugosz	Program Coordinator	Hamp. County Healthy Families
19	3/14/13	Annie Heath	Midwife	CDH Center for Midwifery Care
20	3/21/13	Lynn Paul	Director	Belchertown Family Center
21	3/25/13	Holly Kieszlk	Director	Young World Child Care Center

## Appendix K

## Recruitment Flyer

## Are you a mother who has ADD or ADHD?

Do you have a child who is 2-36 months old?

## What impact has ADD or ADHD had on you?

Be part of a research project that contributes to understanding women's experiences of motherhood.



photo courtesy of Sean Dreillinger @ www.flickr.com

Confidential interviews will be conducted by a Smith School for Social Work student

Questions? Interested in participating? Simply contact Maria @

-----

What have been your challenges, your coping strategies, and your strengths? You may be able to help other mothers by adding your voice to this research.

- · In-person interview takes no more than 1 hour of your time.
- · Location and time of interview will be at the convenience of participant.
- Skype or telephone interviews can be arranged if you live more than 50 miles from Northampton.
- Participant has the right to not answer questions and to stop participation at any time.
- A \$15 Target® gift card is offered as a small thank you gift to all participants

In order to be eligible you must: be 18 years of age or older, have given birth to a child who is 2-36 months old at the time of the interview, have a diagnosis of ADD or ADHD, and be able to speak and read English.

Participation closed April 1, 2013

## Appendix L

## Description of Research for Email, Websites, and Facebook® Accounts

Are you a mother with ADD or ADHD? Do you have a child who is 2-60 months old?

My name is ----. I am a graduate student at the Smith College School for Social Work. I am conducting research about mothers with Attention-Deficit Disorder (ADD) or Attention-Deficit/Hyperactivity Disorder (ADHD). I am looking for mothers who are interested in talking with me about their experiences during their baby's first year and adding their voices to this research. Questions will be asked about the mother's challenges, coping strategies and support she received during the first year after her baby's birth. The interview will last no more than 1 hour. It will take place at a time and location convenient to both of us. All information will be confidential. A \$15 Target® gift card will be provided to each participant as a small thank you for her time.

To be eligible to participate, you must be at least 18 years old and have a diagnosis of ADD or ADHD by a physician, a psychologist or another mental health professional. You must have given birth to a child who is now 2-60 months old. You must be able to speak and read English. Participation closes as of April 15, 2013.

If you are interested or would like more information, you may contact me at (Phone) or email me at (email)

Please feel free to forward this to others who may be interested in participating or who may help in recruiting participants.

Thank you!

Maria has worked with mothers and their babies in western Massachusetts for almost 30 years as an educator and support group facilitator.

## Appendix M

## Recruitment Presentation Script

My name is ----. I've worked with mothers and their babies in western Massachusetts for almost 30 years as an educator and support group facilitator.

Now I am a graduate student at the Smith College School for Social Work. I am conducting research about mothers with Attention-Deficit Disorder (ADD) or Attention-

Deficit/Hyperactivity Disorder (ADHD). I am looking for mothers who are interested in talking with me about their experiences during their baby's first year and adding their voices to this research. I am interested in learning about

- Womens' challenges in the first year after their baby was born,
- The ways they coped with or managed their challenges,
- Their strengths,
- And the support they received.

The interview will last no more than 1 hour. It will take place at a time and location convenient to both of us. All information will be confidential. A \$15 Target® gift certificate will be provided to each participant as a small thank you for her time.

To be eligible to participate, you must

- Be 18 years old or older and
- Have given birth to a child who is 2-36 months old at the time of the interview.
- Have a diagnosis of ADD or ADHD by a physician, psychologist or other mental health professional
- Be able to speak and read English

If you are interested or would like more information, I will be available for you to talk to you after the meeting. You may contact me at (phone) or email me at (email address).

Please feel free to take one of these flyers with you and pass it on to other women who might be interested.

## Appendix N

## Recruitment Presentations and Community Bulletin Boards

## Participant Recruitment Presentations - 7

Franklin County Perinatal Task Force

Hampshire County Perinatal Task Force

Northampton Family Center (x2)

Easthampton Family Center

Jones Library StoryTime Program

Jones Library Music Together Program

## <u>Community bulletin boards – Flyer Postings</u> (in addition to Recruitment Sites) - 14 Amherst Bangs Community Center

Amherst Jones Library Adult & Children's Departments

Easthampton Emily Williston Library Adult & Children's Departments

Florence Lily Library Adult & Children's Departments

Florence Cup & Top

Holyoke Midwives Community Bulletin Board

Northampton Forbes Library Adult & Children's Departments

Northampton Community Bulletin Boards

Northampton Starbucks

Northampton River Valley Market

Northampton Thornes Marketplace

## Appendix O

### Informed Consent

## Dear Participant,

My name is ----. I am a graduate student at the Smith College School for Social Work. I am conducting research about women who have Attention-Deficit/Hyperactivity Disorder (ADHD) to learn about their experiences with the first year after giving birth. The results of my research will be used for my Masters in Social Work (MSW) Thesis, for presentations, and possible publication.

In order to be included in this research study, (1) you must be at least 18 years old, (2) you must have a diagnosis of ADHD from a physician, a psychologist or other mental health professional, (3) you must have given birth to a child who is between 2-60 months old today, and (4) you must be able to read and speak English. Our meeting will take no more than 1 hour to allow time for you to attend to your needs or your child's needs. I will ask you questions about your experiences in the first year after your baby's birth. I will ask you to share your thoughts and opinions with me about the challenges you faced including possible anxiety or depression you experienced, the ways that you coped with or managed the challenges, your strengths, your feelings, and the support you received during your baby's first year. I will also ask you a few questions about you, like your age, ethnic/racial heritage, income, and education. Our conversation will be audiotaped. I may also take notes during our conversation. I am the only one who will hear the tape and transcribe it. If a professional transcriber is needed, he or she will sign a confidentiality pledge.

There may be some risks to participating in this research. The postpartum period is challenging for many women. You may find that discussing memories of that time brings up strong feelings. Included at the end of this statement is a list of resources that may be able to offer you support. Any information you share is completely confidential, but you may feel discomfort with my knowing that you have experienced ADHD, anxiety, or depression. This is a small community. I will ask you how you would feel most comfortable handling chance meetings, should they occur. Your participation in this research will be valuable and you may also benefit from being able to tell your story and have your perspective heard. A \$15 gift card to Target® will be given to you as a token of my thanks for your time.

Care will be taken to protect your confidentiality. Interviews will be conducted in a location that will enable confidentiality of our conversation to be maintained. A code number will be used in place of your name on all materials, such as the audiotape, notes and transcriptions. These materials will be kept separately from your signed consent form. Electronic data such as audiotapes and transcriptions will be removed from my computer's hard drive and stored separately. My research advisor at Smith College may have access to the materials. However, my advisor will not have access to your name or to other identifying information. No identifying information will appear in the written thesis, presentations or publications arising

from it. Data, short stories, or quotes that are used will be carefully disguised to protect your confidentiality. As required by Federal guidelines for research, all materials will be kept in a locked and secure environment for up to 3 years. If I need to keep them beyond 3 years, they will remain in a secure location and be destroyed when I no longer need them.

