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**Pregnancy, an Opportunity for Empowerment: A Trauma and Attachment Informed  
Approach to Creating a Corrective Relationship for Mothers with Trauma Histories and  
Subsequent Substance Abuse**

A project based upon an independent investigation,  
submitted in partial fulfillment of the requirements  
for the degree of Master of Social Work.

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2015

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Pregnancy, an Opportunity for Empowerment: A Trauma and Attachment Informed Approach to Creating a Corrective Relationship for Mothers with Trauma Histories and Subsequent Substance Abuse

### **Abstract**

This theoretical thesis examined how the capacity of a healthy pregnancy and birth and positive attachment could be a corrective experience for mothers with histories of trauma and subsequent substance use. Socratic questioning was used to help trauma and attachment-informed clinicians approach mothers in this population as an asset to their infants rather than viewing them as a risk, hopefully challenging the socially prevalent belief that these mothers should be treated punitively rather than receive treatment. The phenomenon also focused on this population of mothers rather than their infants as primary victim, examining individual and systemic factors that contribute to substance use in pregnant mothers as a means by which they cope with their own history of trauma. In addition, the author conducted assessments of programs that currently exist for these mother and what are the barriers and successes to providing trauma and attachment informed care for these women.

## **Acknowledgements**

I would like to take this opportunity to thank both my thesis advisor Kate Didden, LICSW, PhD and Jean LaTerz, LICSW, PhD for their invaluable feedback and support through this thesis writing process. I would also like to express my heartfelt appreciation to my daughter Sali Kamara for being my confident, moral and emotional support, and for her unwavering belief in me. She was there daily cheering me on, not letting me be less than I am. I hope that I always do the same for her!

I would especially like to express my sincere gratitude to Elisabeth Buchanan, LICSW for her depth of knowledge, her enthusiasm, and her grace and strength as a mentor and role model. It is because of Elisabeth that I embarked on this journey. She has seen me through my entire process at Smith College, School of Social Work, from the writing of my application essay, through acceptance to the school, moving from Germany back to the United States after living abroad for over 9 years, being separated from most of my family, the grueling course work and especially through the humbling experience of writing this thesis. I hope that I have made you proud Elisabeth, and wish one day be even a fraction of the clinician that you have been throughout your career. I thank you from the place in my heart that has given birth to the Social Worker in me.

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## **Chapter I**

### **Introduction**

Humans by nature are very social beings who, from the moment of birth, seek out and thrive through connection, protection and comfort. Our evolution as a species has depended on group survival and reciprocal attachments. Human babies, unlike many animal species, are not fully developed and independent at birth. They rely on the compassion, nurturing and protection of a caretaker, without which a newborn would certainly perish. Pregnancy and childbirth are a particularly vulnerable yet opportune biological and psychological time for this process of learning attachment connections to take place. However, changes in our social and family structure over the last century have impacted the way in which we learn to do so. The ability to continue making these connections and attachments could arguably be one of the largest challenges to public health and social justice that our culture faces today.

Pregnancy and mothering is challenging under the most ideal circumstances, yet so many women face a very difficult start in life due to early experiences of abuse or neglect which potentially translates into trans-generational transmission of trauma. The purpose of this thesis is to explore the critical role of promoting a trauma-informed healthy pregnancy, birth, and positive attachment in the early months and years of infants born to vulnerable pregnant mothers with a history of trauma and/or substance use. It is viewing mothers as an asset not a risk, and assisting her with negotiating the attachment relationship with her infant, even while she experiences symptoms of PTSD and substance use, that is the focus of this thesis.

There are significant numbers of mothers with the history of childhood trauma that has led to subsequent Substance Use Disorder (SUD), who are at risk for poor infant bonding and attachment stemming from biological and psychological factors of their abuse. Issues such as disrupted attachment styles in the mother, neurodevelopment changes to socialization, numbing and other symptoms of Post Traumatic Stress Disorder (PTSD) make connection difficult. Emotional dysregulation and symptoms that inhibit social connections due to addiction are also areas where these mothers struggle. External

factors also impact those who are at risk for childhood adversity, including but not limited to, poverty, marginalization, lack of resources, and exposure to community violence.

Mothers who have substance use issues are still being criminalized instead of being treated as victims of their own trauma and abuse. Statistically as this thesis will show, a large percentage of women become dependent on alcohol or drugs as a result of trying to cope with their abuse. Historically, the U.S. government in its attempt to ameliorate the drug problem has made the situation for mothers and children worse. In the 1980's the crack cocaine epidemic led to strict criminal penalties aimed at getting drugs off the street. The laws and policies implemented at that time focused on enforcement and mandatory sentencing, punishing women (and men) for the ways in which they handled their own victimization, which is sometimes through substance use. The resurgence of heroin in the last decade also contributes to the growing concern about drug use in this population. Is it perhaps necessary to try something different than a punitive approach, offering treatment rather than incarceration?

Infant outcomes are frequently the primary focus of treatment when it is offered. This approach is often punitive toward the mother, judging her for "bad mothering" instead of treating her as a client in desperate need of treatment in her own right. To date there are very few integrated programs designed to address the specific needs of pregnancy when there is also a history of trauma and concurrent substance use. Social workers are uniquely poised to make significant contributions to a more biopsychosocial-existential model of care, especially those who are trauma and attachment informed clinicians. They can be the "bridge of understanding" that views these mothers not from a "risk-model" but from an "empowerment-model" of compassionate care for those who are still being punished for abuses over which they had no control.

### **Conceptualization and Methodology**

This theoretical thesis will explore through Socratic questioning how a history of trauma and a mother's subsequent substance use, viewed through the lens of trauma or attachment theory, is perceived as either a potential risk for adverse perinatal outcomes and poor mothering, or as a building block for capitalizing on a mother's strengths. The author will use these two theories to challenge this risk-model

of motherhood and evaluate how maternal/infant social interactions in the first year can be molded during the perinatal period and beyond, to promote an empowerment-model of corrective and reciprocal relationship specifically for mothers with an early trauma history and related (SUD). The author theorizes that working from an empowerment-model not only could improve the mother's self-esteem and ability to connect with her infant, but might also give her a sense of agency in the rest of her life as well. The empowerment-model equalizes the power dynamic between the clinician and herself, allowing her to feel like an equal partner in her care. In contrast, maintaining the risk-model creates a power dynamic where the mother is seen as lacking. She is not viewed as capable of making appropriate decisions about her care, potentially setting her at a disadvantage for appearing to be an unfit mother or reinforcing her own feelings of failure that often accompany substance use. Viewed through the object relations lenses of trauma and attachment theory, could she be either further traumatized/marginalized by the system, internalizing the "bad" object, or could the clinician mirror to her, her own goodness and worthiness, which she can then internalize as the "good" object that can then reflect outward to her child?

Can mothers be taught by trauma and attachment-informed clinicians to read their infant's cues as a way of promoting positive and reciprocal social interactions that are the basis for secure attachment (Bell, 1972)? Secure attachment for the purposes of this thesis is reciprocal relationships where patterns of approaching/avoiding behaviors adequately meet the physical and emotional needs of a mother/infant dyad. A corrective relationship is defined as a positive connection between mother and infant that can help improve attachment behaviors that were disrupted for the mother due to early childhood trauma or neglect. Could approaching the therapeutic relationship from this empowerment-model facilitate a woman's capacity to recognize her infant's innate drive for social connection, help identify her inherent nurturing, and build trust in her capacity for attachment through positive mirroring feedback from her baby? To understand the challenges and strengths of these women it is necessary to add an historical context of the social constructs regarding womanhood, sexuality, motherhood, pregnancy and birth.

These constructs within the context of current societal norms in the United States often influence women as they enter the childrearing years, set the stage for attachment styles and the continued



development of the Self for both the mother and her infant. The Self refers to the unconscious and conscious aspects of one's character; personality, cognitions, and feelings as they come together with a person's environment and experience to form one's identity (Adler University, 2014). "For a woman, knowing that she is capable of bearing children has been critical in the development of her sense of femininity, gender identity, and self-esteem, even if as an adult she chooses not to actually have children. The awareness of her reproductive potential is part of her self-image." (Notman, 1988, p. 140)

Girls traditionally celebrated their right of passage into womanhood through pregnancy and birth. It was a time of great celebration of their own power, and one arena in which they need not compete with men. Every society and culture attaches meaning and importance to the process of birth, which until the latter part of the 19<sup>th</sup> century was attended to by the watchful, nurturing, hearts and hands of other women.

In recent decades however, it appears this innate maternal potential is being eroded and undermined by the medicalization of childbirth (Rothman, 2010). Pregnancy often raises interesting philosophical, ethical, and legal questions in our current cultural context, such as the appropriate legal status of a fetus, or considering the gestational period and birth legally to be a disability. Additionally, can we hold women legally accountable for "potential" drug related harm to her unborn baby? And if so are there legal ramifications of considering the fetus as an actual medical patient (Kulka, 2011). In just posing these questions how are changing the balance of power that women currently have over their own bodies? In addition to these legal and ethical questions, the prevalence of violence against women, marginalization, lack of equal access to quality health care, the punitive nature of our Criminal Justice System (CJS) and Department of Children and Families (DCF) all contribute to further power imbalances for many women and mothers.

Understanding current pregnancy related trends and policies provides a clear view of the health of individuals and communities, as well as helping to identify areas for proactive intervention. However, large disparities exist in both access and options for ideal pregnancy care for women in the U.S., especially in economically disadvantaged communities. These disparities can impact mothers in physical

and psychological ways leading to poor birth and parenting outcomes. Exposure to trauma, marginalization, lack of adequate nutrition, lack of transportation, and income inequality can have detrimental physical effects on pregnancy outcomes, but it can also lead to the erosion of a mother's sense of agency, trust in her maternal intuition, and ultimately degrade her self-esteem.

The author's insight and anecdotal observations culminating from over 14 years of clinical practice as Registered Nurse in Maternal Child Health and Family Advocacy, have been influential in conceptualizing the research question and hypothesis that the dyadic relationship of mother and child could be used as an empowerment tool to improve bonding and attachment styles for both the mother and infant. The author set out to form the hypothesis that trauma-surviving mothers who have an addiction can be taught, through the therapeutic relationship with a trauma and attachment-informed clinician to recognize, initiate, and receive positive social interactions with her infant in the perinatal period and first year.

Methodologically, it is the author's intention to illuminate factors that contribute to the phenomenon, and construct a new understanding that shifts the focus to the strengths that these mothers can bring to their overall care. For each aspect of the phenomenon reviewed, I will pose specific questions about how social workers from an empowerment perspective, might envision another way of seeing and treating women from our understanding of pregnancy and childbirth, to our treatment approaches for substance abuse for those women who are pregnant. Furthermore, where appropriate I will pose questions about how trauma and attachment informed clinicians could interact with women throughout the pregnancy and first year, focusing on building strengths, thus challenging both clinician's views and mother's negative cognitions surrounding her trauma and substance use.

Next, the author will conduct a thorough history and review of both trauma and attachment theory, paying particular attention to how both theories impact the phenomenon by either disrupting or promoting positive attachment connections for the population of mothers who are survivors of childhood abuses and also have substance use issues. The review of the two theories will also chronicle practical applications, as they were understood at the time of their conception, were either integrated or dis-

integrated into how clinical practice is approached today from either risk informed or empowerment informed framework.

The author anticipates that holistic treatment approaches could bring together aspects of a working model that could be studied and applied at a later date, paying attention to “person-in-environment” systems issues that could be barriers to implementing these types of interventions. Person-in-environment refers to the manner in which an individual’s environment and personal circumstances either promote or hinder their success. The aim is to help the mother build skills that empower her to meet her attachment potential and feel secure and connected to her infant.

Project specifics were formulated with the following in mind. The perinatal period provides an excellent opportunity for addressing behavior modification in mothers with substance dependency at a time when they may be most motivated to make significant behavioral changes for the health of her baby. Practitioners have nearly 10 months to capitalize on laying the foundation for the future of the dyad. Adequate prenatal screening for behavioral health issues during the initial obstetric visit is crucial if a multidisciplinary, biopsychosocial approach to care is to succeed. Although some of the following is already being done, the author will conduct a more comprehensive examination of criteria and specific screening tools used to assist in gathering a thorough assessment of possible trauma and attachment informed behavioral health issues, presence of violence, and substance use issues that may exist, and could be integrated as part of routine perinatal care for *all* women. For example, would having a social worker as part of the intake team during initial prenatal visits be helpful in gathering a more comprehensive biopsychosocial assessment instead of at the time of delivery as is the case in many obstetric practices? It is not enough however, just to screen. Criteria specific to each perinatal treatment environment could also include an adequate collection of resources for referring clients. An examination of research will be necessary to identify how agencies and facilities are addressing the issue of referrals and support synthesis of coordinated outreach care. Follow-through to maximize clients entry into additional treatment is also an area for exploration in this thesis, and may be essential in providing comprehensive care specific to the needs of this vulnerable population. Though integrated programs may

be difficult to find, individual practitioners can still make a difference in providing more holistic mother/infant-centered care in their own practice interventions when working from an empowerment-model.

### **Overview of Thesis**

In order to conceptualize the corrective relationship that may be possible between and infant and a mother who has a history of trauma and substance abuse, it was necessary to conduct an extensive exploration of work that is already being done with this vulnerable population. The literature to date lacks current research looking at this specific capacity of a mother/infant dyad from an empowerment-model verses a risk-model to provide a corrective relational experience for the mother. Therefore, the following chapter will examine the individual portions of this phenomenon such as the social construct of motherhood, changes to birthing trends in the last century, prevalence of trauma and substance use in pregnant mothers, perinatal outcomes of substance use in pregnancy, as well as policy and treatment currently impacting pregnant women who are using substances and/or are survivors of traumatic events. In conducting this review the author investigated current trends, and how these in fact impact the pregnancy and attachment relationship between the mother and her infant. It was also important to identify risk factors that influence why women typically use substances, and how the perinatal period is often missed opportunity to screen and refer clients with these significant issues, helping them get more comprehensive treatment for this particular cluster of issues. The phenomenon chapter also examined the existing literature, highlighting gender differences, income inequalities, interpersonal violence, and lack of cultural support as factors that have a negative impact on healthy pregnancies and empowered mothering, and are challenges that so many women face.

Chapter three examines the historical roots of psychoanalytic development of trauma theory, including Freud and his followers and traces how trauma theory was integrated or dis-integrated in clinical practice. It will then trace the development of Contemporary Trauma Theory through the works of Levine, Van der Kolk, Herman, Perry, Siegel and Cozolino. Chapter 4 reviews in a similar manner,

the historical development of attachment theory including Klein, Bowlby, Winnicott and their successors through to the neurodevelopmental models being used to integrate trauma and attachment theory today.

The final chapter of the thesis will consist of a discussion of how trauma and attachment theories, along with examples of current clinical practice and policies can be woven together to inform treatment options that improve biopsychosocial models of intervention. This discussion will also provide a synthesis of the theoretical work as well as a review of the strengths and limitations of the thesis and the implications for social work, continued research, as well as practice and policy changes needed to improve integrated care for pregnant women with a history of trauma and SUD.

## **Chapter II**

### **Phenomenon**

The goal of this chapter is twofold: to explore the current literature identifying how the perinatal period and motherhood, traditionally viewed as a risk-model in this population, is affected by current trends of insufficient individual and community support, violence against women, the role of gender in power dynamics, and subsequent substance use that many mothers employ as means by which to cope. Additionally, this chapter will examine how pregnancy and the first few years of an infant's life might provide a critical window of opportunity for *mother/infant-centered* interventions to promote an empowerment-model corrective experience for these mothers. Corrective experience for the purposes of this thesis speaks to the occurrence of having for the first time, a positive and reciprocal nurturing and attuned relationship that was previously lacking due to disrupted bonding with a primary caretaker in the mother's early years of development (Bell, 1972). This transition to motherhood is critical to the mother's continued development of the Self and that of her baby.

Understanding the phenomenon necessitates further exploration of this population. To begin, the author will examine the social construction of motherhood and the changes in the medicalization of birth since the 19<sup>th</sup> century. This historical context shapes the attitudes towards this particular population, their birth, and parenting capabilities. In order to understand the scope of this phenomenon, a growing public health issue, the author will next explore statistics related to poor birth outcomes, trauma and substance abuse. Finally, I will review literature on treatment and policy related to pregnant women with SUD and why they exist. The chapter will conclude with case material and a summary of the phenomenon as it relates to the goals of this thesis.

#### **The Social Construct of Motherhood**

What makes a woman a mother is a universal physical process by which every child enters the world. Yet, the *idea* of mother is as diverse as those that she brings forward into life. Motherhood in this way is a social construction, assigning meaning and judgments about her identity that govern how she

navigates this role not only as an individual and on family level, but also within her cultural systems at large (Nelson, 1997). But who actually defines this concept of motherhood? The way in which a woman navigates the construct of the ideal mother/woman and the development of her own mother/self certainly is central to our view of her as either an at-risk or an empowered woman.

Women and mothers have traditionally been depicted as the bearers of life and nurturer of family, the sacred goddess, the domestic ruler, as well as the keepers and protectors of societal morals. They were relegated as guardians of social nurturing, often holding it through helping professions as nurses, teachers, and advocates for social justice. They are still seen as the healers, and holders of the heart. Women are also the bearers of emotions, and the vessels for collective pain. Yet they are also seen as the shadow, Eve/Jezebel/Medusa, the fallen, the temptress, cold, calculating, and detached—a threat to masculinity and the patriarchy (Nelson, 1997).

Motherhood in all its intricacy is inextricably linked with another social construction, female sexuality. Nelson and Holmes write: “Visions of motherhood [in Victorian and post-Victorian eras] variously competed, co-operated, and collided with contemporaneous visions of sexuality” (Nelson, 1997, p. 2). Constructs of sexuality and motherhood at this time were both compatible and competitive. Purity and sanctity were the prevailing components of the idyllic construct of being a mother. Pregnancy, birth and childrearing were viewed in this way as “noble and altruistic” (Nelson, 1997). Motherhood was in this sense, an intensely moral and selfless duty, which elevated the woman in the eyes of society.

Throughout history the concept of “mother,” in conjunction with ideas about woman as a sexual being in her own right, has been fluid, unfixed and quite dichotomous. The Victorian Era according to Nelson and Holmes illustrates these subtle competing perceptions. The mother was the “angel” in the household, “the source of all comfort; the best evidence of (or substitute for) divine love...” (Nelson, 1997, pp. 3,4). It must be noted however that this vision of “angel-mother” was confined only to those of the privileged upper class. It was also only an “image” put forth by society; the reality in the home being quite different, particularly along class divides. Family life for the upper echelon was quite formal, and though childrearing manuals of the time encouraged bonding and maternal ties, mothers of this era *were*

often cool and detached. Children were frequently considered a nuisance and were relegated to the care of a myriad of nannies, nursemaids and servants. It was these servant women who became the nurturer and protector of the collective by working in the homes and nurseries of the wealthy, however they were viewed as “the help” in need of strict oversight and monitoring for competence (Schoolwork Helper, 2011).

By the beginning of the 20th century, Victorian women began the shift away from domesticity, as care for the household and children was delegated to servants. This shift of duties freed upper class women to engage in activities of entertaining both in private and public spheres. The image of motherhood thus lost much of its sacred and glorified prestige. It was now viewed as servitude and beneath such women of privilege (Nelson, 1997). How might these views be giving way to the manner in which those on public assistance are perceived today?

The role of mother has not had a “neat and tidy trajectory” of individual and social representation. Every generation it seems has its dissonance when attempting to define the protean nature of motherhood, “for good or for ill, in the family and in society” she must balance the individual and public persona revealing her ability to live up to the changing ideal (Nelson, 1997). Since the proverbial “fall from grace,” mothers have struggled with how they are perceived by themselves and others.

As ideas of feminism began to grow around the turn of the century, a small but vocal corps of women chose to separate themselves from maternity and sexuality, opting instead to move outside the domestic sphere into professions such as nursing or workhouse visiting. This allowed them to serve as “social mothers” while remaining childless (Nelson, 1997). The independent woman with no attachment to a man was free to challenge the constructs of being female. The turn of the century also ushered in an era in which women began exploring their female sexuality. Previously, sexual desire was not compatible with the virginal, iconic, purity of motherhood and was vehemently repressed. In the post-Victorian era, which also witnessed birth of modern psychology, quite a different image of mother-woman began to emerge. The mother began to be described as demanding, “threatening—warped, often in a sexually inflected way” (Nelson, 1997). Male writers at that time were producing evocative titles such as “Walt



Rudling's 1896 novel *An Evil Motherhood*, or the "subtly horrific conjuncture of sexuality and maternity in J. M. Barrie's *Peter Pan* (1991), or Radcliff Hall's portrait of smothering maternity in *The Unlit Lamp* (1924), based according to one biographer on Hall's lengthy and sometimes difficult love affair with older women" (Nelson, 1997, pp. 4,5). When women and mothers are no longer angelic but dangerous and suffocating, it is not difficult then for men to view the woman/mother as a threat. Freud's complex ideas surrounding eroticism and infantile sexuality began to emerge about this time. The centerpiece of his theories of development culminated in concept of the *negative Oedipus complex*, the resolution of which, he believed was *castration anxiety* over the perceived threat of emasculation (Mitchell, 1995). This complex theory as the author understands it, describes this intimate conjuncture of maternity and sexuality in the eyes of the male child. "A boy wants to remove the threat posed by his rival (father) by castrating him, and assumes that his father will punish him in like fashion. It is only because of the threat of castration that the child's oedipal ambitions are renounced" (Mitchell, 1995, Kindle ed.). The father, in this telling of Sophocles' Oedipus tale, is the threat to this intimate maternal/sexual relationship. The fear that the father will reciprocate the desire to castrate his rival creates intense anxiety that forces the son to develop past this maternal/sexual fantasy. However, what happens if a grown man is confronted by a woman society constructs as devouring, possessive, seductive and threatening? Women are described and depicted in popular culture as highly sexualized, seductive, "man-eating," "gold-digging," controlling, suffocating, and dare I say reminiscent of the devouring mother of Oedipus. Perhaps it is an unconscious, inexpressible reminder of the fact that he cannot act against his "rival-father" without fear of retaliatory castration (loss of masculine power), and anger at the loss of the seductive "mother-lover" that is unconscious the root of violence against women, and destruction of the modern mother/woman, in an attempt to restore the power dynamic of the patriarchy.

