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Lived Experiences and Coping Styles of Alaskan Women with Opioid Use Disorders

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Abstract

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MA, Rhode Island College, 1995

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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Abstract

Death caused by opioid abuse has increased in recent years, and women in the state of Alaska have been significantly impacted by this opioid crisis. Previous researchers have indicated a possible connection between opioid use and sub-clinical PTSD criteria. The purpose of this grounded theory study was to develop a theory regarding the presence of PTSD diagnostic criteria in this population, to identify patterns in past traumas and other life stressors, and to investigate coping strategies in 43 Alaskan women who sought treatment for opioid use. Archived data in the form of therapy notes were analyzed using grounded theory techniques such as coding information, categorizing the codes, and comparing patterns that were discovered to previous research. Hyperarousal was the most commonly reported criterion of PTSD, becoming the basis of the theory that it plays an important role connecting lived experiences and coping in these women. The most commonly reported experiences included substance use by parents, parental divorce, domestic violence, employment issues, mental health issues, partner substance use, and legal issues. Coping strategies included medicating, seeking support from nonprofessionals, and compliance. Recommendations for applying findings included using trauma-informed care, and implementing therapeutic workplaces, to reinforce abstinence with the ability to work as part of treatment. This data can be used for social change by improving assessment and treatment through addressing what might not have previously been considered trauma in these clients. Thus, providers may provide more effective treatment for opioid use disorders, and implement strategies to help prepare clients for longer term success and reduced prevalence of relapse.

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Dedication

To the women represented in the following pages, not only are you important, but your courage to explore your past has been an inspiration. With every page and every revision, you are remembered.

To my parents who taught me persistence, a trait without which this paper might never have come to fruition. Thank you for believing in me.

To my husband, David, and my children, Elizabeth and Bradley, thank you for your support throughout this endeavor. My heart will forever be with you.

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Chapter 1: Introduction to the Study

Opioid use is a serious problem in our country, and it appears to be escalating more quickly for women than for men. Between 1999 and 2010, over 48,000 women died from prescription opioid overdose (Centers for Disease Control [CDC] 2013a). According to the CDC (2013a), 6,600 women died in the United States from prescription opioid overdose in 2010, an increase of over 400% from the year 2000 (in men, it increased 265% in that same time period). Over 200,000 women visited emergency rooms in the United States in 2010 due to prescription opioid overdose: about 30 for every woman who died of overdose that year (CDC, 2013a).

These overdoses were more likely to be attributed to prescription opioid medications than substances such as heroin. In 2008, over 41,000 people died in the United States as the result of poisoning, 90% of which was the result of drug overdose (Warner, Chen, Makuc, Anderson, & Miniño, 2011). According to the National Center for Health Statistics (Warner et al., 2011), the number of drug poisoning deaths involving opioid analgesics more than tripled nationwide from about 4,000 in 1999 to 14,800 in 2008. In 2010, opioid analgesic overdose deaths were four times the rate of heroin and cocaine combined (CDC, 2013a). These statistics support the idea that prescription opioid overdose is a serious problem, and that it is worsening.

This problem appears to be growing in Alaska, and appears to be even more deadly in that state than is reflected by the national statistics. In Alaska, the rate of poisoning was 24.2 deaths per 100,000 in 2008 (Warner et al., 2011). This was significantly higher than the U.S. rate of 13.4 deaths per 100,000 in 2008 (Warner et al.,

2011). In Alaskan women, between 2007 and 2011, the rate of poisoning was 19.4 deaths per 100,000 (Alaska Department of Health and Social Services, 2013), which was higher than the national rate for both men and women in 2008 (Warner et al., 2011). These numbers did not include the use, misuse, or dependence of nonprescription opioids such as heroin. The highest risk for opioid-related deaths appeared to be in populations of non-Hispanic Whites and American Indian/Alaskan Natives (CDC, 2013a), which are also the predominant races in Alaska.

In my ten years of experience working in Alaska prisons, a domestic violence/sexual assault shelter, and a substance abuse treatment center, it appeared to me that women who were dependent on opioids had a history of trauma. This observation was consistent with researchers who have reported a relation between specific traumas and substance use disorders (Anda et al., 2005; Sansone, Whitecar, & Wiederman, 2009; van der Kolk, 2002). Sometimes the traumatic experiences reported by the women were not disclosed initially, but came out later during treatment. In some cases, the women did not meet *Diagnostic and Statistical Manual, Fourth Edition, Text Revision* (*DSM-IV-TR)* criteria for posttraumatic stress disorder (PTSD); nevertheless, the traumatic experiences continued to impact their lives. Researchers have supported relations between abuse of alcohol and trauma (Nunnink et al., 2010; Sartor et al., 2010), and of stimulants and trauma (Back et al., 2000). The intent of this study was to explore the relation between opioid abuse and trauma.

Not all clinicians noted these experiences, or took this impact into consideration. The label *opioid dependence* may have created a form of diagnostic overshadowing, in

which there is a tendency to attribute all problems to the primary diagnosis, thus missing potential coexisting conditions (Garb, 1998; Kranzler et al., 1995). In this study, I considered the possibility that PTSD, or other stress-related disorders may be overlooked in those with opioid dependency. Thus, in this study, I investigated indications of (a) past trauma, life stressors, or disenfranchised grief in Alaskan women with a history of opioid abuse; (b) the symptoms they reported that may be related to traumatic past events; and (c) the ways in which these women have coped with these symptoms or events.

With the documented rise in opioid-related deaths, emergency room visits, and the presumed impact this has on families and communities (CDC, 2013a; Warner et al., 2011), it is imperative that helping professionals understand this trend and make an effort to control the rise or even reduce the trend. Substance abuse clinicians in Alaska are in a position to make a difference in their respective communities if they know what to look for and how to intervene.

Background

Uram (2011) suggested that trauma can be big or little and that people can react to either type of trauma in big or little ways. When people respond to big traumas in big ways, they may be given the diagnosis of PTSD. Many researchers have looked at PTSD (Brewin, Andrews, & Valentine, 2000), and it has been discussed often in mainstream media since the terrorist attacks on September 11, 2001. For example, a search of the keyword “PTSD” in The New York Times website on January 14, 2014 listed 44 articles prior to the terrorist attacks, and over 1,600 after this event.

Although researchers have focused on traumas such as war, terrorism, violent crime, motor vehicle accidents, and natural disasters for decades (Brewin et al., 2000), until recently, little attention has been paid to chronic life stressors as traumatic (Hien, Litt, Cohen, Miele, & Campbell, 2009). Most therapists understand how interpretation may influence an individual's reaction according to cognitive behavioral theory (Beck, 1967; Ellis, 1962); however, it is less obvious that an individual who has experienced a significant life stressor could catastrophize that incident in such a way that it is experienced as traumatic (Ellis, 1962), making trauma a subjective experience.

There are other researchers that support the concept of trauma as a subjective experience. The Substance Abuse and Mental Health Services Administration (SAMHSA, 2014) defined trauma as

> Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being. (NCTIC's Current Framework, para. 2)

The key idea included in this definition was the way an individual experienced the event, which determined whether the event was traumatic. Additionally, according to SAMHSA's definition, an individual may respond to a life stressor in the same way as someone who experienced a far more obvious trauma, which is corroborated by Mol et al. (2005). Some significant life stressors that do not meet the definition of trauma may also be referred to as *disenfranchised grief* (Doka, 2002) such as loss that cannot be openly

grieved because it is socially unacceptable, invalidated, or unacknowledged. This was also supported by SAMHSA's definition of trauma.

With the introduction of the *DSM-5* (2013), a new diagnosis was developed that included other specified trauma- and stressor-related disorder (p. 289). The diagnostic criteria for this disorder are met when subthreshold PTSD symptoms are present more than 6 months after the stressor has ceased, and it includes persistent complex bereavement. Based on this and other changes in *DSM-5* (the establishment of a trauma and stressor related chapter and a reorganization of other disorders as trauma disorders), PTSD could be conceptualized as a spectrum disorder, with treatment needs being individualized for the client based on how his or her symptoms manifest on the spectrum (Friedman, 2013).

People who have experienced trauma and subsequently develop PTSD are at high risk for alcohol and substance abuse (Brewin et al., 2000). Women with PTSD are more likely to abuse dangerous drugs such as cocaine and opioids (Najavits, 2002). Mol et al. (2005) aimed to gather evidence to determine if life events (e.g., relational problems, problems at work) might generate as many symptoms of PTSD as traumatic events (e.g., war, disaster). Mol et al. found that stressful life events, which may not be labeled as traumatic, can elicit an equivalent number of PTSD symptoms as events labeled as traumatic. However, few researchers have addressed substance abuse risk in adults with life stressors that are not labeled as traumatic to determine if this is a common comorbidity.

Developmental stage may impact how children understand trauma or stressors and influence how the child responds (van der Kolk, McFarlane, & Weisaeth, 2007). Because trauma, significant life events, or disenfranchised grief experienced by women may have occurred as children, it was important to address how early events were integrated into the woman's understanding of the events and then manifested in symptomology and maladaptive coping. Therefore, it was essential to understand a woman's experiences from the remote past, recent past, and present, as well as how she assigned meaning to these events.

Further study was needed in this area because women who enter substance abuse treatment for opioid dependence may not receive treatment for their reactions to significant life stressor(s) or disenfranchised grief, particularly if they believe others may perceive those events as insignificant or inappropriate. Therefore, these women may not identify such events as a presenting problem. Perhaps they might minimize the impact of the trauma, or have been told that they are being dramatic when discussing these experiences. In addition, it is possible that women do not recognize the life stressor as impacting them in a traumatic way; thus, when asked if they have ever experienced a traumatic event, they might have denied it based on their understanding of what constitutes a trauma. Those with disenfranchised grief may also feel guilty for having intense feelings about a loss that is not recognized (Doka, 1989) and avoid mentioning it. Treatment, then, may not initially focus on (a) the client's perceived trauma, significant life event, or disenfranchised grief; (b) the meaning they assign to the experience; (c) or the way they have chosen to cope with the experience, possibly resulting in a

subadequate response by the therapist and subsequently by the client. These experiences would likely be revealed during the course of therapy, but not identified as traumatic at the initiation of therapy; therefore, it would be necessary to explore session notes as the therapeutic relationship developed and the client shared more with their clinician (Kelly & Yuan, 2009).

Briere and Scott (2006) suggested that the term *trauma* be reserved for the most serious events (e.g., combat, witnessing violent death) in which the individual is overwhelmed psychologically. Some experiences are outside the realm of normal human experience. However, some people recover and even experience posttraumatic growth (Calhoun & Tedeschi, 2006). Conversely, some individuals may become psychologically overwhelmed by life stressors (Mol et al., 2005). The suggestion that trauma disorders may be conceptualized as a spectrum disorder (Friedman, 2013) seemed logical to account for types of responses to traumas, life stressors, and disenfranchised grief.

Problem Statement

There is a lack of knowledge about how significant life stressors or disenfranchised grief may be perceived as traumatic and trigger PTSD symptoms (although there has been some suggestion that such a relation may exist: Mol et al., 2005), and how individuals with those symptoms may cope, including self-medication with opioids (Khantzian & Albanese, 2008). Although I was unable to identify a cause and effect relation between previous trauma, life stressors, or disenfranchised grief and opioid dependence, there is a significant lack of knowledge establishing the comorbidity of this phenomenon, particularly in women given recent changes in the diagnostic criteria

regarding trauma. This problem was reviewed in Alaskan women. Alaskan women may be a particularly vulnerable population due to their sex (CDC, 2013a; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995), ethnicity (CDC 2013a; especially Alaska Native; Young & Joe, 2009), relative isolation (UAA Justice Center & Alaska Council on Domestic Violence and Sexual Assault, 2010), and fewer supportive resources (Brewin et al., 2000). Research on Alaskans tends to focus on alcohol dependence (Young & Joe, 2009), tobacco use and cessation (Kaplan, Lanier, Merritt, & Siegel, 1997; Patten et al., 2009), and interpersonal violence (Evans-Campbell, Lindhorst, Huang, & Walters, 2006; Segal, 2001).

A history of sexual and physical abuse may be correlated with alcohol and substance abuse in women (Oviedo-Joekes et al., 2011; Sartor et al., 2010), but to date, no researchers have looked at opioid use disorders in Alaskan women to determine what potentially traumatic experiences, if any, these women may have had. It is important to understand any potential risk factors or vulnerabilities among women who are diagnosed with opioid use disorders in order to develop better informed treatment interventions, break the chain of substance dependence from parent to child, reduce the chance of women getting involved in potentially violent situations as a result of opioid use, and reduce the growing trend of fatal opioid overdose (CDC, 2013b).

Purpose of the Study and Research Questions

The purpose of the qualitative, grounded theory study was to explore the history of trauma, significant life stressors, and/or disenfranchised grief in Alaskan women who have been diagnosed with opioid use disorders, to observe the types of symptoms they

reported, and to identify any potential patterns in their coping strategies. I used archival data in a current database of past clients of a treatment center in Alaska that serves the Matanuska – Susitna Borough, who were at least 18 years old, who were assigned diagnoses in the category of opioid use disorders, and whose records were contained within the Alaska Automated Information Management System (AKAIMS). These records contained demographic information as well as intake information, progress notes, and treatment summaries. This agency is an outpatient treatment center for those seeking substance abuse treatment as well as individual, group, and family therapy. The women seen in this treatment center are predominantly non-Hispanic White and/or Alaskan Native; however, all races and ethnicities were included. Clients who attend treatment from this agency include those from all socioeconomic levels. Qualitative data were gathered from the notes of 43 individuals, recorded by their therapists in AKAIMS.

A primary grounded theory approach was used to systematically interpret and categorize the narratives of session notes. Quantitative data analysis was used to address Question 2: What symptoms of PTSD were reported by Alaskan women who sought treatment for opioid use disorders? The purpose of this question and the examination of quantitative data was to provide descriptive information to support the qualitative study. Specifically, it was determined how many of the women who were diagnosed with an opioid use disorder at this agency were also diagnosed with co-occurring PTSD. In those who were diagnosed with an opioid use disorder but not PTSD, the records were screened to determine how many of the criteria of PTSD these women may have met. There was

no hypothesis associated with Question 2, as its role was to be a descriptive support of the primarily qualitative analysis.

The grounded theory model was developed by Glaser and Strauss (1967). It involves the analysis and interpretation of data in a thematic way, rather than a statistical way. Such an approach was necessary to address the research questions because although coding was used to categorize responses and identify frequency patterns of identified themes in the data, the coding system itself could not be developed before data analysis. Rather, the coding system needed to be developed as the data were examined because of the exploratory nature of the research questions.

The following were the research questions for this study:

1. What types of traumas, life stressors, or disenfranchised grief do Alaskan women who sought treatment for opioid use disorders report?
2. What symptoms of PTSD were reported by Alaskan women who sought treatment for opioid use disorders?
3. How have Alaskan women who sought treatment for opioid use disorders coped with their traumas, significant life stressors, or disenfranchised grief?

The aim in this study was to explore co-occurrences and identify any patterns in traumas, life stressors, or disenfranchised grief in a sample of women who were diagnosed with, and treated for, opioid use disorders, as well as any patterns in their reported symptoms and styles of coping. With this information, it was anticipated that the data obtained would support the self-medication hypothesis developed by Khantzian

(1985) and the work of Mol et al. (2005) regarding PTSD symptoms in those with life stressors. The self-regulation and coping work of Hien et al. (2009) was also used as a framework to identify possible connections between the role of trauma, significant life stressors, and disenfranchised grief in Alaskan women with opioid use disorders.

Theoretical Framework and Nature of the Study

The theories used in this study included cognitive behavioral theory (Beck, 1967; Ellis, 1962) and self-medication theory (Khantzian, 1985). The basis of cognitive behavioral theory is that a person's thoughts, beliefs, attitudes, and perceptions, which are influenced by past experiences, have a significant impact on a person's emotions, which have a significant impact on behavior (Beck & Weishaar, 1989; Ellis, 1962). Based on this theory, the women might have developed an understanding or perception about their trauma, significant life stressor, or disenfranchised grief that impacted their emotions and their behavior. Opioid use might have been rewarding if the behavior decreased emotional or physical discomfort.

According to self-medication theory, individuals will choose substances that match their inner emotional struggle (Khantzian & Albanese, 2008). This psychoanalytically-based theory works well with cognitive behavior theory in that the drug selected is expected to serve to restore balance within the individual (Khantzian & Albanese, 2008). Hence, a person who is chronically hypervigilant may select a substance that will reduce this hypervigilance.

Grounded Theory

Grounded theory was the methodology selected for this research. Glaser and Strauss (1967) asserted that structured qualitative analysis could logically generate theory. Grounded theorists focus on the meaning that participants assign to their experiences and, through coding and categorizing, identify patterns in the available data (Charmaz, 2006). The patterns that are identified in participants' narratives are used to develop a possible explanatory model, or theory, for the observed phenomena (Charmaz, 2006). The theory is generated by, or grounded, in the research data (Creswell, 2007) in an inductive, rather than deductive, form of logic (Charmaz, 2006).

Grounded theory involves simultaneously collecting and analyzing data, using constant comparison at each stage of analysis, to advance theory development (Glaser, 1978; Glaser & Strauss, 1967). Grounded theory is useful when existing theories do not adequately explain observed phenomena, or when no theory has yet been generated (Glaser & Strauss, 1967). This theory can then be used as a basis for further research, including empirical testing (Creswell, 2007).

I frequently observed phenomena in which Alaskan women in treatment for opioid use disorders reported a history of trauma, life stressors, and/or disenfranchised grief. Although there are theories that may suggest possible explanations for this co-occurrence such as the self-medication hypothesis (Khantzian, 1985) and cognitive behavioral theory (Beck, 1967; Ellis, 1962), scholars have not explored this phenomenon to determine if there is a more appropriate explanation for this observation. Grounded theory was an appropriate research method for this qualitative study because I sought the

participants' perspectives about their respective stressors and how they have chosen to cope. I aimed to understand what types of trauma, life stressors, or disenfranchised grief have been experienced by Alaskan women who have used opioids, and to identify patterns in their experiences and efforts to cope with distressful emotions. Grounded theory was chosen to explore commonalities in these women's reported experiences, as recorded by their therapists, with the hope of developing an explanation for the observed phenomena.

The framework of the self-medication hypothesis and cognitive behavioral theory allowed for the development of a method for coding the data and categorizing the events and stressors reported in the women's treatment notes. The categories that emerged from the data were unknown prior to the coding process, and in this way the process of grounded theory diverged substantially from a quantitative approach. By reviewing the treatment records of these women in a systematic analysis, patterns related to their experiences, their symptomology, and their coping behaviors were able to emerge upon which a grounded theory was developed to inspire future empirical research. Additionally, understanding these patterns may be helpful to the clinician for developing additional treatment targets. By understanding and focusing on such underlying issues, treatment could facilitate lasting change (M. Nickerson, personal communication, April 24, 2015).

Definitions

Abuse: According to the *DSM-IV-TR*, abuse is a maladaptive pattern of substance use manifested by recurrent and significant adverse consequences related to the repeated

use of substances (American Psychological Association [APA], 2000, p. 198). The term abuse is not defined in the more current *DSM-5,* but was used by therapists under the older *DSM-IV-TR*.

Addiction: Physiological dependence that is characterized by tolerance and withdrawal. Acute withdrawal symptoms occur if the substance is sharply reduced or stopped. Psychological dependence is characterized by a strong and compelling need for something that may be strong and continued, despite harmful effects to self or others (Corsini, 2002, p. 18)

Disenfranchised grief: A type of grief that cannot be openly mourned because it is not socially acceptable, is not validated, or is not acknowledged (Doka, 2002)

Opioid (narcotic): This refers to opium and its derivatives, which may be processed directly from the poppy plant, *Poppy papaver somniferum*. It also includes synthetic opioids (such as meperidine, fentanyl, and methadone), which are made entirely in a lab, and semisynthetic opioids (such as morphine, codeine, heroin, oxycodone, hydrocodone, and hydromorphone), which are synthesized from naturally occurring opium products (Drug Enforcement Agency, 2011)

Opioid dependence: A compelling urge for and physiological dependence on an opioid to the degree that acquiring and using the opioid becomes a priority in the person's life (Corsini, 2002)

Opioid misuse: Nonmedical use of legal opioids, such as using the drugs without a prescription (SAMHSA, 2010)

Opioid use disorder: Prolonged use of opioids that are used for no legitimate medical purpose or, if another medical condition is present, the use of opioids is in excess of the amount needed for that medical condition (APA, 2013, p. 542)

Posttraumatic stress disorder (PTSD): A diagnosis from the *DSM 5* (APA, 2013, pp. 271-280) in which a person develops symptoms in response to a trauma (as defined below). These include symptoms of intrusion, avoidance, and arousal, as well as negative changes in cognition and mood associated with the trauma.

Stressor: A situation or stimulus that physically or psychologically burdens a person's adaptive capacity (Corsini, 2002, p. 951).

Substance use disorder: According to the *DSM-5*, a substance use disorder is indicated for a person demonstrating an unhealthy pattern of behaviors related to use of a substance despite significant related problems (APA, 2013, p. 483).