Participation in this research study is completely voluntary. You have the right to stop participating at any time. You have the right not to sign this form and by doing so, you choose not to participate. Once you have signed this form, you have the right to refuse to answer any question or to cut our meeting short. You have the right to contact me by email or by telephone by April 20, 2013 and ask that some or all of your comments not be used. In this case, all materials related to the comments and to our contact will be destroyed immediately. After you have signed the Informed Consent stating that you meet the guidelines for being included, you will receive a \$15 gift card to Target® which you may keep even if you choose to withdraw from the interview or to request later that any or all parts of the interview be withdrawn. If this interview is via phone or Skype©, a signed copy of the Informed Consent and the Target® gift card will be postmarked within 24 hours of the interview and mailed to your address. If you have any questions or concerns about your rights or any aspect of this study, please feel free to contact me or you may call the Chair of the Smith College School for Social Work Human Subjects Review Committee at (413) 585-7974.

YOUR SIGNATURE INDICATES THAT YOU HAVE READ AND UNDERSTAND THE ABOVE INFORMATION, THAT YOU MEET THE GUIDELINES FOR BEING INCLUDED, THAT YOU HAVE HAD THE CHANCE TO ASK QUESTIONS ABOUT THE STUDY, ABOUT YOUR PARTICIPATION, AND ABOUT YOUR RIGHTS AND THAT YOU AGREE TO PARTICIPATE IN THE STUDY.

Participant's signature		Date	
Researcher's signature		Date	
My Email address:	My Telephone #:		
Please keep the second copy	of this form for your records.		

Thank you very much for your willingness to participate in my research study. I look forward to spending time with you.

Respectfully yours,

## Appendix P

## **Resource Lists for Participants**

#### **THERAPISTS**

Specializing in ADHD, Depression, Anxiety, and/or Neuropsychologicial testing

## **BERKSHIRE COUNTY**

The Counseling Center in the Berkshires
34 Depot St., Suite 201, Pittsfield
413-499-4090
906 Main St., Williamstown, 413-458-3279
314 Main Street, Suite 1, Great Barrington
413-499-4090

Many major Insurance, Sliding fee, BMC Health Net

## **HAMPSHIRE COUNTY**

Elizabeth Bristow, LICSW Northampton, MA 01060 413-308-5272 Depression, Anxiety, ADHD, Parenting, Trauma and PTSD Many major insurance, Sliding scale, Mass Health, Health Net

Binda Colebrook, LICSW 90 Conz St., 2<sup>nd</sup> Floor Northampton 413-358-4998 Specialty –Pregnancy/Postpartum Depression, Anxiety, Parenting

Sallie Deans Lake, MSW, PhD 8 Trumbull Rd, Suite 202 Northampton 584-3464 Young and new mothers, parenting

Northampton Neuropsychological Associates, LLP 25 Main Street, Suite 208 Northampton, MA 01060 413-585-9991 Mark Haffey, PhD
Katharine Jane Melaney, LICSW
Haffey Center for Attention & Memory
433 West Street, Suite 5
Amherst, MA 01002
413-314-3991
ADHD, Anxiety, OCD, Parenting
Many major Insurance. (No sliding fee scale), (No Mass Health or Health Net)

Ruth Perlman, LICSW
19 Center Court, Room 3B
Northampton
ADHD, Trauma and PTSD
Women with ADHD
413-206-2032
Some major health insurance, Sliding fee scale (No Mass Health or Health Net))

Andrea Reber, LICSW
40 Washington Ave.
Northampton MA 01060
413-584-3556
Pregnancy and Postpartum Anxiety,
Depression and Mood Disorders, EMDR
Many major Insurance, BMC Health Net,
No sliding scale,

200 Main Street, Suite 2A
Northampton, MA 01060
413-285-3274
Pregnancy and Postpartum Stress,
Depression, Parenting, Anxiety
Some major Insurance, (No sliding scale),
(No Mass Health or Health Net

Nicole Stevens, LICSW

### **HAMPDEN COUNTY**

Maria del Mar Farina, MSW, PhD 1236 Main St., Suite 201 Holyoke, MA 01040 413-337-1973 Depression, anxiety, domestic violence, bicultural (Spanish/English) Major Health Insurance, No sliding fee, No Mass Health or Health Net Jackie Humphreys, LICSW 1866 Northampton St. The Carriage House Holyoke, MA 01040 413-347-4103 Anxiety, Trauma or PTSD Sliding scale, No Mass Health or Health Net

Valley Psychiatric Service 511 East Columbus Avenue Springfield 413-827-8959 English/Spanish/Vietnamese, Mandarin Chinese, ASL

## **MULTIPLE LOCATIONS**

Baystate Behavioral Health 3300 Main St., Springfield 413-794-5555 164 High St., Greenfield, 413-773-2595

Servicenet Adult Behavioral Health Services 5 Outpatient Clinics, Franklin, Hampden, Hampshire and Berkshire Counties Central phone # 413-585-1300 Most health Insurance CHD Outpatient Behavioral Health Services, 367 Pine St., Springfield, 413-737-1426 622 State St., Springfield, 413-654-1606 494 Appleton St., Holyoke, 413-420-2302 179 Northampton St., Easthampton, 413-529-1764 238 Main St., 4<sup>th</sup> floor, Greenfield, 413-774-6252 131 Main St., 1<sup>st</sup> Floor, Orange, 978-544-2148 357 Main St., Athol, 978-830-4120 246 Park St., West Springfield, 413-737-4718

#### **Additional Resources**

### **Postpartum Support**

- 1. MotherWoman.org 413-585-8990. Facilitated support groups for mothers throughout Western Massachusetts. *Postpartum Resource Lists on-line*.
- 2. Cradlefamily.org 413-341-5282, Thornes Marketplace, Northampton. Support groups and classes
- 3. Postpartum Support International (<a href="www.postpartum.net">www.postpartum.net</a>) 1-800-944-4PPD Resources to support women and their families experiencing postpartum emotional issues. Warm line links to local help.

## **Attention-Deficit/Hyperactivity Disorder**

#### **Books**

- Hallowell, E. M., & Ratey, J. (2011). Driven to distraction: Recognizing and coping with Attention Deficit Disorder from childhood through adulthood. New York, NY: Pantheon Books.
- Kohlberg, J. & Nadeau, K. (2002). *ADD-Friendly ways to organize your life: Strategies that work from a professional organizer and a renowned ADD clinician*. New York, NY: Brunner-Routledge.
- Nadeau, K. G. & Quinn, P. O. (2002). *Understanding women with AD/HD*. Washington D.C.: Advantage Books.
- Nadeau, K.G., Littman, E. B., & Quinn, P. O. (1999). *Understanding girls with AD/HD*. Silver Spring, MD: Advantage Books.
- Solden, S. (2005). *Women with Attention Deficit Disorder: Embrace your differences and transform your life* (10<sup>th</sup> ed.). Nevada City, CA: Underwood Books.