The contemporary woman faces similar challenges in living up to the societal ideals of motherhood. Due to growing divorce rates or mothers who choose not to marry in the United States, single-motherhood is a new defining identity. The author believes it is this identity construction that influences whether the mother is seen as at-risk verses empowered, both to herself and in the larger

cultural context. Many view single-motherhood as a correlating risk factor for poverty, issues with mental health, and poor perinatal outcomes. This is also true of the population of women with histories of trauma or substance use. Women continue to be marginalized in ways that men are simply not judged. Motherhood is not seen as being compatible with other aspects of being human such as sexuality, certain professions like sex work, drug use, or incarceration. They do not fit the ideal of “mother” and are therefore treated as a risk and danger to society that must be punished. “Society sanctions women for failing to live up to preconceived gender-role expectations by using legal interventions, particularly against poor women of color who use drugs while they are pregnant” (Carter, 2002, p. 167). In a similar manner Baker (2011) describes how current public and political debate blames moral failings and childrearing behaviors of young low-income mothers for their economical struggles, yet ignores the structural inequalities that are their experience. Her study was “designed to document and analyze the process through which young, low-income mothers construct understandings of themselves as mothers...” (Baker, 2011, p. vii). In contrast, May, in her article on narrative identity and construction of lone motherhood, envisions a more empowered approach to single or lone-mothering not as a pre-determined category through which to relate to an individual, but rather allocates it to a place in the narrative construction of the self. By reversing the socially constructed lens through which a mother is defined, it is her narrative identity that gives voice and understanding to the woman in her own right. In other words, instead of viewing the woman as an addict, an identity that comes with risk, it is the woman’s narrative identity that informs why she uses substances. One could take this a step further to say that narrative identity can be used to re-conceptualize or rework the construction of the self (May, 2004). Could this ability to formulate a more positive construct of the self through the narrative identity of being a mother be used to improve relational security for herself and her infant, and that the positive social interactions of baby could *be* the narrative on which to reconstruct the self?

### **Cultural Changes to Childbirth Since the 19<sup>th</sup> Century**

Change to childbirth practices is another area that is now defined by social construction. Birthing was once a sacred event that held significance and power for women that man could not experience; the

one place they could not tread. In less than three generations however, birthing choices in the U.S. have significantly shifted from relatively little medical intervention to a highly medicalized process. With the medicalization of childbirth, men usurped and dominated the field of obstetrics, once again stifling the powerful influences of the female gender (Rothman, 2010).

An interesting article by Theodorou and Spyrou explores the privileged consumerist side of birth focusing on “how first time mothers (to be) acquire a sense of motherhood and simultaneously construct notions of babyhood as their pregnancies unfold; how the experience of pregnancy is lived and perceived by expectant mothers as a state of anxiety and a condition of risk; and finally how these processes are mediated by consumption, broadly conceived. We situate our discussion at the intersection of theorizations of the medicalization of pregnancy (and the discourse of risk inherent within), social constructions of motherhood and the consumptive relations that envelop the technological mediations between the mother, the fetus and a medically significant other (usually the gynecologist or sonographer)” (Theodorou & Spyrou, 2013, pg. 80). They go on to reflect on how consumption is implicated in the way a mother begins to develop her constructed view of self as at-risk, by choosing to consume or refrain from consuming certain products such as foods, medicine, or in subtler ways, medical advice, diagnostic procedures and reproductive services on behalf of her fetus (Theodorou & Spyrou, 2013). They posit that the contemporary mother is attempting buy away anxiety and ensure the safety and health of her fetus in order to save it from the inherent risk of birth that the medical community has constructed.

Yet, the move toward a medicalized model of childbirth has been implicated in increasing numbers of birth related trauma that are likely the result of cultural changes in our delivery system of perinatal care and current birthing policies and practices in the U.S. Routine prenatal care for most women consists of monthly prenatal visits after the first trimester, various laboratory tests, as well as ultrasounds (often performed without informed consent) to verify approximate due date, adequate growth of the fetus, and normal development of major organs (Office of Women's Health; U.S. Department of Health and Human Services, 2010). “The rise in prenatal and genetic testing allows parents and society at large new forms of control over what sorts of children are born, and it enhances the level of

medicalization and surveillance during pregnancy” (Kulka, 2011, p. web ed.). With this belief that testing is giving parents more autonomy over their reproductive rights, choices about the type of baby they want to have and assistance in whether or how to reproduce, are we actually improving parents’ freedoms of choice once medicalization has been introduced and are these truly informed choices when parents give consent (Kulka, 2011)? When increased medical surveillance becomes expected by current medical and societal trends, they become difficult to oppose. All of these things put pressure on the woman to “shoulder the responsibility of producing socially acceptable, productive citizens, and for disciplining their own bodies and laying them open to medical intervention...” (Kulka, 2011, p. web ed.).

The initial prenatal visits are an opportune time to perform screening for substance use as well as history of trauma and other behavioral health issues. Involving social workers in the early prenatal care team could improve screening and referrals for trauma substance. However, many women who use during their pregnancy are reluctant to enter into obstetric services due to the very realistic fear of judgment or punishment. Obstetric practitioners have made much progress in the areas of screening, but referring women to behavioral health care and substance abuse treatment continues to be an issue. One focus group study of obstetric providers and their screening practices found that perinatal care providers either “fail to take advantage of prenatal visits to address behavioral risks or, following initial assessment, fail to conduct follow-up assessment, provide further counseling or make referrals” (Herzig, 2006, p. 229).

Medicalization has also shifted the birthing care out of the home and into for-profit doctors offices, hospitals, or birthing centers. Of women who seek prenatal care, between 79.5% and 91.1% are seen by an obstetric physician rather than a midwife (CDC/National Center for Health Statistics, 2014). Very few women choose to give birth outside a hospital and even fewer at home (CDC/National Center for Health Statistics, 2014). This is a huge shift from the early 1900’s when nearly all women gave birth outside of a hospital. Yet by 1944 the percentage of women birthing outside the hospital fell to only 44% and by 1969 it was less than 1% (MacDorman MF, 2014). “Medicalization can be defined as the “biomedical tendency to pathologize otherwise normal bodily processes and states. [It] leads to

incumbent medical management [and is] a social process whereby an expert-based biomedical paradigm dominates discussion of health and frames it in negative ways, usually as illness” (Shaw, 2013, pp. 523-524). Though much of contemporary birthing happens in this way, there is at the same time a vocal “natural birth” movement that has pushed back against this medicalization (Kulka, 2011). “The disagreement between these two camps often circulates around whether birth is thought of a dangerous and abnormal process best managed by medicine in an institutional setting [by professionals], or as a ‘natural’ and ‘normal’ bodily function that requires formal medical attention only in unusual cases” (Kulka, 2011, p. web ed.). The problem is not fundamentally the use of technology, but the shift from patient-focused to professional expert-focused care. When misused however, technology and intervention subjugates the mother to medical authority, undermines her confidence and control and estranges her from the birth process. What effects does this have on potentially alienating her also from her attachment process (Kulka, 2011)?

Feminist critics of the medicalization of childbirth pose the argument that freedom of choice in childbirth is not possible within the confines of medicalization because obstetrics is based on the traditionalist masculine culture of patriarchy that undermines women’s autonomy (Malacrida, 2012). Possible barriers to choosing to birth at home under a biologically centered and more natural birth setting may include finding obstetric clinicians willing to perform births outside the hospital, especially in marginalized communities, fear generated by social media about the safety of home birth, and whether or not insurance companies will cover costs of birth at home. The pressure on women to succumb to a hospital birth can be overwhelming. Once a mother agrees to care in a hospital setting, she must advocate at every turn in order to have as near a “natural birth” as possible. Women in marginalized communities are less informed and have fewer choices when it comes to having the kind of birth they desire.

Each year, more than one third of all births in the U.S. result in cesarean sections. Our country is second only to Brazil whose rates are as high as 36% nationally and over 80% in certain hospitals (Murphy, 2010). Current literature available seems to describe risk factors for medical trauma are due to spontaneous lacerations to the perineum and vaginal wall, episiotomies and trauma related to the use of

forceps for both the mother and the baby (Ely, 2007). There is also the risk of emergent cesarean section, hemorrhage, and the potential of having to remove the uterus to stop the bleeding. However medical treatment often does not address the psychological effects of emergency surgery, and the procedures or traumas mentioned above. Might it be helpful to offer counseling services to women who experience these events during pregnancy as a preventative measure, and how many hospitals do this? The current examination of literature does not seem to be addressing these psychological needs of women experiencing traumatic births prior to leaving the hospital.

### **Psychological Implications of Birthing for this Population**

Pregnancy and birth often lay a foundation on which an infant and mother navigate their relationship; the infant either forms a life schema of safety and nurturing or vulnerability and shame. Yet the entire birthing and mothering process in the U.S. has become a practice based in pain, paranoia, and fear of risk, therefore, how does this impact the mother and infant as they build the groundwork of their dyadic relationship? How much better might it be for them if the mother was properly screened and referred to counseling services at the beginning of her pregnancy to help her prepare for or even choose birth and motherhood? How does substance use by a mother automatically set some women at a disadvantage, being labeled “high-risk?”

Pregnancy and birth can be either incredibly empowering or a time of great vulnerability for a mother, particularly for those with histories of early childhood abuse and subsequent addiction. Trauma can sometimes resurface as a woman makes the transition to motherhood and her body begins to change. Those with histories of physical and sexual abuse perhaps need help processing how their own bodies have been violated in the past, and some may even see the growing fetus as another assault from within. Those with issues of neglect may have psychological difficulties stemming from a longing for love and attachment that was not modeled for them.

Labor can bring a whole new wave of physical, emotional, and painful vulnerabilities. Historically, *women* intuitively gave birth in an upright or squatting position. Modern medical practice with the introduction of technological “advances and interventions” now impact the positions in which

*doctors* feel most comfortable delivering a baby, which is typically in a supine position. Many hospitals require a mother to have an IV line placed on admission to Labor and Delivery. They may require fetal monitoring, at least intermittently during labor (Shaw, 2013). These two seemingly innocuous interventions dramatically restrict a mother's freedom of movement. Without freedom of movement she may experience increased pain simply because she cannot do what her body naturally wants to do to relax during her labor. Restriction in movement may also keep a mal-presented fetus from floating into a more effective position in order to fit ergonomically through the birth canal (Shaw, 2013). The increase in pain may also lead a mother to choose epidural anesthesia, further restricting her ability to move. This may keep the mother from being in an upright position, increasing the possibility she will remain supine in bed especially during the time of pushing because her legs do not have the same supportive strength she had without the epidural. Our sedentary lifestyle in America possibly also contributes to a less physically fit body that must endure the work of contractions and pushing, reducing chances for a vaginal delivery (Shaw, 2013). All of these practices may not seem as if they make much difference. However, the birthing process itself is a very vulnerable life experience for most women but for those with trauma histories in can feel completely disempowering to be lying on her back, in pain, not knowing when or if her body carry her through to the birth of a baby that she may, or may not be mentally prepared to bring into this world (Shaw, 2013).

In my experience as a labor and delivery nurse, I have seen first hand the challenges of both treating, and the treatment of this vulnerable population of mothers and infants in the clinical setting of hospitalized birth. As staff in a birthing unit, physicians, midwives, and nurses often have no formalized training in, or understanding of the unique needs of mothers who have an addiction.

In a medical model, treating the "pathology" of pregnancies where substance use exists often focuses again on the "risk-model" verses an "empowerment-model." Locating substance use in pregnancy as a moral failing or disease, does not take into account or even encourage the physical and psychological strengths and capabilities of the mother. In fact, the medical model often strips the addicted mother of her agency to make decisions about her own body and the care of her infant. Staff often times have very

personal judgments about the effects of substance use on the fetus and make the assumption that the mother does not care enough about her child to quit using. They also assume that because she uses substances, she is automatically incapable of being a good mother. “Pregnant women who use alcohol and drugs violate deeply held cultural visions of appropriate motherhood” (Kulka, 2011, p. web ed.). It is tempting to surmise that any consumption of alcohol or drugs during a pregnancy constitutes self-indulgent or epicurean behavior. Yet it seems to have far less to do with actual evidence of risk to the fetus than upholding the image of maternal self-sacrifice and moral elevation (Kulka, 2011). Ethical issues from severe alcohol and drug use that have the likely potential to cause harm to the fetus, however, do exist. “Clearly this is undesirable behavior that we would like to prevent if possible, and if a woman can stop this behavior, she is ethically required to do so. Many states have tried to prosecute pregnant drug users for separate crimes beyond illicit drug use, such as child abuse but such charges rarely stand up in court” (Kulka, 2011, p. web ed.). However over 240 women have been prosecuted in 35 states since 1985. As of the late 1990’s, 11 states had specific statutes for prosecuting gestational-substance use (Carter, 2002). Prior to 2001 many hospitals obtained urine drug screens in both the mother and the infant often without permission. States like Minnesota had the most stringent reporting system that included “involuntary civil commitment” to drug rehabilitation programs. Eight other states also considered it the responsibility of health care worker to be mandated-reporters required to inform child protective services of any infant having a positive toxicology screen (Carter, 2002). The likely scenario is that the mother will lose custody of the child upon giving birth. Threatening pregnant mothers suffering from SUD with punitive measures does not necessarily protect the child and creates a possible cascade of detrimental outcomes. Legal measures may well deter mothers with addiction from entering into early prenatal care and drug treatment. Additionally screening for alcohol and drug use is performed disproportionately on women of color, even though they use drugs at rates no higher than white women, making a punitive approach that is likely to be unjustly and unequally applied (Kulka, 2011). These beliefs about substance using during pregnancy further marginalize the mother, often re-traumatizing her,



and reinforces her own negative beliefs surrounding the shame of addiction, and undermines the belief in her own capacity to mother.

The choice of whether or not to breastfeed might also be difficult, especially when it triggers memories of trauma. Many women who use substances often find themselves supporting their addiction by turning to sex-work. This may impact how the mother is able to nurture her infant in a space that has been previously viewed as a commodity exploited for the sexual gratification or violation by others. There is little research, and even fewer integrated prenatal drug treatment interventions designed to meet the specific social and emotional needs of the substance using pregnant mother and infant. Medical management of the mother and newborn might benefit from a more integrated biopsychosocial approach that encourages the mother to begin dealing with or continue working on her trauma, recognizing how it may impact the relationship with her baby, and empower her by being informed about her choices during childbirth and beyond. Integrated care that begins with prenatal trauma/attachment based counseling and substance use treatment explores ways in which the mother can strengthen her pregnancy bond, keeps mother and infant together as much as possible after birth, allows time for the mother to deal with the specific needs of her withdrawing baby, and promotes the attachment for which both mother and baby long. This can enable the woman in her successful transition to motherhood. Using the prenatal period as an opportunity to provide this comprehensive model of care that includes adequate screening and counseling could prepare not only the mother, but also the hospital staff to treat this unique dyad with compassion and an attachment-centered approach to parenting her infant. In this manner would integrated care prepare the foundation for improved attachment centered nurturing of herself and her baby?

Women in this culture are losing the historical knowledge of motherhood, as policies in the U.S. seem to undermine women and leave them struggling to succeed. No longer do most women have the collective of other female role models in their immediate vicinity to help them with this transition (Rothman, 2010). Allowing mothers to be empowered with choices in their perinatal care and mothering, and giving them the support they need is the theoretical impetus for my thesis, *especially*

when a mother has not had an optimal foundation for secure and nurturing attachment on both the individual and/or community level.

### **Negative Birth Outcomes**

Low birth weight (LBW) continues to be the most significant direct cause of neonatal mortality worldwide, and is more prevalent in communities where resources are scarce, with highest numbers occurring in low and middle-income countries and most vulnerable populations. Even “high-income” countries are faced with rates not consistent with their economic context (e.g. Spain, UK, Northern Ireland and the United States) (World Health Organization, 2012). In these instances it is believed that LBW has multiple causes including infection, early induction for medical and non-medical reasons, health complications such as pre-eclampsia, diabetes and high blood pressure, and multiple fetuses as a result of in-vitro fertilization treatments. In more vulnerable communities the associated causes also include lack of economic resources, inadequate nutrition, insufficient access to health care, multiple pregnancies, teen pregnancies, access to birth control, and birth spacing practices (World Health Organization, 2012). The impact of LBW on the mother/infant dyad can lead to prolonged medical separation, disrupting the bonding experiences required for a secure attachment relationship. This difficulty with attachment can have long-term effects for both the mother and infant.

Once the infants are born there are a myriad of reasons that care for LBW infant becomes challenging. Many countries are not equipped with hospitals or Neonatal Intensive Care Units (NICU) and preterm infants are less likely to survive. Preterm birth (PTB) here in the U.S. is defined by the Mayo Clinic as those infants born prior to 37 weeks gestation, and consist of four classifications: Late-preterm 34-36 weeks, Moderately-preterm 32-34 weeks, Very-preterm and Extremely-preterm, before 25 weeks (Mayo Clinic, 2014). Consequences and sequelae from preterm delivery and LBW include but are not limited to, increased risk for infection, cognitive impairment, developmental delays, and chronic diseases later in life (World Health Organization, 2012). In addition to these physical effects prolonged care disrupts attachment to primary caregivers. Disparity in birth outcomes continues to be a problem in the most marginalized populations due to systematic racism, income inequality, low earning power, access to

quality education, prevalence of crime in low-income areas, and healthcare inequalities. It is important to mention that further research needs to be done regarding how the psychological effects of poverty, racism, unsafe living environments and lack of resources may be a stronger predictor of adverse outcomes for the fetus and infant than a mother's substance use, as this is often overlooked (Carter, 2002).

### **Trauma and Substance Use in Pregnancy**

There appears to be a limited number of publications that report the actual number of U.S. women of childbearing age who are pregnant, and also have histories of any types of trauma. However, statistics collected through the Adverse Childhood Experiences Study (ACES) show the prevalence of individual women with adverse childhood experiences is estimated at 24.7% for sexual abuse, 27% for physical abuse, and 13.1% for emotional abuse. In addition, 16.7% of women report histories of emotional neglect and 9.2% report physical neglect. The study goes on to report that 24% of women report at least one Adverse Childhood Experience, 15.5% report two, 10.3% report 3, and shockingly, 15.2% report 4 or more experiences. This study also reports that the Adverse Childhood Experiences are those events that happen prior to a child's 18 birthday (Center for Disease Control and Prevention, 2014). This study however, does not report on trauma experienced as an adult; therefore incidence of trauma in women of childbearing age could be much higher. In corroboration of data presented in the ACES studies, a study by Huth-Bocks estimates that at least 20% of all women report exposure to childhood experiences of maltreatment, with approximately 80% of all abuse being perpetrated by a parent or primary caregiver (Huth-Bocks, 2013). This estimation is also potentially low, due to the fact that many women do not report their abuse. The numbers of women with abuse histories increase for women of marginalized populations. “[Self-reported] rates of physical, sexual, and emotional abuse were as high as 82% among a mostly minority sample of first-time mothers assessed 6 months after birth,” (Huth-Bocks, 2013, p. 279). Another study by Dailey, Humphreys, Rankin and Lee also observed the occurrence of trauma exposure for low-income, African American women. Their study revealed 87% of their sample reported at least one trauma incident. The median exposure documented in their research was actually 3 traumatic events during their lifetime (Dailey, Humphreys, Rankin & Lee, 2011). Though much of current literature

explores domestic violence (DV) or interpersonal violence (IPV) during pregnancy, there appears to be a lack of information measuring the number of pregnant women exposed to community hostility such as gang violence, trafficking of any kind, or violent crimes committed in their neighborhoods (Dailey, Humphreys, Rankin & Lee, 2011). Even without this additional information, the current statistics are staggering if we consider one in four women of childbearing age are victims of trauma, an average that is considerably higher for women of color. It is not surprising then, those women who have trauma histories may also have increased tendencies to cope with their trauma by using drugs or alcohol.

