



VENTURA COUNTY  
BEHAVIORAL HEALTH  
A Department of Ventura County Healthcare Agency

March 2020

**TRAUMA-INFORMED SERVICES FOR  
PERINATAL SUBSTANCE USE TREATMENT**

From Research to Clinical Practice  
A New Start for Moms (ANSFM)

Presented by Linda Gertson, Ph.D.

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**The A New Start for Moms (ANSFM) Study**

This presentation will:

- Describe the ANSFM perinatal substance use treatment program which is embedded in the Substance Use Services Division of Ventura County Behavioral Health.
- Discuss our ongoing clinical research while simultaneously presenting the current published literature supportive of this study.
  - This discussion will include:
    - Why we do it (the research questions)
    - How we do it (the measures we utilize)
    - What we find (research results to date)
    - How we use the results for program improvement



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**A New Start for Moms (ANSFM)**

Program description:

- Department of Health Care Services Drug Med-Cal Certified site:
  - Outpatient Program
  - Intensive Outpatient Program
  - Medication Assisted Treatment Services
  - Co-Occurring Mental Health Services



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**ANSFM Target Presentation**

- Pregnant and substance using; or
- Parenting and substance using, with a child(ren) ages birth through 17.
- Parenting also includes a woman who is attempting to regain legal custody of her child(ren).

**Priority admission:**

- Pregnant injection drug users;
- Pregnant substance users;
- Parenting injection drug users; and
- Parenting substance users.



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**ANSFM Program Services**

Program Services Include:

- Assessment
- Individual Counseling
- Parent Education
- Trauma-Informed Group
- Relapse Prevention
- Recovery Services
- Family Therapy
- Case Management
- Medication Services



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**ANSFM Program Services**

- Basic health screening and women's care
- On-site child watch
- HIV education and STD education class
- Referrals to other helpful resources
- Transportation
- Referral to Public Health Nurse
- On-site drug screening
- Medication Services
- Mental Health Services: Psychosocial Assessments and Individual Psychotherapy *(added due to results of the study)*



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### ANSFM Program Services

- “Mindful Parenting” Groups (MPG) *(added due to results of the study)*
  - MPGs are designed to target parental reflective functioning (mentalization) with at-risk and underserved populations, including birth parents with child welfare involvement. MPGs bring together infants, toddlers or preschoolers at risk for insecure or disorganized attachments along with their parents for the purpose of promoting childhood attachment security. MPGs provide an engaging group environment that allows parents to slow down, reflect and practice mindful observation about their own emotional experiences as well as those of their young children.
  - It is important to differentiate MPGs from “parent education” groups which are didactic in nature and do not include the offspring with the mother.



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### ANSFM Program Services

- The data reported in this presentation reflect study results prior to the addition of MPGs in November 2019. Over the course of the next year we will be researching whether the clients who participate in the MPGs exhibit better outcomes compared to “treatment as usual” (no MPG).



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### Program Challenges

- High attrition rates – failure to complete treatment; failure to get follow-up measures (38 percent of clients failed to complete at least 90 days of treatment)
  - Addiction as a chronic, relapsing disorder
  - Loss of motivation for treatment when CFS case closes or loss of child custody in court proceeding
- Existence of multiple stressors in mother’s life
  - Legal problems (CFS case and/or other legal problems)
  - Mother does not have legal custody
  - Homelessness/or other unstable housing/poverty
  - Need to find employment
  - Domestic violence/other relationship conflicts



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### ANSFM Client Demographic Data

The majority of ANSFM clients are referred by Children and Family Services (CFS) and have a history of previous CFS involvement.

Average Age of ANSFM Client	Ethnicity	Average Number of Children	Average Age of First Pregnancy	Percent Lost Custody of at Least One Child	Percent Lost Parental Rights of at Least One Child
30.7 (range 18-54)	Hispanic 48% White 37% Mixed 11% Other 4%	2 (range 1-10)	22 (range 13-41)	71%	20%



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### ANSFM Client Treatment History Data

Data reveals repeated episodes of treatment indicative of the chronicity of addictive disorders.

Percent With Previous ANSFM Admissions	Percent With Previous Other SUD Services
39%	67%



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### ANSFM Client Drug Use Data

Primary Drug Of Choice (Average Age of Onset is 18.5 Years)

DRUG	PERCENT
Methamphetamine	66%
Heroin	23% (increase of over 50% since 2015)
Alcohol	14%
Marijuana	13%

First Drug Used (Average Age of Onset is 13.0 Years)

DRUG	PERCENT
Methamphetamine	6%
Heroin	Less than 1%
Alcohol	32%
Marijuana	61% (most frequent first drug)



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### A Note Regarding Early Onset Use of Marijuana

- The human brain continues to develop from before birth into the mid-20s and is vulnerable to the effects of addictive substances (Levine, et al., 2017).
- The recently published “U.S. Surgeon General’s Advisory: Marijuana Use and the Developing Brain” reports that frequent marijuana use during adolescence is associated with:
  - Changes in the areas of the brain involved in attention, memory, decision-making, and motivation.
  - Impaired learning: Chronic use is linked to declines in IQ and school performance that jeopardizes professional and social achievements, and life satisfaction.
  - Other substance use



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### A Note Regarding Early Adverse Experiences and Use of Opioids

- Of particular importance to the ANSFM clients is a study conducted by University of California in Irvine published in the January 2020 volume of *Molecular Psychiatry* that found a relationship between early life adversity and opioid addiction. According to this study, individuals with a history of such experiences are disproportionately prone to opioid addiction especially in females.