### **On-line Resources**

- 1. Children and Adults with Attention Deficit/Hyperactivity Disorder (CHADD) http://www.chadd.org
- 2. Attention Deficit Disorder Association, http://www.add.org/
- 3. Mayo Clinic, http://www.mayoclinic.com/health/adult-adhd/DS01161
- 4. Centers for Disease Control and Prevention, Attention-Deficit/Hyperactivity Disorder Home Page, http://www.cdc.gov/ncbddd/adhd/
- 5. ADDvance: Answers to your questions about ADD (ADHD), http://www.addvance.com/
- 6. The Center: A resource for women and girls with AD/HD, http://www.ncgiadd.org
- 7. Women with ADHD, http://www.womenwithadhd.com/
- 8. Additude: Living well with attention deficit, http://www.additudemag.com/adhd-guide/women.html
- 9. ADD Consults: Helping women with ADD get unstuck and on track. http://addconsults.com
- 10. Dr. Hallowell: Live a better life. http://www.drhallowell.com
- 11. The A.D.D. Warehouse. www.addwarehouse.com
- 12. On-line organization coach: www.Flylady.net

### **Parenting Support - Family Centers**

- 1. Amherst Family Center, 413-256-1145, www.umass.edu/ofr/familycenter.php
- 2. Belchertown Family Center, 413-283-7594, www.belchertownfamilycenter.org
- 3. Child Care of the Berkshires, 413-663-6593, http://ccberkshire.org
- 4. Cummington Family Center, www.cummingtonfamilycenter.org
- 5. Easthampton Family Center, 413-527-5496, www.easthamptonfamillycenter.org
- 6. Franklin County Family Network, 413-475-1555, www.communityaction.us/franklin-county-family-network.html
- 7. Gateway Family Center, 413-667-2203x3, www.collaborative.org/early-childhood/parents
- 8. Hatfield Playgroup, www.collaborative.org/early-childhood/parents
- 9. Northampton Parents Center, 582-2636, www.northamptonparentscenter.org
- 10. Palmer-Monson Family Network Families, 413-283-6246, www.collaborative.org/early-childhood/parents
- 11. South Hadley Family Center, 413-533-7096, http://www.shfamilycenter.org Ware Family Center, 413-967-8127, http://warefamilycenter.org

### Appendix P

## Resource Lists for Participants

## RESOURCE REFERRAL GUIDE

## Help for the emotional experience of pregnancy and the postpartum period

Many women have lots of feelings during pregnancy and the year after a baby is born. Being a mother is a hard job. Having support and help can make things go better. All mothers and new families deserve lots of help. You do too! Call Crisis Services (see below) or visit the emergency room if you are in an urgent situation. It's a good time to call Crisis Services if you are afraid to be alone or are concerned about your safety or the safety of your child/ren.

#### SUPPORT GROUPS

Motherhood can be surprising in many ways. Come meet other mothers and talk about being a mom.

#### Beyond Birth

Thursdays from 1–3pm in the Childbirth Center, Cooley Dickinson Hospital, Northampton. A weekly gathering for new parents and their babies. Open to all. Contact at (888)

## Circle of Moms: We Are All In

This Together
Fridays, 10am-12pm. Join mothers
for a free, safe, confidential drop-in
group for mothers of infants and
bables who are experieincing a challenging postpartum time. Community Action Family Center, 90 Federal Street, Greenfield. Contact CSO at (413) 774-1000. MotherWoman trained facilitator

#### Empty Arms Support Group

4th Wednesday of every month at 7pm, Conference Room D at Cooley Dickinson Hospital. For parents grieving infant and pregnancy loss. Contact Carol McMurrich and Greg Reynolds at (413) 529-1610 or carolmcmurrich@comcast.net.

MotherWoman Group: Getting Real About Motherhood Wednesdays, 9:45–11:15am. Amherst Family Center. Free childcare. Community, diversity, self-discovery. Share laughter and tears. Be inspired. It's all here. Expectant mothers welcome. Contact Amherst Family Center at (413) 256-1145. MotherWoman trained facilitator

## MotherWoman Postpartum

Support Group
Wednesday, 1-2:30pm at Midwifery
Care of Holyoke, 230 Maple Street,
Holyoke, Expectant mothers
welcome. Contact (413) 536-7385. MotherWoman trained facilitator

## MotherWoman Postpartum Group: This Is Harder Than I

Thought
Tuesdays, 10am-12pm.
MotherWoman Office, 220 Russell
St, Hadley, Free childcare. For
women experiencing a challenging postpartum time, Expectant mothers welcome. Contact Annette Cycon at (413) 387-0703. MotherWoman trained facilitator

## Pregnancy and Postpartum Group for Partners: "The

Other Parent" 4th Monday 7-9pm. Cooley Dickinson Center for Midwifery Care, Northampton. Workshop for non-birthing partner to explore issues related to pregnancy, birth, the postpartum period, and parenting. Group is free of charge, facilitated by experienced parents/partners. Contact Kate Bohne at: Katherine Bohne@cooley-dickinson.org or (413) 687-5817

## Parents Helping Parents

Support Group Wednesdays from 6:30–8:30pm. Amherst, A place to vent your parenting stress in a caring community support group co-led by parents and a volunteer facilitator Contact Susan Barbaro (413) 256-6940 stbarbaro@aol.com.

#### Share Bereavement Group For those who have had a

ror trose win o nave nad a miscarriage, stillbirth or baby loss. Held on the 2nd Wednesday of the month at 7:30pm, Baystate Medical Center Ambulatory Building. Contact Joanne at (413) 562-1731

#### ONLINE SUPPORT

There are many resources online for mothers. This is a wonderful way to get support when you can't leave the house, in the middle of the night, or for those of us who would rather have online contact.

#### Postpartum Support International

www.psi.org Information for mothers, family and professionals. There is a PSI weekly Phone Chat with an expert.

#### Postpartum Progress postpartumprogress.

typepad.com
The most widely-read blog in
the United States on postpartum
depression, postpartum OCD, antepartum depression, postpartum PTSD and postpartum psychosis.

#### The Online PPD Support Group

www.ppdsupportpage.com PPD Support Group plus forums on different topics, information and

#### AT HOME SUPPORT

In the days and months after a baby is born, all mothers need help and support. It's okay to ask for help from family, friends and your community. It's okay to ask for more help.

#### Green River Doula Network www.greenriverdoulas.org

A postpartum doula provides services and support in the home to help facilitate a warm and nurturing experience for the entire family.

#### PHONE SUPPORT

Call someone when you need support at home. The people at these numbers can listen to you on the phone, as well as refer you to other resources.

#### PPDMoms Hotline (800) PPDMOMS or (800) 773-6667

Available support 24 hours a day, 7 days a week. For moms and their loved ones. Support, information and referrals.

#### Parental Stress Line (800) 632-8188

A statewide warmline that is available 24 hours a day, 7 days a week; staffed by trained volunteer counselors who are sympathetic and non-judgmental.

#### Postpartum Support International of Massachusetts Warmline (866) 472-1897

Confidential information, support and listings of local resources, Leave a message and a volunteer will get back to you within 24 hours.

## CRISIS SERVICES

Call if you are in crisis and need immediate support and assistance. It's a good time to call Crisis Services if you have not slept in over 48 hours, are afraid to be alone or are concerned about your safety or the safety of your child/ren.

All of the following Crisis Services offer 24 hour psychiatric assessment. They all accept Commonweath Care, Mass Health and uninsured.