The following data is the most current available from National Institute of Drug Abuse (NIDA). It is estimated that more than 5 percent of almost 4 million women who gave birth in the decade since 1992 used illicit drugs while they were pregnant. “[This] NIDA-sponsored survey, which was released last fall, provides the best estimates to date of the number of women who use drugs during pregnancy, their demographic characteristics, and their patterns of drug use” (Mathias, 1995, p. web ed.). The survey discovered a strong correlation between cigarette smoking and the increased probability that the woman also used marijuana, cocaine, or methamphetamines. On the other hand of those women who reported no smoking of cigarettes, only about 1% stated they did smoke marijuana or use cocaine (Mathias, 1995). It is estimated that approximately 21% of women of childbearing ages smoke and anywhere between 12-29% of those women continue to smoke during their pregnancies. Mathias research also reports an estimated 10-22% of women who smoked also report drinking some alcohol during their pregnancy; and another 2-3.5% describe heavy or frequent alcohol use (Mathias, 1995). Meschke, Holl, and Messelt discovered that the incidents of Fetal Alcohol Syndrome (FAS) from the 1990’s varied greatly by race. Asians, Hispanics and Whites all were under 0.9 per 10,000 FAS births, but the number jumps in stark contrast with African Americans who had incidence of FAS at 6.0 in 10,000, and Native Americans had 29.9 cases per 10,000 births (Meschke, Holl, Messelt, 2003). Despite messages about the effects of alcohol and smoking mothers continue to use these substances during their pregnancies. Estimates noted by Powers, McDermott, Loxton and Chojenta put prevalence of alcohol consumption at approximately 11% in the U.S. (Powers, McDermott, Loxton, Chojenta, 2012). Several nationwide surveys of pregnant

women found that 2.8-7% admitted to using illicit drugs during their pregnancy. Another study by the U.S General Accounting Office estimated that 100,000-375,000 women who are pregnant each year use some form of illicit drugs or alcohol” (Chang J. D., 2008). Results of a national sample study observe that based on numbers from 2002-2003, one in four women report substance use during their pregnancy, approximately 4% use illicit drugs, 18% smoke and approximately 10% consumed alcohol (Havens, 2008). This study also looked at the factors associated with reported use. Risk factors likely associated with substance use were being unmarried, unemployed, and having a current behavioral health diagnosis (Havens, 2008). Reported numbers of pregnant mothers who use may be underestimated for several reasons. “The number of mothers who disclose their use may be low for fear of legal ramifications, stigmatization, and fear of harsh judgment by medical personnel. These findings reinforce the need for health practitioners to screen monitor the status of both licit and illicit drug use during pregnancy” (Mathias, 1995, p. web ed.). The statistics mentioned above are also from 1995 up through 2008 and may not reflect the current resurgence in use of highly addictive street heroin in the United States today, thus indicating a need for more current research on opiate drug use in pregnant women (Opioid Task Force, 2014).

Recent research concerning drug and alcohol during pregnancy focuses mostly on fetal outcomes. For example tobacco products are believed to be associated with increased risk for placental abruption, an early separation of the placenta from the uterine wall that causes internal bleeding that is life-threatening, preterm birth, Sudden Infant Death Syndrome (SIDS) and low birth weight. Alcohol is strongly associated with poor fetal growth, birth defects, mental and cognitive impairment and FAS. Cocaine use can impact blood flow to the placenta causing slow growth. Mothers who use cocaine are also more likely to have a placental abruption (Havens, 2008). “Besides the risk of spontaneous abortion, heroin [and cocaine] abuse during pregnancy (together with related factors like poor nutrition and inadequate prenatal care) is associated with low birth weight, an important risk factor for later delays in development. Additionally, if the mother is regularly abusing the drug[s], the infant may be born physically dependent on heroin [or cocaine] and could suffer from Neonatal Abstinence Syndrome (NAS), a drug withdrawal

syndrome in infants that requires hospitalization. An Australian article by Abdel-Latif, Oei, Craig, and Lui, looked at demographics, utilization of services and infant outcomes of pregnancies where substance use occurred. Their study of 879 participants (n=879) described the main “characteristics” of the mother, which in their sample included 84% of moms received some antenatal care, 90% were under 20 years-old, 75% were multiparous, 44% had behavioral health issues which broke down to 79.2% having depression and another 21% reported anxiety. An additional 182 women (20.7%) reported violence in the home (Abdel-Latif, 2013). Substance use differed among participants, with opiate dependency being the most common (46.8%), followed by amphetamine use (22.9%), then ecstasy (1%). A number of women (39.7%) were on methadone maintenance. Mothers were also diagnosed with Hepatitis C (41.4%), Hepatitis B in 2.2%, and syphilis in 0.6%. 21 infants were born before arriving at the hospital. Infant characteristics showed 871 were live births, meaning 8 fetuses died at some point during the usual 40 weeks of gestation. Of those live births, 23.6% were born before 37 weeks of gestation, and 27.1% weighed less than 2500 grams (5.51 pounds). More than half (51%) required admission to a special care nursery due to complications, the most common condition was withdrawal (23.2%) (Abdel-Latif, 2013). 15 infants had major congenital anomalies, including congenital heart malformation, Gastroschisis, and Down Syndrome. Of infants that had symptoms of withdrawal, pharmacologic treatment was required by 202 of them, 195 needed morphine and 7 needed phenobarbital and 32 needed both. The average number of days in the hospital was longer for those who required pharmacologic treatment (median 15 days, range 10-27 days) than those who did not (median 4, range 2-7) (Abdel-Latif, 2013). Concerns about sending the infants home with their mother were raised in 354 (40.3%) cases, 149 (17%) infants already had siblings who no longer lived with the mother. Sixty-six infants (7.6%) did not go home with the mother and were placed outside the home or with family members (Abdel-Latif, 2013). This article illustrates several unsettling findings and justifies critical analysis of research findings, for example this population of mothers is still viewed as a risk to their infant despite the fact that data shows some significant strengths within this cohort. A large percentage of these mothers entered into prenatal care and were relatively willing to report their substance use. More than a third of them were being

maintained on MAT prior to their deliveries. There were no statistics reporting if anyone had quit using altogether during the pregnancy. Four-fifths or 669 (79%) infants actually did not require medical treatment for withdrawal. Almost three-quarters of the mothers delivered at full-term. Less than 10% of infants were not able to go home with their mother. The data on the congenital anomalies did not include confounding factors that might reveal other explanations for the deformities. It would be interesting to look at what protective factors were employed by the mothers who had the best outcomes. According to another recent study, treating opioid-addicted pregnant mothers with buprenorphine (a medication for opioid dependence) can reduce NAS symptoms in babies and shorten their hospital stays” (National Institute on Drug Abuse, 2014, p. web ed.). However more research needs to be done through an empowerment lens regarding best practices for attachment-centered care of mothers and newborns that experience NAS.

Little emphasis is given to looking at maternal physical and behavioral health outcomes and assisting her with entry into trauma-informed substance use treatment. Current approaches to dealing with SUD during pregnancy focus on punitive measures of automatic involvement with the DCF, mandatory SUD treatment and sometimes even incarceration. Yet, these measure are aimed at protecting the fetus and infant and are not focused on treatment for underlying unresolved issues connected to the behavioral health of the mother. “The call for women to ‘take responsibility’ for substance abuse often enjoins them to accept responsibility for the disruptive symptoms of past abuse but excludes considerations of current abuse and/or the pressing responsibilities they have to their children and others” (Salter, 2014, p. 165). It is also important to consider the mother’s level of support when she enters into treatment. What resources does she have on which to build? Identifying predictors or risk factors can be helpful as long as the practice does not further marginalize the mother. Yet are clinicians and programs looking to what the mother brings as strengths and what other systems and individuals might also need to take responsibility for the victimization of the woman in the first place? Mothers in the Power’s study reported history of experiencing partner violence 43%, poor mental health 34%, low level of support 34% however the direct correlation between these variables and the continued substance use during a

pregnancy was unclear. Use of concurrent alcohol and tobacco products during a pregnancy in these participants did have a positive correlation and these mothers were less likely to be able to decrease their use of either substance (Powers, 2012). Treating only the physical problems is a reactionary intervention that does not actively support primary prevention. The statistics above illustrate the negative health outcomes, but do not address the underlying issues of trauma, disrupted attachment, and violence against women that are the result of systems problems that we face in our culture. One public policy that is attempting to make some progress toward a more systemic and multidisciplinary approach is the Healthy People 2010 plan (ongoing Health Peoples Projects continue to exist beyond 2010.) This plan recognized the need for improving community partnerships to address systemic disparities across demographics and attempted to build a more reciprocal and attuned relationship between individual health and community health. Components of the plan centered on empowerment not denial of the individual or systemic marginalization of communities (Salter, 2014). The author applauds this intention, however one of the identified goals for improving maternal, infant, and child health still focuses on decreasing maternal drug usage. This plan creates opportunities for healthy lifestyle choices, still putting the onus of the change on the individual woman. There is no offer of systemic changes that would alleviate some of the systems factors that contribute to victimization, lack of resources and disparity across communities. For example, are these healthy lifestyle choices actually even available to some communities, and how easily accessible are they (Salter, 2014)? Working toward empowerment is essential if change is to happen. “Empowerment refers to increasing clients’ personal, social, and political power so that they can change their situations and prevent reoccurrence of problems” (Salter, 2014, p. 170). This statement is presumptive in that again, it places undue burden on those who are victims of personal and societal systems problems to be the one to “fix” them. Are there ways in which we can promote individual empowerment by taking it upon ourselves as clinicians to advocate for policies that empower this population and tell them that they matter? Salter does go on to offer that empowerment strategies used by individual clinicians are extremely helpful in encouraging women to assert their own agency, improve self-esteem, and impact their own positive functioning and influence the political environment (Salter,



2014). How can we as social workers ensure that we are partnering in our clients' care and not further complicating their burden?

### **The Woman as the Primary Victim and Client: In their own words**

Contrary to the majority of academic research that focuses on fetal outcomes of women who are using during pregnancy, this thesis proposes to shift the focus from the fetus as victim, to the mother as primary victim and to incorporate maternal outcomes, particularly in the psycho-social domain, as a needed goal in prenatal care approaches. Women who use during their pregnancy are often viewed as unfit, terrible mothers who don't care about their children. But the reality as pointed out by Howell and Chasnoff (1999) is that people do not see the women or little girls behind the addiction. From the 88 women who participated in one of their focus groups, we can see and hear the picture of the their lives "behind the statistics of substance abuse" (Howell, Chasnoff, 1999). Most women in their study had troubling childhoods and described this as the biggest reason for their initiating substance use. Many had early pregnancies and continued to use at least through the early months of gestation. There was a prevalence of substance use in the homes of those that used at an early age. "The youngest age of initiation of substance use was 5 years. For almost all the women who began using substances before 10 years of age, the first episode of substance use was accompanied by sexual molestation, the perpetrator providing the alcohol or illicit drug" (Howell, Chesnoff, 1999, pg. 141). One women described her childhood in the following: "I remember being nine years old and thinking everything that was going on in the house was my fault and the drugs, pimps, and lifestyle in my house was OK because that's what my mother did. For so long I thought that lifestyle was OK" (Howell, Chesnoff, 1999, pg. 141).

The following case study is used also to illustrate the dynamics of trauma and related substance use in a mother of childbearing age.

"It is a Tuesday morning during my first year social work field placement. I am mentally preparing for my usual Intensive Out-patient (IOP) Substance Abuse treatment group. I walk into the day room and I'm immediately struck by the presence of a young woman. It is her first group session in our clinic. She sits in the far corner of the room, resisting eye contact with all others,

and only speaks when spoken to. She is dressed almost completely in black, her eyes rimmed in heavy Goth-style make-up. She has several tattoos and piercings, the most prominent of which is a name scrolled in elegant script, embraced by tiny, intricate and delicate fingers of fleurs-de-lis. It seems almost out of place with the harshness of the rest of her look. (I learned later, it is her daughter's name permanently inked near her heart.) Her hair is dyed black, platinum, and neon pink. I mention her appearance not as a judgment, but simply to note that she seems to be trying to hide her extremely vulnerable self behind the impression of someone who "doesn't give a shit." She seems to be saying "Look at me!" and "DON'T look at me!" all in the same presentation.

Amanda is a 21-year-old, multiracial, female, who self identifies as Puerto Rican. She dropped out of High School the end of her junior year because she was pregnant. At that time, she moved in with her boyfriend, who is significantly older than she. They are married now and their daughter is two. Amanda was mandated by (DCF) to attend our treatment program.

When Amanda walked in with her, "I don't give a shit!" attitude, I was almost intimidated enough to let her remain silent, but I quickly began to see the pain and vulnerability behind her façade. Instantly I wanted to protect and mother her in a way that it was clear she had never experienced. Her daughter was recently placed into the care of Amanda's mother due to an incident in which Amanda ended up in the hospital after a near fatal heroin overdose.

Her history is complicated and complex. A family member introduced her to heroin at the age of nine by repeatedly drugging and abusing her sexually. This continued with her mother's boyfriends as well. Amanda states, "Drugs were always out. I could use whatever I wanted, and nobody paid any attention...and I did. I used EVERYTHING! I just didn't want to feel ANYTHING!"

Amanda's current relationship with her mother remains strained. She states her mother makes bitter statements about her to the DCF worker in an attempt to make her appear unfit to regain custody of her daughter. Amanda's mother is currently fighting to keep the child. As part

of the work Amanda and I did together in treatment, both of us stayed closely involved with DCF to assess the safety of the child in the grandmother's care. (Given her mother's inability to protect Amanda, neither of us felt comfortable at all with this arrangement, even though the grandmother is now clean and sober and there were no outright signs of abuse or neglect.)

Amanda did not share much in the group setting, but when she did, it was clear that she is an incredibly intelligent and articulate 21-year-old with wisdom beyond her years. She was often the one to help others in gaining insight about their addiction. She was extremely tuned into her own motivation or lack thereof to stay clean. She admitted she clearly wasn't ready, and was wallowing in a "state of self-pity and selfishness." *Amanda: "I feel like just saying fuck it all, why try?" Me: "So you are saying you can't or don't want change?" Amanda: "No, I guess not, I just really don't want to be here right now, but I know I will never get my daughter back if I don't do this. She is my world; they took everything from me when they took her. I also really DON'T want her to be with my mother."* Amanda was struggling, wanting to remain high in order to block out her pain. However, she knew her daughter needed her and deeply longed for the relationship she did not have with her own mother."

Unfortunately, stories like Amanda's are all too common. They are told by women in all communities, all socioeconomic classes, by all levels of formally and informally educated women across the globe. Though the details may differ, the stories all resonate with the loss of "self." How can one remain empowered when there is no sense of self, and how can someone be expected to help nurture a fetus into existence when they have not experienced that nurturing themselves? Yet somehow women do, and most with a certain degree of success despite having a less than optimal foundation. They just need someone to encourage them and show them their own successes.

Amanda has struggled with her addiction for nearly half her life. At a time when she should be discovering herself, enjoying new freedoms and individuation as a teenager, Amanda was being forced not into freedom, but held back in an existence defined by threat, coercion, and punishment. Yet, Amanda was driven forward by something she valued far more than anything else: the hope she had for

her baby. And in some unconscious way Amanda used the hope she had for her baby as a means through which to redefine herself as a woman despite her trauma and addiction. Therefore, in what ways can we use trauma informed attachment theory as a treatment model on the road to recovery? It is this recognition and promise of a love bigger than themselves that could be used to motivate mothers to get the help they desperately need.

The following studies are making progress connecting maternal health to infant outcomes, yet they are still focused on treating the mother's substance use as a way to improve infant outcomes rather than treating the underlying cause of the mother's substance use and behavioral health issues related to trauma for her benefit, which will ultimately benefit her entire family functioning. One study by Grant, Ernst, and Peavey (2014) explored the connection between substance use and involvement in the Child Welfare System. They were curious to know if removal of the index child, the one whom was initially placed into foster care, compounded or improved substance abuse issues in subsequent pregnancies. The removal of a child has far reaching outcomes for both the mother and the child, which repeat the cycle psychological trauma as well as carry it into the next generation. Their study discovered that women who had lost custody of their index child due to substance abuse were 3 times more likely to continue to use during subsequent pregnancies, further complicating adaptive issues for these families (Grant, Ernst, Peavey, 2014). Another study, performed by Walten-Moss, suggests that although decreasing or ceasing use of harmful substances during pregnancy leads to better perinatal outcomes, women who live in marginalized communities have a more difficult time in recovery from substance use, suggesting that the substance use itself may not be the only factor mitigating poor birth outcomes. They also suggested that those mothers who perceived their overall health status as poor indeed had poorer outcomes (Walton-Moss, 2009). This supports the hypothesis that drinking or using drugs to cope with distress, may be a predictor of childhood sexual assault history and/or other traumatic life events, as well as marginalization as an additional form of life-trauma. For example, women who have difficulties with an addiction may be more likely to use alcohol or other substances as means by which to cope with their traumatic events or life circumstances. A study by Ullman, Relyea, Peter-Hagene and Vasquez, discovered that the type of trauma, specifically

interpersonal trauma (IT) in the form of sexual abuse, domestic abuse, or intimate partner violence (IPV) was associated more often with problematic use of substances in women with trauma histories (Ullman, Relyea, Peter-Hagene and Vasquez 2013). In their methodology, sexual abuse in both childhood (prior to age 14) and adulthood (at age 14 and over) was assessed in a volunteer sample of women (n=1863) ranging in age from 18-71, using a modified version of the Sexual Experiences Survey. The revised survey assessed specifically unwanted sexual experiences including unwanted sexual contact, verbal coercion of intercourse, attempted rape, and rape resulting from the use of force or incapacitation. The severity of the abuse prior to age 14 was also assessed using a 5-level ordinal variable ranging from fondling/kissing through completed rape. In addition women were asked to rate their other traumatic life events, symptoms related to their sexual assault, and any substances used to cope. Their results, though self-admittedly not representative of the general population of women, indicate added risk for substance use and behavioral health symptoms in women who experience sexual abuse ( Ullman, Relyea, Peter-Hagene and Vasquez 2013). Research is slowly beginning to connect victimization and substance abuse among women. For example, many forms of childhood adversity or maltreatment are associated with an increased likelihood of early-onset drug and alcohol use (Afifi, 2012). Results were significant making a correlation between early use and all five types of maltreatment, physical, sexual, and emotional abuse, as well as physical neglect, and emotional neglect even when adjusted for sociodemographic and existing mental health variables with the exceptions of an associate between childhood sexual abuse in men and alcohol, hallucinogens or amphetamine abuse or dependence, and childhood sexual abuse in women and heroin use or dependence (Afifi, 2012). However these statistics were from 2001 and 2002 and may not reflect the current resurgence of heroin use in the U.S. to date.

Clearly more research needs to be done on the psychological effects of victimization, marginalization, and substance use present in the pregnant mother that are focused on maternal outcomes. There also needs to be a more organized and evidence based treatment model available to meet the needs of this unique population. If the mother is being treated for her substance use, without taking into consideration her trauma history, will she continue to have patterns of avoidance in other areas of her life,

even if she is successful in treating her substance use disorder? Will she still use patterns of attachment from her own childhood with her children? When the mother is emotionally healthy it seems much more likely that the baby's physical and emotional health will follow.

Investing in the systemic changes that support mothers in general could improve community outcomes overall. If a mother is struggling without support, regardless of her substance use history, the relatively traditional gender roles of current American society have far different ramifications than if it is a man who struggles. Far greater numbers of single mothers than single fathers are seen; thus caregiving still falls primarily to women, especially in more marginalized communities. Mothers who are pregnant and using have a completely different experience due to the differing gender roles surrounding birth and parenting.

### **Gender Roles in Addiction and Specific Treatment Needs**

Understanding these gender differences is important in working with pregnant women who suffer from trauma and substance dependence. Addiction is a progressive disease process that affects every aspect of a woman's life, but ironically it is a disease of extreme preoccupation with only one thing, obtaining and using the drug. Behaviors of obtaining the drug become an all-consuming series of activities that take precedence over all else. In essence, the drug in the mind of those who use is equated with survival, and people will do almost anything to get their primary substance (Harvard Publications, 2010). Normal things that may be priorities for other pregnant women may not be a priority in the mind of a woman who uses recreational drugs. For example, if there is a choice between spending a few dollars on bus fare to attend a prenatal visit or a buying the next high, getting high will often take precedence and in many cases be cheaper. Even when the mother enters into Medically Assisted Treatment (MAT) for substance abuse much of her time will be consumed by traveling back and forth to get methadone, Suboxone or other forms of pharmacologic treatment or attending sessions for counseling. Careful monitoring of her pregnancy may also increase the number of appointments facing the woman who uses. If we were to study the time spent on treatment requirements for these women what we might

see is that they spend considerable time and additional expense than those mothers who do not use substances.

Addiction rates among women are increasing, particularly with drug use. The number of pregnant women using prescription opiates and street heroin is presently considered to be an epidemic (Opioid Task Force, 2014). Current numbers are difficult to obtain at this time, as they are outpacing the ability of researchers to keep numbers current. Numbers are also outpacing systems with which to treat these women.

The racial and ethnic breakdown of those who have an addiction to heroin and cocaine according to Bernstein, Bernstein and Hingson note that it is an “equal opportunity disease” (Berstein, 2005). Their study consisted of 1175 subjects using data sets that included: baseline demographics, cocaine or heroin use in last 30 days, Addiction Severity Index (ASI), biochemical marker using ½ inch hair samples for follow up at six months, and again for follow up after a treatment duration of six months. The study had 726 subjects who identified as African American (68% female), 272 as Hispanic (17% female) and 166 as White (33% female) (Berstein, 2005). Among the African Americans in the study, 82% reported cocaine use, compared 57% of Whites and 54% of Hispanics. These percentages of cocaine users were found to be slightly higher when the hair samples were examined than in the self-report across the panel of participants. 94% of African Americans, 66% of Whites, and 74% of Hispanics showed cocaine use in the last 30 days in the hair samples. In this study, the heroin use breakdown was as follows: only 31% of African Americans, 71% of Hispanics, and 71% of Whites reported use in the last 30 days (Berstein, 2005). It is important to note that this study was conducted between 1999-2002. A study by Cicero, Ellis Surratt and Kurtz published in JAMA in 2014 shows that over the last 50 years however, the demographic composition of heroin users entering into treatment has shifted from an inner-city predominantly minority concern to involving predominantly white men and women in their late 20’s living outside of urban areas (Cicero, 2014). This is leaving communities with increasing numbers of people with addictions in areas not equipped for treatment. It is also causing more competition for state and government funding for addiction treatment between urban and suburban communities. This

competition leaves treatment lagging behind the rapidly increasing numbers of people who suffer from addiction (Cicero, 2014).