Trauma: According to the *DSM-5,* trauma may be defined as exposure to actual or threatened death, serious injury, or sexual violence by directly experiencing, witnessing it as it occurs, learning that it occurred to a close friend or family member, or repeated or extreme exposure to aversive details of the event after it has occurred (APA, 2013, p. 271).

Assumptions

It was assumed that the participants in the study were truthful in disclosing any history of trauma, significant life stressors, and/or disenfranchised grief to their clinicians, and those clinicians documented their clients' histories accurately and faithfully as those histories were relayed to them. It was further assumed that themes

would emerge when seeking the characteristics of individuals' trauma, significant life stressors, disenfranchised grief, and their ways of managing stress from the participants' records (e.g., intake notes, treatment summaries, and discharge summaries). It was assumed that the treatment records were complete and detailed to the extent that it was possible to identify such themes. It was lastly assumed that cognitive behavioral theory and the self-medication hypothesis were the most applicable theoretical foundations for this study.

Limitations

Recognized limitations for this study included the following four points:

1. It was possible that not all clinicians asked about or explored significant life stressors beyond trauma. Because there was no direct researcher contact with the therapists or clients, there was no opportunity to clarify or confirm data from the records.
2. The available thoughts, beliefs, attitudes, and perceptions of the participants were dependent upon the documentation of the clinician in the records. The records may have been incomplete, clinicians may have been conservative in their notes, and/or reports of trauma, significant life stressors, and disenfranchised grief may not have been recorded.
3. The data may not have included all those with previous trauma, significant life stressors, or disenfranchised grief, but rather those who reported it to their clinicians; thus, the association between opioid use and such past events was likely an underestimate.

4. Data were collected from the records of only one substance abuse treatment agency in Alaska. Therefore, the results might not be transferable to all populations or geographic areas.

Delimitations

Delimitations for this study included the following:

1. Records from women, aged 18 or older, who were residing in Alaska at the time they sought treatment (whether court imposed or voluntary) from the treatment center were used for the study.
2. Only records of women who were diagnosed with opioid dependence (*DSM-IV*, 2000) or opioid use disorders (*DSM-5*, 2013) were included.
3. Individuals included in the database generally ranged from those in rural Alaska to those who lived in small towns. The U. S. Census Bureau (2014) estimated the population of Wasilla, the largest nearby city, to be approximately 8,500 in 2012.

Significance of the Study

This study helped to expand knowledge to establish a basis for additional questioning during an initial assessment and areas to explore during substance abuse treatment among women with opioid use disorders. It was believed if themes arose that indicated a commonality of trauma, significant life stressors, and/or disenfranchised grief in the background of opioid-dependent women, then clinicians may know what to ask about in intake interviews and determine more effective ways to treat the client, thus reducing relapse in the use of these dangerous substances. If clinicians understand their

clients' histories of trauma, significant life stressors, and disenfranchised grief as corresponding with the use of opioids as a maladaptive coping skill (i.e., self-medication), then they may contribute to slowing or even reversing the trend of unintentional poisoning by way of opioid overdose, which has been rising over the past 10 years (CDC, 2013b). Additionally, individuals who suffer from opioid addiction may also gain an understanding about their diagnoses and the relation between opioid use and past traumas through their work with their clinician.

The societal costs of prescription opioid misuse, abuse, and dependence are high in the United States. The total societal cost was estimated at over $55 billion when considering workplace costs, health care costs, and criminal justice costs (Birnbaum et al., 2011). Presumably this number would be larger if nonprescription opioids (i.e., heroin) were included in the estimate.

Additionally, women with children who are using opioids to cope with a history of trauma or significant stressors may put themselves in dangerous situations, which may concurrently place their children in dangerous situations (Appleyard, Berlin, Rosanbalm, & Dodge, 2011). These children may then experience trauma or significant stress and choose to cope as their mothers did (Bradley, 2007) creating a vicious cycle of trauma and maladaptive coping. Clinicians are in a position to make a difference by asking the right questions and applying the skills they already have to help these women learn more adaptive coping skills.

Finally, if commonalities were found to exist in women treated for opioid use with regard to their histories, their reported symptoms, or their styles of coping, then this

would provide a basis for future empirical studies. Researchers may seek to understand any potential relationships between trauma, significant life stressors, disenfranchised grief, and opioid use disorders, be they causal or correlational.

Summary

Based on recent reports from the CDC (2013a, 2013b), there is a need for something to be done about the five-fold increase in opioid-related deaths in U.S. women over the past 10 years. Alaska's rate is higher than the national average, with the third highest death rate of any state in the nation (Warner et al., 2011). American Indian/Alaskan Native and non-Hispanic White women are at the greatest risk for opioid-related deaths according to CDC (2013a, 2013b) statistics. In Alaska, there are a number of factors that increase the risk for these women, all of which will be reviewed in Chapter 2.

The purpose of this study was to examine the prior history of trauma, significant life stressors, and/or disenfranchised grief by women who have been treated for opioid use disorders to determine what symptoms of PTSD they may report and to explore how they have coped with these symptoms. Opioid use may be understood according to the self-medication hypothesis (Khantzian & Albanese, 2008) in which individuals may use opioids to manage symptoms that are a result of trauma, life stressors, or disenfranchised grief. Cognitive behavior theory was used in addition to the self-medication hypothesis. According to cognitive behavior theory, individuals may catastrophize a significant life stressor as traumatic or disenfranchised grief as unspeakable and unworthy of support (Ellis, 1994). Additionally, consistent with cognitive behavior theory (Ellis, 1962), the

use of opioids may be rewarding if it reduces the discomfort of physical or psychological pain.

Although a causal relation cannot be identified in this study, the association between opioid dependence and the presence of a history of trauma, significant life stressors, and/or disenfranchised grief was examined. Client records from a large substance abuse treatment center were reviewed. The number of cases of women diagnosed with comorbid opioid dependence and PTSD was noted for quantitative descriptive analysis to support the qualitative analysis of the treatment notes. The data were also examined for traumas, or life stressors, that may have resulted in a traumatic response in the women. A grounded theory approach was used to examine patterns in the data. Then, for the women who were diagnosed with opioid dependence, a grounded theory approach was used to explore patterns of trauma, significant life stress, and/or disenfranchised grief.

Chapter 2: Literature Review

Introduction

The purpose of this grounded theory study was to explore the history of trauma, significant life stressors, and/or disenfranchised grief in Alaskan women who have been diagnosed with opioid use disorders, to observe the types of symptoms they reported, and to identify the patterns in their coping strategies. This was done with women who attended treatment for addiction to opioids from February 2003 through December 2014. The association between trauma and substance dependence has been established in the literature (Dass-Brailsford & Myrick, 2010; Golder & Logan, 2011; Najavits, 2007; Oviedo-Joekes et al., 2011; Sartor et al., 2010). However, this commonly co-occurring relationship has not been established for opiate dependence specifically, and not investigated in Alaskan women, for whom there are fewer resources and more isolation than in many other parts of the United States (Alaska Network on Domestic Violence and Sexual Assault, 2006). In addition, recent changes to the definition of trauma and the diagnostic criteria for trauma-related diagnoses make updating research in this and related areas (i.e., life stressors and disenfranchised grief) a priority.

In this chapter, I will define the constructs and variables for the research, such as opioid dependence, posttraumatic stress disorder, and trauma in its many manifestations. The logic of examining the relation between opioid use, life stressors and disenfranchised grief will be provided. An overview of relevant statistics regarding women and substance abuse in the State of Alaska will be reviewed. Finally, a review of the literature on the

relationships between opioid dependence and trauma, trauma and women, and women and opioid dependence will be provided.

Search Strategy

The literature used to study these phenomena was based on a review of journal articles from online searches of databases such as EBSCO, SAMHSA, ProQuest, and Google Scholar. Such keywords as *trauma*, *posttraumatic stress disorder*, *PTSD*, *opiate*, *opioid*, *addiction*, *dependence*, *Alaska*, *Alaskan*, *women*, and *female* were used in these online searches. Additionally, books with copyrights of 2000 or later were reviewed, with exceptions for classic or foundational works and reviews of referenced materials.

Overview of Trauma

A traumatic event was defined in the *DSM-IV-TR* (APA, 2000) as (a) the experience, witness, or confrontation of an event, or events, involving "actual or threatened death or serious injury, or a threat to the physical integrity of self or others" where (b) the individual's "response involved intense fear, helplessness, or horror" (p. 467). In 2013, the *DSM-5's* definition of trauma changed to include learning that the traumatic event involved a close friend or family member where the event was violent or accidental (APA, 2013, p. 271). Additionally, frequent or intense exposure to disturbing details of a traumatic event is now recognized as a traumatic event under the *DSM-5*. It is important to understand both sets of criteria, as I included clients who were diagnosed under the *DSM-IV-TR* prior to the release of the *DSM-5* in 2013.

Not all exposure to trauma results in the development of PTSD (APA, 2000). Although an estimated 76% of people in the United States have been exposed to extreme

stress (van der Kolk et al., 2007), only about 8% have gone on to develop PTSD (APA, 2000). It is possible that the actual traumatic event may not be what causes the individual to suffer, but rather the response or attempts to adapt. Humans are considered to be some of the most adaptable creatures on Earth (R. Kolts, personal communication, October 25, 2012), but it is in this strength that PTSD may become a problem. Humans may be the only animals to think about the event and its meaning for them, or have a negative view of themselves as a result of the trauma (Lee & James, 2011). R. Kolts explained that other animals may respond to the situation, but eventually move on, either learning from the event or forgetting about it entirely (personal communication, October 25, 2012). Humans may become anxious, have their threat system activated, and begin to organize their lives around the memory of the trauma in an attempt to adapt to it or avoid memories of it (Tirch, 2012). This is what likely leads to psychological distress (van der Kolk et al., 2007).

Posttraumatic Stress Disorder

In addition to experiencing a traumatic event, the criteria for a diagnosis of PTSD under the *DSM-IV-TR*, specifically, included the following:

- Re-experiencing the event in at least one way (B)
- Avoiding stimuli associated with the event in at least three different ways (C)
- Experiencing hyperarousal in at least two different ways (D)
- The above symptoms last for at least a month (E)

- The above symptoms result in significant distress or impairment in important areas of life such as social or occupational settings. (F; APA, 2000, p. 468)

With the release of the *DSM-5*, some changes were made. Criteria under this edition include the following:

- Experiencing intrusion symptoms associated with the event in at least one of five identified ways (B)
- Avoiding stimuli associated with the event in at least one of two identified ways (C)
- Beginning or worsening of negative cognitions or moods associated with the event in at least two of seven identified ways (D)
- Experiencing hyperarousal associated with the event in at least two of six identified ways (E)
- The above symptoms last for at least a month (F)
- The above symptoms result in significant distress or impairment in important areas of life such as social or occupational settings (G)
- Symptoms cannot be attributed to the effects of another medical condition or a substance. (H; APA, 2013, p 272)

Additionally, there are now separate diagnostic criteria for children who are 6 years old or younger when exposed to a traumatic event (APA, 2013, pp. 272-274).

Traumatic Stress

It is possible that an individual may experience the symptoms of PTSD (criteria B-F under the *DSM-IV-TR* or criteria B-H under the *DSM-5*, listed above) without experiencing trauma at the severity level described in previous versions of the *DSM* (Mol et al., 2005). The event may have been perceived by the individual as traumatic, despite the interpretation by counseling or clinical professionals that the event did not meet the criteria to be called traumatic, an assertion that is supported by cognitive behavioral theory (Ellis, 1994). The individual may, nevertheless, interpret the situation with intense fear, helplessness, or horror, or may have catastrophized the event. In such a way, significant life stressors and disenfranchised grief may have an impact on the individual. Ellis (1994) defined catastrophic thinking as a cognitive process in which stress is appraised in such a way as to amplify the severity of the problem (i.e., interpreting an event more negatively than most other people might interpret it or predicting more negative consequences from an event than most other people might predict). Catastrophic thinking may be a risk factor for the later development of PTSD, meaning that trauma may be defined as a subjective experience (Bryant & Guthrie, 2005).

Uram (2011) explained that anything has the potential to traumatize, but nothing must invariantly traumatize. Uram illustrated this point with an example of a 2-year-old child whose mother becomes mildly depressed for 6 to 8 weeks. In this situation, although outsiders might notice little difference, the child, whose survival is based on the caregiver's ability to provide appropriate care, may be traumatized. Uram described this example as a *little trauma*, which may remain in the survival part of the brain.

Other examples of little traumas may include certain forms of household dysfunction, such as mental illness, substance abuse, or criminal behavior (Crusto et al., 2010; Dong et al., 2004). In such cases, the individual may catastrophize what the dysfunction means for him or her or experience intense feelings of helplessness based on the dysfunction. Such an individual would not meet criteria for a PTSD diagnosis because the event does not meet *DSM-IV-TR* or *DSM-5* criteria for trauma. However, individuals might respond to this intense stress in ways similar to a person who experienced trauma as defined in the *DSM IV-TR* or *DSM-5*. This intense stress may be referred to as traumatic stress (van der Kolk et al., 2007). An individual may, therefore, be using substances as a dysfunctional coping response to traumatic stress, significant life stressors, disenfranchised grief, or little traumas, but if this is overlooked, then the practitioner may miss a motivator for the substance use. Individuals who suffer from opioid addiction may gain an understanding about their diagnoses and the relation between opioid use and past traumas. Clinicians will also gain an understanding of the difference between the event (trauma, life stressor, or disenfranchised grief) and the individual's symptomatic and coping responses to the event to understand the problem and make informed treatment decisions.

Separating Trauma from Responses to Trauma

An individual may have experienced a traumatic event or events as defined in criterion A of the *DSM-IV-TR* or *DSM-5* for PTSD, but the individual may not meet all conditions as set in criteria B (re-experiencing), C (avoidance), or D (hyperarousal). For example, the individual may not be experiencing two persistent symptoms of increased

arousal, which were not present before the trauma (APA, 2000, p. 468). This person may, nevertheless, be seeking ways to cope with the trauma, specifically if he or she is re-experiencing intense emotions associated with the trauma that are causing significant distress and/or impairment (APA, 2000, p. 468; APA, 2013, p. 272). This leads to a question of whether those who experience trauma, but fail to meet the criteria for the diagnosis, may still experience similar difficulties in daily functioning.

Conversely, a person may meet criteria B (re-experiencing), C (avoidance), and D (hyperarousal), but not meet criterion A (trauma) as defined by the *DSM IV TR* (APA, 2000) because theirs was a little trauma (Uram, 2011), as described above. This is a crucial distinction, because the purpose of this study was to explore the co-occurrence of trauma history (big and little traumas, significant life stressors, and disenfranchised grief), not PTSD, in women who are addicted to opioids. With this common history, clinicians would be encouraged to make more of an effort to seek past events that, although not necessarily as life-threatening as described in the *DSM-IV-TR* or *DSM-5*, are nonetheless traumatic to the individuals who are seeking services for opioid dependence or who endorse a history of opioid dependence for which they may be currently in remission. This concept was supported by Mol et al. (2005) who found that some people who had not met criterion A1 otherwise met criteria for PTSD. In fact, the participants in their study who had not experienced a clearly defined traumatic event showed more symptoms of PTSD than those who had experienced such a traumatic event (Mol et al., 2005). This difference, although small, was unexpected (Mol et al., 2005). Mol et al.'s study included 832 random family practice patients in The Netherlands; 43% of the

respondents were male. In the study, 299 participants experienced a traumatic event as defined by the *DSM-IV-TR*, and 284 of these individuals met the other criteria for a diagnosis of PTSD (approximately 95%; Mol et al., 2005). In the 533 individuals who experienced a life event that would not be defined as traumatic in the *DSM-IV-TR*, 519 met all other criteria for PTSD (approximately 97%; Mol et al., 2005).

Part of the difficulty for clinicians may be recognizing the range of traumas, significant life stressors, and disenfranchised grief, which may be experienced by the women. Understanding the differences in the quality of the trauma, and the resulting symptomology (complex PTSD versus simple PTSD) would likely aid the clinicians in developing a better informed treatment plan.

Complex versus Simple PTSD

There have been controversial viewpoints (Yufik & Simms, 2010) regarding the criteria for posttraumatic stress disorder as a diagnosis, which may impact how people understand PTSD. Specifically, there was a thought that fundamental differences exist between simple PTSD and complex PTSD and that separate diagnoses would be necessary to reflect accurately the true nature of this disorder (Cloitre et al., 2009; Herman, 1992). *Simple PTSD*, which is the type included in the *DSM-IV-TR*, has been defined as a single event trauma such as a motor vehicle accident, robbery, or tornado. *Complex PTSD*, which was first proposed by Herman in 1992, has been defined as trauma, usually interpersonal violence, which involves chronic, repeated exposure to trauma (or traumatic stress) such as long-term physical and/or sexual abuse, and where the victim is captive, unable to escape, and under the perpetrator's control (p. 377) such

as prisons, certain types of organizations or institutions, and families. This control could take the form of physical, social, financial, emotional, or psychological control (Herman, 1992).

Although there has been support for the idea of complex PTSD (e.g., Anda et al., 2005; Cloitre et al., 2009; van der Kolk et al., 2007), this distinction was not identified within the *DSM-IV-TR* as an accepted differential diagnosis, thus leaving out characteristics of the disorder that may be relevant to the treating professional (Brett, 1996). With the release of the *DSM-5*, this distinction was addressed to a degree. There is a new criterion D that includes negative changes in thinking pattern and mood associated with the disturbing event (APA, 2013, p. 271); however, complex PTSD still does not have its own diagnosis.

Excluding criterion A, complex PTSD includes the same criteria for diagnosis as simple PTSD plus additional manifestations such as difficulties in the regulation of affect, attention, self-image, somatization, and socialization (Hien et al., 2009). Those who are raised in highly stressful environments have frequently been found to be insecurely attached and emotionally dysregulated (Ford, 2005). Difficulty in affect regulation may be seen especially as uncontrolled anger, irritability, or depression (Hien et al., 2009). Difficulty in regulating attention may lead to forgetfulness, disorganization, or increased dissociative episodes (Hien et al., 2009). Difficulties in regulating self-image or somatization may lead to self-blame, self-loathing and/or self-injurious behaviors, increased access to medical services, use of medications, and loss of productivity in occupational functioning (Hien et al., 2009). Finally, difficulty regulating socialization

may lead to unhealthy, high risk relationships or isolative behaviors, both of which would preclude social support (Hien et al., 2009; van der Kolk et al., 2007). Understanding self-regulation and its dysfunction in those who may have experienced a trauma, life stressor, or disenfranchised grief is important because it may be related to coping strategies in some individuals (Khantzian & Albanese, 2008), an area of focus in this study. Those with adequate self-regulation will be more likely to use adaptive coping skills, but those without developed self-regulation skills will likely find maladaptive ways in which to cope with the event (Hien et al., 2009; van der Kolk et al., 2007). This does not apply only to trauma, but to other events that may not fit the *DSM* definition of trauma.

Acute Stress Disorder and Other Trauma Related Disorders

Acute stress disorder is an additional relevant diagnosis in the *DSM-IV-TR* and *DSM-5*. It can only be diagnosed within a month of the traumatic event, and it focuses on dissociative reactions to the event (Solomon, Laror, & McFarlane, 1996); however, it also includes symptoms of re-experiencing, avoidance, and hyperarousal, just as PTSD does (Miller, 2007). Acute stress disorder may precede PTSD (APA, 2000, pp. 466-467) and is predictive for a later diagnosis of PTSD if not addressed (Gibson, 2014).

With the introduction of the *DSM-5*, a number of diagnoses were recategorized under the Trauma-and Stressor-Related Disorders chapter. Aside from PTSD and acute stress disorder, additional recategorized diagnoses include reactive attachment disorder, disinhibited social engagement disorder, adjustment disorder, and other specified trauma- and stressor-related disorder (APA, 2013). This demonstrates a movement toward understanding trauma disorders as being on a spectrum (Friedman, 2013), and thus

understanding the need to treat individuals based on the type, degree, and causes of trauma.

Causes of Trauma

Trauma falls into three categories: intentional human-caused trauma, unintentional human-caused trauma, and nonhuman-caused trauma (Hien et al., 2009). Intentional human-caused trauma includes such events as abuse, assault, or terrorist attacks. Unintentional human-caused trauma includes such events as motor vehicle accidents or industrial accidents. Nonhuman trauma includes such events as catastrophic weather events or life-threatening disease. Of the three types, nonhuman trauma is the least likely to lead to symptoms of PTSD, and intentional human-caused trauma is the most likely (APA, 2000, p. 464). The trauma most commonly seen in women is a history of childhood physical and/or sexual abuse and adult interpersonal violence (Hien et al., 2009), which would be considered intentional human-caused trauma. Women who are exposed to trauma may be more likely to develop symptoms of PTSD due to trauma type, and they are more likely to experience complex PTSD than simple PTSD, due to chronic, repeated exposure. Additionally, they are also more likely to have symptoms and difficulty coping because of the timing of their trauma (Hien et al., 2009).