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### ANSFM Study

**Research Question Number One**  
*(Do ANSFM Clients have a History of Childhood Maltreatment?)*

**WHY WE DO IT**

To explore whether the women receiving services at ANSFM have a significant history of childhood maltreatment compared to the general population.



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### Research Question Number One

“Early maltreatment has enduring negative effects on brain development. Our brains are sculpted by our early experiences. Maltreatment is a chisel that shapes a brain to contend with strife, but at the cost of deep, enduring wounds. Childhood abuse isn’t something you ‘get over.’ It is an evil that we must acknowledge and confront if we aim to do anything about the unchecked cycle of violence in this country.”

Martin Teicher, MD, PhD  
*Scientific American*



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### Research Question Number One

“Neglect and abuse during early life may cause bonding systems to develop abnormally and compromise capacity for rewarding interpersonal relationships and commitment to societal and cultural values later in life.”

C. A. Pederson  
*Annals of the New York Academy of Science*



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### Research Question Number One

“A brain pre-set to be easily triggered into a stress response is likely to assign a high value to substances, activities and situations that provide short-term relief and less interest in long-term consequences. In contrast, situations or activities that for the average person are likely to bring satisfaction are under-valued because, in the addict’s life, they have not been rewarding – for example, intimate connections with family. This shrinking from normal experience is also an outcome of early trauma and stress...”

Gabor Mate, MD  
*Journal of Restorative Medicine*



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**Research Question Number One (Literature Review)**

A review of literature reveals that childhood emotional abuse and neglect and its consequences are now recognized as a common form of maltreatment and contribute significantly to adult dysfunction.

- “Emotional abuse and neglect may be powerful predictors of adult emotional functioning that should not be overlooked due to the more subtle nature of this form of trauma” (Spertus, et al. 2003, p. 1257).



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**Research Question Number One (Literature Review)**

- Adverse development related to childhood neglect may be manifested in delays or deficits of behavioral and emotional regulation, cognitive and psychosocial function, antisocial behaviors and poor academic achievement (DeBellis, 2005).
- Emotional neglect is prevalent but often unreported and is one of the most predictively potent maltreatment types associated with psychological distress (Hanson, et al., 2015)



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**Research Question Number One (Literature Review)**

- Experiencing childhood emotional abuse and neglect increased the odds of adult major depression, dysthymia, mania, any mood disorder, panic disorder, social phobia, generalized anxiety and PTSD (Taillieu, et al., 2016).
- Adolescent poly drug users were found to have a greater prevalence of all types of maltreatment but especially abuse and emotional neglect (Alvarez-Alonso, et al., 2016).
- Emotional abuse emerged as the only maltreatment type to uniquely contribute to internalizing difficulties as well as trauma-related symptomology (Cecil, et al., 2017)



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**Research Question Number One (Literature Review)**

- Neglect of children was 60% more likely when their mother had a history of childhood neglect. A 300% increase in multiple-type maltreatment occurred when mothers had a history of multiple-type maltreatment (Bartlett, et al., 2017).
- A history of childhood neglect negatively influenced parents’ capacities to regulate their emotions and behaviors which, in turn, may contribute to insensitive or even abusing caregiving (Buisman, et al., 2018).
- Each of the 10 types of ACEs were significantly associated with adult interpersonal difficulties. Emotional abuse and emotional neglect explained more variability in these difficulties (Poole, et al., 2018).



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**ANSFM Study**

*Research Question Number One (Do ANSFM Clients have a History of Childhood Maltreatment?)*

**HOW WE DO IT**

Administer the Adverse Childhood Experiences (ACE) Scale to ANSFM clients and compare with ACE data from the original study conducted by Kaiser and the Centers for Disease Control.



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**Adverse Childhood Experiences (ACE) Scale**

- The original ACE study conducted in 1995 and 1996 was based at Kaiser Permanente’s San Diego Health Appraisal Center and conducted in collaboration with the Centers for Disease Control. The ACE scale is a 10-item measure that assesses various types of traumatic experiences before the age of 18.
- The results of the ACE responses were compared with the patients’ medical records to ascertain whether there is a relationship between early adverse events and adult health.



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### Adverse Childhood Experiences (ACE) Scale

ACE contents:

- Three categories of childhood abuse: psychological abuse, physical abuse and contact sexual abuse
- Four categories of exposure to household dysfunction during childhood: exposure to substance abuse, mental illness, violent treatment of mother or stepmother, and criminal behavior.



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### Adverse Childhood Experiences (ACE) Scale

Emotional Abuse

- Did a parent or other adult in the household often or very often swear at you, insult you, put you down, or humiliate you? OR Act in a way that made you afraid that you might be physically hurt?

Emotional Neglect

- Did you often or very often feel that no one in your family loved you or thought you were important or special? OR Your family didn't look out for each other, feel close to each other, or support each other?