Specialized substance treatment programs tailored to the unique needs of women are difficult to locate in many areas and typically have long waiting lists. This poses additional hardship for mothers seeking treatment as transportation and childcare become barrier to entering into treatment (National Institute on Drug Abuse, 2000, p. web ed.). There are even fewer options for those women who are also pregnant. As noted previously, the issue is compounded by the fact that most treatment centers are located in urban centers, in an attempt to treat the highest number of women, yet the drug trade, especially here in New England, is trending into more rural areas of Western Massachusetts, Vermont, and New Hampshire where communities are not as well equipped to deal with the drug use issues (Opioid Task Force, 2014).

There are several significant factors that make treating substance abuse in women unique. Divergences exist in both *why* women use, and *how* addiction affects women differently. NIDA has made a major research commitment to identifying and understanding these differences. They suggest that there are significant “differences in the way that women and men-girls and boys- are first exposed to drugs, in their risks of abuse and addiction, and in the effectiveness of treatment” (National Institute on Drug Abuse, 2000). For example, men may have more opportunity to use drugs, however both men and women are equally likely to use drugs for the first time when given the opportunity. The reason why men and women seek treatment in substance abuse also differs. Women in treatment were more likely to have suffered sexual abuse, less likely to have graduated high school, less likely to be employed, and more likely than men to have significant health problems. They were also more likely to have sought treatment for their addiction, but are still less likely to recover, or take much longer to recover than men. They also have higher rates of attempted suicide (National Institute on Drug Abuse, 2000). Further research is perhaps needed to determine whether these differences are due to social constructs and the fact that women may be more likely to drop out of High School due to early pregnancies, or less likely to remain in treatment because of childcare issues. Regardless, men and women appear to differ in their



vulnerability to certain drugs. Drugs such as cocaine, heroin, hallucinogens, tobacco, and inhalants are equally addictive to both genders, but women are more likely to become addicted to or dependent on sedatives and drugs designed to treat anxiety or sleeplessness, and less likely than men to abuse alcohol and marijuana (National Institute on Drug Abuse, 2000). It might also be noted that the types of traumas these women experience are often at the root of anxiety or sleeplessness that cause this preference for anxiolytics or sedatives/insomnia medications. There are also real biological differences in how substances affect women and men. In their research NIDA has observed in both animal and human subjects, women will self-administer intravenous doses of cocaine or heroin sooner than their male counterparts, and will administer larger doses of the drug. The drugs may also affect them differently. Studies show that women may be more sensitive to the cardiologic effects of cocaine than men (National Institute on Drug Abuse, 2000). In a fact sheet put out by the National Institute for Health on Alcohol and Substance Abuse, information is somewhat contradictory. Their report claims that women are less likely than men to use and develop drug-related problems. However both reports agree that, when women do use substances, they report problems of greater severity such as losing custody of children. They may also experience more health related problems like malnutrition, cardiac problems and diabetes due to the differences in the way women's bodies metabolize alcohol or drugs. There are also health risks related to the manner in which men and women obtain their drugs. Women often have to resort to sex work to support their addiction, making them vulnerable to sexually transmitted illnesses, where as men are more at risk for physical violence due to dealing. Women's substance abuse is also more likely to interfere in more areas of life functioning than for men (Green, 2006). Harvard Medical School found men are more likely than women to become addicts yet women may face more challenges in dealing with their addiction. They found that "11.5% of males ages 12 and older had a substance abuse or dependency problem, compared with 6.4% of females. But in other respects women face tougher challenges. They tend to progress more quickly from using an addictive substance to dependence (a phenomenon known as telescoping)" (Harvard Publications, 2010). There is also much controversy and few theories on how best to treat co-morbid substance dependence, especially when it comes to gender differences in treatment

options. Many programs are still lumping the needs of men and women into one model. Very few are addressing the needs of either gender when it comes to trauma informed substance abuse treatment, and almost no one provides specific services solely to pregnant women with trauma histories and substance abuse.

### **Treating Co-occurring Substance Use Disorders and Trauma: Disagreement in Treatment Theories**

Often programs, and even individual practitioners within the same agencies, have differing views on treatment for dual-diagnosis patients. When pregnancy is added, obstetric practitioners often do not want to accept the responsibility for the potential risk to the fetus and are ill informed where to refer women for adequate SU treatment. The following section will explore common beliefs held about treatment for clients suffering from both PTSD/trauma and Substance Use Disorder. “While substance use is often detected in PTSD patients, Substance Use Disorder (SUD) is typically an exclusion criteria for PTSD treatment. Thus substance abusers are often deprived of treatment for their PTSD until they are able to abstain from using substances.” (Riggs, 2008, p. 121) However, many patients with PTSD use alcohol or drugs to alleviate their symptoms and help them cope with strong emotions brought about in PTSD treatment. This can lead to repeated relapse, making it a barrier to receiving adequate treatment for their PTSD. “Several models have been put forth to explain the relationship between PTSD and SUD. For example, the self-medication model posits that substances are used, and abused, to provide relief from PTSD symptoms. Another model suggests that substance use increases vulnerability to PTSD or interferes with the normal recovery process. A third model suggests that substance use and abuse make individuals more vulnerable to traumas (i.e. sexual assault, interpersonal trauma) that are more likely to cause PTSD. Regardless of how disorders develop, once they are established, functional relationships among the symptoms may form a vicious cycle in which PTSD symptoms and SUD serve to maintain one another” (Riggs, 2008, p. 121).

It is estimated that 11-60% of women entering substance abuse treatment also have a diagnosis of PTSD (Toussaint, 2007). It is the author’s belief that SUD is in fact traumatizing in and of itself. Anecdotally, clients have shared that they often have recurrent nightmares about using or activities

involved with using. They may waver between strong feelings of aversion to and compulsion for obtaining the substance or people and places that remind them of the substance. They also describe vacillating between being hyper aroused or numb to their environment, situations or people in their lives. 25-55% percent of those entering into drug treatment report symptoms that likely indicate a diagnosis of PTSD, with another 60-89% reporting a severely violent trauma event. Women entering substance abuse treatment report significantly higher rates of violence and sexual abuse, with numbers even greater for women of color. Those who have concurrent PTSD and SUD experience greater difficulty and poorer treatment and behavioral health outcomes (Toussaint, 2007). For women this also complicates psychosocial factors, as they are still predominantly the primary caregivers for their children, and viewed as a risk in this regard. One program in Colorado has implements and is in the process of evaluating and modifying a PTSD/Trauma specific treatment program for empowering women. Treatment Recovery and Empowerment Program was integrated into its model, and is a manualized curriculum developed specifically for female trauma survivors with SUD. It is a 9-month 33-session model (ideal for work during pregnancy) that focuses on psycho-education, cognitive restructuring, survivor empowerment, skill building and peer support (Toussaint, 2007).

In Massachusetts, “The Bureau of Substance Abuse Services (BSAS), part of Department of Public Health (DPH), is committed to ensuring that pregnant women with substance use disorders, a priority population for BSAS, have speedy access to effective treatment. Pregnant mothers are moved to the top of waiting lists for in-patient detox admission or community based intensive outpatient substance treatment services. However, there are still challenges for pregnant women attempting to access a system that is overstressed and underfunded (Office of Women's Health; U.S. Department of Health and Human Services, 2010). Some parts of the state have treatment programs available to women who are pregnant and have an addiction, yet these programs simply accept pregnant women into their one-size-fits-all treatment approach. Their programs are not specifically and exclusively designed to meets the needs of these mothers. More research is needed on programming designs that meet the unique needs of pregnant women and program efficacy that is evidenced based. There just does not seem to be agreement or

adequate access to integrated care models that meet the specific substance dependency needs of women during pregnancy (Office of Women's Health; U.S. Department of Health and Human Services, 2010).

Given the scope of vulnerabilities for the woman and fetus, pregnant women need quick, uncomplicated responses when a substance use treatment need is identified. Pregnant women with SUD are exposed to a range of risks as identified above. They are less likely to seek timely prenatal care, and are more likely to experience pregnancy complications, including pre-term delivery. Substance use contributes to maternal mortality, with approximately 20% of pregnancy-associated injury deaths due to drug overdoses (Health and Human Services, 2015). More research is required to assess whether using trauma and attachment informed methods that combine concurrent trauma and substance use treatment is more or less effective than treating each diagnosis separately. If they are to be treated separately then which diagnosis should be addressed first? Encouraging practitioners to remain current in treatment trends also poses challenges when offering models of care to clients. The entire phenomenon highlights the components that contribute to risk dynamics for this population, yet could there be many untapped areas as described in the Colorado TREM program where empowerment could be introduced instead?

### **Policies and The Impact of Social Work**

The field of social work needs to be involved in helping integrate the management of behavioral health needs and substance dependency treatment during pregnancy for these mothers, as well as advocating for public policies that protect and maintain family attachment instead of making things more difficult. Policies around Maternal Alcohol Tobacco and Illicit Drugs (MATID) first began to surface in the 1980's with what is now known as the "crack epidemic." This took place at approximately the same time as the legislative interventions directed at stemming the tide of drugs available in the U.S. The Reagan and Bush administrations pushed for a sustained legislative and governmental effort to combat drugs. This concerted push for drug control became known as "the War on Drugs," and gave way to policies such as New York's Rockefeller drug laws that insisted on strict mandatory sentencing in drug related crimes. In response to the "crack crisis," Congress passed the 1986 Narcotics Penalty and Enforcement Act, imposing severe penalties on any person convicted of possessing or dealing cocaine

(Lester, 2004, p. web ed.). State legislature also took an interest in substance use in pregnancy under the basic premise that states are obligated to provide for the welfare of their citizens. In response to media attention and pressure, many types of bills were introduced to combat the issue, such as mandatory reporting of abuses by health and childcare workers, mandatory involvement of child service agency if drug use was discovered, and adding warning labels to tobacco and alcohol products. Though no specific legislation exist, criminalizing drug or alcohol use during pregnancy, many states attempt to prosecute women under statutes that deal with child abuse, assault, murder or drug dealing. “Since 1985 approximately 240 women in thirty states have been criminally prosecuted in relation to their use of drug during pregnancy” (Lester, 2004, p. web ed.). Many more have been charged when states use other creative means of dealing with the issue. These and other legislative policies marked the start of skyrocketing rates of incarceration. Numbers of people jailed for non-violent crime increased from 50,000 in 1980 to over 400,000 by 1997 (Drug Policy Alliance, 2015). Prevention, though also including *some* funding for treatment, was taken to the streets with its emphasis on law enforcement, prosecution, imprisonment, and seizure of assets (Lester, 2004). “The emphasis on drug interdiction and policing has resulted in an increase in the national drug budget over the last 20-25 years. According to the Office of National Drug Control Policy, Federal spending on drug control has increased from 1.5 billion in 1981 to 19.2 billion in 2002” (Lester, 2004, p. web ed.). While 66% of the Federal budget is spent on law enforcement, at the state levels only an average of 9% goes toward funding child and family assistance and 7.5% mental health and developmental disabilities (Lester, 2004).

An article by Van Denend, takes a Kleinian view of the psychodynamic process of a paranoid-schizoid position that happens to mothers when they are incarcerated due to drug use or possession, particularly when pregnant. Van Denend quotes the Klein to describe how infants “experience the two realities of the mother; the good mother [breast] who nurtures and feeds us, and the bad mother [breast] who frustrates us, and as we perceive her, intentionally persecutes us” (Van Denend, 2010, p. 4). For example, she observes that many women are arrested for rather minor infractions involving drugs, however, unlike men there is an extreme split in how women are sentenced. Van Denend ponders what

conscious or unconscious motivations do judges have in deciding the fate of these women with relatively minor or marginal drug involvement? What she discovered was that decisions were often made by the judge based on their moral opinion of a woman's ability to mother. Judges tended to make these choices on the extreme ends of the sentencing continuum, doling out lenient sentencing if the mother shows an acceptable ability to mother or issuing the maximum sentence for mothers deemed unfit. Just the introduction of drugs into the mothering scenario often swayed judges to pronounce mothers as unfit to parent. This often leaves the mother in an impossible situation of being incarcerated for not being "the good breast" and now must accept the role of "bad breast" as she is no longer available to nurture and feed her infants because she is imprisoned (Van Denend, 2010). This suggest that it is not the mother who is exhibiting the paranoid-schizoid position, but the Criminal Justice System that chooses not to place the women-in-environment; ignoring systematic marginalization and culpability on the part of society when sentencing these women.

"Many other studies illustrate that when a woman has a trauma history as well as an addiction, the combined effects of physical abuse, emotional abuse and substance use lead to more complex mental health issues, including increases in exposure to violence, interpersonal problems, difficulty maintaining education and employment, decreased functioning, loss of custody of children, increased incarceration rates, and overall decrease in quality of life" (Covington, 2008, pg. 380). The impact of poverty, violence, and substance use reverberates through entire communities. Incarceration rates of women (higher percentages being women of color) have increased nearly 800% over the last two decades. In 2006 alone, over 200,000 adult women were arrested primarily for drug related offenses (Asberg, 2012). If we were to include statistics for sex-work in relation to obtaining substances, the number of arrests would increase significantly. For many women, prostitution is the only means by which they can support their attempts to self-medicate their physical and psychic pain. Since many of these women are single mothers and most often the primary and only caretakers of their children, imprisoning them as punishment instead of offering them addiction treatment leads to overextension of our Foster Care system to the breaking point. This leads to a ripple effect where schools are also dealing with high acuity of

physical and behavioral health issues, diminished environmental experiences that directly affect student's ability to learn, and the continuation of trans-generational transmission of trauma.

What ensues is a cycle of continued suffering, not just at the individual level but for entire communities as well. Can we envision and create a more integrated, biopsychosocial – existential model of care that has become the hallmark of Social Work practice? How can we advocate for more progressive and less punitive policies that protect the mother with SUD and trauma issues? What is needed in Social Work education programs to ensure that new social workers are equipped to work with trauma, attachment and effects of substance use as prevalence of these issues increases?

Given the statistics regarding pregnancy, trauma, and the relationship with addiction, it is important for clinicians to have an understanding of the unique needs of these women and their infants. The entire phenomenon highlights the components that contribute to “risk” dynamics for this population. Yet there are many areas where empowerment dynamics could instead be introduced in practice and policy. From the onset, clinicians are challenged with reframing pregnancy and substance abuse from a risk perspective to an empowerment perspective. Increasing access to the appropriate forms of treatment is also vital but challenging. Integrated treatment programs are almost non-existent, as resources for social services over the years have dwindled.

Initiating comprehensive treatment that includes trauma and attachment informed behavioral health counseling during the perinatal period could have far reaching physical and psychological benefits for both mother and baby. Despite this, there is a discernible lack of literature on the biopsychosocial model addressing the unique needs of substance using mothers with trauma history while they are pregnant. What responsibility do we as social workers have to better advocate for social policies that give assistance for treatment rather than imprisonment? Problems such as interpersonal violence, inequality, racism, wage-gaps, governmental policies that do not protect mothers and families, as well as the breakdown of our education systems, are all related in some way to lack of effectual support for women and mothering. Valuing pregnancy and motherhood is a primary prevention method that has could have impact on all these systems issues. Thus, the field of social work needs to be involved in helping

integrate the management of behavioral health needs and substance dependency treatment during pregnancy for these mothers, as well as advocating for public policies that protect and maintain family attachment instead of making things more difficult.



### Chapter III

#### Trauma Theory

Contemporary trauma theory is born out of a convergence of different conceptions of how and why a traumatic event affects the way in which someone attempts to make sense of themselves in relation to the world around them. Since the inception of psychology as a domain in the human sciences, we have sought to understand why *some* people do not function optimally after such events. There have been numerous opinions about trauma that developed out of Freud's original theories on symptoms that appeared to be of neurologic etiology but were later discovered to have their basis in psychological functioning. An historical review of Trauma Theory and its history helps us to put into context the diverse beliefs that developed into contemporary trauma theory. The review of this theory will also chronicle functional applications, as they were understood at the time, being either integrated or disintegrated into clinical practice, as well as how they lend themselves to the unique needs of mothers/infant dyads with trauma and SUD today. In this chapter, the writer would also like to connect trauma theory and neuroscience making parallels in how trauma disrupts both neural and relational networks.

#### **Definitions and History of Trauma Theory**

To understand of Trauma Theory, we must first understand the definition of trauma in relationship to the psyche. "The problem arises [however,] as major theorists hold a different conception of trauma, defining it in varied and dramatically different terms, depending on the anthropological or biological assumptions through which they seek to comprehend human nature" (Kirschner, 1994). Kirschner posits that what is fundamentally at stake across all theorists such as Ferenczi, Klein, Winnicott and a host of others is the threat of destruction of "the good object," and it is the therapeutic relationship that helps to maintain or restore this "symbolic object" (Kirschner, 1994). A more contemporary conceptualization of trauma as Judith Mezsaros writes: "An event in the life of a subject

which is characterized by the fact that a set of physical and/or psychic stimuli affecting the personality exceeds the tolerance level of the individual's given developmental stage/condition. The individual, therefore, is incapable by the usual means available of preventing, stopping or effectively processing this set of psychically damaging stimuli or of restoring the previous state of balance” (Meszaros, 2010, pg. 329).

### **From Freud to Fromm: Early Theoretical Developments About Trauma**

Throughout the last century trauma theory has been developed and reconstructed. It is interesting to ponder that the birth of modern psychology actually developed out of the ideas of Charcot and Freud who both had their beginnings in neuroscience as medical doctors (Mitchell, Black, 1995). It seems we have come full circle as many now look to neuroscience to validate scientifically, what we have come to understand to date about the psychological workings of the mind. In their work together Charcot and Freud noticed that patients, mostly women, were coming to their clinic with symptoms that appeared to be neurological in nature yet, they could not find any physical etiology in the brain for their symptoms (Mitchell, Black 1995). Freud then began to question, if there is no apparent neurologic cause for these symptoms, are they perhaps psychological, stemming from the patients mind? The cluster of symptoms that Freud and Charcot were seeing at the time came to be known as neuroses and were then used in promoting the diagnosis of hysteria. In his early work, Freud theorized “the symptoms hysteria had their origins in early exposure to experiences that were sexual in nature” (Mitchell & Black, 1995, Kindle ed.). There also seems to be a wide theoretical disparity in how Freud’s work has been interpreted in the modern context. “Freud is ineluctable if for no other reason than that, as Hacking has put it, he ‘cemented’ the idea of psychic trauma—specifically, the trauma of sexual assault, Freud’s famous seduction theory” (Leys, 2000, pg. 18). What critics of Freud often fail to recognize is that even when Freud was at the height of his “seduction theory”, he believed it was not the original experience of the trauma, but the revival of the trauma memory and the meaning that is assigned with that memory that creates the psychological conflict. “At the same time, as Hacking also observes is no figure more reviled by present day theorist of childhood trauma, precisely because in 1897 Freud famously abandoned the very

theory of sexual seduction that is crucial to today's recovered memory movement" (Leys, 2000, pg. 18). Memories of children who were too young to understand the meaning of the acts during the originating event thus would be repressed until such time as the individual reached sexual maturity (Leys, 2000). Though Freud was perhaps the first to describe the connection between experience of childhood trauma of a sexual nature and the emergence of specific symptoms associated with trauma, he later modified his idea of actual events leading to psychic crisis, to maintain that it was repressed sexualized fantasies that prompted the symptoms of hysteria. This shift in conceptualizing hysteria was in part due to disputes that arose from the psychological community in response to his claim that women were being sexually abused as children. He also doubted his theory to be clinically viable due to the fact that "the sexual abuse so often mentioned was all too irrationally frequent even for him" (Meszaros, 2010, p. 328). This begs the question, especially in light of the statistics presented previously on the prevalence of sexual, physical, or emotional violence against women and children in particular, might trauma theory be useful in understanding the root of all underlying causes of dysregulation of the mind and emotions that lead to behavioral health imbalance? Further, would we perhaps have integrated trauma theory into general therapy sooner and more comprehensively if Freud had not questioned his early ideas and thus instilled doubt in his followers that women and children were actually sexually abused? Would victims be doubted, or doubt themselves, in the veracity of their narratives?

Freud's treatment for hysteria included psychoanalysis, in which the client talked using a form of free association, and the therapist was there as a "blank screen" on which the client projects their unconscious roots of shame. Once the shame was uncovered, Freud believed the unconscious was then integrated into the conscious and the symptoms would resolve. This model seems to be rather limited and perhaps ill matched for this type of client, in that the analyst might inadvertently become caught in a reenactment of the very relationship and power dynamic that led the person to treatment. If there is no reciprocal bond formed with the therapist, is that perhaps more traumatic for someone, who has never had anyone reflect back to them their own goodness? In this form of treatment, the therapist plays no role in the construction or reconstruction of the Self, and there is nothing in the immediate moment for the

patient to grasp as a reflection of their developing Self. For mothers who have trauma histories, especially those that occurred at the hands of a primary caretaker or family member, does this type of relationship potentially constitute an enactment?