Timing of Trauma

The diagnostic criteria for PTSD fail to consider the interpretation or perception of a disturbing event by the individual, especially if he/she was a child at the time of the event. Trauma in children can be more devastating than trauma in adults (Hien et al., 2009). Certain events that might be interpreted as benign to an adult may be interpreted

as a threat to survival to a child (Kreis, Gillings, Svanberg, & Schwannauer, 2016; Uram, 2011). Depending on the developmental stage at the time of the trauma, the child may not have developed adequate coping skills to manage the stress that accompanies trauma (McFarlane & De Girolamo, 1996). Due to their limited experience of the world, they may not have a healthy context through which to interpret the traumatic event. They may view themselves as helpless; there may be more fear that is based on catastrophic thinking. Some children may lack adequate role models to demonstrate appropriate coping skills (Hien et al., 2009). Children who have serious dysfunction in their home may choose to keep this a secret from others, which may limit the amount of support they can be provided by outside sources such as teachers or friends.

Trauma in Early Development

In one study (McCauley et al., 1997), 1931 women were given a self-administered, anonymous survey asking about physical and sexual abuse throughout their lifetime. They were divided into six subgroups: (a) never abused, (b) abused in childhood only, (c) abused in adulthood in the past only, (d) currently being abused as an adult but not abused in childhood, (e) abused in childhood and in the past as an adult but not currently, and (f) abused in childhood and currently as an adult. The goal was to determine the degree to which physical symptoms, psychological symptoms, alcohol abuse, and street drug use were associated with childhood versus adult abuse. McCauley et al. (1997) acknowledged that because so many women who are abused as adults were also abused as children, it was difficult to distinguish these groups.

One finding was that those who were victimized only in childhood had almost five times the rate of drug abuse compared to those who had never been abused. McCauley et al. (1997) also found that in comparison to the women with no history of abuse, women who were abused only during childhood experienced significantly more depression, anxiety, interpersonal sensitivity (low self-esteem), and somatization (all $p <$ .001). They were more than five times more likely to have attempted suicide, almost three times more likely to have considered suicide in the seven days prior to the study, and more than four times more likely to have been hospitalized for emotional/mental problems. These findings support the concepts of complex PTSD, because the majority of the childhood victims reported chronic, repeated exposure to traumatic stress at a young age.

Eight percent of participants who reported no history of abuse reported past use of street drugs (McCauley et al., 1997). It is unknown if any of the women in that group had experienced other forms of trauma or traumatic stress, because only intentional human caused trauma in the form of abuse was assessed. Therefore, even though 92% of substance users in the McCauley et al. (1997) study reported a history of trauma, this may be an underestimate since unintentional human-caused trauma and nonhuman-caused trauma were not considered. Additionally, “street drugs” in this study was reported as a general category, and not broken down by the type of drug used, so it is not clear if this included opioids.

Trauma Related Risk Factors

In a meta-analysis of risk factors for PTSD conducted by Brewin et al. (2000), 77 articles including 85 separate data sets were used. They included 49 civilian and 28 military population samples: 26 all-male, 12 all-female, and 40 mixed gender samples, and a variety of trauma types. It is noted that all studies included adult participants only, and included sample sizes from 25 to 4,127 with a median sample size of 119. They determined differences in risk factors between the military and civilian studies, and differences based on the assessment tools used within each study. However, despite these differences, certain factors remained higher risks. Specifically, severity of trauma, history of childhood adversity, and lack of social support were consistently deemed high risk for the development of PTSD (Brewin et al., 2000).

In civilian studies, additional risk factors included female sex, which Brewin et al. (2000) surmised may be due to a greater likelihood of previous childhood abuse and sexual abuse, and/or possibly a greater likelihood of women being willing to report symptoms. Risk factors that were noted, but deemed to have a weaker impact, included lower socioeconomic status (r = .14), lack of education (r = .10), lower intellectual functioning (r = .18), psychiatric history (r = .11), and family psychiatric history (r = .13). The authors also noted that pre-trauma variables had a weaker effect than post-trauma variables. For example, risk factors that had stronger effects included trauma severity (r = .23), current life stress (r = .32), and lack of social support (r = .40). Based on these findings, it appears that managing post-trauma risk factors such as increasing

perceived social support or decreasing perceived life stress might be a significant way to help prevent the onset of PTSD symptoms.

Summary of Trauma

In summary, the trauma most commonly seen in women (being female is a higher risk) is a history of childhood physical and/or sexual abuse (childhood adversity is a high risk) and adult interpersonal violence (intentional human-caused traumas are the highest risk) that occur repeatedly (chronicity is a high risk) over a period of time (Hien et al., 2009). If the victims do not have adequate role models for adaptive coping and do not receive social support (either because the trauma is not known or because support is not available), they may be at higher risk for the development of PTSD (Brewin et al., 2000). If all risk factors described above are in place, a greater percentage of these women who are exposed to traumatic stress may develop symptoms of complex PTSD (Hien et al., 2009), but not necessarily meet criteria for posttraumatic stress disorder as it was defined in the *DSM-IV-TR*, or is currently defined in the *DSM-5*, if they do not meet criterion A1 (Mol et al., 2005).

Overview of Opiates

Mood altering drugs are typically used to promote pleasure or avoid pain (Stimmel, 2009). Opioids are drugs that have analgesic (pain suppressing) effects (Pinel, 2006), and may induce a drowsy, euphoric state (Pinel, 2006; Preda, 2012). They include opium, morphine, oxycodone, and heroin, among others.

Opiate Dependence was defined by the *DSM-IV-TR* as maladaptive opiate use which leads to significant distress or impairment in important areas of life such as social

or occupational settings (APA, 2000, p. 192). To meet criteria for this diagnosis, at least three of the following seven criteria were required to be met within the same 12-month period (APA, 2000, p. 195):

- Tolerance;
- Withdrawal;
- Taking more of the opioid, or taking the opioid for a longer duration, than originally intended;
- Continual desire to reduce, or failed efforts to reduce, the amount of opiate use;
- A significant time is spent trying to obtain, using, or recovering from use of the opiate;
- Reducing the frequency of "important activities" due to opiate use; and
- Continuing use of the opiate despite knowing of a medical and/or psychological reason why use should cease.

With the transition from the *DSM-IV-TR* to the *DSM-5*, the diagnosis of substance use disorders changed. With regard to opioids, there are now five diagnoses listed in the Opioid-Related Disorders section: opioid use disorder, opioid intoxication, opioid withdrawal, other opioid-induced disorders, and unspecified opioid-related disorder. The specifiers were simplified to include (a) in early remission, (b) in sustained remission, (c) on maintenance therapy, and (d) in a controlled environment. The severity labels changed as well. With the presence of two or three symptoms, the severity is listed as mild (APA, 2013, p. 542). Moderate requires the presence of four or five symptoms, and severe

requires the presence of six or more symptoms (APA, 2013, p. 542). The criteria include all of the criteria listed in the *DSM-IV-TR*, but also include:

- Cravings;
- Use leads to failure to fulfill major role obligations at work, school, or home;
- Continued use despite recurrent interpersonal problems caused by the opioid use;
- Recurrent use in situations where use is physically hazardous

Opiate Use as a Coping Strategy

With the problems of emotional dysregulation and somatization, two potential consequences of complex trauma, it would seem plausible for the use, misuse, and eventual abuse of opioids to become a coping strategy in a person who lacks adaptive skills to mitigate the intolerable intensity of their emotions. About one third of traumatized people eventually resort to substance use to cope (van der Kolk, 2002). In some individuals, this may be a prelude to developing PTSD when substances fail to mitigate symptoms adequately, leading to further feelings of helplessness to improve mood (van der Kolk, 2002).

Although clients may seek substance abuse treatment on their own, many clients may present for substance abuse services at the insistence of the courts or of loved ones. Just as they may not be motivated to share the details of their opioid use, they may be equally, if not more reluctant, to discuss the details of any prior trauma (van der Kolk et

al., 2007), especially when they may be avoiding thinking about it through the use of the opioid.

As described above, avoidance is a criterion in the diagnosis of PTSD. According to the *DSM-IV-TR*, individuals generally make efforts to avoid thoughts, feelings, and discussions, about the traumatic event (APA, 2000, p. 464). Opioid intoxication may include a sense of euphoria followed by a sense of apathy, and may be accompanied by difficulties in attention and memory (APA, 2000, p. 271). Hence, opioid use seems to support avoidance, which is consistent with use of opioids as a coping tool, or as self-medicating.

Another criterion in the diagnosis of PTSD is that of hyperarousal, as discussed above. According to the *DSM-IV-TR*, individuals under the influence of opioids may demonstrate decreased attention to the environment (APA, 2000, p. 271). This might be experienced as a reprieve for the individual who is struggling with hyperarousal. Thus, it might seem reasonable for a traumatized individual to seek out opioids as a way to cope with these symptoms. Despite the reference to PTSD, such symptoms may also exist in the traumatized person who fails to meet full criteria for PTSD. Therefore, a traumatized person who is experiencing some of the symptoms of PTSD but does not meet criteria for PTSD, and who does not have adequate coping skills, may be at equal risk as the person with PTSD for turning to opioids for relief (Fullilove et al., 1993; Mol et al., 2005).

Cognitive Behavior Theory

According to cognitive behavior theory, aspects of operant and classical conditioning come into play (Kohlenberg, Tsai, & Kohlenberg, 2006). Initially, the

aversive event is paired with a neutral stimuli, and then the neutral stimuli is associated with the intense emotions which were experienced during the aversive event (Kohlenberg et al., 2006). Understandably, the individual may become aroused when presented with the neutral stimuli, and seek to avoid it (Kohlenberg et al., 2006). When a behavior results in pleasure or reduces pain, it is reinforced (Ellis, 1962). If an individual experiences hyperarousal, and this symptom is mitigated by use of the opioid, it would be rewarding. If the individual experiences somatization that is alleviated by use of the opioid, this too would be rewarding. Understanding how the client perceives and assigns meaning to the event (trauma, life stressor, or disenfranchised grief), and the function of the behavior (opioid use), may be different for each individual (Ellis, 1994; Follette & Ruzek, 2006). This emphasizes the importance of understanding the individual client's perspective of their event, their coping behaviors, and the symptoms they report.

Self-Medication Hypothesis

Self-medication hypothesis is a theory in which it is assumed that individuals will select a substance that matches their inner emotional struggle (Khantzian & Albanese, 2008). In one study, Suh, Ruffins, Robins, Albanese, & Khantzian (2008) explored the relationship between the participants' drug of choice (alcohol, cocaine, heroin, or other) and their scores on six MMPI-2 scales. The 402 participants were from a vocational program in New York City that recruits from shelters, drug treatment programs, and social service agencies. The participants were mostly female (64%), single/never married (65.7%), and their ethnicities were predominantly African American (66.7%), but also included Hispanic (18.3%) and Caucasian (7.0%). Suh et al. analyzed secondary data

from the vocational program from those who participated in the program between 1997 and 2002.

The MMPI-2 scores Suh et al. (2008) used included MA2 (desire for elation), DEP (level of depression, guilt, apathy, and hopelessness), CYN (anger and negative feeling toward others), PK (severity of trauma, emotional turmoil, intrusive thoughts, and sense of feeling misunderstood and mistreated), R (emotional inhibition and denial), and OH (over-controlled or rigid inhibition of hostility). Suh et al. reported that CYN was the only significant predictor for heroin use ($p < .05$). They also reported that elevated PK scores did not predict heroin preference.

The results of the Suh et al. (2008) study did not support the expectations of the current study; however, a number of reasons might explain the difference. First, the population for their sample was both men and women from New York City. Perhaps there are cultural differences between urban and rural populations. Secondly, both men and women were included in the study, and there were no analyses conducted to investigate potential differences by sex. Suh et al. also indicated that the PK scale may not be sensitive to childhood trauma, but rather identifies only current trauma symptoms. Lastly, they conceded that their secondary data source could have included inaccurate or minimized information, because this information was self-reported during the participants' time in treatment. This is an important point if participants are avoiding discussing their traumas, significant life stressors, or disenfranchised grief, a similar limitation of the current study.

The self-medication hypothesis does not adequately support the use of opiates to mitigate numbing as a symptom of PTSD. It is likely that if an individual were seeking to use substances to ease this symptom, then they might choose a different drug rather than opioids. Since this theory postulates an individual will select a substance that matches his or her emotional struggle, opioids would be more likely chosen in the case that the individual wanted to feel less (i.e., pain, either physical or emotional), or less hyperarousal (Bremner, Davis, Southwick, Krystal, & Charney, 1994). According to the self-medication hypothesis, individuals who are trying to mitigate numbing would choose a different substance. It is expected that the individuals who are dependent on opioids would therefore not identify numbing as a predominant symptom from which they are seeking relief. Suh et al. (2008) did, however, indicate that anger and negative feelings toward others might be related to opioid dependence. This seems to support the idea that emotional dysregulation may contribute to a potential connection between significant life stressors and opioid dependence. Khantzian (1999), indicated that those who experienced intense rage and/or anger, but who have fragile or inadequate defenses were more likely to use opioids.

The way this theory applies to the current study is that there may be a pattern to reported symptoms and the use of an opioid to cope. This possibility was explored by reviewing the documentation to determine what patterns of events (trauma, life stressors, and/or disenfranchised grief), symptoms, or coping behaviors, if any, existed.

Relevant Alaskan Statistics

American Indian and Alaskan Native (AIAN) women are more likely to be sexually assaulted than Black or White women, according a review of the National Violence Against Women Survey and the National Crime Victimization Survey by Bachman, Zaykowski, Lanier, Poteyeva, and Kallmyer (2010). Over 65% of AIAN women who live in an urban area such as New York City have reported some form of interpersonal violence including child abuse, sexual assault, or domestic violence (Evans-Campbell et al., 2006). Those who live in rural areas or on reservations are less likely to report such violence and tend to have fewer resources for assistance in coping with trauma and psychological symptoms (Black et al., 2011). In these communities, there may be a question as to the appropriate jurisdiction for law enforcement. In incidents occurring on reservations, law enforcement may be limited to the single Village Public Safety Officer, or there may be confusion regarding reporting to tribal law enforcement versus state law enforcement (Curtis, 2011). Further, there may be limited public services available for victims in these rural areas. For example, an Arctic Village woman seeking shelter services for domestic violence must fly 237 miles to Fairbanks for that form of assistance (Alaska Network on Domestic Violence and Sexual Assault, 2006). This, in addition to the issues of determining jurisdiction, might lead to the perception of less social support for victims (Bachman et al., 2010), which according to Brewin et al. (2000) is a risk factor in the development of PTSD.

The problem is not limited to those of AIAN heritage. According to the 2010 Alaska Victimization Survey (a telephonic survey) conducted by the UAA Justice Center

and the Alaska Council on Domestic Violence and Sexual Assault, 59% of Alaskan women reported experiencing intimate partner violence and/or sexual assault in their lifetime, and 12% reported experiencing such violence during 2009 alone. This report may have been an underestimate, as acknowledged by the researchers, as it did not include non-English speaking women (such as those who spoke only in their Alaska Native languages), those without telephones, or those without a residence. It is possible that women without a residence may be at higher risk of being victimized, or may be suffering the aftermath of past traumas (living in Alaska without a residence is presumed to be a significant life stressor). Although the study did not mention nondisclosure, there is also the possibility that participants might have denied intimate partner violence and/or sexual assault to those administering the telephonic survey.

According to the CDC (2013b), non-Hispanic White and AIAN women were at the greatest risk of dying from opioid overdose in comparison to other ethnicities. According to the United States Census Bureau (2014), these are the majority ethnicities in Alaska. This emphasizes the extent and importance of studying this population. The population of the Matanuska-Susitna Borough is estimated at 95,000 people; approximately 48% of them are female, and 27.7% are under the age of 18 (U. S. Census Bureau, 2014). This means that there are approximately 33,000 women over the age of 18 living in the area being sampled.

In 2007, nationally, 4.6% young adults aged 18 to 25 years (1.5 million), and 1.6% adults aged 26 or older (3 million) used a prescription pain reliever non-medically in the past month (SAMHSA, 2009). Additionally, there appeared to be a fairly stable

range of 1.7% to 1.9% of females, nationwide, who used prescription pain relievers in a nonmedical way from 2002 to 2007 (SAMHSA, 2009). According to 2006 statistics, however, SAMHSA noted the estimated percentage of Alaskan individuals (of both genders and over the age of 12) using, but not necessarily addicted to, pain killers for nonmedical purposes was approximately 5%, and the dependence rate for any illicit drug was about 2.2%.

Based on these statistics, it is estimated that approximately 1.7% of females over the age of 18 are, or have been, addicted to opiates/opioids at some point in their lives. This percentage is within the national average for female nonmedical use of prescription pain relievers, but is low enough to fit into the Alaskan estimate of dependence on any illicit drug for women over the age of 18. Based on the estimate of 1.7%, and the known population of adult females in the Mat-Su Borough (33,000), the target population was estimated at approximately 561 adult women who are currently, or have in the past been, addicted to opioids.

The Relationships between Trauma, Women, and Opiate Dependence

Although there are a number of researchers who have investigated the relationship between trauma and substance dependence, none was found which specifically addressed the lived experience of trauma and opiate dependence in women of Alaska. In this section I review those articles that focus on trauma and opioid dependence, women and trauma, and women and opioid dependence, and how they relate to each other.

Trauma and Opiate Dependence

Oviedo-Joekes et al. (2011) reviewed data from individuals who were part of the North American Opiate Medication Initiative (NAOMI) and were receiving treatment for long-term opioid dependence with substitution opioids. The participants were interviewed by their assigned psychosocial support worker. Oviedo-Joekes et al. reported that of the 251 opiate-dependent participants, 97 were female, and 44.5% reported a history of physical or sexual abuse; however, they advised caution that their evaluation tool (Addiction Severity Index) included quite specific questions on physical and sexual abuse that might have resulted in an underestimate of its occurrence. Other researchers (Conroy, Degenhardt, Mattick, & Nelson, 2009), also caution that prevalence rates of sexual abuse and physical abuse may be varied when comparing studies because of how each risk factor is operationalized.

Heffernan et al. (2000) found that among both male and female psychiatric inpatients of an urban hospital, 18% ($N = 136$) were addicted to opioids. Heffernan et al. noted that no sporadic use was reported; participants reported as either non-users ($N = 618$) or heavy users. Childhood abuse was reported by 41.6% of the sample, and was associated with an almost three-fold increased risk for opioid use versus no history of opioid use (Odds ratio = 2.68). In this particular case, 350 men were included in the study, including some who reported opiate use without a history of childhood abuse. The co-occurrence of childhood abuse and opiate addiction was not reported separately for the 404 women in the study.

Conroy et al. (2009) investigated childhood maltreatment (physical abuse, emotional abuse, two forms of sexual abuse [penetrative and contact], and three different forms of neglect [physical, emotional, and supervisory]) and early environmental risk factors (parental separation, parental conflict, parental substance abuse, poor maternal relationship, poor paternal relationship, and no support person) in 967 opioid-dependent individuals. The participants' histories were compared in a case control design to 346 non-opioid-dependent individuals, a number of whom had substance dependence (alcohol, cannabis, and "other" illicit drug). Control participants were matched with case participants with regard to age, gender, and employment status. Multiple regression analysis was used to control for alcohol dependence, cannabis dependence, and other illicit drug dependence.

The goal of the Conroy et al. (2009) study was to determine the prevalence of childhood maltreatment and early environmental risk factors in those with opiate dependence as compared to controls. In the study, Conroy et al. found several significant differences. For example, opiate dependent females were more likely to have been sexually abused than opiate-dependent males (72% versus 36%), or non-opiate dependent females (56%). For the opiate-dependent females who were sexually abused, the abuse was more likely to have been penetrative than for the control group females (56% versus 28%) or for the opiate-dependent males (21%). Opiate-dependent females were more likely to have experienced multiple incidents of sexual abuse (61%) than the non-opiate-addicted females (38%) or the opiate-dependent males (48%). Finally, opiate-dependent

females who were sexually abused were more likely to know their perpetrators (80%) than were non-opiate-dependent females (66%) or opiate-dependent males (68%).

In the Conroy et al. (2009) study, although both opiate-dependent males and females endorsed higher rates of physical abuse (58% and 59% respectively) than their non-opiate-dependent counterparts (36% and 43%), this was only significant for males in the study ($p < .05$). Opiate-dependent females were more likely to have been emotionally abused than opiate-dependent males (60% versus 47%) or non-opiate-addicted females (48%); however, the difference between addicted and non-addicted females was not significant. Although the prevalence of neglect was high with opiate-addicted males and females (68% and 78% respectively), it was not significantly higher than the non-opiate-addicted individuals.

Conroy et al. (2009) also looked at early environmental risk factors, which were not significantly higher for opiate-dependent individuals versus non-opiate-dependent individuals with one exception: 38% of opiate-dependent females reported early parental separation as compared to non-opiate-dependent females (24%). Early parental separation was also a significant risk factor for physical abuse among females (adjusted odds ratio=5.6). Conroy et al. surmised, based on their findings, that sexual abuse among female children may increase the risk of future opiate dependence. It was noted that this study only looked at childhood traumas, but it did look at both big traumas, such as sexual abuse, and covert traumas (Uram, 2011) such as early parental separation.