#### **BHN Psychiatric Crisis Services**

nome based visits a (413) 733-6661 en County and surrounding communities:

#### Franklin County Crisis Services

Franklin County: (413) 774-5411, (800) 562-0112

#### Crisis Services of Hampshire County

Hampshire County: (413) 586-5555

#### Westfield Crisis

West Springfield, Agawam, Westfield, Hilltowns: (413) 568-6386

COMPILED BY THE PREGNANCY AND POSTPARTUM SUPPORT COALITION OF WESTERN MASSACHUSETTS

#### SOCIAL OPPORTUNITIES

Take care of yourself by connecting with other people. Get out of the house several times a week. Go to a group and meet new people.

Parenting Resource Directory www.parentingdirectory.org An extensive community resource guide for families; online and at libraries and other locations. Information on Family Centers, Housing, Medical and Food

#### RESOURCES FOR YOUNG MOTHERS

assistance, and social activities.

Being a young mother can be challenging and stressful. There are resources available for you.

#### **Healthy Families**

A home visiting program for first time parents under the age of 21.

- Holyoke Healthy Families contact Angle Morrell (413) 532-9446 at MSPCC
- Springfield Healthy Families contact Mary Benedetti, (413) 734-4978 at MSPCC
- Hampshire Healthy Families Berkshire Children and Families Healthy Families Program; contact Gail Fries, (413) 584-5690
- Franklin Healthy Families contact Sandy Clark at Community Action (413) 774-2318

#### SELECTED LITERATURE

For Mothers and others who care

Down Came the Rain: My Journey Through Postpartum Depression by Brooke Shields

Pregnant on Prozac by Shoshana Bennett, Ph.D

The Mother-to-Mother Postpartum Depression Support Book by Sandra Poulin

This Isn't What I Expected: Overcoming Postpartum Depression

by Karen Kleiman & Valerie Raskin

#### COUNSELING AND THERAPY

How do I know if I need therapy? Being a mother is a tough job. It's OK to ask for help. Ask questions and share your concerns.

The following care providers specialize in postpartum care. This is not an exhaustive list of providers nor an endorsement of any particular provider. When seeking support we recommend that you consult your primary care physician, obstetrician/ midwife and/or pediatrician.

Andrea Reber, LICSW Northampton: (413) 584-3556

#### Counseling and Gynecology Group

East Longmeadow: (413) 567-9355 Jennifer Fleming, Tiana Marpae, Dr. Max Chorowski;

Ellen Bollier, RN, CS, APRN Northampton: (413) 584-8993

Kathleen O'Kane, LICSW Hadley: (413) 584 3929

Mary Hunter Kratt, LMHC, NCC Greenfield: (413) 774-7720

Michelle Kaskey, APRN, BC Northampton: (413) 586-3319

Nicole Stevens, LICSW Northampton: (413) 320-1108

Paula Shulman, LMFT, MS.Ed, MA (413) 230-9642 West Springfield: (413) 737-4719,

Paul Shore-Suslowitz, EDD Longmeadow: (413) 567-9993 ext. 12

Rachel Zamore, MA Brattleboro, VT: (802) 258-7014 www.brattleborotherapy.com ServiceNet Outpatient Mental Health Clinic Northampton: (413) 584-6855

Windhorse Associates Northampton: (413) 586-0207

#### MEDICATION PRESCRIBERS

How do I know if I need medication or if it's the right thing for me? Talk to your OB and/or primary care provider. Share your experience and history. Ask questions and share your concerns.

Caroline Broudy Northampton: (413) 586-0411

Clinical and Support Options Northampton: (413) 582-0471 Greenfield: (413) 774-1000 Hampden County: (413) 737 9544

#### Counseling and Gynecology Group

Dr. Max Chorowski East Longmeadow: (413) 567-9355

Behavioral Health Network Springfield: (413) 732-7419

Brien Center Pittsfield: (413) 499-0412

Michelle Kaskey, APRN, BC Northampton: (413) 586-3319

Ellen Bollier, RN, CS, APRN Northampton: (413) 584-8993

Elizabeth Bertuch, MS,APRN,BC,PC Holyoke, Longmeadow: (413) 532-6777

ServiceNet Outpatient Mental Health Clinic Northampton: (413) 584-6855

#### COMPLIMENTARY THERAPY

There are many types of therapies that can be supportive and helpful during this period. The following people specialize in women's care.

#### Free Weekly Auricular Acupuncture Clinic

Mondays 4:30 – 6pm; Quaker Space, 43 Center St., Northampton. www.freedom-center.org

#### Mindi Palmer Fried,

Chiropractic care Easthampton: (413) 527-0207

#### Amy Mager

Acupuncture Florence, East LongMeadow: (413) 222-8616 www.magerhealing.com

#### Sharon Weizenbaum

Acupuncture Amherst: (413) 549-4021

## Jennifer Tongren

Acupuncture Amherst: (413) 230-4400

## Sam's Gentle Hands

Perinatal Massage Greenfield: (413) 774-7365

#### Kristin Bernard Craniosacral therapist

(978) 544-5748

#### Barbara Weinberg, Lic. Ac., ADS, RN, BSN

Northampton, Leverett: (413) 549-6405

#### SELECTED LITERATURE FOR PARTNERS

How do I help my loved one get through this difficult time? How do I get through it too? Learn more, ask questions and contact any of the resources above. While these books are geared towards fathers, they would be appropriate for all parenting partners and family members.

She's Had a Baby and Now I'm Having a Meltdown: What Every New Father Needs to Know About Marriage, Sex & Diapers

by James Douglas Barron

Postpartum Husband: Practical Solutions for Living with Postpartum Depression by Karen Kleinman, MSW

#### WHAT TO ASK WHEN YOU CALL:

- Do you accept my insurance? (private, MassHealth, Commonwealth Care)
- What special experience or training do you have in postpartum emotional issues?
- . Do you speak my language? (e.g. Spanish)
- · Are you available in emergencies?
- · What are your hours? Your address? Parking? Bus stop?
- · How soon can I get an appointment?
- · Are you able to prescribe medication if needed?

PREGNANCY AND POSTPARTUM SUPPORT COALITION OF WESTERN MASSACHUSETTS

MOTHERWOMAN, INC., BOX 2635 AMHERST, MA 01004 (413)387 0703 COALITION@MOTHERWOMAN.ORG WWW.MOTHERWOMAN.ORG

## Appendix P Resource Lists for Participants

## FRANKLIN COUNTY RESOURCE & REFERRAL GUIDE

## Help for the emotional experience of pregnancy and the postpartum period

Many women have lots of feelings during pregnancy and the year after a baby is born. Being a mother is a hard job. Having support and help can make things go better. All mothers and new families deserve lots of help. You do too! Call Crisis Services (see below) or visit the emergency room if you are in an urgent situation. It's a good time to call Crisis Services if you are afraid to be alone or are concerned about your safety or the safety of your child(ren).

The following care providers specialize in postpartum care. This is not an exhaustive list of providers nor an endorsement of any particular provider. When seeking support we recommend that you consult your primary care physician, obstetrician/midwife and/or pediatrician.

#### SUPPORT GROUPS

Motherhood can be surprising in many ways. Come meet other mothers and talk about being a mom. Most groups do not meet during public school vacations and on snow days. For the most up-to-date meeting information, please check motherwaman.org

#### Circle of Moms: We Are All In This Together

A free, safe, confidential dropin support group for mothers. Expectant mothers welcome. Feel heard, nurtured and energized. Free childcare & snacks provided. Transportation support available. Fridays 10:00-12:00pm at the Community Action Family Center, 90 Federal Steret, Greenfield. Contact Mareike at (413) 774-1000 ext. 2048 mmuszymski@csoinc.org or Healthy Families at (413) 475-1566. Motherklivenag tosined for cilifornes.