Nearly three decades later, Freud's friend and colleague Sandor Ferenczi resurrected elements of his original theory. "Freud noted in his own diary in 1932 that "Ferenczi has totally regressed to the etiological views I believed in and gave up 35 years ago that the gross sexual traumas of childhood are the regular cause of neuroses ..." (Meszaros, 2010, p. 328). This divergence caused Ferenczi to permanently break from Freud over the issue of sexual trauma in children. Ferenczi and Rank developed the belief that some traumas did *indeed* stem from actual events and were not repressed sexual desires or fantasies having their origins in infantile sexuality that led to intrapsychic conflict. They believed that the patient was suffering, and that regardless of whether the patient's crisis stemmed from an actual event or from intrapsychic conflict, the patient's subjective experience was at the center of their psychic dis-ease (Mitchell, Black, 1995). "[They also were the first to take Freud's idea of] intellectual reconstruction of the truth" and replace it with [Ferenczi's] system of emotionally explored "*multi-directional processes of interpersonal and intersubjective elements*" (Meszaros, 2010, p. 331). Ferenczi also felt that the analyst had to be more than a detached observer. Authentic dialogue between the client and the therapist becomes an indispensable means by which to emotionally deconstruct the subjective experience in order that it makes sense to the client. In this manner during treatment, the therapist becomes the major conduit for development and acceptance of the Self. "Ferenczi also believed that love is as essential to a child's healthy growth as food. With it, the child feels secure and has confidence in himself. Without it, he becomes neurotically ill ... [or] often dies because of lack of love.... *Security* soon takes on significance not only in the role it plays in the therapeutic atmosphere, but also as a part of optimal personality development" (Meszaros, 2010, p. 332). Thus, it is critical for a mother to be able to connect in some way to her infant, and when examining the population of mothers with trauma and addiction how do those two things factor into her capacity for this type of interaction? "Cocaine/polydrug-using mothers have been described as more passive and disengaged in interactions with their newborns and non-drug

using mothers, and methadone/polydrug-using mothers have been characterized as less responsive and less encouraging of their infants than non-using mothers” (Johnson, 2002, p. 192). For Ferenczi, the idea of trauma was a total experience where the object/other had failed the child either through action or inaction (Kirschner, 1994). Therefore, having this genuine reciprocal relationship with the client, albeit professional, is a form of that love, and is ultimately the therapeutic tool for recovery of the “good object” and the Self. Affect changes due in part to both trauma and substance use in the mother, can be potentially inhibit both the initiation and the interpretation of social interactions. How can trauma and attachment informed clinicians help her build a more interactive and more accurate repertoire of interactions with her unborn baby and infant? It is this idea of interpersonal psychotherapy that gives birth to the ideas that later formed much of Attachment and Relational Theory.

Looking at Object Relations and Relational Theory, one can explore the ways in which it is not the primary object as a person per se, but the subjective experience of the relationship by the client that actually leads to the identification of the Self as something that is not acceptable, and that the intersubjective experience, not the person, is at the root of disrupted attachment. Harry Stack Sullivan would go on to call these experiences “unattended interactions” (Mitchell & Black, 1995, Kindle ed.). In other words, interactions that somewhat miss their mark. The parent may have the intention of connection, but may not accurately convey this to the child or the child may miss the intention put forth by the parent. This may explain why siblings in some families grow up with very different interpersonal experiences of the same parents. These are patterns of behavior or experiences that form an interactional context that either maintains the ideal connection or does not. These patterns of interaction are then re-enacted over and over as the client’s way of navigating the Self-in-environment based on past experience.

Eric Fromm theorized that humans are incredibly social beings and that they must navigate their environment by developing certain character types. Thus, it is selection of “desirable social traits,” not inherent primal drives as Freud believed, that shape people according to social need. “In Fromm’s view, the unconscious is a social creation maintained because of the deep abhorrence each of us has of our own

freedom and the social isolation we fear may result from a fuller expression of our authentic, personal experience” (Mitchell & Black, 1995, Kindle ed.). For example, if a child feels that patterns of interaction are not safe, the child begins to attempt to change its behavior to accommodate or change the response of the caretaker. This is perhaps the reason that an infant who is left repeatedly to cry alone, will initially become more upset, but will eventually stop crying altogether. The infant has learned withdraw to avoid the anxiety and tension emanating from the caretaker therefore removing the need to discharge the tension. It has also learned to stifle the expression of their own authentic experience, in order to accommodate that of the caretakers. Trauma in this sense is the subjective experience, and/or objective experience that shapes how this infant will continue to function in it’s environment. For the infant who learns to withdraw to avoid tensions, how does this impact their ability to form positive intimate relationships as adults and parents?

For the purposes of this chapter, I would like to adopt a much broader view of trauma as anything that disrupts the cohesive and natural development or maintenance of the Self, whether it be neglect, abuse, disaster, constant stress, disruption in family relationships, divorce, interpersonal violence, community violence, racism, substance use or any number of other situations. It might be argued that trauma in its many forms is the underlying issue that brings most people to therapy. Some are aware of their traumas, yet for many, they remain in the unconscious. Freud’s ideas of unconscious impulses or drives, which begin as sensations or somatic presentations in the body, then generate psychical tensions in the mind. He believed this tension seeks discharge through satisfying the impulse. [Freud also believed] “Objects are accidentally discovered in the external world, such as the breast during feeding, which are found to be useful in eliminating the libidinal tension of the drive, and these objects are thereby associatively linked to the impulse” (Mitchell, Black, 1995, Kindle ed.). This theory is related directly to the most basic form of needs and trust, for if the impulse remains as an accumulation of psychical tension without discharge, the aim connects only sporadically with its object. The infant in this scenario would experience this as a form of trauma. If the impulse *never* discharged the infant would actually perish from lack of nourishment and love.

## **Klein through Winnicott: Object Relations and Relational Theory of Trauma**

Melanie Klein further developed Freud's ideas of drive and impulses, significantly modifying the conceptual beliefs into a relational theory of unconscious psychic conflict about good and bad as perceived by the infant, and the destructive force of the infant's goodness and rage toward her good and bad *objects*. "The paradigmatic images of these states involve the infant at the breast. In one state, the infant feels bathed with love. The [good breast], the mother is filled with wondrous nutriment and transforming love, infuses him with life-sustaining milk and envelops him in loving protection. He in turn loves the 'good breast' and is deeply grateful for it" (Mitchell & Black, 1995, Kindle ed). In contrast, when the breast is not there ready to provide this love, nourishment and protection, the infant "rages" at the breast. "At [these] times, the infant feels persecuted and in pain. His belly is empty, and his hunger is attacking him from within. The 'bad breast,' hateful and malevolent, has fed him bad milk, which is now poisoning him from within then abandons him. He hates the "bad breast" and is filled with intensely destructive retaliatory fantasies" (Mitchell & Black, 1995, Kindle ed). The author finds it fascinating that Klein envisions the infant as possessing the capacity for omnipotent transformative or retaliatory fantasies. It is difficult, given what we know to date about infant development to visualize the infant possessing such capacities for fantasy. Without language how is that an infant can process emotions into conscious action of connection or separation? I feel this paradigm is perhaps better understood as a purely somatic experience perceived as unlabeled love or neglect in each moment for the infant. The *object*, (breast/mother) is experienced in the same moment as an emotion and is therefor causally linked in the primitive memory of the infant. Thus a "good" breast that provides milk is associated with the sensation of satiety, comfort and protection, whereas the "bad" breast, empty or absent when wanted, is associated with frustration, discomfort and vulnerability. Yet how does this split between good and bad manifest in the maternal/infant relationship? In relation to the idea of splitting, Klein introduced the idea of projective identification, an idea that is difficult to differentiate from Freud's ideas of projection. Klein believed that the infant fantasized of "depositing parts of the self, or the whole self, into the object in

order to produce an effect” (Buckingham, 2011, p. 5). She envisioned dangerous substances (excrements) as the representation of the infant’s rage at the “bad” breast. “Together with these harmful excrements, split off parts of the ego are also projected onto the mother or, as I would rather call it, *into* the mother. These excrements and bad parts of the self are meant not only to injure but also to control and take possession of the object” (Klein, 1946, p. 8)

Though contemporary psychoanalysis usually describes this as the dynamic between client and therapist, it can also exist between client and another. Some argue that the difference between projection and projective identification is not clinically useful. Klein thought of the difference as, projection is the psychical mechanism, and projective identification as the particular fantasy of expressing it. “In introducing this concept Klein was ‘emphasizing that one cannot have the phantasy of projecting impulses without projecting part of the self, which always involves splitting, and, further, the impulses and parts of the self do not vanish when projected; they are felt to go into an object. Unconsciously, if not consciously, the individual retains some sort of contact with the projected parts of himself.’” (Buckingham, 2011, p. 7). In this way, the author conceptualizes a reverse of the projection, the trauma relation that is passed from mother into the infant. The mother who has an insecure attachment due to trauma, may either consciously or unconsciously project into her infant the “bad” object that was her own experience; one she does not wish to psychical own. She then splits off this “bad” object believing the infant is now the source in an evocative manner in an attempt to illicit responses to which she then can respond negatively. The infant in turn internalizes this “bad” object as itself, and the cycle continues.

Splitting in the world of psychodynamic theory is a complex idea that is related to whether a person is able to integrate experiences, both good and bad while maintaining functioning in an adaptive way. There are basic conceptualizations of splitting put forth in an article by Blass, based on the work of Freud and developed further by later analysts such as Ferenczi, Kohut, Kernberg and Klien. Splitting as *dissociation*, involves a trauma so severe and disruptive, that it threatens the physical or psychological Self or their ability to function as a self-object. (Object being something the individual turns to for protection, comfort or reassurance.) The ego then unconsciously splits off whole parts of the Self, in



order to create a separate adaptive persona. This persona, unknowable to the patient, usually takes on the role of functioning, where the patient is unable (Blass, 2015). Splitting as *disavowal* as Freud maintains is when an individual experiences some unbearable reality that creates a psychological conflict or trauma within the self. The conflict is so unbearable to the ego that it causes an unconscious rejection of the reality and the psyche turns to pathological adaptations of this reality, manifesting as extreme narcissism or schizoid position. “Splitting of *representations* refers to a state (or process) by which an individual in which unitary objects are regarded (or come to be regarded) as two separate images, representations” (Blass, 2015, p. 96). It is this type of splitting that sometimes happens in childhood when the representations of the primary caregiver fails to adequately coincide with the infant’s instinctive drives. In other words, the child instinctively knows that it the caretaker *should* be there for comfort, nurturing, or protection, and is perceived as a “good object,” someone who will meet his or her needs. However if the child’s *actual* experiences more often align with basic needs not being met or are threatened, the child unconsciously cannot integrate the bad experience with what the child instinctively wishes were the reality from the parent, and therefore splits the representations of the caretaker. The infant cannot grasp that *caretaker* would ever be bad and must maintain them as the internalized “good object,” making the *child* somehow the one who is unlovable, therefore the internalized “bad object.” It is these interactions that the author believes are not fixed but can be mediated through teaching the mother to be more attuned and responsive to her child.

Studies were conducted in an attempt to build on these Kleinian ideas of attunement and disruption that take place between the primary caretaker/object and the infant. Burns (1972) observed three groups of neonates, two groups that were being adopted, and the control group consisting of mothers with their own newborns. Group A neonates had multiple caregivers implementing intensely structured feeding times. Group B consisted of single caregivers feeding on cue. They discovered that newborns with multiple caretakers had significantly increased distress during feeding than did those who had one consistent caretaker. In addition, on day 11 of life, the groups were purposely disrupted. Group A was then assigned one caretaker allowing them to feed on cue and Group B was given a different single

caretaker who still allowed the infants to feed on cue. They observed that the distress in Group A went down when there was one predictable caretaker meeting their expressed feeding needs. However, Group B displayed increased distress, as they no longer had the synchronicity of relational attunement that had developed between neonate and caretaker during the initial 10 days of life (Silverman, 1987). Klein links distress and attunement to Freud's instinctual drives of aggression and libido. For example, instinctual "rage" at the "bad" object by the infant is a bodily expression of aggressive drive, and the searching and longing for the "good breast" is also a somatic expression of the libidinal drive toward the "good" object. These ideas about the origins of instinctual drives, explains the divergence in beliefs, with Freud teaching infantile sexuality and Klein explaining libidinal and aggressive drives as the searching for, and fear of losing the "good" object; what she later termed the death instinct. This death instinct plays out as a subjective experience of trauma to the developing infant's psyche. Beebe and Lachmann's study (1987) made observations that support Klein's explanation of the phenomenon. "In their study of frame by frame, second by second facial interactions between infant and mother, they have demonstrated that within the dyad there is a mutual influencing system. The authors suggest that what gets internalized -- initially on a sensory motor level -- are the interactional experiences between mother and child and that these are the precursors of psychic structure" (Silverman, 1987, p. 205). Can this instinctual use of aggressive and libidinal drives by the mother and infant form the basis for how trauma can be viewed in its relevance to pregnancy and early childhood development of attachment patterns?

### **Herman Through to Today: Contemporary Trauma Theory and Neuroscience**

Progression into Contemporary Trauma Theory is not a theory of linear progression but one more cyclical in the nature. Much of contemporary theory had its origins in neuroscience and the study of the brain; in fact stemming from the clinical work of Charcot and Freud that began over a century ago. Advances in technology are helping to scientifically validate the theories of how trauma and attachment impact the developing brain, as well as the brains of adults. The introduction of neuroimaging has allowed scientist to see the brain in real-time action. This has significantly improved how scientists understand the different parts of the brain, their functions, and how the brain makes pathways of neural

connections (Cozolino, 2014). In relation to trauma, the following section will explore how the somatic response of electric circuitry activation in the body from trauma experience is laid down in the mind and paired with memory formation stored in the brain (Herman, 1997).

### **PTSD: Its History and Role in Trauma Theory**

Intense clinical debate over the etiology and treatment of “war neuroses” and the mechanism of trauma memory certainly existed in early post-war Europe. During World War I, thousands of soldiers began to display a range of physical and psychological symptoms associated with combat. This cluster of symptom began to be recognized in the medical and psychiatric world as having no observable physical lesions to the brain but was more psychological in nature. “Shell shock” as it came to be termed, was the “powerful emblem of the suffering of war” (Loughran, 2010, p. 1088). “The use of hypnosis to deal with war neurosis marked a return to a therapy that, since the time of its flourishing under Charcot’s leadership more than twenty years earlier, had been largely abandoned by the medical profession. More precisely, practitioners returned to Breuer and Freud’s early method of treatment of hysteria by hypnotic catharsis, a method whose relinquishment by Freud around 1896 had been a decisive gesture to differentiate the “discipline” of psychoanalysis from the “enigma” of suggestion” (Leys, 1994, p. 623). Shell Shock and its contemporary counterpart PTSD are primarily perceived as a disorder of military men. History suggests there was a clear diagnostic differentiation that women’s experience of “hysteria” was a malady of women. In feminist analysis of the two disorders, Elaine Showalter argued that hysteria was a product of female oppression as well as a physical and mental rebellion against repression experienced by women. She also described shell shock in a similar manner that described it as a somatic and psychic protest against war (Loughran, 2013). This difference in the gender experiences and the symptomology of children following trauma continues to be an item of debate, including how a formal diagnosis of PTSD has evolved in the Diagnostic and Statistical Manual over time, and its impact on the care of clients that experience trauma.

## **PTSD, Gender, and Age**

The work of Bassel Van der Kolk marks segues between the more traditional psychological approach to trauma and the contemporary neurodevelopmental model. His work stems from dissatisfaction with the diagnostic criteria for Post Traumatic Stress Disorder as it was written in the Diagnostic and Statistical Manual, 3<sup>rd</sup> edition (DSM-III) put out by the American Psychiatric Association (APA). At the time in 1980, the formulation for the criteria was based primarily on Vietnam Era male veterans, and male burn victims (Van der Kolk, 2005). Despite the narrow conceptualization of the diagnosis, PTSD became a valuable diagnostic tool across many trauma disciplines and a much broader client base. “Prior to the conceptualization of PTSD, other traumatic syndromes were proposed such as a rape trauma syndrome and a battered women syndrome” (Van der Kolk, 2005, p. 389). These syndromes and their associated problems were not captured in the DSM-III diagnosis of PTSD. The effects of these problems on assault victims included: erosions of a sense of safety, lack of trust in self and others, diminished sense of power and control, loss of a coherent sense of self and fear of intimacy (Chard, 2014). Though the primary population studied to establish the diagnostic criteria for PTSD was primarily men, women’s traumatic experiences comprise the most frequent cause of traumatization; childhood physical and sexual abuse. Women are also more likely to be traumatized in the context of interpersonal or domestic violence and have a larger impact on development and relational issues stemming from their trauma (Van der Kolk, 2005). This is not to say that men do not experience these relational issues but women still tend to carry the larger proportion of childrearing in our culture and therefore are more likely to continue the trans-generation transmission of trauma. Men and women also pass on this transmission of trauma in different manners, as men are more likely to be perpetrators of physical or sexual abuse and women tend to be perpetrators of verbal or psychological abuse that threatens their relationship with others, or more passively neglect or disengagement from their children (Suarez, 2001). PTSD may not yet be the most common psychiatric diagnosis among children, but many children are diagnosed with its individual symptoms such as anxiety, impulsiveness, behavioral issues, and Attention Deficit Hyperactivity Disorder (Van der Kolk, 2005). The experience of childhood trauma has life-long impacts

on areas of functioning like emotional dysregulation, impulse control, ability to organize, learning, and negotiating future relationships with others. It is this negotiating of relationship with others, while exhibiting or experiencing symptoms of PTSD that is particularly relevant to the phenomena of this thesis.

The DSM-5 diagnosis of PTSD was based on more comprehensive research that includes a broader experience than just combat trauma. Inclusion criteria for diagnosing PTSD are based on exposure to actual or threatened death, serious injury, or sexual violation. The exposure can be first hand or witnessed. It also must include at least one of the following intrusion symptoms: intrusive memories, dreams/nightmares, flashbacks, hyper-arousal, and avoidance of exposure distress. Inclusion symptoms that fall under these categories and must also be experienced are broken down as follows: 1) *avoidance* (must experience at least one)-avoidance of internal or external reminders of the trauma, 2) *negative cognitions* (must experience at least two)-memory and cognitive difficulties, self-blame, low self-esteem, negative emotional states or numbing, inability to experience positive emotions, detachment, and 3) *arousal behaviors* (must experience at least two) irritability, increased aggression/rage, recklessness, hyper-vigilance, and sleep disturbances (Nussbaum, 2013). These symptoms have a number of characteristics that would make attachment with, and caring for a newborn difficult, especially if the mother or infant is also dealing with symptoms of withdrawal. In research performed by Kaplan, Evans and Monk, maternal sensitivity to her infant and her perception of infant was the biggest mediator of infant stress reactions, even when antenatal psychiatric diagnoses were present (Kaplan, 2008). Maternal participants (n=39 maternal/infant dyads) included in this study were non-smoking, medication free women with or without an antenatal psychiatric diagnosis. The mothers were assessed in the antenatal period for existence of psychiatric diagnoses (mostly anxiety and depression). Mother/infant dyads were then assessed during 10 minutes of free-play at 4 months postpartum. Infant salivary cortisol levels, infant heart rate, infant temperament and infant responsiveness, and were measured using standardized reliability methods. Mothers were assessed for Maternal Sensitivity using a 9-point Likert model Emotional Availability (EA) scales. Results of this study showed that infant physiology and behavior

were significantly influenced by caregiver behavior. “Heart rate variability has been associated with more adaptive emotional regulation in children and adults” (Kaplan, 2008, p. 253). Infants in this study who had highly sensitive mothers had higher heart rate variability (HRV), those with less sensitive mothers had less HRV, and surprisingly findings were not correlated to the mother’s antenatal psychiatric diagnosis. It was also surprising that cortisol levels of infants of the normal control mothers without psychiatric diagnosis all had lower levels regardless of whether they received (HS) or (LS) parenting. However infants of the diagnosis mothers had significantly higher levels of cortisol when they received (LS) parenting but not if they received (HS) parenting. It would be interesting to see this study reproduced with mothers who have antenatal PTSD and Substance Dependence diagnoses. How might the symptoms of these two disorders affect the maternal sensitivity in her parenting? That there *is* a possibility to help mediate infant stress response with maternal sensitivity is promising when considering therapeutic interventions with this population.