Taking these studies into account, it may be concluded that treatment that addresses both substance abuse issues and trauma needs to be encouraged. Integrated

treatment has specific advantages over trying to treat each aspect separately (Finkelstein et al., 2004). If the maladaptive coping strategies are not replaced with more adaptive coping skills, trying to treat the substance abuse without addressing the trauma can lead the client to experience difficult emotions when that maladaptive coping strategy is removed. The result may be an exacerbation of the trauma symptoms (Najavits, 2002, p. 1). Treating the trauma without addressing the substance use concerns can lead to increased frequency in use (Brown et al., 2007; Dass-Brailsford & Myrick, 2010; Wiechelt, Lutz, Smyth, & Syms, 2008). Therefore, the most effective approach would be to treat the two issues in an integrated format (Dass-Brailsford & Myrick, 2010; Najavits, 2009; Norman, Tate, Wilkins, Cummins, & Brown, 2010).

Women and Trauma

An estimated two-thirds of interpersonal attacks on women are perpetrated by someone they know, whereas about two thirds of interpersonal attacks on men are carried out by strangers (van der Kolk, 2002). Although men are more likely to experience simple trauma (e.g., combat, assault, motor vehicle accident), women are more likely to experience complex trauma such as repeated childhood abuse and/or domestic violence (Hien et al., 2009). Additionally, even when the type and frequency of trauma is accounted for, women are more likely than men to develop PTSD (Brewin et al., 2000; Cottler, Nishith, & Compton, 2001).

Fullilove et al. (1993) interviewed 105 women in an outpatient substance abuse clinic in New York and found that 99.1% (n = 104) of interviewees endorsed at least one of 14 types of trauma, but only 59% (n = 62) endorsed symptoms consistent with PTSD.

This supported the idea that women with traumatic backgrounds but who do not meet criteria from PTSD may have an increased likelihood to abuse drugs. Interestingly, this article reported that two participants who met criteria for PTSD denied violent traumas, but reported non-violent traumas, supporting the current research indicating that non-violent incidents may have an impact on women. Fullilove et al. concluded that "screening for PTSD among women with an addictive disorder should become part of the diagnostic and treatment routine" (Fullilove et al., 1993, p. 533).

Ehring and Quack (2010) conducted a web-based survey that supported the idea that chronic interpersonal childhood trauma may have a greater impact on individuals' emotional regulation skills than later or single event traumatic events, although to a lesser degree than expected. Ehring and Quack recruited participants through posts located on 15 websites that advertised web-based studies or provided information about trauma-related or other emotional disorders. They also recruited through mailing lists, self-help organizations, and online community support for trauma survivors by asking to have the study link shared with members. Ehring and Quack kept the link active for 7 months and obtained a total of 616 participants.

When Ehring and Quack (2010) controlled for PTSD symptom severity, they found that those with early onset chronic interpersonal trauma had significantly more difficulties than those with late-onset or single event traumas in two emotional regulation characteristics (a) awareness and clarity of emotions and (b) difficulties with goal-directed behavior and impulse control. Inclusion criteria in the study involved experiencing trauma as defined by the *DSM-IV-TR* criterion A1 (APA, 2000). This

essentially excluded those with more covert trauma or traumatic stress. Perhaps, the results may have been different if the criteria for what constituted trauma was broadened. Ehring and Quack identified that females with chronic, interpersonal childhood trauma reported more difficulty identifying their emotions, even when controlling for PTSD symptom severity, than the sample as a whole. Additionally, their sample was 82.9% female (n = 511), but it was noted that 92.2% of those who endorsed chronic interpersonal childhood trauma (n = 169) were female, supporting findings in a number of other journal articles that women tend to experience more chronic interpersonal childhood trauma than men (Conroy et al., 2009; Oviedo-Joekes et al., 2011).

Wuest et al. (2009) explored the mediating effects of acute injuries from physical and sexual abuse and the severity of PTSD symptoms in women with chronic pain who have experienced physical intimate partner violence (IPV), psychological IPV, and/or childhood abuse. IPV generally involves repeated exposure to traumatic stress, usually physical and psychological, and possibly sexual, which may result in symptoms of PTSD (Campbell, 2002). Wuest et al. recruited 309 women who had been victims of IPV more than 3 months previously, but within 3 years of the study. Participants were administered questions related to IPV severity, childhood trauma severity, PTSD symptom severity, and chronic pain severity. Wuest et al. found that PTSD symptom severity had larger mediating effects on the relationship between abuse severity and chronic pain severity than abuse-related injury did. Additionally, PTSD symptom severity had a greater effect on chronic pain severity than abuse-related injury when controlling for abuse severity. Based on their findings, Wuest et al. determined that reducing the chronic pain of

survivors of such abuse could be enhanced by also addressing the symptoms of PTSD or other lifetime experiences of violence. This supported the idea of self-medicating with opioids to control pain as a goal for the women in the current study.

Women and Opiate Dependence

In this section I will review opioid dependence in women, regardless of whether the drug is legal (e.g., medications) or illicit (e.g., heroin), or how it was obtained (prescription or black market). This clarification is made to reduce the potential bias that those who are opioid-dependent are only using illicit drugs, or only obtaining these drugs through illegal means. However, this is not to assert that women who are using legally obtained, prescription opioids as prescribed by their healthcare provider would necessarily be categorized as opioid-dependent. The *DSM-5* is clear that those who have developed a tolerance, and would likely experience withdrawal upon cessation of the drug, but who are using it as prescribed under appropriate medical supervision, should not be considered as meeting the criteria for tolerance or withdrawal for the purpose of diagnosing an opioid use disorder (APA, 2013, p 541).

One important reason to identify women who are opiate-dependent is the high prevalence of suicide attempts among this population. In one study (Roy, 2010), opiate-addicted individuals were found to be more at risk to attempt suicide if they were younger, female, and had experienced emotional, physical, or sexual abuse in childhood. Additionally, the author noted that those who had a family history of suicide were significantly more likely to attempt suicide. A family history of suicide may be viewed by the individual as a traumatic event.

According to the CDC (2013a), women are more likely than men to experience chronic pain, be prescribed opioids, given higher doses, and use them for longer periods of time. Additionally, they become addicted more quickly than men, and in 2010 women died from overdose more than five times as frequently as they died in 1999. Yet a women's health guidebook published in 2008 for the Office on Women's Health, U. S. Department of Health and Human Services encouraged women to assert themselves for higher doses, as "many doctors and patients are overly concerned about the risk of opioid addiction. As a result, patients are sometimes not given high enough doses of opioids and suffer pain needlessly" (USDHHS, 2008, p 354). Chronic pain, which may or may not be secondary to abuse and/or trauma, can be a precipitating factor for women to seek out opioids in the first place. In the presence of a trauma history, lack of treatment for the trauma may not only prolong the chronic pain, but also increase the desire to self-medicate the psychological distress that may be subsequent to trauma.

Women, Trauma, and Opioid Dependence in Alaska

The review of the above literature demonstrates the likely interconnectedness between women, trauma, and opioid dependence. However, this interconnectedness has not been studied in the small, yet high risk, population of Alaskan women. Alaskan mental health professionals are in a position to make a difference in the lives of these women, and the people close to them. Because the exact nature of any potential relationship is unknown in this population specifically, a grounded theory approach was warranted to determine what this relationship might look like. This research may then serve as a foundation for further research.

Summary

It may not be trauma that leads directly to ongoing distress, but rather the individual's attempt to cope and/or understand the trauma. Trauma may be "big," or more covert. Because almost anything has the potential to be traumatic (Uram, 2011), it is assumed that the trauma itself is not necessarily the most important culprit in ongoing distress, but rather the individual's perception, interpretation, and meaning of the event, and their corresponding response to the event. To understand how trauma may impact individuals, it may be useful to focus on certain key symptoms such as re-experiencing, avoidance, and hyperarousal. Women who live in more isolated areas with limited resources and less perceived support, and who have not identified more adaptive means of coping, may be likely to use opioids to manage these symptoms.

Certain traumas may, however, lead to chronic pain symptoms, which may be a result of a sensitized nervous system or underlying injury (i.e., assault or motor vehicle accident). Therefore, this mediating factor cannot be overlooked in a discussion about trauma and opioid use. In an attempt to relieve chronic pain, well-meaning women may seek legal opioid prescriptions, but quickly become dependent as they find the effects ease their emotional pain as well as their physical pain.

Women with PTSD are more likely to abuse the most serious substances such as cocaine and opiates (Najavits, 2002, p. 2). They may also use other substances, other unhealthy coping skills, or hopefully find adaptive, healthy coping skills. Perhaps the reverse is true; that women who are addicted to opioids have experienced trauma, significant life stressors, or disenfranchised grief. If this is true, it becomes necessary to

understand this situation in order to provide the best possible treatment. Women in Alaska, because they are often more isolated, may not perceive having the support necessary to mitigate the symptoms that may emerge as a result of trauma. However, through the current research, this understanding can be put to use through education of local counselors, therapists, and psychologists.

Chapter 3: Research Method

Introduction

The purpose of this study was to explore (a) the history of trauma, significant life stressors, and/or disenfranchised grief in Alaskan women who have been diagnosed with opioid use disorders; (b) to observe the types of symptoms they may report; (c) and to identify any potential patterns in their coping strategies. Understanding these experiences will better inform treatment. This chapter provides a description of the research design and approach, as well as the justification for its use. I describe the sample selection and the measures that were taken for ethical protection, and I will also outline the methodology for collecting and analyzing the data.

Research Design and Rationale

There was a lack of knowledge about how significant life stressors or disenfranchised grief may be perceived as traumatic and trigger PTSD symptoms (although there is some suggestion that such a relationship may exist: Mol et al., 2005) and how individuals with those symptoms may cope, including self-medication with opioids (Khantzian & Albanese, 2008). The following research questions were used to address this goal:

1. What types of traumas, life stressors, or disenfranchised grief do Alaskan women who sought treatment for opioid use disorders report?
2. What symptoms of PTSD were reported by Alaskan women who sought treatment for opioid use disorders?

3. How have Alaskan women who sought treatment for opioid use disorders coped with their traumas, significant life stressors, or disenfranchised grief?

The central phenomenon researched was the life experiences of Alaskan women who are or have been addicted to opioids. The main focus of the study was to explore the history of trauma, significant life stressors, and/or disenfranchised grief in Alaskan women who have been diagnosed with opioid use disorders, to observe the types of symptoms they reported, and to identify any potential patterns in their coping strategies. The data gathered during the course of the study were expected to lead to a better understanding of the relation between opioid use and life experiences that are perceived as traumatic as well as understanding how these women may have responded to the perceived trauma in the context of traumatic symptomology and both adaptive and maladaptive attempts to cope with those symptoms.

A qualitative, grounded theory design was the best approach for understanding the individual experiences of these women and for determining common patterns in their experiences. A qualitative approach, with supporting quantitative data, was determined to be the most appropriate way to address the research questions for this study. In the research questions, I sought a pattern in the experiences reported by the sample to their therapists. The data collected included therapist notes regarding clients who were treated for opioid dependence. They also included diagnostic information. Quantitative data were used to address the second research question, which focused on a count of how many women meet the criteria for PTSD based on the information provided in the chart. This

quantitative, descriptive data analysis was used to support the qualitative data analysis, which was more focused on the subjective nature of potential traumas and stressors in the lives of the participants.

Creswell (2007) claimed that there is an ontological assumption in qualitative research that relates to each individual's subjective reality. In qualitative research, the researcher seeks to understand these multiple realities. Creswell described an epistemological assumption in which researchers try to get as close to their participants as possible. In this study, treatment note data were used to understand the participants. There is an axiological assumption, in which researchers recognize the values they bring to the study (Creswell, 2007). I recognized the bias I brought to this study: I had worked with opioid dependent women and had subjectively noted a pattern of past trauma. This bias was kept in mind as the analysis was conducted and was recorded in a memo about my personal reactions, including opinions, emotional reactions, and reflections on where that reaction originated. A peer coder was used to reduce the risk of researcher bias influencing the interpretation by comparing proportion of agreement in coding between researchers. For every eight records, one was randomly selected for peer coding. Based on the inductive approach, qualitative research was the best choice to develop a richer understanding of this social problem.

Other qualitative strategies of inquiry were considered prior to deciding on grounded theory. A narrative approach was not applicable because the goal of this study was not to focus on individuals, but rather the common experiences of a defined group of women (Creswell, 2007). A case study was not applicable because the plan was to review

several records in order to understand the patterns in a group of women (Creswell, 2007). Ethnography was not used because I was not exploring culture-sharing behaviors of a group (Creswell, 2007). A phenomenological approach was also considered because of its emphasis on understanding the meaning of the lived experience to a group; however, this was not appropriate as I did not focus only on the meaning of an experience, but rather on exploring if there is a common lived experience in the lives of these women, and to develop a theory based on the information gathered from their treatment records.

Grounded theory was a logical first step in determining how to best understand and conceptualize what the participants' common experiences were because of its inductive approach to discovering theory in a grounded way. In grounded theory, the researcher seeks to understand the commonalities in the participants' experience, and after a disciplined analysis, develops a theory that takes into account their experiences (Creswell, 2007). Although some researchers have developed theories about trauma and opioid use and have conducted research to determine if their theories are correct (e.g., Mills et al., 2005; Oviedo-Joekes et al., 2011), I took a different approach by developing a theory grounded in the data, which consisted of the therapy notes of Alaskan women who were treated for their opioid use. Expanding the knowledge base of the association of opioid dependence and possible trauma, life stressors, and disenfranchised grief through grounded theory analysis also allowed for the development of new best practice rationale. The findings were expected to help determine if there was a need for chemical dependency treatment providers to take a closer look at the clients' past experiences,

specifically in terms of events which may have been perceived as traumatic, and change or add to the mental health treatment being provided.

Role of the Researcher

I was a practicum student at the agency where the research took place. During a clinical discussion, I shared my observation of co-occurring opioid use and reports of past trauma in settings that included jail, a domestic violence shelter, and the behavioral health treatment center. Clinical staff at the agency also observed that many women in the domestic violence shelter were concurrently participating in substance abuse treatment. During my practicum, the question was raised as to whether the women who were participating in both programs might benefit from a trauma-informed treatment approach, despite not being diagnosed with PTSD. The agency asked if I might like to conduct research to determine if there was some connection between past trauma and substance abuse, and they agreed to provide archived data for this research. This site was also a logical choice due to being the largest substance abuse treatment center in the Matanuska Susitna Borough, and whose data were recorded and archived through the Alaska Automated Information Management System (AKAIMS), which is managed by the Alaska Department of Health and Social Services (DHSS). Based on my history of working in this agency as a practicum student, and my personal observations of Alaskan women who were using opioids at the time I worked with them, I expected to see an association; however, I kept this bias in mind as I examined and coded the data and used the strategies described in this chapter to strengthen the trustworthiness of the study and my conclusions. I do not currently serve in any other professional role at this site.

Methodology

Setting and Sample

This research was a retrospective review, using an electronic database (AKAIMS) of existing records of adult women who have been diagnosed with an opioid use disorder and who sought services through a treatment center located in Alaska prior to 2015. To be eligible for inclusion in this study, the selected records must have been from clients who are female and at least 18 years of age at the time they were clients of the agency. They must also have had a history of addiction to opioids. There were 323 clients in AKAIMS who fit the inclusion criteria. This was enough to reach theoretical saturation (Creswell, 2009).

The agency required Walden Institutional Review Board (IRB) approval of the proposal, verified by the agency, prior to granting a request to access the records of clients in AKAIMS in order to search for those who met the inclusion criteria in accordance with HIPAA regulations for research. In order to do this, search criterion seeking the variable female in AKAIMS was used. This resulted in a list of women treated at the agency, which was then sorted by birthdate, to eliminate any minors' files from being used. It was then identified which of these women had opioid use disorder, opioid abuse, or opioid dependence, current or in remission, listed among their diagnoses. Only the records of those who were not currently in treatment were included in the study. Because current clients might not have yet disclosed any trauma, life stressor, or disenfranchised grief, their records would be incomplete for the purposes of this study.

A copy of the client notice, which allows use of treatment information for research purposes and is signed by clients during the intake procedure, is included in Appendix A. The agency signed a letter of cooperation (see Appendix B) agreeing to allow me access to AKAIMS in a way that is similar to employees of the agency. The database was stored on a password-protected website with security maintained by the State of Alaska. It was expected that the data would be collected from the website over a 2-month period.

Although identifying information, such as names and birthdates, were accessible to me, this information was not stored in the research database used for this project. Each record that was used was transferred to a database and assigned a random number code to maintain confidentiality. The key to this name/number code was stored on my password-protected laptop computer until the research database was completed, at which time the key code was deleted.

Demographic information that was maintained in the database included the individual's age, ethnicity, and education level. The individuals' diagnoses were noted; then narrative information from the intake and therapy notes were saved with their random number codes. All this information was kept on my password-protected laptop computer. I was the only person with access to the computer which was kept in a locked cabinet in my home office. Data analysis began after the key code was destroyed.

Data Analysis Plan

The raw data for this research were from archived records located in AKAIMS. This included the intake notes created by the therapists (both narrative entries and drop-

down menu entries), as well as ongoing treatment notes, and end of treatment summaries. It was from these raw data that open coding began. The drop down menu entries were noted for demographic and diagnostic information. The narrative entries were analyzed using grounded theory techniques, described below.

Grounded theory (Glaser, 1978) was used to organize and guide data analysis twice: once for each qualitative research question (#1 and #3). Question #2 was addressed with descriptive data including diagnostic information and counts of the PTSD diagnostic criteria that were met by each participant. Information from this question was then used to support the primary qualitative data analysis: I was able to identify how many, if any, women might have met criteria for a PTSD diagnosis if not for the specific definition of trauma that is provided in criterion A of the *DSM 5* (APA, 2013). There was no hypothesis for Question #2 as the data were used only to support the exploratory qualitative data analysis that was the primary goal of this study.

The narrative data were first open-coded to label the different categories that were found in the data. The data were constantly compared to the data found before it to determine consistency in the initial codes. Axial coding was the next step. It was used to determine how each code may relate to the others. This was done through the use of my notes. How all the codes and categories were related was explained in a step called selective coding. Finally, a theory was developed based upon the patterns that emerged from the codes, as well as memos that were determined to be relevant. During this process, a colleague, who had experience in coding, was asked to code five cases of my sample. Our coding was compared to determine the percentage to which we overlapped

to determine agreement: the goal being at least 80% agreement. If 80% was not achieved, we planned to discuss why we were not agreeing and then code two different cases. Notes would have been maintained should such disagreement have occurred to explain both the disagreement and the negotiated agreement that followed. This process would then have been repeated until 80% agreement was achieved, and the coding that emerged from that process would have been applied to all other cases in the sample. Fortunately, this was not necessary, as we achieved 84% agreement. We did, however, discuss how our 84% agreement could have been improved. The data were organized with NVivo qualitative research software. The NVivo software was used to aid in the organization, coding, and categorizing of the data.

Issues of Trustworthiness

As is true in quantitative studies, issues of validity and reliability should be addressed in qualitative studies (Creswell, 2009). In qualitative research, the terms credibility (representing internal validity) and transferability (representing external validity) are used to describe validity (Creswell, 2009). Credibility in the current research project was based on the strategies of triangulation, the presentation of discrepant information, and the use of a peer coder. Triangulation was obtained by using the record of each participant's intake note, treatment summaries, and discharge summary to obtain a more complete understanding of each woman's experience. If any patterns were found in the data that were not consistent with expectations (discrepant information), this contradictory information was noted and discussed (Creswell, 2009). The peer coder process is described above and was used to check the coding of the data for consistency.

Transferability was based on the inclusion of records of all women who were 18 and older, who had sought treatment from the agency providing the records.

In qualitative research, the terms dependability is used to describe reliability (Creswell, 2009). To establish reliability, audit trails and crosschecking codes were used to determine intercoder agreement. As suggested by Miles and Huberman (1994), the goal was for the peer coder and I to be in agreement at least 80% of the time.

Ethical Procedures

Ethical considerations are important due to the access to confidential information that was granted by the supporting agency. Confidentiality and privacy were the primary risks of this study. As described above, clients sign a client notice that describes the potential use of information for research purposes (Appendix A). Client information for those who were currently in treatment were not used, as information disclosed on an ongoing basis may change during the course of therapy. For this reason, only archived data from past clients were used.

According to the National Institutes of Health Office of Extramural Research (2014), coding data, such replacing a name with a randomized number, is considered an appropriate way in which investigators can de-identify the research data. Accordingly, identifying information was not used in the research database that was built. A temporary key code was created matching names to the random number to ensure that information collected from AKAIMS was attributed to the correct participant.

Once the research database was complete, the key code was destroyed by deleting it from the password-protected laptop computer. This process was completed prior to the

analysis of any data. Once the key code was destroyed and access to AKAIMS was terminated, I was not able to identify the individuals' coded private information, thus ensuring confidentiality for the clients whose information was being used. The de-identified data will be stored on the same password-protected computer for 5 years, and then will be destroyed by deletion.