#### MotherWoman Postpartum Group: This Is Harder Than I Thought

For women experiencing a challenging postpartum time. Expectant mothers welcome. Tuesdays, 10am-12pm. Free childcare, MotherWoman Office: 220 Russell St. Hadley. Contact Annette Cycon at (413) 387-0703. www. motherwoman.org MotherWoman trained facilitators.

#### MotherWoman Group: Getting Real About Motherhood

Community, diversity, self-discovery. Share laughter and tears. Be inspired. It's all here. Expectant mothers welcome. Wednesdays, 9:45–11:15am at the Amherst Family Center. Free childcare. Contact Armherst Family Center (413) 256–1145. www.motherwoman.org MotherWoman trained facilitators.

#### ONLINE SUPPORT

There are many resources online for mothers. This is a wonderful way to get support when you can't leave the house, in the middle of the night, or for those of us who would rather have refine contact.

#### Postpartum Support International www.postpartum.net

Information for mothers, family and professionals. There is a PSI weekly Phone Chat with an expert.

#### Postpartum Progress postpartumprogress. typepad.com

The most widely-read blog in the United States on postpartum depression, postpartum OCD, antepartum depression, postpartum PTSD and postpartum psychosis.

#### Online PPD Support Group www.ppdsupportpage.com

PPD Support Group plus forums on different topics, information and resources.

#### ATHOMESUPPORT

In the days and months after a baby is born, all mothers need help and support. It's okay to ask for help from family, friends and your community. It's okay to ask for more help.

#### Green River Doula Network www.greenriverdoulas.org

A postpartum doula provides services and support in the home to help facilitate a warm and nurturing experience for the entire family.

#### It Takes a Village itavillage.info

The Village is a free-of-charge community service that matches families with a volunteer who visits the family home to provide support on a weekly basis.

#### PHONE SUPPORT

Call someone when you need support at home. The people at these numbers can listen to you on the phone, as well as refer you to other resources.

#### PPDMoms Hotline (800) PPDMOMS or (800) 773-6667

Available support 24 hours a day, 7 days a week. For moms and their loved ones. Support, information and referrals.

#### Parental Stress Line (800) 632-8188

A statewide warmline that is available 24 hours a day, 7 days a week; staffed by trained volunteer counselors who are sympathetic and non-judgmental.

#### Postpartum Support International of Massachusetts Warmline (866) 472-1897

Confidential information, support and listings of local resources. Leave a message and a volunteer will get back to you within 24 hours.

#### SOCIAL OPPORTUNITIES

Take care of yourself by connecting with other people. Get out of the house several times a week. Go to a group and meet new people.

#### Franklin County Family Network/Family Center & Community Action

Playgroups, literacy programs, parenting education. For services contact Program Coordinator Francia Wisneski, M.Ed, 90 Federal Street, Greenfield. (413) 475-1553 www.communityaction.us

#### CRISIS SERVICES

Call if you are in crisis and need immediate support and assistance. It's a good time to call Crisis Services if you have not slept in over 48 hours, are afraid to be alone or are concerned about your safety or the safety of your child(ren).

Crisis Services offers 24 hour psychiatric assessment. They accept all insurances and uninsured patients. Crisis evaluations take place in your home or in the community.

### Franklin County Crisis Services

Franklin County: (413) 774-5411; (800) 562-0112 MotherWoman trained staff available.

COMPILED BY FRANKLIN COUNTY POSTPARTUM SUPPORT COALITION

#### Parenting Resource Directory

www.parentingdirectory.org

An extensive community resource guide for families; online and at libraries and other locations. Information on Family Centers, Housing, Medical and Food assistance, and social activities.

#### RESOURCES FOR YOUNG MOTHERS

Being a young mother can be challenging and stressful. There are resources available for you.

#### Franklin Healthy Families at Community Action

A home visiting program for first time parents under the age of 21. Contact Community Action: (413) 774-2318

#### SELECTED LITERATURE

For Mothers and others who care

A Daughter's Touch: A Journey of a Mother Trying to Come to Terms with Postpartum Depression

Down Came the Rain: My Journey Through Postpartum Depression

The Mother-to-Mother Postpartum Depression Support Book

#### Pregnant on Prozac

Shoshana Bennett, Ph.D Safety regarding medication and alternative treatments in pregnancy for depression, anxiety, bipolar disorder and other mood issues are thoroughly discussed.

#### This Isn't What I Expected: Overcoming Postpartum Depression

by Karen Kleiman & Valerie Raskin

#### COUNSELING AND THERAPY

How do I know if I need therapy? Being a mother is a tough job. It's OK to ask for help. Ask questions and share your

#### Clinical & Support Options Outpatient Mental Health Clinic

Greenfield: Contact Clinical Director Amy Olson, LMHC for referral to MotherWoman trained counselors at (413) 774-1000

#### Community Health Center of Franklin County

Mother/baby dyad services. Contact: Meme English Turners Falls: (413) 772-3784

#### ServiceNet Outpatient Mental Health Clinic Contact Christina Neiman

Greenfield: (413) 772-2935

Fran Fassler, LICSW Valley Medical Group, Greenfield: (413) 773-3310

#### NELCWIT (New England Learning Center for Women in Transition)

Free and Confidential services for victims and survivors of domestic and sexual violence. For Services in Greenfield & Orange call (413) 772-0806 or (888) 249-0806.

#### Laura Morrissette, LMHC

MA Licensed Psychotherapist Compassionate Holistic Counseling MotherWoman Trained Counselor Speaks khmer, Outreach Available Greenfield and Amherst: (413) 772-6900

#### Sara Steingiser, PhD

Montague Psychological Associates, Montague: (413) 774-2981

#### AREA MEDICATION PRESCRIBERS

How do I know if I need medication or if it's the right thing for me? Share your experience and history. Ask questions and share your concerns.

#### Clinical & Support Options Outpatient Mental Health Clinic

Greenfield: Clinical Director Amy Olson, LMHC at (413) 774-1000 Michelle Kaskey, APRN, BC Northampton: (413) 586-3319

Leslie Fishbein, MD Berkshire Medical Center Pittsfield: (413) 447-2216

#### ALTERNATIVE THERAPY

Many types of therapies can be supportive and helpful during this period. The following people specialize

Megan Bathory-Peeler CMT, CST, CMRP, SEP, PBAT Craniosacral & Attachment Therapy Greenfield: (413) 772-0078 dancinghands@verizon.net

Kristen Bernard RN, CT Midwife & Craniosacral work Cradle: (413) 341-5282

## Sam's Gentle Hands

Greenfield: (413) 774-7365

Linda Romano (C/L) MT, BSW Holistic Practitioner. Massage and Holistic Services. Leyden: (413) 624-3334

#### Janet Masucci

Integrated Acupressure Professional Gill: (413) 863-8694 or www.JMheartwell.com

#### SELECTED LITERATURE FOR PARTNERS

How do I help my loved one get through this difficult time? How do I get through it too? Learn more, ask questions and contact any of the resources above. While these books are geared towards fathers, they would be appropriate for all parenting partners and family members.