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### Adverse Childhood Experiences (ACE) Scale

Kaiser and the CDC found that Adverse Childhood Experiences were related to adult health problems including:

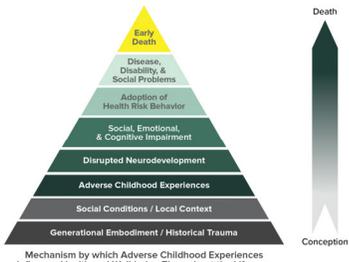
- Alcoholism/Drug Dependence
- Depression
- Suicide Attempts
- Smoking
- High Risk Sexual Behavior
- Poor Health Related Quality of Life
- Chronic Obstructive Pulmonary Disease
- Obesity
- Fetal Death
- Ischemic Heart Disease
- Liver Disease, Cancers
- Intimate Partner Violence



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### The ACE Pyramid



Mechanism by which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan

Content Source: Centers for Disease Control and Prevention  
National Center for Injury Prevention and Control. *Science of Disaster Response*



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### ACE Results (Kaiser Study)

Adverse Childhood Experiences (ACE) (Felitti, et al., Anda, et al., 2006)

- Compared to individuals who had no exposure to adverse childhood experiences, those with exposure to four or more categories had a 4 to 12-fold increased for alcoholism, drug abuse, and depression.
- For persons with 4 or more ACEs, the risk of smoking, alcoholism, illicit drug use, and injection drug use were increased 1.8, 7.2, 4.5 and 11.1, respectively.
- For persons with 4 or more ACEs, the risk of early intercourse, promiscuity, and sexual dissatisfaction were increased 6.6, 3.6, and 2-fold, respectively.



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### Effects of Childhood Maltreatment (Kaiser)

- Women who reported four or more types of abuse were 1.5 times more likely to have an unintended pregnancy at or before the age of 20.
- Farrugia (2011) found that individuals who experienced childhood trauma had a significantly earlier age of intoxication and had used significantly more drug classes in their lifetime than those with no experience of childhood trauma.
- Dietz, et al. (2011) and Hillis, et al. (2011) found a strong dose-response link between number of childhood adverse experiences and adolescent pregnancy.
- "Abuse or household dysfunction may influence a woman's feelings of control or power in sexual relationships and may lead to difficulty in negotiating contraceptive use with a partner" (Dietz, et al., 2011, p. 1363).



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### Effects of Childhood Maltreatment (Kaiser)

- Teicher and Samson (2013) found that maltreated individuals with depression, anxiety and substance use disorder had an earlier age of onset, greater symptom severity, more comorbidity, and increased risk for suicide and poorer treatment response than individuals without a history of childhood maltreatment.
- These authors propose that individuals with childhood maltreatment constitute a “critically distinct subtype” of depressive, anxiety and substance use disorders and recommend adding the specifier “With Maltreatment History” or “With Early Life Stress” to Axis I disorders.



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### ANSFM Study

**Research Question Number One**  
*(Do ANSFM Clients have a History of Childhood Maltreatment?)*  
**WHAT WE FIND**

The following slides present ACE data from the ANSFM clients compared to the data collected from the Kaiser ACE study.



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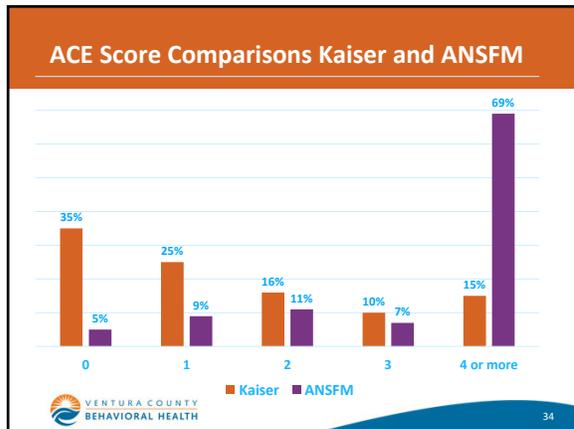
Comparison of Prevalence of Individual Adverse Childhood Experiences (women only)

ACE Category		Original Kaiser ACE Study	ANSFM ACE Study
Abuse	Emotional Abuse	13.1%	55.8%
	Physical Abuse	27.0%	41.6%
	Sexual Abuse	24.7%	47.8%
Neglect	Emotional Neglect	16.7%	55.8%
	Physical Neglect	9.2%	26.5%
Household Dysfunction	Mother Treated Violently	13.7%	28.3%
	Household Substance Abuse	29.5%	61.9%
	Household Mental Illness	23.3%	41.6%
	Parental Separation or Divorce	24.5%	73.5%
	Incarcerated Household Member	5.2%	35.4%

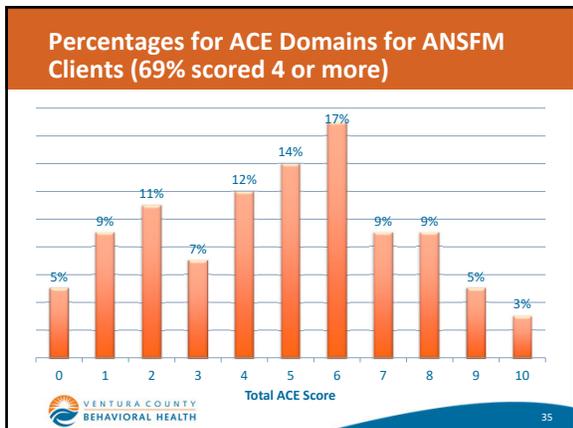


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### Research Question Number One Summary

- As the slides illustrate this study found a high endorsement of emotional abuse and emotional neglect as early adverse childhood experiences, even greater than sexual and physical abuse.
- In addition, endorsement for all items, as well as for endorsement of greater than 4, was substantially higher than the original Kaiser study.
- According to the National Scientific Council on the Developing Child, severe neglect appears to be an even greater threat to health and development as physical abuse including more cognitive impairments, language deficits, academic problems and deficits in peer interaction.