### **The Sexual Abuse Recovery Movement and False Memory Debate**

The 1980’s, with the growing number of reports of child abuse, saw an increase in adult survivors coming forward seeking psychotherapy. This rekindled the quondam Freudian debate regarding the veracity of narratives of those with traumatic childhood experiences, again threatening the clinical care of traumatized people (Herman, 1997). Herman in her review of research on memory described several theoretical constructs related to accuracy in normal memory reliability. Study findings of memory distortions or errors in recall are more prone to happen in both children and adults when subjects are asked leading questions in an attempt to gather the narrative. In contrast, errors or bias are least likely to occur if the client generates the spontaneous account on their own. Others maintain the normal memory, though fallible in terms of peripheral details, is generally solid at its most central or salient core (Herman, 1997). However can these findings be applied in the conceptual framework of how memory is laid down during traumatic events? Many people, who experience trauma, report highly intrusive, vivid, and unwavering memories surrounding the events. However, this does not account for those who have no recollection of their trauma exposure (traumatic amnesia), and is counter-intuitive when applying the

theories regarding memory to some individuals. “If terrifying events are unforgettable, how can they be completely forgotten” (Herman, 1997, p. 558)? Memory disturbances such as amnesia and hypermnesia are one of the defining symptoms those who experience trauma. Herman believes that clients can have either no recollection of the experience, they are conscious of bit and pieces, or they can have continuous, unwavering and vivid recollection of the events. There is also a smaller percentage who, initially have no recollection of the trauma, but can after a period of time have what she describes as delayed recall (Herman, 1997). Herman was interested in study whether the role of psychotherapy influenced retrieval of traumatic memories. Her study consisted of 130 adult outpatients seeking treatment at a public hospital-based clinic. Seventy-seven (n=77) charts formed the database for the study, 67 women and 10 men all who reported a history of childhood trauma. Fifty-nine reported sexual abuse, 53 reported physical abuse and 24 reported witnessing interfamilial violence. The results showed that 53% of the clients had continuous memory with no delay, 17% had continuous memory with delayed recall, and 16% had complete amnesia and delayed recall. Of the 25 participants that had delayed recall, 25% or 7 of them contributed the recall to being in psychotherapy (Herman, 1997). A separate reflection by Davies, Morton, Mollen and Robertson, highlights the difficulties in finding a consensus in this sometimes-contentious debate. They reference the America Psychological Association (APA) Final Working Group Report on Investigation of Memories of Childhood Abuse, comparing it to the British Psychological Society Report, discussing areas of alliance rather than division in the continuing debate. Their review of both reports details the two school of thought, 1) that it is possible that memories of abuse that have been forgotten for an extended period can be remembered and 2) it is also possible to consciously or unconsciously elicit convincing “pseudo-memories of abuse that never occurred (Davies, Morton, Mollen and Robertson, 1998). This eliciting of memories is at the crux of the clinical discourse and therapists are currently divided into those who argue that recovered memories are valid accountings of actual trauma and those who claim therapist are creating a dynamic for false recovery of events, leading to the term False Memory Syndrome (FMS) (Haaken, 1995). Parents who are accused of sexual abuse formed the FSM Foundation claiming allegations against them were false, and siting eliciting of false memories by a

therapist as the mechanism of recall (Haaken, 1995). “Survivors of sexual abuse are part of the “adult child” movement that has advanced a broad critique of the American family and its ‘dysfunctionality.’ Unlike earlier periods when poor families were the primary focus of professional scrutiny (i.e., the ‘culture of poverty’ and its ‘disorganized’, ‘broken’ or ‘matriarchal’ families), the adult child movement combines self-help groups and psychotherapy to advance an indictment of middle-class, ‘intact’ families” (Haaken, 1995, p. 192). These survivors challenge the risk mentality that has shrouded much of their experience of something being wrong with them, thus the struggle has given way to the Sexual Abuse Recovery Movement. Survivors certainly have more social support than they have ever had in the past, however the debate of recovered memories remains and continues to be a stumbling block for those who are trauma survivors. Women and children continue to be questioned as to the veracity of their narrative as if it is a threat in some way to patriarchal and misogynistic power. This questioning of memories is perhaps the most dangerous and potentially re-traumatizing aspect of seeking treatment and where the clinician has a clear power dynamic over the client. Many trauma survivors may not be consciously able to articulate the trauma events, often wondering if they are crazy for even having pieces of it in their mind. Practitioners continue to question the role of memory in treatment and the validation that some sort of abuse actually occurred. The author questions, why is the verifiability even important unless it is important to the client? The actual work is a re-integration of split individual psyche in order for the client to feel whole. “As practitioners, we need to be aware of how the past is, in part, constructed as much as it is discovered in therapeutic inquiry” (Haaken, 1995, p. 190). Is it possible as Forenczi suggested, that the clients subjective experience of the actual physical or psychical trauma should remain the focus of treatment, and the veracity of the narrative is somewhat clinically less salient, except of course where there is verifiable evidence presented and required to prosecute an offender? Perhaps the question might also be posed, is it necessary to work through or even discuss the actual trauma material to improve daily functioning of the individual? All of this work continues to impact the clinical practice of Social Work and is incredibly important when working with traumatized clients.



## Trauma and Neuroscience

Most Contemporary Trauma Theory in its relation to neuroscience agrees with ideas put forth by Herbert Spencer that provide a coherent theory of the evolution, structure and function of the nervous system. “He postulated the human mind can only be fully understood by considering its phylogenic development. In his view, the phylogeny of consciousness illustrates a general principle of evolution, namely the development from a simple, undifferentiated homogeneity to a complex, differentiated heterogeneity” (West, <https://www.ncbi.nlm.nih.gov>, 2012). This idea of simple to complex development is often described in terms of three-brains-in-one, termed the “triune brain theory” put forth by Paul MacLean. Each portion of the three-brain strata represents an evolutionary level of function from primitive to highly sophisticate. In the early 1960’s MacLean developed his brain model, layering each more developed function over its more primitive predecessor. At the core is the R-complex, or reptilian brain, the mid layer holds the paleo-mammalian brain or limbic system, and contained in the outer layer is the neo-mammalian brain or neo-cortex (West, <https://www.ncbi.nlm.nih.gov>, 2012). MacLean’s system however has been criticized as being too simplistic in its conceptualization, and for using the view inspired by neurologist John Hughlings Jackson, to separate rational thought from emotion thus implying that rational behavior is more desirable and “better” than emotional behavior (West, <https://www.ncbi.nlm.nih.gov>, 2012). Despite such criticism that he inadequately explains the complexity of brain systems, much of MacLean’s work still impacts the fields of evolutionary biology, neuroethology, clinical neuroscience, neurology, psychiatry and the social sciences. He sought to answer two critical questions in relation to these fields: (1) “where do subjective emotional experiences reside in the brain?” and (2) “is the functional circuitry of the brain inherited in the evolution of vertebrates and, if so, how did these circuits evolve?” (Newman, 2009, p. 4). These questions spurred his curiosity about the subjective emotional experiences noticed in his early work with patients suffering from psychomotor epilepsy who described emotional feelings and viscerosomatic symptoms. Based on preceding work done by James Papez in the late 1930’s, MacLean expanded his proposal linking the hypothalamus with the “limbic lobe”. “Seeking to account for sensations involved in the visual, olfactory, and auditory auras

associated with these seizures, he reasoned that the external sensory apparatus must have access to the brain circuits where seizures arose and that cortical association pathways could potentially connect visual, auditory and somatic neocortical areas with the hippocampal gyrus” (Newman, 2009, p. 5). This reorganization of Papez’s proposal “suggests that the limbic lobe and its major connections in the forebrain—the hypothalamus, amygdala and the septum—constituted a ‘visceral brain’ (Newman, 2009). He later renamed this the limbic system, whose primary function is to make sense of the somatic or visceral input of emotional feelings “that elude the grasp of the intellect” as they travel to the brain from the hypothalamus, amygdala and the septum (Newman, 2009). This is critically important in making sense of how trauma memories are stored for preverbal and very young children, and how unconscious “visceral or body” experiences can impact the developing brain.

To understand the structure and development of the human brain, it is crucial to study its formations and evolutionary function. Despite still being used, MacLean’s triune brain theory has given way to further exploration of the complex neural networks that do not fit neatly into his model. Though still a basis for understanding, the three brain systems are far more complicated with all three layers being linked together in an intricate complex of lateral and vertical neural networks (Cozolino, 2014). In addition, each hemisphere in the brain is also specialized to integrate diverse functions of the body and psyche. “For example, cortical specialization has resulted in the formation of a conscious linguistic self that is biased toward the left and a physical emotional self biased toward the right” (Cozolino, 2014, p. 18). Language function, problem solving and conscious ability to cope dominates areas of the brain also associated with the left hemisphere. In contrast, the right hemisphere is primarily responsible for assessing danger to self or others, developing a sense of the somatic and emotional self as well as use of unconscious defenses in the protection of the self (Cozolino, 2014). Why are these functions important, and why does it matter how the brain is organized? Our human brains are perhaps one of the most highly developed processors of extremely large bodies of information. Without organization, the brain could easily short circuit, leaving the human species vulnerable to annihilation. The functioning of our brain and how it is organized keep it and the rest of our body running relatively smoothly, without pause for the

duration of our lives. “The fundamental behavior tendency of all organisms is to approach what is life sustaining and avoid that which is dangerous. The success of rapid and accurate approach/avoidance decisions determines whether an organism lives long enough to reproduce and carry its genes forward into the next generation or is fated to go not so gently into that good night” (Cozolino, 2014, p. 20). This is true psychologically as well. We tend to have this same approach/avoidance behavior when attempting to protect the psyche and alleviate suffering. How does this relate to development and resolution of trauma for those whose role it is literally to carry the genes into the next generation as well as all that gets carried along with those genes?

New frameworks of theoretical rationale continue to emerge when working with maltreated and traumatized children and adults. In the last three decades, key clinical discoveries in developmental neurobiology are beginning to offer insight to theoretical questions across a wide array of disciplines such as pediatrics, psychiatry, social work, and psychology (Perry, 2009). This Neurosequential Model of Therapeutics (NMT) is based strongly in Perry’s efforts to integrate core concepts of neurodevelopment into a practical clinical approach. Perry, like Cozolino, works from a neurosequential model of brain development, where the brainstem develops first, then the mid-brain/limbic system and later the outer cortex/thinking reasoning brain. In this manner timing of trauma or maltreatment has implications at each stage of development and development over time. He describes how each portion of the brain must be intact and well regulated in order for the higher functioning brain to work to its potential. “An overanxious, impulsive, dysregulated child will have a difficult time participating in, and benefitting from, services targeting social skills, self-esteem, and reading...” (Perry, 2009, p. 243).

It is estimated that in the U.S. there are millions of maltreated children and youth that exist within our educational, juvenile detention, child protective services, and mental-health settings, the majority of whom do not have access or receive adequate clinical treatment. Identifying maltreatment and trauma continues to be missed for many of these children. “While current policy efforts to create trauma-informed practices and programs are a welcome start, for children and youth, focusing on trauma alone is insufficient. Practice, programming, and policy must become substance abuse, attachment, and neglect

informed as well; we must become fully ‘developmentally informed’ to understand and address the range of problems related to maltreatment” (Perry, 2009, p. 246). While the author agrees with this premise, Perry’s work still focuses on the child as the victim of maltreatment and approaches the work from a developmental standpoint. The issues pointed out above as the cause of neurodevelopmental disruption, are issues stemming from primary caretakers. An “overanxious, impulsive, dysregulated” mother “will have a difficult time participating in and benefitting from services targeting” infant attunement, social skills, organization, and responsibility when caring for her baby (Perry, 2009). However, these approaches to understanding neurodevelopmental workings of the psyche continue to operate from the risk or deficit model. Are there ways in which our profession can reorganize and integrate the empowerment framework on all levels when attempting to work with our target population? What does the mother do well and how can we as clinicians help her to build on these strengths? It is critical to add being empowerment-informed in creating programming and clinical practice that supports the nurturer role, rather than further disrupting it.

Each step in the female/mother’s development is critical for her optimal success and sets the foundation for what she carries forward into the next generation, if and when she decides to do so. This is why assessing every pregnant mother for trauma and other behavioral health issues, and referring them for appropriate treatment during the perinatal period could help stem the tide of trans-generational trauma and abuse. “The meaning of past and current relational trauma perpetrated by primary caregivers and significant others may be unique during pregnancy, in particular, because pregnancy is a salient time when mothers’ important relationships are reworked and reorganized to ‘make room’ for the relationship with the baby” (Huth-Bocks, 2013, p. 282). Identifying women who have experienced trauma and use substances to cope and get them appropriate treatment is arguably one of our most pressing social justice and public health issues of our time. It is also critical to assess her strengths and her already developed skills, for these will be the foundation on which our interventions can build. Pregnancy provides the opportune time for performing these types of biopsychosocial assessments in order address needs as they arise.

## Chapter IV

### Attachment Theory

Just as understanding the complexities of trauma theory can inform clinicians when working with pregnant women with a history of trauma and substance abuse, attachment theory can also guide them to help lessen the effects of trauma. It is the author's belief that trauma and attachment are inextricably linked and inform each other as theoretical lenses through which clinicians can make valuable interventions. If trauma is the lens through which we understand disruption and dysregulation of functioning, then could attachment the lens through which integration and regulation can begin to happen? This chapter will explore the history of attachment theory as both the ideal process, and the potential mode of service delivery for mitigating the effects of trauma. In addition the author would like to connect attachment theory and neuroscience making parallels in how we form our constellation of both neural and relational networks. Being the social humans that we are, how do we lay down and maintain neural pathways and relational connections in the brain and why?

#### **Object Relations: Klein through Winnicott**

Humans in Freud's view, were wired like animals to pursue "simple pleasures with ruthless abandon" believing that individuals with their self-centered impulses for pleasure were potentially detrimental to the group and therefore socially unacceptable behavior needed control by the collective. Klein in contrast, believed the infant is immediately connected to its objects, specifically the "breast-mother." She, like other object relations theorist, followed the belief that infants were actually more suited to their environment, adapting as needed to circumstance, not out of impulse, but to maximize connection (Mitchell, 1995).

Melanie Klein was perhaps the bridge between the Freudian ego psychology and later object relations theory. Silverman quotes Klein: "The infants first object relation is the relation to the mother's breast and to the mother. I would not assume that the breast is for [infants] merely a physical object" (Silverman, 1987, p. 202). The breast offers not only nourishment but provides the first comforts of

intimacy, warmth and goodness; trust that the world is safe. The symbol for all these experiences of attachment to the mother is the breast, with external stimuli experienced as pleasure symbolizing the “good breast,” and those that are unpleasant as the “bad breast”. This process as viewed by Klein begins in the at birth, continues throughout life, and is attended with intense fear of loss of the “good object.” “This vulnerability persists throughout life so that even during the oedipal period the chief anxiety in Klein’s view is not castration but the ‘feared loss of the ‘good’ objects” (Silverman, 1987, p. 203). The mother’s breast is the first relationship but becomes the “sexual” object, not the connection to objects as we think of in the contemporary sense of the vagina and the penis, but as a symbol of connection that is the first embrace. Thus withholding the breast is withholding the embrace, the representation of love. “Drives for her [Klein] are not discrete quantities of energy arising from specific body tensions but passionate feelings of love and hate directed towards other and utilizing the body as a vehicle of expression. *Drives for Klein, are the relationships*” (Silverman, 1987, p. 203).

Building on her work, Fairbairn talks about the universal splitting of the ego that happens as a child begins to navigate relationships with the primary caretakers in early infancy. (Mitchell, 1995). The child adapts these body expressions as an attempt to accommodate maintaining the connection. He describes the child, who under the care of unresponsive parents begins to express itself *like* the unattended caretaker. In an attempt to match the features of the overly depressed, narcissistic, or self-absorbed parent the child strives to gain connection through expressing these behaviors. It is through these “pathological” character traits that the caretakers begin to feel accessible to the child (Mitchell, 1995). “This internalization of the parents also necessarily creates a split in the ego: part of the self remains directed toward the real parents in the external world, seeking actual responses from them; part of the self is redirected toward the illusory parents as internal objects to which it is bound” (Mitchell, kindle edition, 1995). He also illustrated a further split in that the individual internalizes the attractive parts of the parents or the “exciting object” and splits off the frustrating or discouraging characteristics into the “rejecting object.” This manifests itself in a dynamic where the child begins to feel excitement or the allure of hope for a loving connection but must compensate for continuous disappointment by dashing

that hope in the form of constricting or choking off feelings. Fairbairn understood that in this internal ego splitting, the client only feels connection to others through negative feeling states and self-defeating behaviors (Mitchell, 1995). Resolution of this splitting dynamic begins to happen when the individual can allow a trusting connection built by the consistent responsiveness from another.

Each working independently from one another, Bowlby, Ainsworth, and Winnicott believed that infants have fundamental attachment styles based in their experience of being cared for by an adult primary caregiver. However, when those attachments are less than ideal, it most definitely manifests as a form of trauma for the child. In comments made about Bowlby, Ruth Eissler suggests that his work has made significant contributions to understanding the “harm done to little children by separation from their mother, harm that is liable to lead to a permanent distortion of the personality and character” (Eissler, Freud, Hartmann, Kris, 1961, pg. 305). Bowlby, known primarily as an attachment theorist, produced work that stemmed from rigorous training at the University of Cambridge in 1928, where he volunteered at a school for children with maladaptive behaviors. He observed the effects of disrupted early family relationships that impacted the psychological development of the child (Eissler, Freud, Hartmann, and Kris, 1961). What I suggests is Bowlby’s work was actually deeply rooted in trauma theory and laid the groundwork that was later translated by Ainsworth’s into the beginnings of Attachment Theory.

These contributions were solidified through Ainsworth and Bell’s empirical study of infant’s interactions with their mothers. What she was able to show was there were distinctly positive outcomes when mothers responded consistently and promptly to their infant’s cries (Bell, 1972). In this study, Bell and Ainsworth observed 26 subjects from white middle class and their infants. Data collection took place in the home lasting approximately 4 hours. The first 15 pairs were visited at 3-week intervals from 3-54 weeks. The second 11 pairs were visited weekly from week 1-4 for 2 hours, and again at 6 weeks for 4 hours, then every 3 weeks thereafter for the remainder of the year. Trained coders who were not informed of the hypothesis or other findings used a narrative report to document each instance of crying during the visit, paying particular attention to the length of crying episode, mother’s response time and success in alleviating the crying episode. Their observations were interesting in that they discovered that infant

temperament was less a factor in the amount of crying episodes in the first two quarters of the study year contrary to their hypothesis. However, those that did develop a pattern of crying after the first half of the year persisted to have this pattern of crying in subsequent quarters. The median maternal responsiveness in the first quarter was 46%, meaning that the mother responded to 46% of her infants crying episodes. The range showed a wide spread from the most responsive mother ignored only 4% of cries and the least responsive mother ignored 97%. In addition to the responsiveness, this study illustrates that even the least effective intervention calmed crying in 40-59% of all episodes, and the frequency of crying clusters is negatively and substantially related to maternal effectiveness, again displaying the correlation between maternal nurturing behavior and the decrease of infant crying bouts (Bell, 1972). This study also showed difference in the signaling patterns within each quarter of the baby's first year. The first quarter signaling promoted proximity responses from the mother. The infant cries tended to be observed when the mother was not present. However, this shifted in the later part of the year when the infant cries were initiated in the proximity of the mother and were focused on a more goal-oriented behavior. "This implies that an infant's attachment behavior is not only directed toward an attachment figure, but is constantly being 'goal corrected' in accordance with the changing location and behavior of that figure. Furthermore, the desired degree of proximity to, or contact with, the attachment figure provides the conditions for the termination of the attachment behavior" (Bell, 1972, p. 1185). Ainsworth, with Wittig also went on to devise a measure for assessing the quality of attachment between mothers and infants called the Strange Situation Classification. From observations made during this study Ainsworth developed her classification of Attachment Styles, (Group A: insecure-avoidant, Group B: secure, Group C: insecure-ambivalent/resistant, and Group D: insecure-disorganized/disoriented). Infants with secure attachment (Group B) showed confidence in the connection with the mother, even though they had a range of responses to separation. When reunited they responded positively and showed signs of relief at her return, seeking close proximity or bodily contact with the mother. Those with insecure-avoidant attachment (Group A) exhibited few attachment behaviors during the actual Strange Situation procedure. They appeared independent and played without distress when separated from the mother. Upon reunion,



the children ignored the mother, showed little or “restricted” affect and seemed more likely to actively avoid contact with her, even when she attempted to elicit a response. Infants with Insecure-Ambivalent/Resistant Attachment (Group C) showed intense distress and need for attachment when separated from the mother. They were more likely to retreat from play, lacked confidence in the attachment relationship and exhibited signs of high anxiety. Upon the mothers return, the infants sought close bodily contact with the mothers but also rage and distress that was inconsolable by the mother. The last group of infants (Group D), those with Insecure-Disorganized/Disoriented attachment, had a much less organized response to the Strange Situation. When reunited with the mother, they showed simultaneous contradictory behaviors such as reaching for the parent but then turning away, remaining motionless or appearing dazed. Some walked toward the mother with their head averted, or simultaneously smiling at the mother but also looking distressed and afraid. Instead of approaching the parent these children might seek out the comfort of the stranger. They also do not seem to clearly signal need for assistance from the parent. Lacking internal or reciprocal regulation of emotions the infants were more likely to remain aroused (Davies D. , 2011). These attachment schemas are what inform the internal working models of relationships as the child continues throughout the lifespan.

A study performed by Bernier, Mattè-Gagne, Bélanger, and Whipple, set out to redesign Ainsworth’s Strange Situation study, as critics question whether existing measures of maternal sensitivity have the capacity to account for the intergenerational transmission of attachment. They describe difficulties in explaining intergenerational transmission may stem from an incomplete match between outcomes (attachment and security) and the explanatory variables considered (Bernier, Matte-Gagné, Bélager, and Whipple, 2014). Instead, these researchers set out to observe whether a balanced pattern of proximity-seeking and exploring behaviors allowed by the mother is actually the mediator making secure attachment possible, rather than the mother’s sensitivity and responsiveness. Working toward this end, they proposed operationalizing parental support for child exploration through the notion of “autonomy support” to refer to caretaker behaviors that promote or discourage a child’s willingness for exploration, autonomy and volition. They conceptualized this support of autonomy as the polar opposite of control or

power assertion over the infant (Bernier, 2014). In conducting the research, the team started with a sample size of 130 dyads (58 male and 72 female infants). Participants were recruited from hospital lists randomly generated and provided to the research team by the Ministry of Health and Social Services in Montreal, Canada. Approximately 97% of mothers were married or living with the child's father during data collection phase, and nearly half of infants were first-born. The assessed the mother's attachment state when their infants were 7 months old using the Adult Attachment Inventory developed by George, Kaplan and Main (1996) which a semi-structured method asking the mothers about the relationship with their own parents and childhood experiences of being cared for. Maternal sensitivity was assessed at 12 months of age using the Maternal Behavior Q-sort (MBQS, Pederson & Moran, 1995) designed to assess the quality of mother/infant interactions. The dyads were then assessed again at 15 months of age by using the Attachment Security Q-sort (ASQS, Waters, 1995). This tool was designed to describe the child's potential behaviors. Their results indicated that there was a positive and significant correlation where higher AAI scores in the mother showed greater child attachment. Those mothers who were more securely attached in their internal working models were more attached to their own infants. Greater sensitivity and autonomy by the mother was also related to higher attachment security in the child. This result remained when the child was tested again at two years of age (Bernier, 2014). A weakness of this study is that 97% of the mothers were living with partners at the time of the study. Might this impact the mother's ability to encourage or discourage a balance of exploration and proximity-seeking behaviors from her infant? Would single parenting yield different results, perhaps due to the fact that the mother has less energy and patience allow for infant autonomy? How might demographics also impact how much freedom is safe for her child? For example, if the dyad lives in an area of high community violence, can the mother let her child freely explore outside, or might she have to restrict the child to a safer, less stimulating environment? With this restriction, is there also the potential for more pent up energy and frustration from both the infant and the mother, making it more difficult to be patient with each other?