Summary

This chapter provided an outline of the research design, a description of the role of the researcher, and the strategies to establish trustworthiness. The plan for how data were collected was addressed with attention given to ethical considerations in order to protect the confidential nature of the participants' treatment records. The data analysis plan was discussed according to grounded theory traditions. Plans were laid out to ensure that the use of these treatment records for research was worthwhile by attending to credibility, transferability, and dependability.

The purpose of this study was to identify if there are common themes of trauma, significant life stressors, or disenfranchised grief in the life histories of Alaskan women who are being treated for an opioid use disorder. By determining what common themes exist, if any, clinicians might determine more effective ways to treat these women that may improve their lives, and the lives of those around them. In the next chapter, I will identify the common themes that were found in records of some Alaskan women who were diagnosed with opioid use disorders.

Chapter 4: Results

Introduction

This chapter provides a review of the demographics of all women who originally qualified for the study (all women of the agency who were diagnosed with an opioid-related diagnosis), and then provides a description of the 43 women who were selected for inclusion in the qualitative study. Descriptions will be presented of the themes that were found with regard to types of life experiences, PTSD criteria, and coping skills. The results of the grounded theory data analysis will be discussed, with a review of how trustworthiness was established.

Data Collection

Following receipt of Walden IRB approval (number 10-13-15-0116712), research began. Data collection continued for approximately 3 months. A total of 1,733 female clients with closed cases were identified, and all cases of minors (n = 437) were eliminated. Each remaining file (n = 1296) was examined for diagnostic information. A total of 323 adult females with an opioid-related diagnosis were identified (see Table 1). Ninety two of those women (28.4%) had also been diagnosed with PTSD, and three additional files indicated a PTSD diagnosis be ruled out. This left 228 women with an opioid-related diagnosis without a diagnosis of PTSD.

Records were considered for inclusion only if there was at least one behavioral health assessment (BHA) and sufficient additional data beyond the BHA to make a qualitative analysis possible. Of the 228 women with opioid-related diagnoses and without a PTSD diagnosis, 77 had sufficient data. Sufficiency was determined by the

presence of a second BHA, a Drug Evaluation Network System Addiction Severity Index (DENS ASI), or at least two treatment reviews. To determine the amount of sufficient data available, each of the 77 records were screened to identify those with the greatest amount of history in order to provide the richest data. To reduce the 77 records to a more manageable number, a BHA or a DENS ASI was assigned two points each (as they have the greatest amount of history), and treatment reviews were assigned one point (as they have less history included). Cases with six or more points were then included in the qualitative portion of the research. This selection process narrowed the number of cases to 43. The demographic information of these 43 is listed in Table 1. Chi-square nonparametric tests for goodness of fit indicated there was no significant difference between the demographics of the 323 adult females with an identified opioid-related diagnosis and the sample demographics ($n = 43$). There was no significant difference for age, $X^2(7, n = 43) = 5.38, p > .10$, for education level, $X^2(6, n = 43) = 5.84, p > .10$, or for race, $X^2(3, n = 43) = 2.03, p > .10$.

Table 1

Demographics

	Women with Opioid-related Diagnoses (*n= 323*)	Participant Sample (*n= 43*)
Age (years)		
18-19	14 (4.3%)	2 (4.7%)
20-24	87 (26.9%)	11 (25.6%)
25-29	70 (21.7%)	12 (27.9%)
30-34	44 (13.6%)	4 (9.3%)
35-39	40 (12.4%)	7 (16.3%)
40-44	27 (8.4%)	1 (2.3%)
45-49	20 (6.2%)	4 (9.3%)
50 +	21 (6.5%)	2 (4.7%)
Education level		
Non-graduate	70 (21.7%)	8 (18.6%)
High school diploma	102 (31.6%)	12 (27.9%)
GED	75 (23.2%)	16 (37.2%)
Vocational training beyond high school	36 (11.1%)	3 (7.0%)
Post-Secondary Education (non-grad)	28 (8.7%)	3 (7.0%)
Post-secondary graduate	8 (2.5%)	1 (2.3%)
Unknown	4 (1.2%)	0
Race		
White	262 (81.1%)	34 (79%)
American Indian/Alaskan Native	26 (8.0%)	6 (14%)
Latina	9 (2.7%)	0
Black	1 (0.9%)	0
Mixed Race	24 (7.4%)	3 (7%)
Unknown	1 (0.9%)	0

Data Analysis

NVivo 11 was used to manage, organize, and code the data. The data were copied and pasted into a Word document to prevent transcription errors, and then they were

imported in the coding program for organization prior to beginning the coding process. A two-stage model was used, which included open coding followed by axial coding. A line-by-line style of coding was used in the open coding. As contents were identified that reflected trauma, life stressors, or disenfranchised grief, these were coded with nodes labeled to reflect the content and were separated at the outset as experiences that occurred in childhood, defined as before the age of 18, or in adulthood, defined as after the 18th birthday. This resulted in 47 nodes in the initial coding for these experiences: 23 for childhood experiences and 24 for adult experiences. Following this, data were reviewed and coded with nodes labeled to reflect symptoms that matched criteria B through E for PTSD. This resulted in four nodes. Finally, the data were coded with nodes labeled for the ways in which the women reported to their counselors how they have coped in the past or were coping during treatment. This resulted in 26 nodes in the initial coding. Nodes were then sorted into categories of trauma types and coping styles.

Additionally, some initial nodes were combined as similar or renamed to better describe the content of the category. In the end, childhood experiences included 19 nodes, or subcategories, adulthood experiences included 24 subcategories, and coping styles included 24 subcategories. The four PTSD symptom categories were not further categorized, as they were designed to correspond with the *DSM-5*.

Traumas, Life Stressors, and Disenfranchised Grief

The first research question asked what types of traumas, life stressors, or disenfranchised grief were reported by Alaskan women who sought treatment for opioid use disorders. The first round of initial coding involved identifying experiences that may

be described as traumas, life stressors, or disenfranchised grief during childhood and during adulthood. Following the open coding, experiences were categorized by their similarities in axial coding. Table 2 shows the seven childhood categories and five adulthood categories that seemed to best encompass and focus the experiences reported by the women.

Quotations were taken from notes in client records and may not have been accurately transcribed word for word. These quotations are italicized in quotation marks. In cases where the therapist quoted the client, the client's words are italicized in single quotes within the therapist's quotation.

Table 2

Traumas, Stressors, and Disenfranchised Grief

Childhood Stressors	Stressors in Adulthood
Neglect-Related Issues	Threats to Self
Loss of Parent/Caretaker Relationship	Threats to Relationships
Personal Childhood Disadvantages	Romantic Partner
Changes to the Family Unit	Other Relationships
Parental Medical/Mental Health Issues	Threats to Role
Abuse	As a Mother
Child with Adult Responsibilities	As a Community Member

Childhood stressors. Childhood stressors included the following categories: *neglect-related issues*, *loss of parent/caretaker relationship*, *personal childhood disadvantages*, *changes to the family unit*, *parental medical/mental health issues*, *abuse*, and *child with adult responsibilities*. In many cases, there were combinations of stressors.

Neglect-related issues. Neglect-related issues involved childhood issues in which the child's needs may have been ignored or the caretaker's needs or desires were placed above the child's needs. A total of 35 women reported neglect in their childhood. The two types of neglect-related issues included *parental substance abuse*, which was reported by all 35 women, and *childhood neglect*, which was reported by seven women as co-occurring with parental substance abuse.

Parental substance abuse included placing the caretaker's needs above the child's while abusing a substance. In this case, caretakers modeled unhealthy coping behaviors or failed to care about the impact the substance abuse had on the child. The number of reported alcohol-dependent biological fathers was large (27 of the 35 cases) in comparison to all other forms of substance abuse or familial relationships. One of the adopted clients recalled that her biological parents were alcoholics prior to being removed from the home. The other adopted client did not know for certain about her biological parents, but reported her adoptive father was alcohol-dependent:

> *Client reported her biological parents may have had substance abuse issues, but she is unsure because she was adopted…reported her adoptive parents divorced when she was 7-years-old. 'One day he was gone. We had no contact after that'. He was an alcoholic who died of cirrhosis of the liver*.

In some cases, the father's alcohol use was in remission: "*Client says her father had been an alcoholic, but now is a nondrinker*," and in other cases relapsed, "*Client reports her father was a 'dry drunk' for a while but has begun to drink again.*" At least one client did not even know of her father's alcohol dependence until she entered

treatment: "*The Client denied any family history of substance abuse problems but when her father joined the interview he reported he had a history of alcohol dependence that he had successfully stopped on his own*." One client explained the direct influence of her father's alcohol use on her own use: "*At 16, [she] drank "barely ever, except when Dad would buy me alcohol.*" Some of the clients minimized their fathers' use, for example: "*she described her father as a 'functional alcoholic' and 'daily drinker'*." One client alluded to a paternal, familial relationship in her statement "*her paternal grandfather was an alcoholic*."

The subcategory childhood neglect was reported by seven individuals who had also reported parental alcohol abuse, and included failing to give necessary care: *"Client reported there were neglect issues in the foster care home, such as improperly cleaning a severe burn that the client had suffered,"* or not providing adequate supervision at an age-appropriate level, such as, *"She described experiencing neglect as a child and frequently did not have food and her mother not being home when she was ages 12-16."*

Loss of parent/caretaker relationship. Loss of parent/caretaker relationship was reported by 31 women, with 11 women reporting more than one such experience. This category included *parental divorce or separation*, especially if the client became estranged from the absent parent, *out of home placement/adoption,* which was reported by seven women, and *death of a parent/caretaker*, which was reported by six women. One woman was removed from her home, adopted, and later her adoptive parents were divorced.

Parental divorce or separation was the second largest subcategory for childhood stressors, with 28 clients reporting their biological parents were divorced, 23 of them when they were under the age of 12. One client's chart described this experience and how she believed it to be her fault:

> *She describes she found her dad having an affair and she had to tell her mother. Client said parents separated and this was a very difficult time for her. She said she got into trouble because both of her parents left the home and left her there to live alone. Client said she was having parties and 'hanging out with the wrong people.'*

Out of home placement/adoption, which was reported by seven clients, was defined as being removed from the primary home by the state and placed in an alternative home, but also included long-term placement in a residential treatment center, as was the case for two clients. In some cases, the client was removed from her primary home and placed with family members, such as grandparents. In one case, the client's mother was allowed to live with the client and the grandmother, but this was still coded as an out of home placement because of the possible disruption of the primary caregiver role, an essential element of this subcategory. Two clients experienced adoption, although only one remembered life before being removed from her family of origin. She reported being physically abused by the foster parents who cared for her before she was adopted, and "*expressed she remembers not wanting to be adopted*," although she described the relationship between her and her adoptive mother as improved.

Six clients reported death of a parent/caretaker prior to their 18th birthday. Although the death of a parent was also coded for adults, differences in developmental stage at the time of the parent's death led to this being organized into two different categories. Four individuals experienced the death of a biological parent, and two the death of a caretaker. One client who learned about the death of her biological mother when she was 16 years old, a couple years after it happened, and several years after her adoption into a new family. She believed "*her biological father may have killed her biological mother*." One client perceived the death of a non-parent caretaker as impactful when she stated, "'*I had a good childhood until my grandpa passed away.' She stated her maternal grandfather passed away from leukemia when client was 9 years old. She stated 'he raised me. That's when my drug problems started'*." She drew a direct connection between the death of her grandfather and the onset of her substance abuse.

Personal childhood disadvantages. This category included stressors that impacted the child's body due to unintentional human caused or nonhuman caused etiology; intentional human-caused stressors on the child's body were categorized as abuse. This category included *childhood mental health issues*, which were reported by 12 clients, *childhood medical issues*, which were reported by 12 clients, *childhood accidents*, which were reported by 11 clients, and *learning or cognitive disabilities*, which were reported by nine clients.

Childhood mental health issues were varied, but mostly included anxiety, depression, or behavioral disorders. For example, "*the client reported being diagnosed with depression at age 13*," "*she was both anorexic and bulimic at age 13*," and "*the*

client reports that at age 14 she spent several months in treatment at Providence Hospital Behavioral Health (Discovery) program, Anchorage, AK." In one particular case, the client believed her behavioral problems were the cause of a second stressor (an interstate move), which also modeled a style of coping the client would eventually tend to overuse (running away): "*Client says stepfather #2 had moved the family to Alaska because, at the time, 10 years ago, client was having behavioral problems in school*."

Childhood medical issues were a significant stressor in the lives of 12 women, "*Client was diagnosed with Crohn's Disease at age 14. Client stated she was ill a lot and couldn't finish high school due to her illness.*" Some women drew a direct connection between what they believed was their stress level and their medical issues: "*She states she struggled with hyper and hypo-thyroid problems when she was younger but these have since disappeared. She believes they were related to stress and depression*."

Similarly to medical issues, childhood accidents sometimes disrupted normal childhood development by negatively impacting the individual's role as a student or through long-lasting physiological consequences in addition to the trauma of the accident itself. For example, one woman reported the recovery from a near fatal car accident prevented her from returning to school:

> *The client reported she was in an auto accident in '01 where she suffered several serious injuries including shattering both shoulders, shattering both knees, a broken arm, a head injury, and a neck injury. She reports she was thought to have been dead initially at the scene as she was knocked unconscious*.

She expressed regret that she was not able to complete her senior year of high school. Another client reported the lasting consequences of an equine accident: "*At age 14 she fell from a horse and suffered a traumatic brain injury*."

Learning or cognitive disabilities may have existed since birth, occurred following childhood accidents, or occurred as the result of abuse or neglect, to name a few possibilities. During initial coding, this category was coded without regard to the possible cause of the disability. Disabilities in this subcategory included stressors such as reading disorders, math disorders, attention deficit hyperactivity disorder, traumatic brain injury (TBI), prenatal alcohol exposure, or other disorders for which the client may have received special education services or other accommodations. This was identified as a stressor because academic success may have been more difficult for these women. One entry read: "*Client described she 'kind of struggled in school' and was in a special learning program.*"

Changes to the family unit. Changes to the family unit do not include divorce or death, but rather changes in its location (*childhood interstate moves*) or sudden additions to the family (*blended family issues*) both of which require accommodation by the client. Childhood interstate moves were reported by 27 clients, and blended family issues were reported by 14 clients. Although these changes may be harmless and even positive to some individuals, others may struggle with this change. One client explained why moving was so difficult for her as a child:

> *Client says she did not have an easy childhood, as she was a 'Navy brat' whose family moved often, but client does not have an extroverted personality, so she suffered through the frequent changes. She moved to AK at age 13*.

One client reported "*she experienced conflict with her step-father at this age because he wanted to move here*."

Abuse. The category of abuse included *sexual*, *emotional*, and *physical abuse*, as well as *witnessing domestic violence*. It was assumed the clinicians followed up on reports of abuse as required by ethical code and Alaska state law. An outlier in this category was the kidnapping of a client when she was 9 years old. She reported little memory for the events that occurred while being held for two days before being found and returned to her family. Due to her lack of memory, it was difficult to categorize this event, but was described here as an intentional, human-caused trauma.

Childhood sexual abuse was coded in 17 of the records, and included both chronic abuse and single episodes. "*The client states she was neglected as a toddler then physically and sexually abused by her stepfather from 3-10 years old*" and "*she reported being raped at age 13.*" This subcategory included cases where the client did not recognize her sexual victimization, and those in which she knew it was a problem, but did not know what to do about it. "*Client stated she suffered emotional and physical abuse from the father of her daughter, who was aged 34 and client was 15 at the time*," and "*She reported she was sexually abused by her paternal grandfather from age 3 to age 13. Client didn't tell anybody for a really long time, because she was afraid of what her father would do*."

> Childhood emotional abuse was reported by 15 clients. One counselor wrote: *She appears to continue struggling with finding acceptance from a male figure which this clinician believes stems from her relationship with her father. It is believed that her substance use was used as a tool to deal with the deep emotional scars left by her childhood experiences*.

Another individual was emotionally abused by phone, "*She reports she did experience some emotional abuse from her father when he would call and tell her that he was going to kill himself.*"

Childhood physical abuse was reported by 13 of the participants. It was often at the hands of caretakers: "*Client stated her mother was abusive and would hit her*," or "*Client reported she was abused by her foster care parents at the age of 6, including being hit by a cup that left a scar*." Physical abuse was also reported at the hands of older siblings: "*client stated she was physically abused by her older sister at the age of 8*," and "*she states her father and older brother abused her physically*."

Witnessing domestic violence was reported by 13 of the women, and appeared to have serious impact on those who witnessed this violence perpetrated on their mothers. For example, "*client stated she has flashbacks to her father who was abusive to her mother and sister*," and "*reported her biological father may have killed her biological mother*." One woman reported a previous childhood diagnosis of PTSD due to witnessing domestic violence perpetrated against her mother. No clients reported observing domestic violence by their mothers against their fathers or stepfathers.

Parental Medical/Mental Health Issues. Parental mental health issues were reported by 17 clients, and parental medical issues were reported by 12 clients. This category was coded only if they occurred in childhood; if these issues occurred when the client was an adult, it was coded as a stressor in adulthood. In an example of how mental health issues impacted the client, "*Client reports her biological father has been psychiatrically institutionalized and that he attempted suicide twice."*

Child with Adult Responsibilities. Child with adult responsibilities included the subcategories, *teen pregnancy* and *childhood legal issues*. These issues reflect a level of responsibility that might have been stressful or overwhelming for the age of client. Outliers in this category included clients who raised their siblings or were married in childhood (four clients reported raising siblings and two clients were married before their 18th birthday).

Teen pregnancy was reported by seven clients, including four girls who dropped out of school when they became pregnant, two who became pregnant shortly after dropping out, and one who became pregnant and graduated high school. One chart reflected that, "*this was really against her and her family's religious beliefs*," and that the client experienced a lack of familial support and shame in addition to the stress of mothering a child. One girl who became pregnant at 15 years old reported the father was a man more than twice her age.

Childhood legal issues were reported by six of the 43 women. Four women reported being charged with consuming alcohol as a minor, and one was a charged as a "*minor driving a motor vehicle after drinking.*" Two were placed in residential treatment

centers due to their behavior (i.e. running away, alcohol use). Another chart reported: "*client and her younger brother had to do community work service in the fall of 2002 when 'they stole money from the family to buy marijuana'*."

Stressors in Adulthood.

Stressors occurring in adulthood were coded as issues that could be viewed as threats to survival in adulthood rather than childhood. Categories included *threats to self*, which encompassed many of the same issues as personal childhood disadvantages and childhood abuse. The other categories were *threats to romantic relationships*, *threats to other relationships*, *threats to the community member role*, and *threats to the mother role*.

Threats to Self. This category included threats to physical and psychological integrity. This included the subcategories *domestic violence*, which was reported by 32 women, mental illness, which was reported by 31 women, *accidents and injuries*, which was reported by 28 women, *surgeries*, which was reported by 26 women, *chronic pain*, which was reported by 26 women, *serious illness*, which was reported by 22 women, and adult sexual assault, which was reported by seven women.

Domestic violence was coded for all acts or threats of violence, as well as sexual, emotional, psychological, and financial abuse within the romantic relationship. This included domestic violence in which the client was a victim, and mutual domestic violence. Domestic violence in which the client was a victim included such traumatic experiences as attempted murder, "*he tried to kill her by strangling her. He was arrested and served 4 years of 6 year sentence.*" Physical violence was not always the most severe abuse in the eyes of the client, for example "*The father of her son was very*

abusive and tried to keep client isolated. Client reported there were two physical fights, but most of the abuse was emotional/verbal; she reported him saying things such as: 'you won't get out of here with my son'." Mutual domestic violence was coded here because, despite the client's violence, she may have believed herself to be in danger, for example, "*She reports she lost her temper in 05/2012 when she needed to defend herself from her husband's abuse.*" Domestic violence in which the client was a perpetrator was not coded here, because this was considered to be a threat to the relationship rather than to personal physical integrity. Incidents in which the client was the perpetrator toward a non-romantic partner were considered to be threats to other relationships, described below.

The subcategory mental illness was defined as a stressor related to coping with one's own mental illness and which appeared to cause stress or other issues (e.g., legal, employment, social problems). The most commonly reported mental health diagnoses were depression and anxiety-related disorders. Additional diagnoses included bipolar I disorder, Tourette's, ADHD, and panic disorder. One example of this category:

> *Client reported she feels depressed at times because 'I feel like I'm not fulfilling'. Client has severe anxiety. She described she has panic attacks. She reported 2-3 days a week she does not want to leave her house due to anxiety.*

Accidents and injuries was often associated with chronic pain, especially back and neck pain. Some of the more common accidents reported included motor vehicle accidents, snow machine and four-wheeler accidents, falls, and accidental drug overdoses. Although the experience of the accidents may have been perceived as traumatic by the client, the residual chronic pain may have been a stressful experience

and possibly a reminder of a traumatic event: "*Client reported she experiences pain and she walks with a limp related to a hip fracture. She stated she sustained this injury during an episode of intoxication.*"

Surgeries included both elective and non-elective procedures. In some examples, the client became addicted to the medications that were prescribed for pain following the procedure, "*Client had a gastric bypass surgery in 2000, after which time she became addicted to narcotic pain medications*," and "*Client has had a surgery on each knee; these surgeries started her addiction to opioids.*" The most common surgical procedures reported by the women in the research were hysterectomies, tubal ligations, gall bladder removal, cesarean sections (C-sections), and surgeries for various broken bones (wrist, arm, knee, and ankles). Surgeries, like accidents and injuries, frequently led to chronic pain, per clients' reports.