She's Had a Baby and Now I'm Having a Meltdown: What Every New Father Needs to Know About Marriage, Sex & Diapers by James Douglas Barron

Postpartum Husband: Practical Solutions for Living with Postpartum Depression by Karen Kleinman, MSW

## WHAT TO ASK WHEN YOU CALL

For most providers, you will leave a message. If you don't get a response within 24 hours, call back or try another provider. For urgent care, see "Crisis Services" on page one.

- Do you accept my insurance? (private, MassHealth, Commonwealth Care)
- What special experience or training do you have in postpartum emotional issues?
- · Do you speak my language? (e.g. Spanish)
- · Are you available in emergencies?
- · What are your hours? Your address? Parking? Bus stop?
- · How soon can I get an appointment?
- Are you able to prescribe medication if needed?

FRANKLIN COUNTY POSTPARTUM SUPPORT COALITION

MELINDA WILLIAMS, C/O CLINICAL SUPPORT OPTIONS, 1 ARCH PL., GREENFIELD MA 01301 (413)774-1000 x2065 MWILLIAMS@CSOINC.ORG

## Appendix Q

#### **Interview Guide**

## "Grand Tour" Question

My understanding is that you have ADD or ADHD. I would like to understand what some of your challenges have been in the first year of being a mother to this child and how you feel having ADHD may have affected your experiences with these challenges. Can you recall some challenges and how you felt you coped with them or managed them?

## DEPENDING ON RESPONSES TO GRAND TOUR QUESTION

## I. Probes related to challenges identified by participant and/or suggested by interviewer.

## A. Challenges with establishing routines for self-care

- 1. What was your experience with establishing routines for yourself? (eating, sleeping, household tasks, shopping, getting to work)
- 2. If you were to place yourself on a scale from "1" feeling challenged, but coping well with it to "5" feeling overwhelmed by the challenge, where would you place yourself? (Refer to scale for each of these challenges or overall experience, depending on response to #1) (Show participant Appendix ....Coping with Challenges Scale)
- 3. If indicates she has routines for self additional probes
  - a. How did you do it?
  - b. Any barriers?
  - c. Did you have support if so what kind?
  - d. How old was your baby when you feel you had routines to care for self?
  - e. How easy/hard is it to maintain your routines?
- 4. Do you feel having ADD or ADHD may have contributed to the way you experienced this challenge and coped with it? If so, in what way?

## B. Challenges with establishing routines for baby care

- 1. What was your experience with establishing routines for your baby? (feeding, sleeping, play, getting to daycare)
- 2. If you were to place yourself on a scale from "1" feeling challenged, but coping well with it to "5" feeling overwhelmed by the challenge, where would you place yourself? (Refer to scale for each of these challenges or overall experience, depending on response to #1)

(Show participant Appendix ....Coping with Challenges Scale)

- 3. If indicates she has routines for baby
  - a. How did you do it?
  - b. Any barriers?
  - c. Did you have support if so what kind?
  - d. How old was your baby when you feel you had routines for caring for baby?
  - e. How easy/hard is it to maintain routines?
- 4. Do you feel having ADD or ADHD may have contributed to the way you experienced this challenge and coped with it? If so, in what way?

## C. Other challenges with being a mother as identified by participant

## (e.g. working, paying bills, getting to appointments, etc.)

- 1. What was your experience like with this challenge?
- 2. If you were to place yourself on a scale from "1" feeling challenged, but coping well with it to "5" feeling overwhelmed by the challenge, where would you place yourself? (Refer to scale for each of these challenges or overall experience, depending on response to #1) (Show participant Appendix ....Coping with Challenges Scale)
- 3. How did you cope with or manage this challenge?
- 4. Do you feel having ADD or ADHD may have contributed to the way you experienced this challenge and coped with it? If so, in what way?
- 5. Did you have support? if so what kind?

## II. Probes Related to Maintaining Self-Esteem, Sense of Self-Competency

- 1. Do you remember how felt about yourself when you were experiencing this (these) challenge(s)?
- 2. Do you remember how felt about yourself after resolving this (these) challenge(s)?
- 3. Do you feel that having ADD or ADHD affects your role as a mother to this child?
  - a. Can you explain?
- 4. Many women compare themselves to other mothers and feel better or worse about how they are coping and managing. Did you compare yourself?
  - a. If so, how did you feel you compared?
  - b. Do you feel believe this is related to having ADHD or not related to it?
- 5. What are the strengths that you feel you bring to your role as a mother to this child?

## III. Probes Related to Support(s) Mother Received for Caring for Self/Child in 1st Year

## A. Personal Supports

- 1. Did you receive any support for caring for yourself and your baby in your baby's 1<sup>st</sup> year?
  - a. If so, what types of support did you receive?

(List, if necessary: partner, mother, sister, friend, doula, support group, la leche league, lactation counselor, on-line support, therapist, medication)

- b. What was helpful and not helpful about the supports you received?
- 2. Do you feel any of your supports addressed challenges you experienced as a mother who has ADD or ADHD?
- 3. If you could imagine the perfect type and amount of support for you in your baby's first year, what would it look like?

### **B.** Medication

- 1. Did you take medication for ADHD prior to pregnancy, during pregnancy, and/or in your baby's first year?
  - a. If yes, was it helpful and in what way?
  - b. Did it influence your choice of infant feeding?
  - c. If it did affect your choice, what helped you to make your decision?
- 2. Did you take medication for anxiety or depression during your pregnancy and/or in your baby's first year?
  - a. If yes, was it helpful and in what way?
  - b. Did it affect your choice of infant feeding?
  - c. If it did affect your choice, what helped you to make your decision?

## IV. WHAT DID I MISS?

Is there anything else that feels important about your experience that you would like to share with me?

## Coping with Challenges Scale

Challenge:								
How much of a ch	allenge was it	for you?						
1	2	3	4	5				
Little bit		A lot		Huge				
How do you feel y	ou coped with	it?						
1	2	3	4	5				
Coped well		Coped, but it was hard		Overwhelmed				

## Appendix R

## Informational and Demographic Questions Form

1) What is your age?
2) What is your baby's age in months?
3) How old were you when you were diagnosed with ADD or ADHD?
4) Check which type of ADHD (if known)
Inattentive type Hyperactive type
Combined inattentive and hyperactive type
5) What professional made the ADD or ADHD diagnosis? (check one)
physicianpsychologistother mental health provide
other
6) Circle any of the following diagnoses you received during this pregnancy
Anxiety Depression
7) Circle any of the following diagnoses you received during your baby's 1 <sup>st</sup> year
Anxiety Depression
8) When your baby was born:
How many adults (18 years or older) lived in your household?
How many children (less than 18 years old) lived in your household?
9) What was your marital status at the time of your baby's birth?