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### Research Question Number One Summary

- The results of the ANSFM study are consistent with those of Cecil, et al. (2017) reported above which found a unique contribution of emotional abuse to adult symptomatology and the need for greater attention to this form of childhood maltreatment in research, policy and clinical practice.
- In addition, the ANSFM study results support the suggestion by Bartlett, et al. (2017) for attending to types of childhood abuse and neglect experienced by mothers and their conclusion that attention to types of abuse could result in an enhanced approach to prevention of trans-generational abuse.



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### Research Question Number One Summary

Early childhood adversity can increase the risk for addiction:

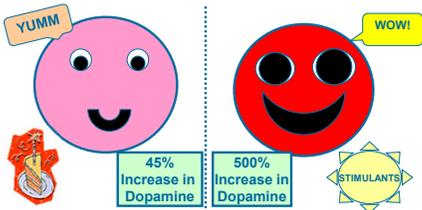
- Dysregulation of the stress response system of the hypothalamic-pituitary-adrenal (HPA) axis and increase of cortisol resulting in sensitization to stressful situations.
- Alteration of the mesocorticolimbic dopamine system (brain's reward system) leading to increased vulnerability to addiction. Because psychoactive substances activate this system so powerfully and reliably, they differ from conventional reinforcers in that their stimulant value is significantly greater than natural reinforcers.
- The prefrontal cortex plays an important role in decision-making and emotional regulation. Maltreatment-related alterations in these structures affects the brain to enhance risk for addiction by diminishing the capacity to regulate impulses, emotions and mindfulness in social situations.



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### Conventional Reinforcers versus Stimulant Drugs




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"I don't live in the past, the past lives in me."

Holocaust survivor  
Yehuda, Lehrner & Bierer  
*Environmental Epigenetics*



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### ANSFM STUDY

**Research Question Number Two**  
*(Do ANSFM Clients Experience Abuse in Adulthood?)*  
**WHY WE DO IT**

To explore whether ANSFM clients experience adult abuse and whether there is a correlation with childhood abusive experiences.



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### Research Question Number Two (Literature Review)

- In an article titled "How Does Trauma Beget Trauma," Smith, Davis & Fricker-Elhai (2004) suggest that early childhood abuse impairs the consolidation of emotional and/or social-cognitive skills which may impair the individuals ability to accurately assess the dangerousness of a situation or individual. Their study found that adult victims of childhood abuse reported greater perceived benefits and lower perceived risks associated with risky sexual behavior, illicit drug use, and heavy drinking.



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### Research Question Number Two (Literature Review)

- Individuals with multiple forms of childhood abuse and neglect experience higher numbers of lifetime traumas, adult psychological abuse and victimization experiences. (Widom, Czaja & Dutton, 2008, 2013).
- Nurius, et al. (2015) suggest that early life adverse experiences damage the developing brain, contribute to maladaptive health and behavioral habits and limit the formation of protective relationships. Exposure to adult adverse events may increase relationship problems, residential instability, disability and involvement with the criminal justice system.



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### Research Question Number Two (Literature Review)

- Mersky, Janczewski and Topitzes (2018) developed the Adult Experiences Survey to assess “adverse grownup experiences” (AGEs) which they matched to items on the ACE. They found that the most prevalent AGE was partner emotional abuse, partner incarceration and partner physical abuse. A significant association was found between the number of ACEs and AGEs.



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### ANSFM Study

**Research Question Number Two (Do ANSFM Clients Experience Abuse in Adulthood?)**

**HOW WE DO IT**

The “Adult Adverse Experiences Scale” (AAE)

- Prior to the scale developed by Mersky, Janczewski and Topitzes described in the previous slide, our group developed the AAE (2016). We created this scale through modification of the World Health Organization’s “International Violence Against Women Survey” to create domains which matched those of the ACE to compare “type to type” adverse experiences.



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### ANSFM Study

**Research Question Number Two (Do ANSFM Clients Experience Abuse in Adulthood?)**

**WHAT WE FIND**

The following slides present AAE data from the ANSFM clients.



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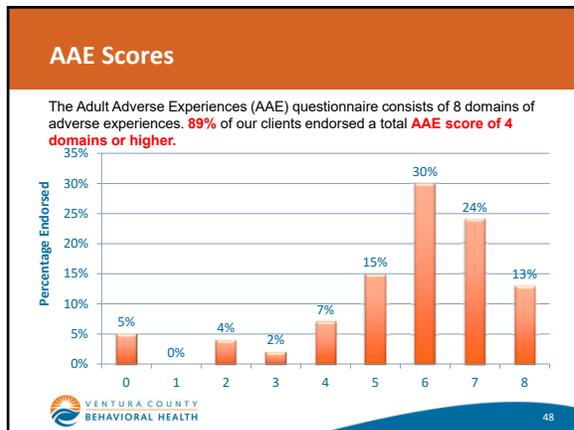
### Adult Adverse Experiences (AAE) Results

Category	Percent	
Abuse	Emotional Abuse	88.4%
	Physical Abuse	83.0%
	Sexual Abuse	55.4%
Neglect	Emotional Neglect	67.0%
Household Dysfunction	Household Substance Abuse	85.7%
	Household Mental Illness	70.0%
	Separation or Divorce	34.8%
	Incarcerated Household Member	86.6%