Similar critiques of attachment theory are that it needs to have a more multicultural application that takes into account how culture *and* environment construct successful attachment. “The theory of attachment has been revered as one of the most profound for conceptualizing healthy families for the purpose of generating parent therapeutic interventions” (Mirecki, 2013, p. 509). However, therapists working from this framework might benefit from understanding culturally specific sensitivity to differences. Ainsworth’s attachment styles have come under scrutiny in recent years, as researchers begin to ask the question about the generalizability of outcomes across cultural settings. This study has been repeated in several other countries such as Germany and Japan. In Germany the study produced similar results, however there was a different distribution of infants that fit into the different attachment styles in the Japanese study (McLeod, 2008). This should be taken into account when applying the results across differing cultural settings even within the U.S. Ainsworth’s work in Uganda does demonstrate a relatively universal mother/infant attachment styles however should be taken in the context of their cultural development of relationships (Mirecki, 2013). Ainsworth found that maternal sensitivity to her infant was the constant and decisive factor in attachment security. However, it is still important to view attachment within the cultural context in which it was developed. How do we, as clinicians provide culturally sensitive help when beliefs clash with the norm? “For example, Cook-Darzens and Bruno (1999) stressed the importance of utilizing general and culture-specific services within the family context. They promoted a strength-based approach that focused on the resourcefulness of the extended matriofocal family structure common to French Caribbean Martinican families, rather than pathologize these families’ experiences as ‘defective’ based on a western standard. It was understood that responding to children’s basic needs of nurturance and protection, could be clearly defined and reliably carried out in many different ways (Mirecki, 2013). Another example would be, the current news threads regarding “Free-range Kids” of some American and other immigrant groups that allow children to navigate being alone in public rather than constantly monitored by a caregiver; the belief being that it helps them build independence, an awareness of danger and the ability to problem solve (Pimentel, 2012). Another critique of early attachment theory is that the success or failure of the attachment process rest solely on

the mother. “There is a long history of society blaming mothers for the ill health of their children. Preliminary evidence of fetal harm has led to regulatory over reach” (Richardson, Daniels, Gillman, Golden et. al., 2014, pg. 1). Regardless, women are still the majority of primary caregivers, however phenomenon of blaming mothers leads to interventions conceptualized in the “risk model” and does nothing in supporting mother’s strengths to be capitalized on for her optimal functioning. Given the statistics about abuse, neglect and trauma in American culture, especially when experienced at an early developmental stage, what events or environments might lead to interruption in the attachment and reciprocal engagement of mother and child and does it differ across the demographic make up of the U.S.? I am particularly interested in how trauma upsets the mother’s potential for optimal attunement and attachment to her child when she has experienced trauma herself. More specifically, how might the child, with help from a trauma/attachment informed therapist, help the mother build a more secure attachment schema, thus initiating a restorative relationship and helping to protecting them both? It is this creation of a stable and secure relationship that Winnicott refers to as a holding environment.

### **Attachment Styles and the Development of the Self**

Winnicott though mostly know as an Attachment Theorist, has used his thoughts on trauma to create his breadth of work in the area of attachment. According to Alford (2013), “D.W. Winnicott approached trauma by asking whether the individual is able, or can be therapeutically enabled, to live a rich interior life, one not devoted to responding to external events, [or] environmental intrusions” (Alford, 2013, p. 263). Understanding this inner world and how easily it can be shattered, is the soul of so much of Winnicott’s work. Perhaps even more interesting, is that “virtually every aspect of Winnicott’s work assumes that behind the mother and baby stand first the father, then the holding community, within which we will live our entire lives if we meet with even a modicum of good fortune” (Alford, 2013, pp. 263-264). Though somewhat dated, as our culture today is made of many presentations of family, the concept of a holding community is still quite relative. Without the support of this holding community, primary caretakers cannot adequately provide the necessary attachment through early stages in the development of a child. Developing policies that support extended and paid parental leave, access to affordable daycare

and adjustments to the traditional work hours are all ways that the “holding community” could support families and encourage attachment behaviors today.

Winnicott speaks of two types of trauma as the “penetration of the Self”, what I understand to be the split or fracture of the individual Self by a traumatic experience, and the “erosion of the Self,” or the collective experience of this split created by trauma, marginalization or an assault to collective identity (Alford, 2013). I believe the latter is what we have witnessed, and are continuing see in the extreme crisis experienced in so many of our nation’s cities today and around the globe, in forms of civil unrest, extremism, economic disparity and war. We are experiencing this fracturing of our collective Self because there is no holding community creating a secure base. The “tribe” no longer exists for so many in contemporary societies here in the U.S.

Winnicott was also interested in what it meant to be born and what it takes to become a self. He believed that the infant was born into a sort of “shell of self,” the mother performs the “boundary-maintaining” functioning, until the child is able to develop its own appropriate operation of these functions. “If the mother does a good enough job, the kernel of the self, the spontaneous self, can develop on its own. If she doesn’t, the mother fosters a child whose self is too much on the surface, managing the environment constantly” (Alford, 2013, p. 270).

The self that develops in early childhood has been theorized as a prototype that acts as a precursor for the way in which a child will function in later relationships (Armour, 2011). A study conducted by Armour, Elklit and Shevlin, aimed to empirically test attachment typologies set forth by Collins and Read. A large sample of Danish trauma victims (n=1577) participated in Latent Profile Analysis using scores from the Revised Adult Attachment Scales (RAAS, Collins 1996). “The RAAS consist of three components that can be employed in two different ways. The dimensions can be employed independently of each other to assess individuals in terms of the their level of each. Alternatively, they can be employed to categorize individuals into four different attachment styles” (Armour, 2011, p. 2). These styles than translate into the caregiving behaviors of adults.

The adult “caregiving system” is directly linked to childhood attachment styles, and has evolved to increase the protection and viability of offspring. “In the context of adult love relationships, when an individual’s attachment system is activated (by a threat to well-being or perceived security), his or her partner’s caregiving system is often triggered in response to satisfy the troubled individual’s attachment needs, alleviate distress, restore his or her sense of safety, and promote exploration and self-actualizing behaviors (Peloquin, 2014, p. 562). Caregiver behaviors like attachment styles are characterized by four domains. *Proximity* refers to the physical and emotional availability of partners to soothe the other’s distress. *Sensitivity* is the ability to be attuned to the comfort of distress of the partner. *Control* refers to the amount of responsibility one assumes for the other’s level of distress, taking into account opportunities for the partner to solve their own problems. *Compulsive caregiving* relates to the tendency of an individual to become “intrusively overinvolved” in the partner’s life with little regard for the request or need for assistance (Peloquin, 2014). These systems of caregiving are directly related to how each partner has developed internal working models of the self and others that are a part of their attachment styles. Therefore attachment styles directly impact the type of caregiving behaviors, and care giving is optimal only when the individual own sense of security is intact (Peloquin, 2014).

### **Evolutionary Nature of the Brain: Its Importance in Pregnancy and Nurturing**

The modern primitive brain, in all its evolutionary adaptability is still a compromise between response speed necessary for our fight-flight-freeze response, and the flexibility of our higher cortical reasoning. When faced with danger, the speed of our more primitive brainstem will usually win out over reason (Cozolino, 2014). Some might argue that humans are no longer victims of prey to other species, so this evolutionary process of the primitive brain response is outdated and no longer serves a function. However, the human brain in all its intricate engineering, still functions exactly as is necessary even for the world we live in today. As Cozolino observes, “evolution is driven and directed by the physical survival of the species, not by the happiness of individuals” (Cozolino, 2014, p. 20). This physical survival, with our fight-flight-freeze mechanism is still an integral evolutionary requirement, however the conscious and unconscious mediation of our anxiety and fear response is also critical in forming human

relationships (Cozolino, 2014). It is this capacity of our primitive brain to negotiate approach or avoidance behaviors with other humans is as applicable to our survival as a collective species today as it was millions of years ago. The survival of the human species hinges on our ability to form connections for protection and support. Currently the biggest threat to humanity is other humans.

The ability to navigate relationships begins at birth or as many suspect, in utero, and is thus critical to infant survival. So how does our brain impact how we negotiate these relationships without the higher cortical functioning that develops later in childhood? “From the start, our brains require a large amount of energy. Increasing energy consumption in different regions of the brain during the first year of life proceeds in ‘phylogenic order,’ meaning that the development of more primitive brain structures precedes later-evolving ones. Networks dedicated to individual senses develop before association areas that connect them and the executive functioning, to which they will one day supply information and receive guidance” (Cozolino, 2014, p. 27). These networks of associations are strung together over time through the input of experiences to which the infant is exposed. This process of collecting, associating, organizing and storing information happens in what neuroscientists describe as *critical* or *sensitive* windows of development, especially in the first years of life. These early sensitive periods are highly focused on interpersonal experiences and are essential for our continuing long-term development (Cozolino, 2014). This is why our first and most influential relationship is with our primary caretaker, who is still largely our mother. But what if her early relationships were hijacked by less than optimal circumstance? How might it affect her ability to begin negotiating relationships outside of her family of origin? How does this impact her ability to form and model, or as the therapeutic world describes it, “mirror” social connections back to her baby as she starts her own family? “The brain is structured with an innate capacity to transcend the boundaries of its own body in integrating itself with the world of other brains. —Daniel Siegel” (Cozolino, 2014, p. 27). The brain/psyche as the author envisions, creates is neural networks much in the same way that humans seek out others to make social connections web a web network of others. It continues to add these neural and social networks through the stages of development.

The adolescent brain is responsible for a period of “disorganization and re-organization” of the social brain as it moves into adulthood. There appears to be three critical social transitions taking place: 1) individuation from the family of origin, 2) formation of identity and connection with peers, and 3) initiation of a family of one’s own (Cozolino, 2014). Yet this period can be confusing to the young adult brain and is fraught with physical and emotional dangers, making an individual vulnerable to high-risk behaviors in an attempt to fit in with their peers. These behaviors may result in early sexual experimentation, high-stakes rebellion and addiction (Cozolino, 2014).

### **Neuroscience and Why Attachment Behaviors Matter**

“A fundamental characteristic of Western philosophy is the conception of the thinker as alone rather than embedded within a human community. It is a way of understanding the world that leads us to look for answers to human problems through theories and technology rather than within the lived experiences and social interactions. Grounded in this philosophy, researchers in neurobiology and neuroscience study the brain in scanners and on dissection tables but neglect the fact that the brain evolved to function within a matrix of other brains” (Cozolino, 2014, p. 3). In this evolutionary context, relationships are hard-wired into the human species as a mechanism for survival and are a process of Darwin’s theory of natural selection. As far as we know, our larger and more complex brains, though they take longer to develop, allow us a larger variety of responses in complex and diverse situations that enhance the survival of the species. But what is the evolutionary purpose of the relationship in this process of survival. As Cozolino points out the expansion of the cortex in larger primates has allowed for the more complex organization of larger social groups. There is a certain amount of “safety in numbers” that a social group provides to one another, but there is also the ability for differentiation of tasks and consolidation of workload that lessens the burden of survival for each individual. Other species are capable of immediate preparation for survival at birth, yet human infants require a long period of brain growth following birth that allow adaptation to this complex system of social organization that results through lived experience.



It is these early lived-experiences during sensitive periods of growth that are the most influential for our long-term development and well-being. At birth newborns have billions of neurons that make up our nervous system. It is a system of cells that move electrical impulses as signals that pass messages from the body to the brain and back again. Each neuron has anywhere from 10 to 30,000 connections each, and are linked together according to their coordinated electrical activation in infinitely complex patterns. “Each cell is an active ecosystem, taking in nutrients, generating energy and adapting to environmental changes” (Cozolino, 2014, p. 29). The cellular level of activity grows and develops in much the same way as we develop our relational connections as human beings. For example, our first connection is to the mother in whose body we begin to develop. An infinite and very unique pattern of interactions begins to emerge strengthening or weakening the connection between the two. After birth, we then go on to form literally billions of major or minor connections in the forms of approach or avoidance behaviors with others over our lifetime. Neurons rely on neighboring neurons for survival much in the same way that we as humans cannot exist from infancy without connection with others. “Neurons that fail to communicate with other neurons die off through a process called *apoptosis*” (Cozolino, 2014, p. 29). If a human baby fails to have communication and connection with another human being, it will also die. Interestingly the quality of those linked experiences with another human being will determine the quality of neural associations being made at a cellular level as well. Millions of these individual neurons chain together to form highly adaptable neural networks that perform the millions of functions of our nervous system. These networks then interconnect allowing for the formation of increasing complex functions and skills. “Once neural patterns are established, new learning relies on the modification of instantiation patterns” (Cozolino, 2014, p. 31). In order to continue to learn, we must rely on these previous patterns that are laid down and then modified to fit the new situation, much in the same way as we raise scaffolding based on what was laid down on previous level. The synaptic strength of electrical connection between cells is maintained by internal and external stimuli. Long-term potentiation (LTP) excitation between cells allows for synchronization in patterns of firing to produce coordinated function. For example, every time an infant experiences hunger and cries, hopefully the

primary caretaker will respond by feeding the infant. If this happens with enough repeated and predictable regularity, the infant learns to summon the caretaker with a cry when it is hungry. In contrast, if no one responds to the repeated infant cries, the infant learns that crying does not bring a caretaker. The infant begins to withdraw its connection (cry), as has the caretaker (no response), and the infant is now in danger. This delicate balance of learning cause and effect through approaching and avoiding behaviors continues to be the basis on which we navigate our lived experiences. But why is early infancy so important in laying the foundation of how we continue to learn throughout our lives as social beings?

### **Brain Developmental and Attachment Behaviors**

When we think of bonding behaviors, what comes to mind? Perhaps the deep gaze of a mother/infant dyad locked in wonder, awe and profound feelings of comfort and safety, the close proximity that allows for intimate and nurturing touches. But what is the purpose of these somewhat innate behaviors? Why do human mothers and baby need to have these bonding behaviors? “Our ability to achieve emotional resonance, attunement, and empathy with and for others is grounded in the brain’s ability to simulate within this system what we see happening with others. In the establishment of mother-child bonding and attachment, the ability to recognize and respond to the pain and distress of your child is fundamental to their survival” (Cozolino, 2014, p. 50). It is the mother that models for the infant this critical social skill. But the infant also is programmed to elicit these critical responses. It is an indispensable element of the reciprocal linking together of social brains.

Facial recognition is one of the very first tools an infant uses in an attempt to maneuver the complexities of human relationships. The infant searches faces looking for cues to guide their responses. For instance, if a child is hungry and must elicit the proximity of the caregiver to relieve tension and be fed, as the adult responds, the facial cues of empathy or disdain inform the infant whether the “breast/mother/caretaker” is a safe and nurturing space in which to relax and feed. The infant meets these subtle cues with either approaching behaviors, (snuggling in, holding on, relaxed tone) or avoiding/resisting behaviors (anxiety, turning away, arching and rigid tone.) These patterns of avoidance and approach are repeated numerous times throughout the infants early months and years. If the infant’s

tensions are met consistently enough by the caretaker the child learns to trust and is comforted. If the tensions are met inconsistently or not at all the infant begins to shut down, or become dysregulated. If the infant remains in either of these states, the mother is apt to continue to leave the infant's needs unattended, as is begins to create tensions within herself toward her baby (Bell, 1972). There are neurologic mechanisms at play during these attachment interactions. Humans are designed to make meaning from their experiences. "Have you ever found yourself reflexively looking up because you saw other people doing it" (Cozolino, 2014, p. 51)? These automatic imitation activities are what Cozolino calls *resonance behaviors*, and are responses we make when interacting with others. Our frontal and parietal lobes in the brain possess what we now call *mirror neurons*. These neurons are activated when we observe others performing functional tasks, and are a major component in how a developing child begins to learn both physical behaviors and emotional connections. "It is hypothesized that mirror systems and resonance behaviors evolved into our ability to attune to the emotional states of others. They provide us with visceral-emotional experiences of what the other is experiencing, allowing us to know others from the inside out" (Cozolino, 2014, p. 52). This gives us a neurological confirmation of what theorist like Bowlby believed was happening in the brain/psyche before the advent of neuroimaging. But how might trauma and substance use disrupt the functioning of these neuronal systems that are so critical to maintaining relationships?

### **Maternal Child Interactions and Substance Use**

Most mother and infant dyads employ an instinctive pattern of reciprocal communication through balancing approach/avoid behaviors. But how might substance use and trauma histories negatively impact the affect regulation of both mother and child? Beginning with the cocaine epidemic in the late 1980's researchers have hypothesized about the long-term effects of maternal drug use on her infants. "Maternal cocaine use during pregnancy has been describes as a significant problem affecting large numbers of children. Although there is considerable consensus in the field regarding the impact of prenatal cocaine exposure on infant growth outcomes, the results with other aspects of development have been mixed and somewhat inconsistent" (Eiden, 2002, pp. 77-78). Cognitively, cocaine exposed infants

and children have relatively subtle changes in outcomes. However, in regards to behavioral and regulatory influences on affect, these outcomes may hold more significance. Those infants with cocaine exposure appear to have increased behavioral reactivity and lability. They also exhibit differences in response to novel situations, may have less positive affect, more negative affect, have poor impulse control, and more behavioral problems than infants with no exposure. Other risk factors of cocaine exposure in utero may be associated with higher incidence of using other substances such as tobacco, alcohol and marijuana during a pregnancy. These substances are known to have adverse effects on the fetus, however, alcohol and nicotine specifically, also impact regulatory processes, thus the study of cocaine effects should be conducted in the context of poly-substance use (Eiden, 2002). Maternal cocaine use also appears to have a negative impact on maternal functioning, for example higher incidence of antisocial behavior and psychological distress. When combined, preterm status, hyper arousal of many cocaine-exposed infants, and maternal intolerance of distress, the quality of the home environment could be significantly impaired. In school-aged children, the cocaine exposure and regulatory issues were mediated by the quality of the home environment (Eiden, 2002).

Parents either directly or indirectly influence children in so many areas of life functioning. “Studies on interactions between children and their individual parents imply that sons and daughters observe their mothers and fathers [or other partners] differently and are developmentally impacted in different ways from each parent. Hence it is important to understand how children relate and respond to their parents in order to try to anticipate how a generation of children from non-intact families may, in turn establish their own significant relationships and either break or perpetuate the cycle of forming non-intact families” (Levine, 2004, p. unk). However what must also be taken into account when focusing on parental behaviors, is what system issues may inhibit optimal functioning. Parenting as mentioned above is difficult under the most ideal circumstances, so how does poverty, racism, lack of family and community support also need to be contextualized when studying parenting behaviors. These factors may contribute to health-compromising behaviors such as substance use (Beach, 2014). “One potential mechanism of interest regarding long-term health effects is telomere shortening [complex protein caps

that maintain chromosome integrity], a process that may be responsive to chronic stress” (Beach, 2014). This study by Beach looks at how non-supportive parenting, adverse childhood events, and caregiver strain, may all be precursor to increased risk for using substances among teens. Rapid onset of substance use by adolescents may be a later predictor of developing dependency later in life. It may also be associated with development of poor psychosocial functioning, further substance dependence, and poor mental health outcomes. Shortened telomere length was also associated with heart disease, diabetes, cancer and stroke. Evidence also suggests that substance use is correlated with shortened telomeres (almost half-length in alcohol abusers), pointing to harmful changes at the cellular level that can lead to negative health outcomes (Beach, 2014). How might these cellular changes in fact have an impact on a mother and fetus during a pregnancy? And how can clinician used attachment-focused interventions to mediate individual and systemic stressors? What can the mother be taught to help mediate these effects of stress and substance abuse?