11) How do you identify your racial/ethnic heritage? (Policy, Management and Budget Offices	,
Office of Civil Rights, 2005)  Check as many as apply	
American Indian or Alaska Native	
Asian	
Black or African American	
Hispanic or Latino	
Native Hawaiian or Pacific Islander	
White	
Additional	
12) What is the highest year or level of education that you completed?	
Some high school	
High School graduate or GED	
Some college or technical school	
Associates degree	
Bachelor degree	
Graduate or professional degree	
13) What is your annual family income?	
\$20,000 or less	
\$20,000 - \$50,000	
\$50,000 - \$75,000	
\$75, 000 - \$100,000	
\$100,000 or more	
I don't know or prefer not to answer	

Policy, Management and Budget Offices, Office of Civil Rights (2005). Ethnicity and race identification. U.S. Office of Personnel Management guide to personnel data standards, Standard Form 181, 42 U.S. C. Section 2000e-16, NSN 7540-01-099-3446. Retrieved from http://www.doi.gov/pmb/eeo/index.c

# Appendix S Scoring Rubric of Adult ADHD Self-Report Scale ASRS-v1.1©

Table S1

Scoring Rubric of ASRS-v1.1©

Questions	1	2	3	4	5
How often do you/did you					
Have trouble wrapping up the final details of a project once the challenging parts are done?			X	X	X
Have difficulty getting things in order when you had to do a task that required organization?			X	X	X
Have problem remembering appointments or obligations?			X	X	X
Avoid or delay getting started when you had a task that required a lot of thought?				X	X
Fidget or squirm with your hands of feet when you had to sit down for a long time?				X	X
Feel overly active and compelled to do things, like you were driven by a motor?				X	X

Note. Score I=never; 2=rarely; 3=sometimes; 4= often; 5=very often. Scores marked with "X" meet threshold for that question. Adapted from "The World Health Organization Adult ADHD Self-Report Scale (ASRS): a short screening scale for use in the general population," by Kessler et al., 2005, Psychological Medicine, 35(2), 245-256. Also adapted from "Adult ADHD Self-Report Scale (ASRS-v1.1) Symptom Checklist Instructions." by Pete Quily. Retrieved from http://www.addcoach4u.com/documents/adultadhdscreenertest1.pdf

Appendix T

Quantitative Study Scoring of ASRS-v1.1© (Kessler et al., 2005)

Table T1

Quantitative Study: Before Pregnancy or Children Scoring of ASRS-v1.1©

Questions	1	2	3	4	5	
How often do you/did you	n = (%)	N=				
Have trouble wrapping up the final details of a	7	26	20	5	1	59
project once the challenging parts are done?	(11.9)	(44.1)	(33.9)	(8.5)	(1.71)	
Have difficulty getting things in order when	13	30	10	5	1	59
you had to do a task that required	(22.0)	(50.8)	(16.9)	(8.5)	(1.7)	
organization?						
**	20	47.57	0	2	0	50
Have problem remembering appointments or	20	47.5(	8	3	0	59
obligations?	(33.9)	28.0)	(13.6)	(5.1)	(0)	
Avoid or delay getting started when you had a	5	29.3	26	7	3	59
task that required a lot of thought?	(8.6)	(17.0)	(44.8)	(12.1)	(5.2)	39
task that required a for or thought?	(8.0)	(17.0)	(44.6)	(12.1)	(3.2)	
Fidget or squirm with your hands of feet when	12	42.4	9	7	6	59
you had to sit down for a long time?	(20.3)	(25.0)	(15.3)	(11.9)	(10.2)	
y = 2 2 2 2 2 2 4 10 3 10 -	(= 3.0)	(=3.0)	(-3.0)	()	(-3.2)	
Feel overly active and compelled to do things,	15	33.9	14	7	3	59
like you were driven by a motor?	(25.4)	(20.0)	(23.7)	(11.9)	(5.1)	
· ·	, ,	` ,	` ,	,	,	

Note. Score I=never; 2=rarely; 3=sometimes; 4= often; 5=very often. Shaded scores met the criteria threshold for that question. Adapted from "The World Health Organization Adult ADHD Self-Report Scale (ASRS): a short screening scale for use in the general population," by Kessler et al., 2005, *Psychological Medicine*, 35(2), 245-256. Also adapted from "Adult ADHD Self-Report Scale (ASRS-v1.1) Symptom Checklist Instructions." by Pete Quily. Retrieved from http://www.addcoach4u.com/documents/adultadhdscreenertest1.pdf

Table T2 - Next page

## Appendix T (continued)

## Quantitative Study Scoring of ASRS-v1.1© (Kessler et al., 2005)

Table T2

Quantitative Study: Since Your First Baby was Born Scoring of ASRS-v1.1©

Questions	1	2	3	4	5	
How often do you/did you	n=(%)	n=(%)	n=(%)	n = (%)	n=(%)	N=
Have trouble wrapping up the final details of a	4	9	20	22	4	59
project once the challenging parts are done?	(6.8)	(15.3)	(33.9)	(37.3)	(6.8)	
Have difficulty getting things in order when you had	4	12	17	18	8	59
to do a task that required organization?	(6.8)	(20.3)	(28.8)	(30.5)	(13.6)	
Hora muchlam mamamhaning annaintmanta an	3	12	30	6	8	59
Have problem remembering appointments or	_	12		6	-	39
obligations?	(5.3)	(20.3))	(50.8)	(10.2)	(13.6)	
Avoid or delay getting started when you had a task	3	6	19	19	12	58
that required a lot of thought?	(5.3)	(10.26)	(32.2)	(32.2)	(20.3)	
may 19 quin ea a 100 of thought.	(0.0)	(10.20)	(22.2)	(02.2)	(=0.5)	
Fidget or squirm with your hands of feet when you	8	22	14	10	5	59
had to sit down for a long time?	(13.6)	(37.3)	(23.7)	(16.9)	(8.5)	
Feel overly active and compelled to do things, like	12	17	16	6	8	59
you were driven by a motor?	(20.3)	(28.8)	(27.1)	(10.2)	(13.6)	

Note. Score I=never; 2=rarely; 3=sometimes; 4= often; 5=very often. Shaded scores met the criteria threshold for that question. Adapted from "The World Health Organization Adult ADHD Self-Report Scale (ASRS): a short screening scale for use in the general population," by Kessler et al., 2005, Psychological Medicine, 35(2), 245-256. Also adapted from "Adult ADHD Self-Report Scale (ASRS-v1.1) Symptom Checklist Instructions." by Pete Quily. Retrieved from http://www.addcoach4u.com/documents/adultadhdscreenertest1.pdf

## Appendix U

> 50% of Aggregated Scores That Met ASRS-v1.1© Threshold for Possible ADHD Diagnosis

Table U1

Quantitative Study Aggregated Scores Threshold for Possible ADHD Diagnosis

N=59	Before Children n= (%)	After Birth of Child $n=(\%)$
Question 1	26 (44)	46 (78)
Question 2	16 (27)	43 (73)
Question 3	11 (19)	44 (75)
Question 4	10 (17)	31 (53)
Question 5	13 (22)	15 (25)
Question 6	10 (17)	14 (24)

Note. Shaded = >50% of respondents met threshold for ASRS-v1.1 criteria diagnosis for this question. Before the pregnancy or birth of children, aggregate scores did not meet ASRS-v1.1 criteria. After birth, > 50% of aggregate scores met the threshold of a minimum of 4 questions for a possible ADHD diagnosis. 2-3 Respondents have an ADHD diagnosis and 3 Respondents "suspect" they have an ADHD diagnosis. Greatest increase in # respondents who met measure after birth of baby: Question 1 ( $\uparrow$ 34%); Question 2 ( $\uparrow$ 46%); Question 3 ( $\uparrow$ 56%); Question 4 ( $\uparrow$ 36%). Minimal change: Question 5 ( $\uparrow$ 3%); Question 6 ( $\uparrow$ 7%).