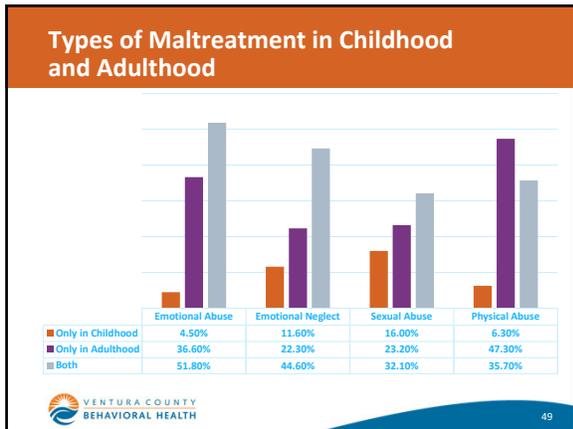


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### Correlations Between Types of Abuse Childhood and Adulthood

CHILDHOOD	ADULTHOOD	CORRELATION
Emotional Abuse	Emotional Abuse	92%
Physical Abuse	Physical Abuse	85%
Sexual Abuse	Sexual Abuse	68%
Emotional Neglect	Emotional Neglect	80%

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### Research Question Number Two Summary

- As shown in the preceding table, childhood adverse experiences are highly correlated with such experiences in adulthood indicating the importance of attention to childhood maltreatment and its impact on adult interpersonal relationships. Such unresolved experiences may lead to the dysfunctionality we observe in ANSFM clients such as continued substance abuse and problematic parenting behavior.
- For this particular cohort the data indicates a higher rate of physical abuse in adulthood than only in childhood or in both childhood and adulthood. This suggests that, as adults, the ANSFM clients engage in relationships with a significant amount of interpersonal violence.

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### ANSFM Study

**Research Question Number Three**  
*(What are Common Factors Attributed to Substance Use Relapse?)*

**WHY WE DO IT**

Addiction is considered a chronic relapsing disease. Common risk factors for relapse can be categorized as:

- Stress-induced (“don’t get too hungry, too angry, too lonely, too tired”)
- Cue-induced (“stay away from people place, and things” reminiscent of substance use)

We examine what clients report as their risk factors to assist with relapse prevention strategies.

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### ANSFM Study

**Research Question Number Three**  
*(What are Common Factors Attributed to Substance Use Relapse?)*

**HOW WE DO IT**

We created the “Relapse Scale.” This instrument asks the clients to indicate which factors were related to their most recent relapse. The scale consists of 40 items across 7 domains (struggling with emotions, interpersonal relationships, hardship, cue-induced, substance use of others, victimization, and medication-related).

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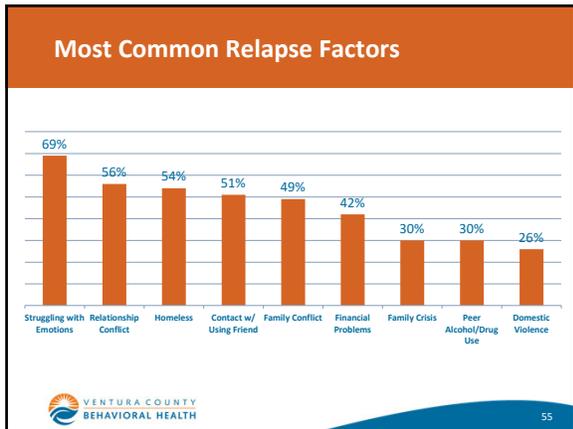
### ANSFM Study

**Research Question Number Three**  
*(What are Common Factors Attributed to Substance Use Relapse?)*

**WHAT WE FIND**

The following slides describe the relapse factors most frequently endorsed by ANSFM clients.

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### Research Question Number Three Summary

- Items endorsed on the Relapse Scale support the concept of “stress-induced and cue-induced craving” as common risk factors for relapse to substance use.
- Close to 70% of the clients endorsed emotional problems as one of the top stressors leading to relapse to substance use.
- Conflict in interpersonal relationships is also frequently endorsed as contributing to relapse.
- Over 50% of the clients endorsed homelessness as a relapse factor indicative of the unstable life situations frequently encountered by the ANSFM clients.
- These findings are consistent with those of McCabe, et al. (2016) which showed that stressful life events are associated with reductions in the chance of becoming or remaining abstinent for at least three years.

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### Research Question Number Three Summary

- Mental Health services (comprehensive psychosocial assessments and individual psychotherapy) have been added to ANSFM as a result of the findings for Research Questions Number One through Three. These services are provided by a Licensed Clinical Psychologist and Doctoral Clinical Practicum students.
- Psychosocial assessments confirm the existence of multiple episodes of trauma experiences sustained by these clients over their lifespan.
- The most frequent psychiatric diagnoses are: PTSD and depressive and/or anxiety disorders.
- Functional impairments are related to unstable living situations, incomplete education, legal problems and unemployment.

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### ANSFM Study

**Research Question Number Four**  
*(Do ANSFM Clients have Deficits in Interpersonal Skills?)*

**WHY WE DO IT**

Multiple studies have found that childhood maltreatment is a predictor of interpersonal difficulties across the lifespan. The data from our study indicate that our clients have a significant amount of interpersonal problems continuing through adulthood (Research Question Number Two).

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### Research Question Number Four (Literature Review)

- Children who experience neglect demonstrate more severe cognitive and academic deficits, social withdrawal and limited peer interactions (Hildyard & Wolfe, 2002).
- Poole, Dobson & Pusch, (2018) found that although all types of childhood maltreatment was associated with interpersonal problems in adulthood, emotional abuse and neglect explained more variability in these difficulties.