### **The Role of Empathy**

What is empathy and what are the preconditions necessary for it’s development? Doris Bischof-Kohler defines empathy as “a process in which an observer has *the experience of participating in an emotion or intention of another person and thereby understanding what this other person feels or intends*” (Bischof-Kohler, 2004, p. 1). In her presentation she describes empathy as both an emotional response but also a contagion. As defined by Cozolino above, it is perhaps the activation of *mirror responses* to another that are at the neuropsychological root of empathy (Cozolino, 2014). Yet empathy must be further distinguished from what Bischof-Kohler describes as *perspective taking*. It is similar, as far as this author understands, to being able to “put yourself in someone else’s shoes.” Yet emotional participation is not important. In perspective taking, the emotion is understood but this does not imply that it is shared (Bischof-Kohler, 2004). To illustrate the capacity for empathy Bischof-Kohler and colleagues made experimental observations of 16-24 month-old children. The children were given an empathy test by setting up two scenarios with trained “adult-playmates,” one where the playmate “accidentally” broke the arm off a teddy-bear, and the other where they were sharing dessert together and

the playmate “accidentally” broke the spoon and could not longer eat. In both situations the playmate displayed signs of distress, sobbed and exhibited grief for two minutes over the broken items. The team discovered four categories of subject reaction in the children who: were *helpers*, were *perplexed*, were *indifferent*, and displayed *emotional contagion*. “Helpers were classified as empathizers; Indifferent and children displaying Emotional Contagion were rated as non-empathizers, the latter because their grief remained focused on themselves rather than being centered on the person in need. Perplexed children appeared to be in a transitional state of empathy” (Bischof-Kohler, 2004) Researchers who did not know the results of the empathy test also observed to see if the children could recognize themselves in a mirror, using the Rouge Test method (Asendorpf, 1996). At first these mirror test appeared to have little to do with the empathy test, however results showed that all of the recognizers were in the helpers category and all the non-recognizers were in the other three (Bischof-Kohler, 2004). Bischof-Kohler suspects the ability to self-recognize show development of *mental imagery*, the ability to form an image in the mind. At about mid-way through their second year children begin to “symbolically represent reality, allowing them to solve problems with their imagination” (Bischof-Kohler, 2004, p. 3). However mental problem solving, as she suggests would not be efficient without a representation of the self that can be manipulated in the mind, along with the other objects involved in resolution of the problem. She posits that *self-recognition* has two functions with respect to empathy, the recognition that self and other are separate both physically and psychologically, yet are part of *synchronic identification*. The author believes it is this process that is at the core of attuned attachment behaviors. It would be interesting to further study how attachment styles may influence self-recognition and synchronic identification required for the development of empathy. Also can empathy be developed or is it fixed?

Attachment theory in all its complexities, allows us envision how attachment really is the critical anecdote to trauma. We cannot separate the two, especially in regard to our target population. From Klein and Bowlby, to neuro-developmentalists like Perry and Cozolino, we are beginning to see a re-integration of the biological and psychological sciences. We are able to directly view the brain in action, which ultimately helps to validate over a century of psychological theory. There are so many factors that

influence the attachment process between mother and child, and this chapter was certainly by no means exhaustive. It is nearly impossible to fathom how any of us survive into adulthood with all that must align to create the optimal setting for this to happen. Yet we do survive, though not many make it completely unscathed. As Winnicott coined “good enough mothering” does seem to pull most of us through, even when mothers are up against trauma histories and SUD. As pointed out earlier in chapter three, being able to identify what research is truly measuring is critical in forming accurate analysis of supposes evidence based data of whether mothers in our population are truly a risk to their infants, or are they actually doing a “good enough” job?

## **Chapter V**

### **Discussion**

Attachment and Trauma Theory are the outcomes of over 100 years of conceptualization and observation. They both help us to weigh the welfare and risks that ultimately are played out in our daily interaction with others. People's beliefs about safety, nurturing and whether the world is just, all trace back to how well our attachments were formed or disrupted in infancy. For survivors of trauma who also have substance use issues, pregnancy is an optimal time to capitalize on building a mother's sense of agency and empowerment. This critical window can provide an advantageous moment for a mother to use biological and psychological processes to learn to perfect reciprocal attachments between herself and her baby. Yet this population of mother's may need help from an attachment and trauma-informed clinician to navigate individual and systemic hurdles that prevent optimal bonding. Clinicians need to be prepared to not only understand the unique needs of these women, but also view them with compassion and empathy, not a risk to their infant, but as the provider of the infant's ultimate well-being. Through Socratic questioning, the author hopes to have instilled critical reasoning in the clinician who is working with these mothers. It is my hope that viewing a mother through the lenses of attachment and trauma theory can move us toward a more integrated and mother-centered care and away from punitive measures in an attempt to improve infant outcomes. These women are primary victims of abuse in their own right, and deserve careful consideration and compassion when planning interventions.

#### **Trauma, SUD, Pregnancy and Intervention**

As mentioned earlier, screening and referral for behavioral health services during pregnancy are critical and may increase the likelihood to improve not only physical pregnancy outcomes, but relational outcomes as well. However barriers to early entry into treatment still exist. Though women are



beginning to overcome fear of punitive measures of incarceration and involvement with Child Protective Services (CPS), and are more willing to disclose substance use, as evidence in the Abdel-Latif study, practitioners often find having these discussions with their pregnant clients difficult. In a focus group conducted by Herzig et al., findings showed that obstetric providers face barriers to adequate risk assessment, such as underestimating risk, pessimism about behavior change, and time constraints (Herzig, 2006). Inconsistent methods of screening, variations in provider training and counseling practices, and lack of places to refer patients remain challenges in getting these women the help they need (Huth-Bocks, 2013). Obstetric providers also have little to no training on how to provide collaborative substance use treatment for pregnant women who are still using and have little understanding of maternal addiction. “Mothers who are dealing with addiction and recovery have great difficulty controlling their behavior and impulses. They often demonstrate behaviors similar to those identified in their children as evidence of poor regulation—difficulty modulating their voices and paying attention, poor control over their movements, or erratic behavior” (Brooks, 1994, p. 203). Obstetric practitioners and hospital staff often have personal judgments about substance use during pregnancy and find working with these mothers undesirable (Benoit, 2014).

A review of research studies in the Benoit article also concludes that substance use during pregnancy and early childhood exists across all social divisions, yet societal disapproval and subsequent stigma disproportionately falls on marginalized populations and women of color. There are disparities in taking urine drug screens during pregnancies and labor, with African American women being 10 times more likely to be reported to health agencies or CPS, than White women. This was also true with regard to socioeconomic status (Benoit, 2014). “While recent growth of targeted programs aim to minimize the risk of health and social issues for disadvantaged mothers, many of these programs and associated policies are oriented towards identifying individual risk and tend to employ social surveillance in the form of risk assessments of infants by the state, rather than focusing on the empowerment and inclusion of women of disadvantaged backgrounds who lack access to key social determinants of health,” (Benoit,

2014). Getting help for underlying trauma issue during a pregnancy may also help mothers who may not expect that issues surrounding their trauma might surface or resurface during pregnancy and birth.

In addition to difficulties in screening and referrals, lack of consensus on treatment of co-occurring behavioral health issues like trauma and addiction during a pregnancy leave clinician and client struggling for evidence based interventions that are deemed effective. For example, there are still divergent opinions on the etiology of addiction ranging from the moral defect, disease, impaired attachment/self-soothing, to trauma models, all of which, except for trauma, have at their root an underlying psychopathologic illness. None address the systems/social processes and environmental factors that contribute to trauma and addiction (Benoit, 2014). There is much clinical research left to conduct if practitioners are going to effectively mitigate the damage that trauma causes throughout the lifespan in our culture. Being knowledgeable about program models can also help clinicians decide what type of intervention to choose when working with this population of mothers.

### **Residential Care Models**

Several different residential programs exist globally. One model that was developed in Finland helps treat pregnant mothers with addiction. The focus of this program centers on simultaneously supporting maternal abstinence and promoting the mother/baby relationship. A study by Pyykkonen, Kalland, Helenius, Punamaki, and Suchman aimed to explore maternal pre- and postnatal reflective functioning RF (perinatal narrative identity regarding connection with the pregnancy and baby, emotions, and relationships with her own mother and partner) in association with background factors such as trauma exposure, behavioral health diagnoses, maternal/infant interaction, development and later foster care placement (Pyykkonen, 2012). Study subjects consisted of 34 mother-infant dyads living in three residential units during the perinatal period. Self-report questionnaires were administered regarding the above listed factors. Finally video taped mother-infant interactions were coded for sensitivity, control, and unresponsiveness, and semi-structured interviews were conducted to assess maternal reflective functioning. Results of the study showed that postnatal interactions between mother and infant were assessed being within the high risk for lack of sensitivity in 50% of mothers, and high scores for lack of

responsiveness in 45% of mothers (Pyykkonen, 2012). Some mothers reported having different psychiatric symptoms ranging from depression, somatization, and paranoia to psychosis. At 4 months of age, all infants showed development within the normal range. Reflective functioning was weak in the prenatal self-reports, only one mother had “close to ordinary functioning” during the pregnancy but 9 reported close to ordinary functioning in the postnatal assessment. This was a 63% improvement during the intervention phase. Factors that mitigated an increase in RF included level of education; increased maternal age, single versus polysubstance use, age at first use, less lifetime exposure to abuse, and planned pregnancy. The postnatal RF was found to be a better predictor of prognosis for maternal-infant interactions than was the short video observations of maternal sensitivity. Children who required foster care placement during the 2-year follow-up period reported lower RF levels. (Pyykkonen, 2012) Perhaps as suggested in the May article on narrative identity, reconceptualization of the narrative could be key in helping mothers reframe their relationship with their baby.

Though not pregnancy specific, the Trauma Recovery and Empowerment Model (TREM) mentioned earlier was modified for use in an existing residential substance abuse program in Colorado. Results from a study by Toussaint et al. showed significant improvement in outcomes for those women who participated in TREM than those who received treatment-as-usual (TAU). TREM, similar to Najavitz’s Seeking Safety, is a manualized curriculum, with Phase I addressing issues of gender identity, sexuality, interpersonal boundaries, and self-esteem, and Phase II focusing on family, relationships, destructive behaviors, and skill building, including communication and decision making (Toussaint, 2007). This study assessed six domains of functioning using measurement scales with proven validity. The six domains included in the analysis included, personal history, substance use, mental health, trauma, services utilized and consumer perception of services received. Women in the TREM group showed greater improvements on mental health symptoms (Toussaint, 2007). Surprisingly no increased intervention effect was found for alcohol or drug abuse in the TREM group. Both groups received the same exposure to substance abuse treatment so it was not surprising that improvements were noted in each group. However it was expected that the TREM group would corroborate other studies that looked

at trauma-informed treatment for co-occurring substance abuse and trauma, however improvements were statistically the same for both the TREM group and the TAU group. “Historically, substance abuse treatment providers have been concerned that ‘diluting’ substance abuse treatment by simultaneously addressing peripheral issues would exert a negative effect on primary substance abuse outcomes” (Toussaint, 2007, p. 891). “Our failure to detect group differences at follow-up interviews suggest that addressing trauma within a substance abuse treatment experience does not adversely impact substance use treatment effectiveness and does improve mental health functioning and trauma related symptoms” (Toussaint, 2007, p. 891).

### **CenteringPregnancy Care Model**

CenteringPregnancy care is a model developed about two decades ago in response to over crowding and limited time with obstetric patients in many city hospital obstetric clinics. CenteringPregnancy (CP) care is described as group prenatal care in which a licensed health care provider conducts prenatal visits for 8-12 mothers with similar gestational ages at the same time. Visits typically last from 90-120 minutes and the clinician and women have group discussions to answer questions that mothers may have regarding their pregnancy. The members of each centering cohort also serve as an informal peer support group for each other. The aim of the group model, according to Tanner-Smith is to reduce preterm and low birth weight, as well as fetal demise (Tanner-Smith, 2014). This study compared birth outcomes from the two treatment models of care, CP and traditional individual prenatal visits. Results were small when looking at CP group and gestational and birth weight adding only a third of a week to gestation and an average of 29 g overall. However, of the LBW, and preterm babies, the results showed significant benefits. There was an average of 2.56 weeks longer gestational age, and the babies weighed on average 368 g more (Tanner-Smith, 2014). This is a critical benefit for preterm babies as rapid development of major organs like the lungs have significantly more time to mature. Another study with a sample of 49 Hispanic women, 25 in traditional prenatal and postpartum follow-up care, and 24 in the CP care model with similar demographic backgrounds did not report significant differences in the two groups in any outcomes. However there were no preterm babies and only one baby born post dates, in the

combined numbers of infants born. Satisfaction with CP model was high with 87% of participants reporting they would choose CP again (Tanner-Smith, 2014).

A third study on CP, with a participant sample of 519 women looked at the application of the program model. “CenterPregnancy group care has been demonstrated to improve pregnancy outcomes. However there is likely variation in how the model is implemented in clinical practice, which may be associated with efficacy, and therefore variation, in outcomes” (Novick, 2013, p. 1). Analysis in this study found that there were certain barriers that effect how the model was implemented and sustained. Barriers included institutional constraints, provider preference for individual care, and administration’s lack of support for non-traditional models (Novick, 2013). Despite mixed reviews of results, could this model be effective, with slight modifications, for mothers in substance abuse treatment during pregnancy, especially in a residential setting?

This author’s notes that one critique residential treatment programs is the client is temporarily displaced to a very structured and hopefully supportive environment, yet when they return home they must return to all the stressors that were present before entering treatment. How may it be difficult to maintain sobriety in returning to pre-treatment setting? Having adequate follow-up and discharge plans for ongoing treatment is essential. What other types of models could help when the client returns to or remains in the home?

### **Home Visitation and Group Peer Support Model**

Home visitation models might be a helpful option for those women who cannot leave home to enter into substance use treatment for whatever reason, be it issues of childcare, personal safety if there is violence in the home, transportation, and cost issues, as well as whether or how often insurance will cover in-patient care. It is also extremely useful in getting a real-time picture of family dynamics at play and systems issues that might not otherwise be observed when services are provided outside the home. One model that the military is currently using in the U.S. is the New Parent Support Program (NPSP). It is a global program designed to help military families adjust to constant stressors. The program addresses, health, nutrition, early development, parenting and abuse and neglect prevention. “The program aims to

ensure that children have an opportunity for safe healthy relationship building with their parents. ‘We know that attachment is a critical piece of the first years of a child’s development.’ ‘We want to make sure that’s firmly formed...because it has a huge impact on how they [children] build trust with other people’” (Lyle, 2015, p. 1). Licensed registered nurses and social workers conduct weekly, or bi-weekly home visits with families that have children between the ages of 0-3 in their home. These licensed professionals use their extensive knowledge of infant developmental needs and parenting to help build nurturing relationships between parents and their children. Parents can schedule appointments at their convenience, and they receive one-on-one, confidential support in their home. In addition to home visits, the programs offer activities in the community that encourage new parents to get out of the house and create a network of support (Lyle, 2015). In a study conducted by Kelley, Schwerin, Farrar, and Lane, the Navy-NPSP was evaluated on four quality of life (QOL) questions: a) satisfaction with the program quality, b) how well the program met its primary objectives of reducing parenting stress, c) how well the NPSP met its reason for being (helping service members concentrate on their job), d) program impact on mission related outcomes such as (QOL), deployment readiness, and service member retention (Kelley, 2007). The result from this study showed that a majority of families report the *program quality* to be “much better” or “better than they expected.” Over 75% of program users rated the assessed outcomes of *helping to cope with parenting stress in appropriate ways* or *helping them improve their parenting skills* or *build a sense of community*, as “quite a lot” or “a great deal.” In terms of feeling able to *concentrate on my job*, or *NPSP shows concern for Sailors and their families* and *contributes to the health and safety of Sailors and their families*, over 90% of participants who took part in parenting classes, and home based visiting services, “agreed for “strongly agreed” (Kelley, 2007).

In a separate article by Sara Schmidt, participants from the NPSP in Shinnin, Netherlands were able to give voice to their experience of participating in the program. The following are some of their comments: “I remember feeling a bit trapped in my own home because I had a new baby and no support system, no contacts, no way to get around language and cultural barriers.” a new mom recounts. “I tried everything,” fretted one military mom, “[my baby] just wont drink milk.” She worried over her baby

until other mothers at the playgroup shared similar stories about their own children. “One of the biggest needs in this community is childcare, so we designed this group to offer fitness opportunities for parents without having to worry about child care while they workout.” report another mother. This group was able to start a stroller-walking group that included time with their babies while exercising, to fill this community identified need. A program Home Visitor comments on a new playgroup; “You can learn so much from other moms and other dads.”

My experience as a home visitor working for this program gave me the window into peoples’ lives that I would not otherwise have seen. I found myself providing a therapeutic relationship that parents could count on every week, and that was so important to these families that are displaced on average 6-8 times in the course of their soldier’s 20 year career. The strength of the program was its flexibility. Each military community has unique needs and each individual program was allowed to design itself around what was most pressing for families on that particular military base or post. Parents also were encouraged to help design and give input to programming that addressed their specific needs.

NPSP is also a worldwide program that shares best practices, successes and challenges. Individual programs were allowed to be as creative as they wanted, offering playgroups, child development classes, pregnancy education and birth preparation, lactation support, couples groups and deployment and PTSD support groups, depending on the needs in each specific community. Some programs have started community garden projects, taken field trips to explore the area that may be new to military families that move every 2-3 years, or organize walking or fitness groups as an outlet for stress.

One overall program challenge is the constant turn over in staff due to the fact that many of the program’s personnel are military spouses who move when their soldier is relocated to a new duty station. This makes institutional memory difficult. Sometimes incoming staff may want to implement changes that were at another NPSP that may or may not be the best fit in the new community. There also is a tendency to keep “reinventing the wheel.” Since the program is a Department of Defense Program that is contracted out to the service company every two years, there is also frequent turn over in the contracting company, making hiring and retaining staff, and salary and benefit stability an issue. The fact that the

program is government subsidized also may limit whether the program could be replicated in the private sector.

### **Potential Biases of This Thesis**

It should be noted, that although the author's experiences are a potential strength, they also creates potential biases that may be informed by my own feelings connected with these experiences. My experiences as a nurse and family advocate have clearly colored my personal feelings of wanting to support these mothers. However the same experiences have also showed me where we could be doing a much better job in that support of these amazingly resilient families.

Other possible biases could also exist based on the diversity of ethnicity, parenting styles, socioeconomic resources, gender identity, constructs of family, womanhood, and "good mothering" in the U.S. Additionally, an historical bias due to the passage of time since some of the trauma and attachment theories were conceptualized might also lead to bias. The author looks at these theories through the current contextual lens of present day, which may influence my understanding the intentions of the original theorist.

An extensive body of research has already been done in several aspects of the phenomenon that could inform the author's integrative approach to empowering this population, constituting strength of this conceptual methodology. However, one of the biggest limitation in this theoretical thesis was, the author was unable collect direct input from the actual population prior to the conceptualization of the thesis question. It would seem important to know what these women identify as strengths, areas for improvement and specific needs to achieve her optimal functioning as a mother. The author relied only on data, focus groups, and limited narrative input collected by others that was not specifically designed for looking at this phenomenon.

Other biases may be expressed in the ways research is interpreted as either creating a picture of crisis or strength depending on whether the information is used to promote or maintain systemic issues of marginalization and oppression. Often information is used to perpetuate stereotypes about individuals



rather than expose structural persecution of those “outside” what white privilege perceives to be “the” norm.

### **Need for Further Research**

The field of social work is often criticized for not meeting the rigorous confines of scientific inquiry, however due to the vast opportunities for diverse working environments, we have a unique and often liberal freedom to traverse the boundaries of disciplinary domains. With the growing acceptance of narrative qualitative data designs and methods, social workers, and other clinicians must not only conduct the expected verifiable quantitative research, but also gather information, experiential and narrative nature in order to ground data in the context of individual and systems functioning. This thesis brings together a large body of information informing clinicians about particular pieces of this phenomenon, yet there is still much to learn.

In review of findings conducted in 1999 by Howell, Heiser, and Harrington, lack of substance abuse treatment options for pregnant women was clearly documented. In the 1970’s NIDA began to sponsor some SU treatment programs developed specifically for women, however in the 1980’s, several studies documented the shortage of SU treatment services available to women, especially pregnant mothers. For example by 1979 there were only 25 programs nationwide providing treatment specific to treating women and that two thirds of all hospitals had no place to refer pregnant mothers with an addiction for treatment (Howell E. H., 1999). Do we really understand why there is a severe shortage of substance abuse treatment programs in general, never mind those design specifically for pregnant women, when we clearly have not been able to manage the numbers of those suffering from addiction in our country over the last century? What are the factors that prevent programs from being implemented or from continuing operation?

Other results of Howell’s findings showed that women who completed treatment had a greater likelihood of reducing substance use than those who do not. Keeping women in treatment is more successful when treatment is more intensive. “Studies that compare different types of treatment (for

example, residential verses outpatient) are inconclusive—most show little or no difference in outcomes by type of treatment” (Howell E. H., 1999, p. 210). Lack of randomized assignment to treatment type and small sample size was seen as a weakness of many comparisons. Another review of 130 treatment and prevention programs conducted by the Center for Substance Abuse Prevention’s Pregnant and Postpartum Women and their Infants (PPWI) Demonstration Program that received money in the form of grants to bolster options, suggested that the PPWI program strengthened the capacity of service delivery system. Funding was provided for a large number of small, women-centered programs for treatment across the nation. Results from data collected from PPWI women revealed that about 40% were drug and alcohol free at the time of delivery, and that they sought intermediate or adequate care at 43% and 35% respectively. However, lack of any comparison groups limited conclusions that could be made about treatment effectiveness (Howell E. H., 1999).

## **Conclusion**

It is nearly impossible to talk about trauma without understanding how trauma affects basic attachment schemas both in infancy and well into adulthood. Attachment truly *is* a protective factor and the antidote against trauma. In essence they are simply the dichotomous bookends of one single theory. The author finds an interesting parallel between the theoretical split of trauma and attachment as good and bad objects of a single theory, much like the split of the good and bad objects described by Klein. Re-integrating these two theories in the clinical setting might be a model that creates the more holistic biopsychosocial-existential approach, for it is simply not enough to identify how trauma affects the client; attachment is also necessary to begin to repair it. Neuroscience is perhaps the catalyst that can allow theoretical re-integration to happen.

Working with women who have trauma histories and substance use requires an empathetic approach that views the mother as an asset not a risk to her infant. The trauma and attachment informed clinician is particularly well equipped to assist these mothers in relating to their infants. They can help the mother, through modeling and eliciting interactions with her baby; begin to accept that she is indeed worthy of love and capable of giving and receiving it.

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