Table U2

Oualitative Study Aggregated Scores Threshold for Possible ADHD Diagnosis

N=9	Before Children n= (%)	After Birth of Child $n=(\%)$
Question 1	8 (88)	9 (100)
Question 2	7 (77)	6 (67)
Question 3	5 (56)	6 (67)
Question 4	6 (67)	6 (67)
Question 5	8 (88)	6 (67)
Question 6	4 (45)	5 (56)

Note. Shaded = >50% of respondents met threshold for ASRS-v1.1 criteria diagnosis for this question. Before and after birth of child, >50% aggregate score met criteria of at least 4 positive responses to ASRS-v1.1 questions for possible ADHD diagnosis. Before pregnancy and birth of children >50% of aggregate score met criteria for five out of six questions; after birth of children, all six questions met criteria. Increased average score from before to after birth of child: Question 1 ( $\uparrow$ 12%); Question 3 ( $\uparrow$ 11%); Question 6 ( $\uparrow$ 11%). Decreased average score: Question 2 ( $\downarrow$ 10%); Question 5 ( $\downarrow$ 21%). No change: Question 4.

Appendix V

Qualitative Study Scoring of ASRS-v1.1© (Kessler et al., 2005)

Table V1

Qualitative Study: Before Pregnancy or Children Scoring of ASRS-v1.1©

Questions	1	2	3	4	5	
How often do you/did you	n=(%)	n=(%)	n=(%)	n=(%)	n=(%)	N=
Have trouble wrapping up the final details of a project	0	1	2	3	3	9
once the challenging parts are done?		(11.1)	(22.2)	(33.3)	(33.3)	
					_	_
Have difficulty getting things in order when you had	1	1	1	1	5	9
to do a task that required organization?	(11.1)	(11.1)	(11.1)	(11.1)	(55.6)	
**	•			_		
Have problem remembering appointments or	0	4	1	2	2	9
obligations?		(44.4)	(11.1)	(22.2)	(22.2)	
Association delectrostations atomical subsequences had a total	0	1	2	4	2	0
Avoid or delay getting started when you had a task	0	1	2	4	2	9
that required a lot of thought?		(11.1)	(22.2)	(44.4)	(22.2)	
Fidget or squirm with your hands of feet when you	0	1	1	2	5	9
had to sit down for a long time?	U	(11.1)	(11.1)	(22.2)	(55.6)	9
nuu to sit down for a fong time:		(11.1)	(11.1)	(22.2)	(33.0)	
Feel overly active and compelled to do things, like	0	4	1	1	3	9
you were driven by a motor?	9	(44.4)	(11.1)	(11.1)	(33.3)	
y c u c c u u c c c y u c c c c v v		( )	()	()	(23.5)	

*Note*. Score *I*=never; *2*=rarely; *3*=sometimes; *4*= often; *5*=very often. Shaded scores met the criteria threshold for that question. Adapted from "The World Health Organization Adult ADHD Self-Report Scale (ASRS): a short screening scale for use in the general population," by Kessler et al., 2005, *Psychological Medicine*, *35*(2), 245-256. Also adapted from "Adult ADHD Self-Report Scale (ASRS-v1.1) Symptom Checklist Instructions." by Pete Quily. Retrieved from http://www.addcoach4u.com/documents/adultadhdscreenertest1.pdf

*Table V2 – Next page* 

## Appendix V (continued)

## Qualitative Study Scoring of ASRS-v1.1© (Kessler et al., 2005)

Table V2

Qualitative Study: Since Your First Baby was Born Scoring of ASRS-v1.1©

Questions	1	2	3	4	5	
How often do you/did you		n=(%)	n = (%)	n=(%)	n=(%)	N=
Have trouble wrapping up the final details of a project once the challenging parts are done?		0	2 (22.2)	2 (22.2)	5 (55.6)	9
project once the chancinging parts are done.			(22.2)	(22.2)	(55.0)	
Have difficulty getting things in order when you	0	3	1	2	3	9
had to do a task that required organization?		(33.3)	(11.1)	(22.2)	(33.3)	
Have problem remembering appointments or	0	3	4	0	2	9
obligations?		(33.3)	(44.4)		(22.2)	
Avoid or delay getting started when you had a task	1	0	2	4		9
that required a lot of thought?	(11.1)		(22.2)	(44.4)	(22.2)	
Fidget or squirm with your hands of feet when you	1	1	1	4	2	9
had to sit down for a long time?	(11.1)	(11.1)	(11.1)	(44.4)	(22.2)	
Feel overly active and compelled to do things, like	0	2	2	3	2	9
you were driven by a motor?		(22.2)	(22.2)	(33.3)	(22.2)	

*Note*. Score *I*=never; *2*=rarely; *3*=sometimes; *4*= often; *5*=very often. Shaded scores met the criteria threshold for that question. Adapted from "The World Health Organization Adult ADHD Self-Report Scale (ASRS): a short screening scale for use in the general population," by Kessler et al., 2005, *Psychological Medicine*, *35*(2), 245-256. Also adapted from "Adult ADHD Self-Report Scale (ASRS-v1.1) Symptom Checklist Instructions." by Pete Quily. Retrieved from http://www.addcoach4u.com/documents/adultadhdscreenertest1.pdf

## Appendix W

## Qualitative Study: Co-morbidity and ADHD Medication

**Table W1**Perinatal Symptoms Versus Diagnoses of Depression and Anxiety

	Prenatal Other		Post	ADHD		
	Co-morbid	Undiagnosed	Diagnosis	Undiagnosed	Diagnosis	Classification
1	Bi-polar OCD		Anxiety & Depression		Depression - Mild	Inattentive
2						Combined
3						Inattentive
4		Anxiety			Anxiety	Combined
5	Autism & Sensory Symptoms	Anxiety & Depression 2nd and 3 <sup>rd</sup> pregnancies		A- 2 <sup>nd</sup> child D - 1 <sup>st</sup> & 2 <sup>nd</sup> child		Combined
6	Sensory Symptoms	Anxiety & Depression All pregnancies		A- all children D - I <sup>st</sup> & 2 <sup>nd</sup> child	Anxiety – 5 <sup>th</sup> child	Inattentive
7	Bi-polar Sensory		D		A	Combined
8	Sensory		Anxiety- 3 <sup>rd</sup> pregnancy Depression - all pregnancies		Adj. Disorder 2 <sup>nd</sup> child Anxiety -3 <sup>rd</sup> child after 3 months	Combined
9	OCD Symptoms				Depression 3 <sup>rd</sup> child	Inattentive

*Table W2 – Next page* 

## Appendix W (continued)

## Qualitative Study: Co-morbidity and ADHD Medication

**Table W2**Qualitative Study Frequency of ADHD Medication Use

	Before pregnancy	While trying to conceive	During pregnancy	During breastfeeding
1	Discontinued	No	No	No
2	Yes	No	No	No
3	Yes	Off and on	No	No
4	No	No	No	No – Physician advice
5	Discontinued	No	No	No
6	Discontinued.	No	No	No – Physician advice
7	Yes	Yes	No	No
			Pot	Pot
8	Yes	No	Yes - Ritalin	Yes – Ritalin
9	Yes	Unknown	No	Anti-depressant after 3 <sup>rd</sup> birth.