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### ANSFM Study

**Research Question Number Four**  
*(Do ANSFM Clients have Deficits in Interpersonal Skills?)*

**HOW WE DO IT**

We administer the Inventory of Interpersonal Problems-32 (IIP-32) at the time of admission and at the 90-day follow up (Horowitz, et al, 2003). This inventory consists of 32 items which assess difficulties on eight dimensions of interpersonal problems as reflected on the following slide. Items are rated on a 5-point Likert scale from 0 (“not at all”) to 4 (“extremely”). T-Scores >60 are above average and indicate interpersonal difficulties.

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### ANSFM Study

**Dimensions of IIP-32**

- Domineering/Controlling (controlling or manipulative)
- Vindictive/Self-Centered (anger, irritable, combative)
- Cold/Distant (minimal feeling of affection for and little connection with others)
- Socially Inhibited (feelings of anxiety, timidity, or embarrassment in the presence of others)
- Nonassertive (lack of self-confidence and self-esteem)
- Overly Accommodating (an excess of friendly submissiveness)
- Self-Sacrificing (excessively affiliative)
- Intrusive/Needy (friendly dominance, difficulty being alone)



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### ANSFM Study

**Research Question Number Four  
(Do ANSFM Clients have Deficits in Interpersonal Skills?)**

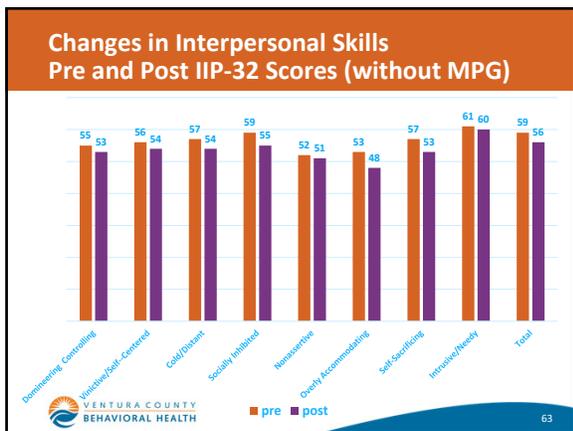
**WHAT WE FIND**

The following slide reflects pre and post scores on the IIP-32.



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### Research Question Number Four Summary

- In general, overall scores were lower than expected with only “intrusive/needy” greater than average. According to Horowitz, et al. (2003), this particular score appears to be related to a “preoccupied” attachment style. This maternal attachment style reflects behavior that is unpredictable and insensitive to the emotional needs of the child.
- In general, results indicate a slight decrease in all scores at the 90-day follow up showing some improvement in interpersonal skills.



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### ANSFM Study

**Research Question Number Five  
(Do ANSFM Clients have Problems with Emotion Regulation?)**

**WHY WE DO IT**

Both early onset/repetitive trauma and substance abuse contribute to deficits in emotion regulation. The ability to effectively regulate one’s emotions is a critical component of healthy social functioning and mental health. Emotion regulation influences interpersonal interactions by assisting in the interpretation of internal and social cues. Emotion dysregulation is linked to many psychiatric disorders including substance abuse.



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### Research Question Number Five (Literature Review)

- Emotion dysregulation is associated with a childhood history of neglect, physical and sexual abuse (Kim & Cicchetti, 2010).
- Burns, Jackson and Harding (2010) found that emotional abuse was the most powerful predictor of emotion dysregulation.
- Banducci, et al. (2014) found that emotional abuse predicted emotion dysregulation above sexual and physical abuse.
- A study by Madavia, et al. (2016) showed that emotional abuse was significantly related to substance use above and beyond the effects of physical and sexual abuse. They suggest that incorporating emotion regulation training into SUD treatment protocols may help enhance treatment effectiveness.



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### ANSFM Study

**Research Question Number Five**  
*(Do ANSFM Clients have Problems with Emotion Regulation?)*  
**HOW WE DO IT**

We administer the Difficulties in Emotion Regulation Scale (DERS-18) at the time of admission and at the 90-day follow up. This scale is 18-item self report questionnaire which measures emotion dysregulation with six subscales as described on the following slide (Victor & Klonsky, 2016). Items are rated on a 5-point scale, from 1 (almost never) to 5 (almost always). Each subscale consists of 3 items. The highest score for each subscale can be 15. Higher scores reflect greater emotion dysregulation.



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### ANSFM Study

**DERS subscales:**

- Awareness (lack of awareness of one’s emotions)
- Clarity (lack of clarity about the nature of one’s emotions (clarity))
- Goals (lack of ability to engage in goal-directed activities during negative emotions)
- Impulse (lack of ability to manage one’s impulses during negative emotions)
- Nonacceptance (lack of acceptance of one’s emotions)
- Strategies (lack of access to effective emotion regulation strategies)



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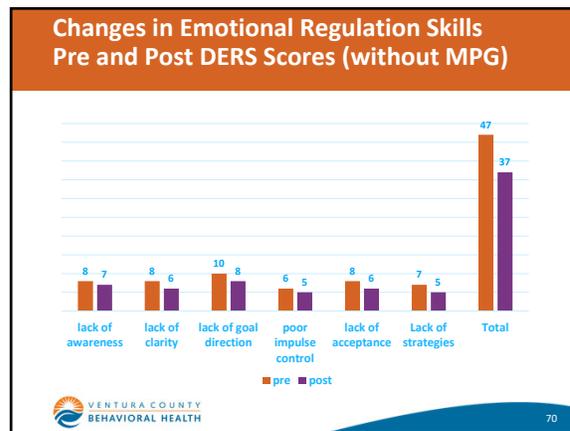
### ANSFM Study

**Research Question Number Five**  
*(Do ANSFM Clients have Problems with Emotion Regulation?)*  
**WHAT WE FIND**

The following slide reflects pre and post scores on the DERS.