Chronic pain was most commonly reported as "*chronic lower back pain"* or "*endometriosis*." In some cases, the women identified the cause of the lower back pain, such as "*chronic low back pain due to a 2001 car accident, for which she had been prescribed opioids in the past*." A number of women, however, did not identify the cause of their chronic lower back pain. In the case of endometriosis, some women reported relief from that particular pain by receiving a hysterectomy, but then were prescribed opioids following the surgery for the pain during recovery. Some women appeared angry regarding the prescription of opioid medications for their chronic pain issues: "*She reported she was in a pain management clinic for a period of time… and stated she would never go back to one due to the prescription of opioids and her addiction issues.*"

Chronic pain also played into the subcategory threats to community member role such as, "*She then stopped working due to health issues, including back pain*." This resulted in a sense of reduced productivity or connection with the community.

Serious illness was most frequently related to poor self-care related to opioid use. Some of the most common reports of serious illness as adults were Hepatitis C and dental issues. One woman explained her dental problems were secondary to her drug use, "*Client had… two teeth pulled due to deterioration from meth use at the age of 18."* One woman reported traumatic consequence of her drug use:

> *Client is currently being treated after having "died" at the hospital from a drug induced heart attack. Client reports only a 25% functioning of her heart which places her at a higher risk should she continue to drink alcohol and/or use drugs.*

Sexual assault as an adult was the only non-domestic assault reported and was found in seven of the records. One woman reported the rape was perpetrated by an acquaintance: "*Client reported there was an incident 5 years ago when she was sexually abused by an individual she met through a friend*," but the other six did not indicate whether they knew the perpetrators.

Threats to Relationships*.* Threats to the romantic partner relationship, which was reported by 40 women, was considered differently than threats to other relationships, which was reported by 34 women. Stressors in these categories are not focused on threats to the woman's physical integrity or about her role within the world, but very specifically about the relationship of which she is a part.

Threats to the Romantic Partner Relationship. Stressors in this category included *romantic partner substance use or dependence, separation or divorce, partner incarceration,* and *domestic violence - client as perpetrator.* The client's romantic partner may be a spouse or an unmarried partner to the client, and often this partner was the father of one or more of her children. Threats to this relationship may be due to the client's behavior, the partner's behavior, or some combination of both. Relationship infidelity was reported by four women, but was not significant enough to be considered a theme.

Romantic partner substance use or dependence was reported by 31 of the women. This was coded when the use of the substance led to domestic violence or when it undermined the client's attempt to maintain sobriety. In a number of cases, the client reported how the relationship was jeopardized by the partner's substance use and associated domestic violence, "*Client has been married and divorced once. That marriage lasted 3 months. Husband was alcoholic and physically and emotionally abusive*." An example of how it undermined her efforts to maintain sobriety included, "*The father of client's son is addicted to drugs and is a drug dealer… She acknowledged she had still been seeing him while in treatment [previously] and had been using drugs with him, including IV heroin. 'He is the only one I used drugs with'*."

Separation or divorce can be stressful whether or not one wants the relationship to end (Holmes & Rahe, 1967). This seemed to be the case with the 27 women in this study who reported divorce or separation. An example of the stress of an unwanted break-up was: "*client called this writer crying to report that her S.O. broke up with her. Client is*

emotionally devastated… and is vulnerable at this time. Client is working to find a place to stay and to keep her children together." The case file of one woman who initiated her divorce reported: "*Client had been married 19 years. She and her husband had met through family friends. Client reported the divorce process "is hectic" and there is a lot of conflict.*"

Partner incarceration, reported by 15 women, is an example of forced separation, with some similar reactions: "*She reported sadness and loneliness when her significant other was in jail for seven months until he was released*." However, in eight cases the partner was incarcerated for an offense against the client, and, in one case for an offense against their 15 month-old son who "*was severely beaten by her ex-husband*."

Domestic violence – client as perpetrator was reported by seven women, and was viewed from a different perspective than the domestic violence code under threats to the self because the client's behavior did not necessarily threaten her physical or psychological integrity, but did threaten the relationship of which she was a part. In an example of this, "*client stated she was drinking. 'I lashed out at him and the police got called.' Client stated he was on Felony Probation and went back to jail. Client expressed regret that she drank alcohol and her temper got out of her control that night.*"

Threats to Other Relationships. Threats to relationships other than romantic ones included, *death of a loved one*, which was reported by 22 women, *parental medical issues,* which was reported by 15 women, *non-death loss,* which was reported by 12 women, *significant interactional difficulties,* which was reported by 10 women, and *others' incarceration* which was reported by five women.

Death of a loved one does not include the loss of the romantic partner or deaths that occurred during the client's childhood. An example of such loss was reported by a woman who lost her brother suddenly, "*She reports she and her siblings were close until her 27 year old brother was killed in a pedestrian-auto accident 3-years ago*." Parental medical issues may threaten the relationship in a different way. In this subcategory, the threat is the potential change in or loss of the adult parent/child relationship due to serious medical issues in the parent. An example of this includes, "*Client reports she had to quit her job in order to care for her mother*."

Non-death loss referred to parents/friends moving away, children moving away, and also giving up a child for adoption. Examples of these types of losses include: "*She reported she misses her family members, most of whom live in Michigan and Wisconsin,*" and

> *Client reported she gave up her daughter up for adoption while she was living in Homer. Client's daughter is now 9-years-old and lives in Wasilla. Client reported she sees her 'once in a while' and thinks about her 'sometimes'. 'That's another thing that might make me drink'.*

In a different sort of non-death loss, one client lost her father when she discovered the truth about the relationship between him and her mother: "*Until last year, client thought her 1st stepfather (now divorced from client's biological mother) was her biological father.*"

Significant interactional difficulties was defined as chronic tension that threatened the relationship between the client and other person. Often this was siblings, parents, or

children. For example, "*Client stated her brother introduced opioids to her when she was 'a lot younger.' Client stated he feels guilt about this and this results in tension. 'We clash a lot. He has a lot of self-hate'*." In one case, it was the client's mother-in-law. The clinician reported in the record that "*she and her mother in-law have a strained relationship and client expressed a great deal of anger, even to the point where she stated 'the old woman needs to die already'*."

Others' incarceration impacted five women. This included relationships with two fathers, two brothers, a sister, and a son (one women experienced the incarceration of both a father and a sister). An example of the impact on the father/daughter relationship was, "*Client reported her father was in jail most of her life. They did not meet until client was aged 14*." Additionally, clients' own incarcerations also threatened their relationships with family members, for example their children, "*Client acknowledged that her being incarcerated has greatly affected her relationship with her son*." Clients' own incarcerations will be discussed below as a legal issue, because their incarcerations threaten relationships with romantic partners and others, as well as their roles as mothers and community members.

Threats to Roles. It was observed that *threats to the community member role*, which was reported by 40 women, was different than *threats to the mother role*, which was reported by 32 women. Stressors in these categories are related to who she is and how she sees herself within the world. Some of the stressors or threats to roles may overlap with other areas to a degree because the themes of some stressors are woven into

different realms of stress types. Being tangled in this psychological knot may be a stressor itself.

Threats to the Community Member Role. Threats to the community member role involved the ways in which the woman sees herself in relation to the rest of the community. For example, labeling herself as a good/bad person, caring for herself, contributing to the community, relying on the community for some of her care, and desiring to be seen/known to others in her community in a certain way. The data in the records gave rise to these questions and informed the subcategories of *legal issues, homelessness/economic/employment issues,* and *interstate move*.

Legal issues as a stressor was reported by 36 of the 43 women and was the most prevalent stressor in adulthood for these women. This subcategory was based upon the added responsibilities of meeting legal obligations, such as probation/parole requirements, the stigma of being labeled a criminal or felon, and determining the role they will take within the community with this label and their criminal history. One woman reported losing her job because of her criminal behavior at work, and believed she would not be able to maintain her career because of this history: "*Client reported that she had been working in a dental office and was caught forging prescriptions*." Some drew a direct connection between their substance use and legal issues, "*Client told this Counselor her substance abuse problems led to most of her legal offenses.*" There was a belief by at least one woman that residual legal issues would likely follow her, and permanently impact her role within her community, "*Client identified continued legal problems as a barrier to her success."*

Homelessness, economic, and employment issues were the second most commonly identified adult stressors, and were reported by 35 of the women. This subcategory was related to the ability to meet basic needs such as shelter or food. One clinician reported such a stressor:

> *Client has not worked or received income from employment in the past 30 days. She did not receive any income from unemployment compensation, welfare, pensions, benefits, or social security in the past month. She has not received any money from family or friends in the past month. Client says that she has not made any money illegally in the past month. Client has one dependent for whom she is financially responsible. No one contributes any cash, food, housing, etc for her support.*

Thirty four of the 35 women who had stressors within this subcategory reported being unemployed but seeking work. Twenty-three women reported their financial situation as having "*not enough for basic needs*" at some point during their treatment, and 12 reported being "*homeless"* while in treatment.

Interstate move was coded for moves involving a change of community with a journey of at least several hours. Eight women reported making such a move. Moving to a new place carries a certain amount of stress (Holmes & Rohe, 1967) as one must learn their way around, seek housing, perhaps seek employment, and eventually settle into some role within the community. For example, one woman reported stress associated with leaving Alaska, which she considered her home:

Client has lived in Alaska all her life except from 2007-2009, when she lived in Washington and Montana. She stated she went to Washington with her husband to go to nursing school to be a registered nurse. She lived in Washington for a year and six months. Then she and her husband moved to Montana because he had family there. 'I was ready to come home [Alaska] then but he wasn't.' She likes living in Alaska and indicated 'I'm not leaving again'.

Another woman reported struggling with moving to Alaska:

Client moved to Alaska with her husband in 6/2005 from Washington. She stated she does not like living here anymore. Client reported her husband does not want to move but she does… Client reported she does not have friends in Alaska. She has some friends in Washington. Client stated she feels isolated.

Threats to the Mother Role. Threats to the mother role involved the way the individual sees herself fulfilling this role, as well as how she believes others may see her filling the role. Her perspective may be through her own perception rather than how others actually see her, or very real judgements about how the woman was conducting herself as a mother. Subcategories of this code include: *children removed from custody*, *childbirth-related difficulties*, *children's medical issues, being a single mother*, and *kidnapping of child*.

Children removed from custody was a stressor to most women in the study who reported involvement by the Office of Children's Services (OCS). With 25 women reporting stressors in this subcategory, it was the most common Threat to the mother role. This directly threatened the woman's role as mother because the children were removed

for lack of adequate care, supervision, or protection. Children were removed for issues related to domestic violence within the home, "*Her children were taken from the home by OCS due to concerns about domestic violence,*" the client's substance use, "*Client reported her alcohol and drug use has caused problems in her life. 'It got my kids taken away. Now I have to be here'*," and failing to protect the child, "*He was removed from her custody when he was age 15 months because he was severely beaten by her ex-husband who is currently incarcerated*."

Childbirth-related difficulties were reported by 18 women and included such issues as C-sections, miscarriage, postpartum depression, abortion, and other childbirth-related complications (not related to the child's medical issues). Seven individuals reported C-sections, four reported miscarriages, and four reported post-partum depression. One woman believed she was responsible for the loss of the child "*she had miscarried a child in the prior year due to her alcohol and drug use*." In another case, the woman reported that a poorly performed C-section resulted in chronic pain for which she was using opioid medications while in treatment.

Children's medical issues were reported by 16 women, and included illnesses or injuries sustained by their child. Stress was related to whether the client caused the illness or injury, the client's belief that she may have caused it or failed to prevent it, or managing the condition. One case file stated: "*client stated she kicked her 7-year-old while she was intoxicated.*" Another example included: "*Client's daughter has also been diagnosed diabetic*." In this case, there is no indication that the client caused her child to be diabetic, she may or may not wonder about genetics, diet, or exercise, but she does

need to know how to manage her daughter's care. Additionally, within this subcategory, there may be a sense of powerlessness to heal, cure, or otherwise fix the problem: "*She stated that she had anxiety when her daughter was diagnosed RSV. She took Xanax for anxiety; she stated she used it only when needed*."

Being a single mother was reported by 11 women and was a slightly different stressor within the mother role as these women may be performing their role well, but there may be additional challenges and perhaps the fear about whether they are doing an adequate job as a parent. One clinician described the client's cumulative stress as, "*Client described she is experiencing numerous stressors, including her Significant Other being remanded to jail, being a single mother, unemployment, and addressing her relapse issues*." One woman, while completing treatment, apparently rose to the challenge in both this role and her role as a community member according to her clinician's comment in the discharge summary: "*Client has worked her way up and has got into her own apartment and financially taking care of herself and her children*."

Kidnapping of child was considered a stressor for the mother in terms of powerlessness, but also, perceived control regarding whether she could have prevented the kidnapping. In all three cases, the child was kidnapped by a known person: the child's father in two cases, and the child's grandmother in one case. The client's powerlessness was evident in the clinician's note: "*Client has emotional issues at this time trying to find her 2-year-old daughter; her boyfriend took the baby and has not contacted client. Client is having a difficult time being separated from her daughter and it appears she needs the support*." There appeared to be both a sense of powerlessness and also self-blame in the

case in which the child was kidnapped by grandmother: "*Client's son is reported to be in State's custody with the Office of Children's Services; reportedly client's biological mother is his Foster Parent, and her mother moved…with client's son to Texas without telling client.*" There may also have been fear for her son given how she described her mother: "*Client says she felt emotionally abused by her mother… as the woman is negative, mean and angry*."

Despite the categories created to frame the various types of traumas, life stressors, and disenfranchised grief, it should be noted that many of these stressors overlap with or were perceived as causally related to other categories. In some cases, the clients were able to explain to their clinicians how one type of stressor led to another and then to a third. For example,

> *Client reported she was sexually abused when she was in elementary school…by her grandfather. The sexual abuse lasted until client was about 12 and she got really sick. [She] was diagnosed with Crone's disease at age 14, at which time she was started on Morphine. Client stated she was ill a lot and couldn't finish high school due to her illness. Client didn't tell anybody [about the sexual abuse] for a really long time, because she was afraid of what her father would do*.

It can be seen from this example that the client's childhood experience shares components from *changes to the family unit* (grandfather living with them) followed by *abuse*, and then *childhood disadvantages* (childhood medical issues).

Criteria for Posttraumatic Stress Disorder

The women included in the sample were not diagnosed with PTSD at the time they were seeking treatment, nor was this diagnosis indicated as a rule out in their records. Many, however, met some, but not all criteria. To answer the second research question, what criteria of PTSD were reported by Alaskan women in treatment for opioid dependence, I identified and coded any mention of meeting any of the criterion in each chart, even if they did not identify a specific experience. If a description of a symptom meeting any *DSM-5* PTSD criterion (B, C, D, or E) was recorded, I then identified which specific criterion was recorded in the clinical file. Criterion A was not included, because it consists of exposure to a traumatic event, which was a matter of inquiry in the first research question.

The node Criterion B, Intrusion (APA, 2013), was coded for women who reported any symptoms related to "recurrent, intrusive memories, dreams, flashbacks, or intense psychological distress or physiological response upon exposure to internal or external cues that symbolize or resemble aspects of the experience" (APA, 2013, p 271). Intrusive symptoms were the least common criteria noted in the data, with only 12 reporting this criterion. Examples of record entries coded at this node were: "*Client reported she has flashbacks to the childhood trauma 'whenever I talk to my younger sister'... Client described she started to drink alcohol more when her sister started talking to her,*" and "*Client stated she occasionally suffers from flashbacks to her history of abuse. She stated she has trouble sleeping and it is hard for her to relax*."

The node Criterion C, Avoidance (APA, 2013), was coded when the women reported any symptoms related to avoiding "distressing memories, thoughts, or feelings associated with the event; or avoiding external reminders (people, places, conversations, activities, objects, situations) that arouse memories, thoughts, or feelings associated with the event" (APA, 2013, p 271). Avoidance symptoms were reported in the records of 18 clients. Examples of entries indicating avoidance include: "*Client reports some depression after her brother was killed, although she has been very careful not to address this issue in depth*," and, in one client's report on the Alaska Screening Tool item, "*In the past 30 days, have you tried hard not to think about the traumatic event or went out of your way to avoid situations that reminded you of it?"* she indicated, "Moderately" In this case, there was nothing in the file to identify what this event might have been, so although she identified traumas and stressors in her past, she may have avoided discussing this trauma in treatment.

Criterion D, Negative Alterations in Cognition and Mood (APA, 2013), was coded when the women reported an

> inability to remember important aspects of an event, negative beliefs or expectations of self, others, or the world, distorted cognitions about causes or consequences of event, persistent negative emotional states, reduced interest or participation in significant activities, feeling detached from others, and an inability to experience positive emotions. (APA, 2013, p 271 – 272)

Twenty-eight clients had at least one entry coded at this node. An example of an entry coded at this nodes include:

She reported being kidnapped at age 9 and being held for two days. She did not know who kidnapped her and she reported she was found 2 miles from her home. She stated then that she had no memory of the event.

Criterion E, Hyperarousal (APA, 2013), was coded when the women reported "irritable behavior or anger outbursts (such as verbal or physical aggression toward people or objects), reckless or self-destructive behavior, concentration difficulties, hypervigilance, exaggerated startle response, difficulties falling asleep, staying asleep, or restless sleep" (APA, 2013, p. 272). This was the most commonly coded criterion for PTSD, with 36 women reporting or endorsing these symptoms. Examples included legal involvement for assaults, reckless endangerment, reckless driving, and disorderly conduct. Notes in the records which were coded at this node included:

She states she has anxiety 'really bad' and describes herself as shaky, fidgeting a great deal, and worrying a great deal so that she sometimes has trouble relaxing or sitting still. She states, "I have a bad temper," and reports that it led to her recent arrest

and "*She stated she has trouble sleeping and it is hard for her to relax… she expressed she has trouble concentrating*."

In many cases, the client did not, or could not, connect the hyperarousal difficulties, or other PTSD criteria to a specific trauma or stressor. For example,

Client reported she has issues with anger. She reported she will get angry every day. Client reported she does not get violent. Client's significant other, who was

present in this assessment, reported she gets "rude and short". Client does not know what triggers her level of anger.

This was despite the fact that no one reported just one trauma or life stressor; there was always a tangle of various stressors that seemed to interplay with each other. So, although symptoms supporting this criterion of PTSD were often present, many times there was no indication that they were related to a specific event, or to the web of trauma, life stressors, and disenfranchised grief. Although this criterion is somewhat vague, and can apply to different diagnoses, it was, nonetheless apparent in a large percentage of the study participants' records.

Coping Styles

The third research question asked how Alaskan women who sought treatment for opioid use disorders coped with their traumas, significant life stressors, or disenfranchised grief. The clinicians' records indicated the women in this study practiced a number of coping strategies to manage their discomfort, emotions, and environment. Coping styles were labeled as *Avoiding, Seeking Support, Seeking Physical Comfort, Externalizing, Submitting, and Distracting* (See Table 3). Each of these styles are described below.

Table 3

Coping Styles

Seeking Physical Comfort
- medicating
- non-medication interventions
- self-harm

Seeking Support
- support from nonprofessionals
- counseling
- participating in spiritual activities
- positive self-talk
- negativity / victim stance / suicidal gesture

Externalizing
- setting boundaries
- planning for the future
- externalizing blame
- aggression
- structuring time and activities
- being cautious

Submitting
- self-criticism
- ignoring or minimizing the problem or issue
- compliance with authority

Avoiding
- contemplating suicide
- running away (unhealthy coping)
- avoiding negativity
- keeping secrets

Distracting
- employment or volunteering
- connecting with others
- healthy leisure activities

Seeking Physical Comfort. Seeking physical comfort included things that the client did to her body to ease discomfort. Strategies in this coping style included *medicating, non-medication interventions,* and *self-harm*. Every client in the study used at least one strategy in this category, and two reported using all three strategies during different stages of their lives.

Medicating with both prescribed and non-prescribed drugs was the most frequently occurring coping strategy, with all 43 women indicating use of this strategy. This was not surprising, given that they were seeking substance abuse treatment. However, 17 women reported only medicating without substituting or concurrently attempting non-medication interventions. Often clients reported their use opioids began following surgeries or accidents, "*The client states she began use of pain medication after her gastric by-pass surgery*," or "*She reports having a fairly heavy history of use of opiates stemming from an auto accident*." Emotion management and trauma were sometimes referred to as the reason for using opioids, "*Client continues to report that her family/marital issues is a big stressor for her... Client reported that this is one of the reasons she continues to use/abuse her Vicodin*," and "*Client reported her father is incarcerated in federal prison in Anchorage. She stated he told her he was going to kill himself and client relapsed with heroin that night.*" The least frequent reasons noted for medicating were to relieve withdrawal, counteract another drug, ease socialization, gain energy, and/or enjoyment: "*She admits to using opioids to relieve the symptoms of withdrawal;*" "*Client relapsed 8/8/2011 with intravenous heroin, per client. Client had used methamphetamine and 'needed something to bring me down'*;" "*She states her main*

motivation to use has been to socialize with others to forget things;" and "*She states her motivation to use was to deal with the loss of her brother, to get energy, and because she liked getting high.*"

Non-medication interventions was reported by 21 women. These interventions relied upon the client doing something to her body to ease discomfort without ingesting medications. Examples included use of heating pads, physical therapy, use of Seasonal Affective Disorder (SAD) lights, change of diet, and exercise when the intent is to relieve pain or emotional discomfort. For example, "*Client has worked on skills to help reduce anxiety and pain such as grounding techniques, using her SAD light, and rewarding herself by listening to music on a daily basis*," or "*Client does continue to go to her physical therapy appointments for her carpal tunnel surgery she had back in July 2010*," and "*Client has been able to reduce her use of prescription medications and she uses alternative pain management such as a heating pad*."

Self-harm was defined as intentionally cutting or burning self without intent to cause death or seek support. This strategy was reported by seven of the women. Self-harm did not include accidental overdoses, suicide attempts, or suicidal gestures. One example of self-harm was, "*Client stated she used to 'cut my wrists'… client stated she does not remember if she was trying to feel or cover pain*."

Seeking Support. Seeking support included many positive strategies, and some that were not healthy (such as suicidal gestures to obtain support). This style generally involved attempts to connect with others who are seen as stronger, wiser, and kind (Powell, Cooper, Hoffman, & Marvin, 2013). Clients may be seeking someone to rescue

them. Every woman described using at least one strategy of seeking support. These strategies include: *seeking support from nonprofessionals, counseling, participating in spiritual activities, positive self-talk*, and *negativity/identifying as victim/suicidal gesture*. *Positive self-talk*, in which the strength, wisdom, and kindness comes from within the person, and in which the woman seeks to support or rescue herself, was an example of a seeking support strategy that did not rely on others.

Although all of the women were involved in treatment, many found it helpful to have support from nonprofessionals during times when the clinician was not available, or as a way to prepare themselves to manage stressors outside of the treatment setting. This was also an expectation for success of treatment. Not surprisingly, this was the second most often coded coping strategy, with 41 women reporting using this at some point in their past or in their treatment. Support from nonprofessionals included self-help groups, such as Alcoholics Anonymous or Narcotics Anonymous, and supportive family or friends who may, at times, help fill the need for support in various areas and give the sense of being rescued with strength, wisdom, or kindness.

Counseling was coded for 33 women and referenced those strategies in which the client sought out a professional for support, such as a psychotherapist or clinician, or participated actively in inpatient or outpatient treatment. Although all 43 women were in treatment for their substance use, ten women had never used counseling services before coming to the agency, and indicated their participation was purely for compliance, a different strategy categorized as a submitting coping style. An example of choosing to enter treatment is: "*Client is willing and appears both internally and externally motivated*

to enter treatment and address her alcohol dependence issues." Once in treatment, maintaining that commitment instead of quitting when it gets difficult is key: "*Client attends group sessions and her attitude has improved as evidenced by her group participation*." When treatment was completed, clients often saw counseling as a potential future coping strategy as well: "*Client stated that she feels very good about herself for completing treatment and being able to graduate. She recognizes how much the treatment she has gone through has helped her make changes in her life and be able to maintain sobriety*."

Participating in spiritual activities was reported by 27 of the women. Although the clients had differences in their spiritual beliefs, they all perceived a higher power who is bigger, stronger, and wiser (Powell et al., 2013), and who can rescue the client: "*Client stated that God has always been a big part of her life. Client stated she knows what God wants her to do by praying and asking him what to do. 'I knew he wanted me to come here'.*" Other examples of ways in which clients viewed spiritual activities as support include: "*Resources: 'My parents. My boyfriend. God',*" and "*after losing 4 relatives in 7 months, she attended grief therapy at the Trinity Church, and she stated 'it was wonderful. I brought my mom there too'.*" Clients were encouraged to develop supports beyond spiritual activities: "*client appears to solely rely on her faith in church, and lacks sober support meetings that promote recovery*."

Positive self-talk was coded under this coping style because it was characterized as a strategy in which the client is able to be the stronger, wiser, and kind person to herself (Powell et al., 2013), and trust she can rescue herself. Twenty women reported

using this strategy. For example, "'*I'm so proud of myself. All this bad stuff is happening but I feel that I am managing it well'*." Another client using this strategy reported her resources are: "'*anything. I know how to access what I need to get*'." One clinician described the client's improvement as, "*Client has an increased level of self-esteem, self-confidence and a stronger ability to assert herself and put boundaries in place with others.*"

Negativity / victim stance / suicidal gesture was a negative strategy for seeking support. This strategy seemed to indicate a lack of trust that they could get the support they needed, or that they lacked the assertiveness to ask for support, and instead sought support through more indirect or dramatic means. Six women reported using this strategy. For example, "*Client admitted that she exaggerated at her initial assessment because; 'I wanted help fast'.*"

Externalizing. Externalizing was defined by the woman's belief that the world around her is responsible for her choice in behavior, and that coping involves changing, manipulating, controlling, or impacting the environment around her. As with other coping styles, there were both healthy and unhealthy ways in which women could employ this style. This style was reported by 41 women in any combination of six strategies. Strategies of externalizing included *setting boundaries, planning for the future, blaming, aggression, structuring time and activities,* and *being cautious.*

Setting boundaries was described by 33 of the 43 women in the study, and was used for at least two purposes. Sometimes this was to protect herself and her children from violence, "*She left the relationship with her oldest children's father due to his*

abusiveness," and other times to protect her sobriety, "*She states she has cut all ties with any previous using friends or associations and even avoids her family members who continue to use*." Sometimes setting boundaries was difficult for the client, "*Client reports being lonely at times because she has distanced herself from old using friends.*" However, clients completing treatment often found setting healthy, appropriate boundaries for themselves was helpful to maintaining sobriety, "*Client stated she does not want to work in an environment where she has access to pills.*"

Planning for the future was a strategy utilized by 26 of the women. These were mostly positive and involved building support, obtaining employment, furthering education, and remaining abstinent. An example of building support included:

> *Client continues to report that she has made some really good friendships/supports through the FRT (Family Readiness Team) on base. Client states that she has taken an active role with the FRT as her and the other wives prepare for their husbands to deploy again. Client stated that she really enjoys doing things with these other wives and is glad that she is going to have them outside of her family when her husband is gone*." In the area of furthering her education, "*She reports she plans on getting her GED and then possibly looking into pursuing a nursing degree.*

In the area of career development:

> *Client has committed to and will begin Ministry School next month. This commitment will help the client reduce issues associated with her primary support*

group, environment and other psychosocial and environmental issues. Client will be able to bring her son to school and they will help her with housing.

Blaming was seen in those clients who attributed their circumstances directly to another person, or who made excuses for why they could not participate actively in treatment. Nineteen women used this strategy. An example of blaming included:

The Client is currently on Adult Probation due to a charge of Leaving the Scene of an Accident on 05/11/2012. She reports she was the injured party who left the scene... She reports she lost her temper when she needed to defend herself from her husband's abuse.

An example of blaming for lack of treatment participation included:

She could not attend Women's Treatment because it meets in the morning when she works, and she could attend only two evening groups a week, and would not be able to attend community support groups because she has no child care available to her.

Aggression, reported by 18 women, was a strategy in which physically or verbally aggressive behaviors toward other people or objects were used in an attempt to control the situation. Passive aggressive behaviors were also included in this strategy. One example of verbal aggression or aggression toward objects:

Client was charged with a DV against her S/O in 2006, but it was pled down to Disorderly Conduct. She stated it was verbal abuse, but not physical. She stated that she was "being violent" by kicking the door down and ripping the phone out of the wall when his brother tried to call the cops.

An example of passive aggressive behavior included, "*Client has experienced difficulty with group attendance this review period and she has had two no show fees. In addition, Client has been late for several group sessions…Client has not presented any homework assignments this review period.*"

Structuring time and activities was reported by 12 of the women. This strategy was defined as taking or maintaining control over the environment to reduce the risk of feeling overwhelmed. For example, "*She has been filling out job applications and is adding more structure to her schedule with a check in sheet for each agency with whom she has services*."

Being cautious as a strategy was indicated by 11 women. This strategy was related to belief that the world is an unsafe place. One particular client explained why this was the case for her: "*Client reported she was sexually molested at the age of 5 by someone close to her. 'It makes me really cautious with my kids'*." This cautious stance also played out in the treatment center, "*Client changed counselors 6 months ago when her previous counselor changed positions in the agency. Client stated that 'I'm still feeling her out'*."

Submitting. Submitting was reported by a total of 41 clients. This style referred to strategies in which the client goes along with what she is told to do. This could be positive or negative, but appeared to be the opposite of the strategy s*etting boundaries*. In this style of coping, the client seeks to avoid attention or conflict through submission, compliance, minimization, or even denial. Strategies under this coping style included *compliance with authority, ignoring or minimizing the problem or issue,* and *self-*

criticism. Although there were originally four nodes identified in this style of coping, one (*minimizing harm to self*) was later divided between two nodes (self-criticism, and ignoring or minimizing the problem or issue) to improve clarity.

Compliance with authority was reported by 34 of the 43 women in the study. This was a strategy about doing what is required or advised, even if it requires engaging in behaviors that feel uncomfortable or require hard work. In this strategy, there may be some belief in the client that she will get what she wants by being compliant with therapists or legal authorities, "*Client stated she did not begin treatment because she was not motivated at the time. It appears that client's level of insight has shifted, and client appears to recognize the need to enter a treatment program and gain recovery skills, in order to re-gain custody of her children.*"

Ignoring or minimizing the problem or issue was coded for 33 women. This involved minimizing or dismissing the problem or its impact, and avoiding responsibility. For example, in describing the abuse she experienced by her significant other, one client stated, "*I didn't think it was too bad*." In describing one client's substance abuse issues and decision-making regarding her living environment, one clinician stated, "*She continues to minimize her use and show a misunderstanding of the severity of her addiction. Client has been open to discussions but continues to deny the severity of her addiction… She continues to make poor decisions in her living environment that places herself and her children at risk.*"

Self-criticism appeared to be related to low self-esteem, or a belief that one cannot succeed, and was reported by 26 women. In one instance, when a client was describing

her near-fatal accidental overdose, the clinician identified the client's self-critical stance: "*It might have been better off if she would have died as 'I'm a fuckup. I fucked up again'.*" At the end of one client's treatment, the clinician expressed concern for the client's low self-esteem: "*Client struggles with her ability to set healthy boundaries with others, which affects her ability to maintain her abstinence and focus on her treatment recovery*." In another example, a client described her situation as hopeless, "*Client seems to have given up on herself and on the hope of getting her son back. Client has exhibited self-sabotaging behaviors.*"

Avoiding. Avoiding, a style used by a total of 39 women, was defined as doing things to avoid feeling uncomfortable emotions, or to prevent discussing, remembering, or thinking about the stressful experience. Specific strategies include *running away, avoiding negativity, keeping secrets, and contemplating suicide*.

Running away was coded as a way of moving away from distress. In contrast, avoiding negativity was viewed as staying away from whatever was known by the client to cause distress. Examples of running away were found in 29 client records: some clients reported this as a repeating pattern throughout their lifetime. In one file use of running away is seen in childhood, right up to the time of treatment: "*Client completed up to 11th grade of high school. She expressed she left school because 'I wanted to move out and get a job'*," and "*client does have a history of starting and not being able to sustain and/or successfully complete an alcohol/drug abuse treatment program*." In contrast, avoiding negativity included: "*She states she has cut all ties with any previous using friends or associations and even avoids her family members who continue to use,*" and

"*Client reports some depression after her brother was killed, although she has been very careful not to address this issue in depth.*" Twenty eight records identified use of avoiding negativity.

Keeping secrets, appeared in 23 client records, and demonstrated a different way of avoiding by not reporting negative experiences, withholding the truth, or lying. Examples of these include, respectively, "*Client stated she never pressed charges against him*," "*Client's self-report was somewhat questionable or evasive*," and "*During the interview there were noticeable contradictions regarding substance use, prescription drug use, and DV in the household*." The purpose of keeping secrets may be to protect oneself from possible consequences, to protect a loved one, or to avoid thinking about the stressor and experiencing the accompanying emotions.

Contemplating suicide as a strategy included suicidal thoughts, ideation, and attempts. Suicide is the ultimate avoidance strategy, and was reported by 17 women. An example included: "*Client reported she was admitted to Alaska Psychiatric Institute when she attempted suicide in 3/2010. She stated she had quit heroin, 'wanted things to quit', and took pills in combination with alcohol.*"

Distracting. The coping style of distracting included activities that may help clients to take their minds off emotional or physical pain. Using this style may lead to feeling productive, having value, connecting to the environment, and increasing mindfulness. A total of 38 women described using any combination of strategies within this coping style. Strategies in this style include *healthy leisure activities*, *connecting with others*, and *volunteering/working*.

Healthy leisure activities was reported by 34 women. This is a strategy that involves interests and hobbies in which the client can place focus and just be present. These could be solitary activities or those in which others participate. In this way, healthy leisure activities can overlap with connecting with others. Examples of solitary activities included, "*She has a dog that she loves a lot. Client likes to go out on the 4-wheeler for fun, reading, taking care of her home and plants*." Healthy leisure activities while socializing with others included, "*She states she is able to get out often and enjoys activities such as dancing, going to movies, bowling, eating with friends, and swimming with her kids*."

Connecting with others as a distracting coping style is different from seeking support in that this type of connecting with others is more about socializing and being part of a group, not necessarily about discussing traumas, life stressors, or disenfranchised grief. This strategy may be used to distract from thoughts about the stressor(s). One may connect with others where they work/volunteer. Likewise, one may connect with peers, family, or children, while participating in healthy leisure activities. For example, "*Client states she has about 12 friends and says she gets to see at least one of them every day. She describes her relationship with her friends as "good, fun, playful'*." This strategy may also be about focusing on others to distract from one's own issues. For example, in one case, the client "*is active in supporting her husband through the VA*." Connecting with others, as a strategy was described in the records of 27 women.

The volunteering/working strategy, observed in the records of 16 women, included seeking value by engaging in productive endeavors. Clients often reported

enjoying their work, or seeking employment to satisfy a desire to be useful. An example included, "*She has also starting working for a friend at her dog grooming shop and that has increased her self-confidence and self-esteem*." Work and volunteering also provided structure to those who reported this coping style:

> *The client reported she has been employed … and reports she enjoys working for her employer who provides good structure to her days…. [Additionally] her work environment is supportive of recovery with a "zero tolerance" policy. Client verbalizes that she likes the structure of work.*

Clients often used combinations of coping skills, as described above. In each coping style, strategies were included which were positive and negative, with the exception of distraction. Additionally, it was noted that some clients had consistent coping skills over the course of their lives. For example, one client described her coping as a child, "*Client reported having difficulty with authority… She stated that she stood up for things and her father didn't like that*," and demonstrated passive aggression as an adult dealing with authority figures: "*Client continues to be late and miss group sessions*."

Evidence of Trustworthiness

As discussed in Chapter 3, credibility in this study was based on triangulation, the presentation of discrepant information, and the use of a peer coder. Triangulation was obtained by using several documents in each client's record. These documents included intake documents such as BHA and/or DENS ASI, the Alaska Screening Tool, Treatment Reviews, and Discharge Summaries. Discrepant information was discussed individually

in the Data Analysis section, but will also be reviewed in the results section below. A peer coder was utilized for this study to establish dependability and confirmability. The peer coder was provided with de-identified documents from the records of five participants, and was used to check the coding of the data for consistency. The peer coder and I were consistent 84% of the time, which was within the pre-determined limit of 80% consistency. In areas where there was not agreement, it was discussed to determine how agreement might have been increased. This led to minor changes in the wording of codes, and in the combining of similar codes.

Transferability was based on the inclusion of records of all adult women who sought treatment for opioid dependence for the initial analysis. From this population, a sample of 43 women who had the richest data were selected to become the participants in the qualitative study.

Dependability was established through audit trails, including memo-writing regarding the research process and the evolution of codes. This audit trail included a list of the original 77 in vivo codes, upon which the analysis was based. Cross-checking codes was used to determine intercoder agreement between this researcher and the peer-coder.

Summary

The present chapter provided a review of the results of this grounded theory research. Findings included, among Alaskan women who sought treatment for opioid dependence, 19 types of childhood traumas, stressors, or disenfranchised grief. These were categorized into seven main categories, or themes: *Neglect-Related Issues*, *Loss of*

Parent/Caretaker Relationship, *Personal Childhood Disadvantages*, *Changes to the Family Unit*, *Parental Medical/Mental Health Issues, Abuse*, and *Child with Adult Responsibilities*. Additionally, there were 24 types of adulthood traumas, life stressors, or disenfranchised grief, which were categorized into five main categories, or themes: *Threats to Self, Threats to the Romantic Partner Relationship, Threats to Other Relationships, Threats to the Community Member Role,* and *Threats to the Mother Role*. Of the specific criteria for PTSD, criterion E (hyperarousal) was the most often observed with 36 women reporting symptoms consistent with this criterion, followed by Criterion D (negative alteration in cognition or mood) with 28 women reporting symptoms consistent with this criterion. Criteria C and B were the least coded with symptoms matching these criteria occurring in 18 and 12 of the women, respectively. Finally, in regard to coping, there were 24 specific coping strategies which were categorized into six coping styles, *Avoiding, Seeking Support, Seeking Physical Comfort, Externalizing, Submitting, and Distracting*. With regard to types of trauma and coping styles, there was much overlap. No woman reported a single experience or a single coping style, in fact, every woman identified at least eight experiences.

In the next chapter, the findings based on each research question will be further integrated and discussed to include the possible connections between stressors and coping styles, stressors and PTSD criteria, and coping styles and PTSD criteria. Discussion will also include why these women might not have developed PTSD, based on the patterns reported in the client records. Lastly, implications for treating these women and possible future research will be discussed.

Chapter 5: Discussion

Introduction

The purpose of this study was to identify and describe the experience of traumatic events, significant life stressors, and/or disenfranchised grief in Alaskan women diagnosed with an opioid-related disorder and who did not have a diagnosis of PTSD. A second purpose was to identify if these women identified or described symptoms consistent with PTSD criteria, and a third purpose was to describe their coping styles. The findings may be used to better inform the diagnosis and treatment of women with similar issues. This chapter will provide an interpretation of the findings presented in Chapter 4, the limitations of this study, and recommendations for future research.

The key findings included the most commonly reported traumas, life stressors, and disenfranchised grief in childhood and adulthood. In the area of childhood experiences, the most commonly reported experiences were parental substance abuse, parental divorce, and childhood interstate moves. In the area of adulthood experiences, the most commonly reported experiences were legal issues, employment issues, domestic violence, mental illness, and substance abuse by romantic partner. The most often reported PTSD criterion was Criterion E, which is hyperarousal. The most commonly reported coping strategies were medicating and seeking support from nonprofessionals, followed by compliance, counseling, setting boundaries, engaging in healthy leisure activities, and ignoring/minimizing the problem.

Interpretation of the Findings for Life Experiences

The first research question asked what types of traumas, life stressors, or disenfranchised grief do Alaskan women in treatment for opioid use disorders report. A majority of the women reported parental substance abuse (81%), parental divorce (65%), and childhood interstate moves (63%). The majority of the sample also reported experiencing adult stressors of legal issues (84%), employment issues (79%), domestic violence (74%), mental illness (72%), and romantic partner substance use (72%). Of these, the only stressor that met the PTSD diagnostic criteria of traditionally defined trauma, or big trauma (Uram, 2011) was domestic violence (74%). The most commonly reported childhood big trauma (Uram, 2011) was sexual abuse (40%).

The large percentage of opioid-dependent women who reported parental substance abuse was not surprising, as these women may have learned self-medicating as a coping skill from their parents through modeling and social reinforcement, as suggested by social learning theory (Bandura & McDonald, 1963). This interpretation is also supported in more recent research (Shorey et al., 2013; Windle, 2000). Parental substance abuse tends to occur more frequently in divorced parents than in nondivorced parents (Guidubaldi, Cleminshaw, Perry, Nastasi, & Lightel, 1986; Temple et al., 1991), which supports the next most commonly reported stressor of parental divorce.