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### Research Question Number Five Summary

- The results of the DERS suggest that the ANSFM clients have difficulty with setting goals during negative emotional states. Awareness, clarity and acceptance of emotions is also problematic in this cohort. These results should not be surprising given the empirical data demonstrating a relationship between childhood maltreatment and the inability to regulate emotions.
- As with the IIP-32, in general, results indicate a slight decrease in all scores at the 90-day follow up showing some improvement in emotion regulation.



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### ANSFM Study

**Research Question Number Six**  
*(Do ANSFM Clients have Deficits in Mentalization?)*  
**WHY WE DO IT**

Early onset substance abuse adversely impacts brain development especially prefrontal cortical functions which are important for executive functioning and mentalization. Targeting mentalization should improve maternal caregiving behavior by reducing emotion dysregulation in general and which may be triggered during stressful parenting situations.



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**Research Question Number Six (Literature Review)**

- Berthelot (2015) report that 83% of infants of abuse and neglected mothers were classified as insecure. The study found an association between mentalization regarding trauma (the mother’s capacity to consider traumatic experiences and their impacts in psychological terms) and infant attachment disorganization.
- Rutherford, et al. (2015) reports that mothers who have difficulty with mentalizing about their infants’ emotions may be less able to tolerate infant affective signals of distress.



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**Research Question Number Six (Literature Review)**

- Mothers with repeated trauma and substance abuse are at greater risk for poor mentalization and have difficulty mentalizing the needs, emotions and behaviors of their children (Handeland & Kristiansen, 2017).
- Hakansson , et al. (2018) found that childhood emotional abuse was related to low parental reflective functioning suggesting that this form of abuse is harmful for the development of mentalizing capacities.



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**Research Question Number Six (Literature Review)**

- Schultheis, Mayes and Rutherford (2019) found that parental difficulties with emotion regulation were significantly associated with poor mentalization. They suggest that targeting emotion regulation could promote mentalization between mother-child interactions.



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**ANSFM Study**

*Research Question Number Six (Do ANSFM Clients have Deficits in Mentalization?)*

**HOW WE INTEND TO DO IT**

Administration of the Reflective Functioning Questionnaire and the Parental Reflective Function Questionnaire. Comparison of scores at time of intake with scores on 90-day follow up.



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**Research Question Number Six**

- Fonagy, et al. (2016) developed the Reflective Functioning Questionnaire (RFQ) an 8-item self-report measure related to states of mind ranging from “Strongly Disagree” to “Strongly Agree.” Reflective functioning (RF) is the capacity to interpret both the self and others in terms of internal mental states. RF is the overt measure of mentalization. The authors describe two types of RF impairment: hypomentalizing (an inability to consider complex models of one’s own mind and that of others) and hypermentalizing (a tendency to develop inaccurate models of the mind of oneself and others).



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**Research Question Number Six**

RF is divided into two different “styles.”

- Uncertain RF style inhibits RF due to a concrete, rigid way of mentalizing (hypomentalizing).
- Certain RF style makes individuals too certain that their own view of the world is the only valid one which results in failure to mentalize about others’ states of mind (hypermentalizing).



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**Research Question Number Six**

- Luyten, et al. (2017) developed the Parental Reflective Functioning Questionnaire (PRFQ). PRF is the capacity to interpret behavior of the parent themselves and their child in terms of mental states. The PRFQ is an 18-item self-report measure related to understanding the states of mind of the child ranging from “Strongly Disagree” to “Strongly Agree.”



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**ANSFM Study**

*Research Question Number Seven  
(Will Addition of Mindful Parenting Groups  
Improvement Client Outcomes?)  
WHY WE DO IT*

Low maternal mentalization is linked with maladaptive parenting behavior. Such mothers have difficulty in perceiving and responding to her child’s signals of emotional distress. Interventions targeting mentalization may foster improvement in maternal care. Groups which emphasize the important of the mother-child dyad are now considered to be important for women with histories of childhood maltreatment and substance abuse.



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**Research Question Number Seven  
(Literature Review)**

- In a series of studies Suchman, et al. (2008, 2010 & 2011) examined the results of the “Mothers and Toddlers Program” (MTP) an intervention similar to Mindful Parenting. Following 12 weeks of treatment mothers showed meaningful shifts toward more balanced representations of caregiving and an increased capacity for mentalization which was associated with improvement in maternal behavior with their child (ensure child’s safety, socially engage with child, maximize opportunities for interaction, and play affectionately).



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**Research Question Number Seven  
(Literature Review)**

- Paris, Herriott, Hold and Gould (2015) stress the importance of interventions that target the mother-child dyad due to the complexities of maternal substance abuse, for example, significant maternal histories of trauma, co-occurring mental health disorders, neurobiological factors related to addiction, prenatal substance use and impaired maternal ability to understand and reflect on her child’s internal experiences (mentalization). This constellation of problems can impair the ability of the mother to provide a secure attachment base for her child.



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**Research Question Number Seven  
(Literature Review)**

- “This type of intervention can go beyond parenting classes by recognizing the challenges of initiating changes in parenting practices, and is important when working with families who are impacted by co-occurring substance use disorders and mental illness, often compounded by trauma” (Paris, Herriott, Holt & Gould, 2015, p. 214).



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**ANSFM Study**

*Research Question Number Seven  
(Will Addition of Mindful Parenting Groups  
Improvement Client Outcomes?)  
HOW WE INTEND TO DO IT*

We intend to compare treatment outcomes between clients who participate in MPG with those who do not (“treatment as usual”) on the following measures:

- IIP-32
- DERS-18
- RFQ
- PRFQ

We will also analyze the interaction of childhood maltreatment, adult maltreatment, interpersonal skills, emotion regulation and mentalization.



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### Discussion

- The results of the ANSMF study support findings of the previous body of literature regarding the prevalence of childhood emotional maltreatment, i.e. emotional neglect and emotional abuse, as common forms of childhood maltreatment.
- Results of the present study also clearly support the previous research which describes the correlation between adverse childhood experiences and adult dysfunction, including deficits in emotion regulation, psychosocial functioning, interpersonal conflict, difficulty setting appropriate boundaries with others, substance dependence and comorbid psychiatric pathology, particularly anxiety and depressive disorders.

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### Discussion

- This is the first study which attempted to draw a correlation among the following variables: specific domains of childhood adverse experiences with those of specific adult adverse events; the association with adult deficits in interpersonal skills, emotion regulation and substance abuse; and an analysis of factors which increase potential for alcohol/drug relapse.
- Contemporary research suggests that early adverse experiences results in a cascade of biological and psychological consequences which contribute to deficits in self-regulation, inability to form healthy attachments, poor coping strategies, early onset of substance abuse, adult pathology including psychiatric and substance use disorders and risk for relapse. These deficits can have a negative impact on parental behavior and contribute to transgenerational abuse and neglect. The current study supports this hypothesis as illustrated in the following slides.

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### Cycle of Dysfunction

- Childhood Adverse Experience**
  - History of multiple forms of childhood maltreatment
  - Most frequently endorsed items include emotional abuse/neglect
  - Unstable family environment
- Attachment**
  - Caregivers may have unresolved trauma from own childhood and are unable to provide appropriate parental reflective functioning
  - Insecure attachment with caregivers
  - Child experiences repeated trauma
- Emotion Regulation**
  - Underdeveloped emotion regulation skills
  - Impaired self-care and development of interpersonal skills
  - Deficits in mentalization

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### Cycle of Dysfunction (continued)

- Early Onset Of Drug Use**
  - Average age of onset of drug use is 13
  - Increased problems with emotion regulation
  - Inhibited impulse control; poor judgment; cognitive deficits; impaired development of interpersonal skills
  - Risk for onset of psychological disorders and interactive effects of substances of abuse
- Adult Adverse Experience**
  - Engagement in adult abusive relationships/repetitive trauma
  - Engagement in high risk behaviors
  - High correlation between childhood emotional abuse and adult emotional abuse
- Continued Substance Abuse**
  - Increased severity of substance abuse; polysubstance use
  - Association with other substance abusers/risk for re-victimization
  - Risk for increased severity of psychological disorders
  - Exacerbation of poor impulses; poor judgment; cognitive deficits; emotion dysregulation; and interpersonal conflict

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### Cycle of Dysfunction (continued)

- Impaired Skills**
  - Incomplete education
  - Inconsistent employment
  - Homelessness
  - Continued inability to form positive interpersonal relations
- Legal Problems**
  - Legal problems related to substance abuse and/or other high risk behaviors
  - Incarcerations; parole; probation; CFS referrals
- Parenting Behavior**
  - History of unresolved trauma related to childhood abuse
  - Emotion regulation deficits with impairment of reflective functioning and parental reflective functioning; failure to recognize child's emotional needs
  - Inability to form secure attachment with offspring
  - Continued substance abuse in this chronic relapsing disorder
  - Possible maltreatment of offspring; unstable family environment
  - Repeated involvement with CFS; loss of custody of children
  - Continuation of dysfunctional cycle

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YOU HAVE TO LOOK IN THE DARK PLACES TO FIND THE RAINBOW

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### Recommendations

Based on the results of the current research (which is supported by related studies) the following recommendations are made:

- The results of this study strongly suggest that PREVENTION and EARLY INTERVENTION are critical to reduce the cycle of maladaptive behavior described above.
- Perinatal substance abuse treatment programs should include the awareness that the women have likely experienced multiple and repeated episodes of maltreatment/trauma spanning their lifetime.
- Staff should recognize how these early experiences affect the mother-child relationship related to social learning theory (mother's learn to repeat patterns of behavior experienced during their on childhood) and the mothers lack of capacity to deny or distort their affect related to traumatic experiences.



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### Recommendations

- Staff should recognize how these early experiences affect the mother-child relationship related to social learning theory (mother's learn to repeat patterns of behavior experienced during their on childhood) and the mothers lack of capacity to deny or distort their affect related to traumatic experiences.
- It is likely that the clients' personal histories of emotional abuse and neglect impair healthy bonding with their own children. The addition of program elements to improve mother/child interaction could increase the ability of the women to form secure attachments with their children.
- It is hoped that these changes would result in an improvement in the early environment of the offspring and decrease the risk that the offspring would follow the same pattern.



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### Contact Information

[Linda.Gertson@ventura.org](mailto:Linda.Gertson@ventura.org)

A New Start for Moms  
Ventura County Behavioral Health  
Substance Use Services Division  
1911 Williams Drive  
Oxnard, California 93036



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