Sixty-five percent of the participants reported that their parents divorced when they were children. According to the CDC (2015), approximately 53% of marriages ended in divorce in 2014 in the state of Alaska. This rate has been relatively constant since 1990 (CDC, 2015). The percentage of individuals who experienced parental divorce

in the study sample was slightly higher than in the general population. Neher and Short (1998) reported that children of divorced couples were more likely than children of married couple to use substances. Likewise, Thompson, Lizardi, Keyes, and Hasin (2008) found that parental separation or divorce in combination with parental alcohol use appeared related to increased alcohol use by offspring. Therefore, parental divorce appeared to be a risk factor for substance use. However, several researchers describe ways in which resilience can be nurtured, such as sibling or maternal support (Jacobs & Sillars, 2012), secure attachments to primary caregivers (Faber & Wittenborn, 2010), and support groups (Regev & Ehrenberg, 2012). Although the topic of resilience is beyond the scope of this research, previous findings support the second most commonly reported coping strategy reported in this study, support from nonprofessionals.

The large percentage of childhood interstate moves was surprising, especially the degree to which the women in this sample found those moves stressful. The results did, however, support Magdol's (2002) research on the differences between male and female responses to moving. Magdol found that women tended to respond more negatively to relocation, at times relating to later depression. Magdol, did not address moves during childhood however, or substance use as a coping strategy. DeWit (1998) identified a link between early childhood moves and drug use initiation and progression, but more in males than females. Dong et al. (2006) suggested that childhood life stressors and traumas were associated with frequent residential mobility and that frequent moves themselves were not solely responsible for the behavioral or emotional difficulties

observed in children. With the multiple stressors reported by the women in the current study, this seemed to support Dong et al.

What the childhood experiences of parental substance abuse, parental divorce, and childhood interstate moves have in common is instability within a social context: a lack of consistency with their parents' state of mind, inconsistent parental presence within the home, and/or inconsistent presence of familiar others outside of the home (i.e., teachers, neighbors, extended family, etc.) However, as parental monitoring and closeness may have a mediating relation between parental substance use and individual initiation of drug use (Shorey et al., 2013), it is possible that it is a protective factor against drug use as well. Protective factors were not a focus of this research, as the sample consisted of individuals with an opioid-related disorder, but future research on parental roles in drug dependence prevention may be useful.

The women in this study reported their primary adulthood stressors as legal issues, employment issues, domestic violence, mental illness, and romantic partner substance use. The vast majority of the women reported legal issues as a life stressor (84%). The majority of these women indicated their legal issues were secondary to their substance use, sometimes due to positive results of drug testing, sometimes related to activities related to obtaining the drug such as theft or forgery, and sometimes due to their behavior while under the influence of the drug such as driving under the influence. In some cases, women reported becoming involved in the legal system for their use of drugs other than opioids. For example, one woman was originally referred to the agency due to struggles with alcohol and cannabis use. As treatment progressed it became clear that her

opioid use was problematic. This speaks to a potential limitation of the current study in that there may have been other women with other substance use issues who were reluctant to disclose their opioid use. There is a possibility that women who could have been included in the study were not considered due to not being diagnosed with an opioid disorder. Additionally, women in this situation may have experienced different types of life stressors or be using a different coping skill, such as minimizing or keeping secrets.

A large number of women reported employment issues as a significant life stressor (79%). This was not surprising when compared with the results of other research. For example, Merline, O'Malley, Schulenberg, Bachman, and Johnston (2004) found unemployment was a factor related to increased likelihood for substance abuse. MacDonald and Pudney (2000) suggested that opioid use was associated with an increased risk of unemployment. These two findings demonstrated a relationship, but the authors conflicted on their views of cause and effect. Regardless of causality, researchers have demonstrated the usefulness of a therapeutic workplace in which opioid-addicted individuals were positively reinforced for continued abstinence by being permitted to work (Holtyn et al., 2014; Silverman, Holtyn, & Morrison 2016). This research will be discussed further below.

Domestic violence was reported by 74% of the women in the sample. In their longitudinal study, El-Bassel, Gilbert, Wu, Go, and Hill (2005) could not confirm that frequent heroin use increases the likelihood of subsequent intimate partner violence, but El-Bassel et al. did support the idea that the experience of intimate partner violence increases the likelihood of subsequent frequent heroin use. El-Bassel et al. indicated that

women may react to the trauma of domestic violence by self-medicating, the most commonly identified coping strategy in the current research study.

Mental illness was diagnosed in 72% of the women in this study. The majority of them reported anxiety-related issues (77% or 56% of the entire sample). Twenty eight percent of the women reported being diagnosed with a mental illness during childhood. The incidence of mental illness more than doubled from childhood to adulthood in these women. According to the diathesis stress model, mental illness may be exacerbated by a combination of genetics and environmental stress, and under enough combination of stressors, psychopathology may be evident (Zubin & Spring, 1977). With the number of traumas, life stressors, and disenfranchised grief reported by the women in the current study (ranging from 11 to 43 identified experiences in each individual), the diathesis stress model might be supported by the current research. Grubaugh, Zinzow, Paul, Egede, and Frueh (2011) suggested that individuals with serious chronic mental illness may be at higher risk for trauma exposure; are more likely to develop trauma-related problems such as PTSD; and that women, young people, and those with complex traumas may be at high risk for poor mental health outcomes. Perhaps mental illness may make it more difficult to cope with stressors or may lower the threshold for coping with stress. Therefore, women with mental illness may benefit from specialized therapy, as will be discussed in the implications section.

Romantic partner substance abuse was reported by 72% of women in the current study. This supported the research of Riehman, Iguchi, Zeller, and Morral (2003), who found that among opioid-using women, there was a greater chance of being in a

relationship with a substance-using partner. Kreis, Schwannauer, and Gillings (2014) identified a pattern of relational factors, both with family members and romantic partners, that may play a role in women's substance use and legal issues. Kreis et al. reported that the more control the partner had over the woman, the fewer days the woman remained abstinent. Additionally, Tuten and Jones (2002) found that, compared to nonusing male partners, substance-using male partners were less likely to be supportive of the woman's treatment.

Traumas are traditionally defined as actual or threatened exposure to death, serious injury, or sexual violence to self, or a close family member or friend, or observing in person this occurring to another person (APA, 2013). With regard to the most common traumatic experiences as they are traditionally defined, 40% of the women in the current study reported being sexually abused when they were children. This is in contrast to Conroy et al. (2009), who reported that 72% of opioid-dependent women in their sample reported childhood sexual abuse. In the Conroy et al. study, women were explicitly asked about specific childhood sexual abuse experiences, but the current research was a chart review study that was not specifically targeted at any particular trauma or stressor. It is possible that with more direct questioning, the number of women reporting sexual abuse may have been higher. However, the 40% statistic identified in the current study was similar to the findings of Oviedo-Joekes et al. (2011), which reported that 44.5% of opioid-dependent women endorsed a history of physical or sexual abuse. Domestic violence victimization was reported by 74% of the women in the current sample, with 30% of them reporting they assaulted their partners at least once. This supports previous

findings that women are more likely to experience chronic interpersonal violence than men (Conroy et al., 2009; Evans-Campbell et al., 2006; Hien et al., 2009; Oviedo-Joekes et al., 2011).

Interpretation of the Findings for PTSD Criteria

The second research question asked what symptoms of PTSD were reported by Alaskan women in treatment for opioid use disorders who report events that are not traditionally defined as traumatic. All four of the PTSD diagnostic criteria, which in combination with the experience of a trauma are necessary for a PTSD diagnosis, were reported by the women in the sample to some degree, as described in Chapter 4; however, the most commonly reported symptom was Criterion E, Hyperarousal (84%). This supported the finding of Avant, Davis, and Cranston (2011), who reported greater non-experimental use of opioids in female college students attempting to reduce the symptom of hyperarousal in contrast to any of the other three PTSD symptom clusters (p=.001).

This finding also supported the self-medication hypothesis (Khantzian, 1999), which postulates that individuals select substances that match their inner emotional struggle. Khantzian opined that rage would be related to the individual's use of opioids, particularly heroin. Suh et al. (2008) explored the relationship between participants' drug of choice and their scores on six MMPI-2 scales. Suh et al. reported that CYN (anger and negative feeling toward others) was the only significant predictor for heroin use, but elevated PK (severity of trauma, emotional turmoil, intrusive thoughts, and sense of feeling misunderstood and mistreated) scores did not predict heroin preference. The current study was consistent with Suh et al. in terms of anger, an aspect of hyperarousal,

but Suh et al. was looking solely at heroin use. In the current research, the women who reported heroin use specifically had no more traumatic experiences than the women who reported using any other form of opioid.

Interestingly, 42 of the 43 participants reported events that would traditionally be defined as trauma. Only five of the women in the current study described symptoms that may have met the criteria for PTSD, indicating that many of the women in the sample experienced some PTSD symptoms without meeting the criteria for the diagnosis. Concerning the reported traumas, life stressors, or disenfranchised grief of the five women who may have met *DSM* criteria for PTSD, their three common experiences included accidents that occurred in adulthood, being the victim of domestic violence by a romantic partner, and legal issues. All five individuals reported between four to eight different childhood traumas or life stressors, and there were no common childhood experience reported by all five women. Additionally, 28 of the participants reported traditionally defined trauma in childhood, and 39 participants reported traditionally defined trauma in adulthood. This supported the *susceptibility hypothesis* connection between trauma and substance abuse (Chilcoat & Breslau, 1998; Haller & Chassin, 2014). In this hypothesis, it is believed that use of substances tends to place the user in dangerous situations that result in stress and/or trauma.

Interpretation of the Findings for Coping Styles

The third research question asked how Alaskan women in treatment for opioid use disorders have coped with their traumas, significant life stressors, or disenfranchised grief. Women in the sample described six coping styles, including avoiding, seeking

support, seeking physical comfort, externalizing, submitting, or distracting. Although they used different styles for different reasons at different points in their lives, some women relied more frequently on specific styles. Within each style were three to six strategies, including both positive and negative coping strategies within each style. The most commonly reported coping strategies were medicating (100%) and seeking support from nonprofessionals (95%), compliance (defined as doing what is required or advised; 79%), engaging in healthy leisure activities (79%), counseling (77%), and setting boundaries (77%).

As these women were in treatment for their use of opioids, drug use was obvious, but it was not assumed which coping strategy best described their use unless documented in the record. For example, drug use may be medicating, leisure activity, or connecting with others; however, the record of each participant indicated the woman identified her use as medicating. The strategy seeking support from nonprofessionals was expected by the agency in order to successfully complete treatment, but this tendency to return to a specific style of coping might also have been related to personality or upbringing. Kelly, Tyrka, Price, and Carpenter (2008) found that women were more likely to use *emotion-focused coping* in comparison to men, which was defined as ways of accepting or adapting to stressors. They were less likely than men to use *problem-focused coping*, defined as addressing the stressor directly or trying to change it. The benefits of emotion-focused coping occur when the stressor cannot be changed, but the unfortunate side effect of emotion-focused coping is that it is associated with an increased incidence of depression and anxiety-related problems (Kelly et al., 2008; Matheson & Anisman,

2003). This concept was supported in the current study, because medicating, compliance, and distracting by engaging in healthy leisure activities are emotion-focused coping. Seeking support from nonprofessionals and counseling, at times, may be either emotion-focused coping or problem-focused coping. Setting boundaries appeared to be most related to directly addressing the stressors, and therefore would be described as problem-focused coping.

Compliance as a coping strategy was indicated in 79% of the women in the present study. Compliance included doing what is required or advised, even if it requires engaging in behaviors that feel uncomfortable or require hard work. By engaging in this strategy, there may be some belief that the client will get what is wanted by being compliant with therapists or legal authorities. The downside of compliance as a strategy is that some women may acquiesce to family members or partners who are not supportive in order to avoid conflict. This finding supports other research, specifically the research of Gudjonsson and Sigurdsson (2003), who found that those who use compliance as a coping strategy tend to use a smaller range of other strategies, relying on it more consistently, as opposed to those who may use a wider variety of coping strategies. Additionally, compliance tended to be related to denial as a coping strategy (Gudjonsson & Sigurdsson, 2003). Many of the women in the current study denied problems with opioids, although they would admit to issues with other drugs.

Engaging in leisure activities was categorized as distraction. There is little research about this form of distraction as a way to cope with trauma, life stressors, or disenfranchised grief; however, Weybright, Caldwell, Ram, Smith, and Wegner (2016)

described how healthy leisure activities in adolescents can be a protective factor against future substance use. Chun and Lee (2010) described how healthy leisure may contribute to posttraumatic growth in those who experienced trauma which resulted in spinal cord injuries. The authors of both studies support the importance of healthy leisure activities as a positive coping strategy.

Additionally, Gossop, Stewart, Browne, and Marsden (2002) reported in their study that distraction as a coping strategy was a protective factor in preventing relapse on heroin, and thus encouraged treatment providers train clients in its use. In contrast, researchers (Cohen, Fouladi, & Katz, 2005) found that women who used avoidant or other passive strategies (such as distraction, denial, substance abuse, and social disengagement) reported more pain and used more medication postoperatively than those who used more active coping (such as seeking support, planning, acceptance). Forty-two percent of the women in the current study reported using all three of the active coping strategies identified by Cohen et al. (2005): seeking support from nonprofessionals, counseling, and planning for the future. The women who used these active coping strategies were more likely to complete treatment than those who did not, which appeared to support the Cohen et al. results. This may be important for therapists to understand as they encourage their clients to build or strengthen active coping strategies such as seeking support from nonprofessionals, counseling, and planning for the future.

Finally, setting boundaries as a coping skill could be described as problem-focused coping (Kelly et al., 2008) or active coping (Cohen et al., 2005). This was viewed as a positive coping strategy, and expected to be useful. Kathryn Speck (2002)

identified setting appropriate boundaries as essential for individuals seeking to maintain sobriety. In the current research, those who reported using setting boundaries were more likely to remain abstinent through the end of treatment. The current study was focused on the past of the women who were in treatment, and there was no opportunity for follow-up. Future research may seek to determine whether those who maintained those boundaries continue to be successful in maintaining abstinence.

Limitations of the Study

The records of only 43 women were employed for this research, which is a select group compared to the total of 323 women who had sought treatment from the participating agency for opioid-related issues. Often these women sought opioid dependence treatment in combination with other drug-related issues, such as alcohol abuse. It is possible that women with opioid issues only, without secondary drug or alcohol related issues, may have reported differently than the women included in this study. This may have led to differences in patterns of trauma, life stressors, or disenfranchised grief, or differences in patterns of coping. Future research may consider interviews with women who indicate opioids as the only substance upon which they are dependent.

The information gathered for this research was based on the records of women who did not have a diagnosis of PTSD and who sought out substance treatment, some voluntarily and others complying with criminal justice or government agencies. However, women who were currently in treatment were not included in this research. The reports of traumas, life stressors, disenfranchised grief, or coping strategies may have been different

for women who were currently in treatment as they might not have shared the entirety of their stories with their therapists, possibly resulting in fewer, or less complete, reports of trauma, life stressors, or disenfranchised grief, and fewer opportunities for clients to disclose their coping strategies, or for therapists to observe coping strategies.

It is not known if the records from this agency would be similar to the records of other agencies. Reviewing the records of only one agency in a very specific geographic area was a limitation in regard to generalization; however, the focus of this qualitative research was on this particular population that has been largely neglected in previous studies. Further, I had no influence over the extant data used (Charmez, 2006). It was written by the respective clinicians more than two years before this research was undertaken for the purpose of note-taking, not for research (Charmez, 2006). This resulted in a limitation of the current research, specifically with regard to who collected the data, the purpose of the initial data collection, and variability in how clients' stories were recorded in the records.

The women themselves were not interviewed, but rather the records consisting of initial assessments, treatment reviews, and discharge summaries, were studied to obtain the data for this study. This leads to another limitation: access to individual therapy notes was not provided in order to protect the privacy of those women included in the study. Additionally, because records were used, there was limited access to the thoughts, beliefs, attitudes, and perceptions of the women, and there was no opportunity to prospectively assess symptoms. If the women were interviewed, there would have been the opportunity for follow-up questions to clarify the meaning the trauma, life stressor, or disenfranchised

grief had for them, or clarify behaviors that were coded as coping strategies to better understand the function of the behavior.

Since criteria B (intrusion), criteria C (avoidance), D (negative alteration of cognition or mood), or E (hyperarousal) may be attributed to issues other than posttraumatic stress disorder (PTSD), caution should be used in making any assumptions regarding diagnosis based on the information reported here. For example, intrusive thoughts may be associated with Obsessive Compulsive disorder (APA, 2013). Likewise, avoidance may be associated with certain personality traits or disorders, negative alteration of cognition or mood could be associated with major depressive disorder or other mood disorders, and hyperarousal may be seen in those with panic disorder or other anxiety disorders.

Recommendations

One recommendation is that it may be useful to do a quantitative study to compare the clients' reported childhood traumas with coping strategies, and with PTSD criteria. It may be useful to compare clients' adulthood experiences with coping strategies, and with PTSD criteria. It may also be beneficial to compare coping strategies with PTSD criteria. This may be useful to obtain a better understanding of this relationship, thus improving the quality of the services that can be rendered to clients such as those in the current study.

While seeking to better understand the results of the current study, research was found indicating parental monitoring and closeness may have a mediating relationship between parental substance use and individual initiation of drug use (Shorey et al., 2013).

It is possible that it is a protective factor against drug use for other stressful childhood events such as parental divorce and childhood interstate moves as well. Although possible protective factors were not a focus of this research, future research on that topic may be useful in the pursuit of preventive approaches to drug dependence.

Another potential protective factor that may be investigated in the future is nurturing resilience through support. Support as a protective factor in trauma is not a new idea (Brewin, Andrews, & Valentine, 2000). Support may be a protective factor in life stressors as well as trauma, even those stressors that do not fit the description of traditional trauma such as parental substance abuse, parental divorce, and interstate moves in children, or legal issues, employment issues, mental illness, and romantic partner substance use, in adults. Resilience can be nurtured in the form of sibling or maternal support (Jacobs & Sillars, 2012) and developing secure attachments to primary caregivers (Faber & Wittenborn, 2010) in children, and in the form of support groups (Regev & Ehrenberg, 2012) in adults.

In the current research, those who reported using setting boundaries appeared to maintain abstinence more frequently than those who did not practice this coping strategy. Since setting boundaries as a coping skill could be described either as problem-focused coping (Kelly et al., 2008) or active coping (Cohen et al., 2005), it may be useful to develop this skill in those being treated for opioid use. There was, however, no opportunity for follow-up. Future research may examine whether those who maintain boundaries continue to be successful in abstinence in the long term.

Because this research included only Alaskan women, future researchers may review the records of other agencies and may consider interviewing the women to access their thoughts, beliefs, attitudes, and perceptions, which may provide further clarification to the information found in the current study. I would recommend that the women be asked direct questions, as it may be easier for individuals to address questions than to be voluntarily forthcoming about topics they may feel uncomfortable sharing.

Implications

Based on the findings in this research, it appeared that by understanding subjective experience, specifically with regard life stressors and coping strategies, therapists may be able to better understand their clients. With all 43 clients reporting multiple stressors and subjective traumas in childhood, 31 reporting big traumas in childhood, and 32 of 43 reporting domestic violence in adulthood, there appeared to be enough evidence to support the wisdom of implementing trauma-informed care in the treatment of opioid-related issues.

A large percentage of women in the sample reported mental illness in adulthood (72%). This was supported by Grubaugh, Zinzow, Paul, Egede, and Frueh (2011), who suggested individuals with serious chronic mental illness may be at higher risk for trauma exposure and more likely to develop trauma related problems such as PTSD, and that women, young people, and those with complex traumas may be at higher risk for poor mental health outcomes. Additionally, Oledibe (2014) reported that individuals who completed integrated mental illness and substance abuse treatment for co-occurring bipolar disorder and opioid use reported improved quality of life. Therefore, there

appears to be enough evidence supporting the establishment of specialized substance abuse treatment that integrates substance abuse and mental health treatment.

There was a large percentage of opioid-dependent women who reported lack of employment as a stressor (79%). Researchers have demonstrated the usefulness of a therapeutic workplace in which opioid-addicted individuals were positively reinforced for continued abstinence by being permitted to work for the therapeutic workplace (Holtyn et al., 2014; Silverman, Holtyn, & Morrison 2016). My findings, as well as these previous findings, suggest that a therapeutic workplace may be a useful intervention to address the relation of unemployment and drug dependency. By offering these women the opportunity to develop a sense of belonging in the form of employment and reinforcing their choice to remain abstinent, they develop support from both professionals and nonprofessionals, such as supervisors and co-workers. With an income, many women can address their legal issues such as fines, or complying with probation requirements such as obtaining and maintaining employment. This may transfer to a sense they can take a productive role as a community member.

Such positive social change implications may include a contribution to the understanding of Alaskan women who are dependent upon opioids and how they may be using opioids to cope with past events. Specific suggestions for positive social change related to my research findings include identifying the stressors that are commonly experienced by women with opioid use disorders, and developing interventions that may address traumatic life events. Interventions that might be the most effective in maintaining abstinence for these women include the use of trauma-informed treatment

and the implementation of a therapeutic workplace. This would benefit the women who are impacted by trauma and drug dependence and their families by providing optimal treatment approaches. With the support of substance abuse therapists and other helping professionals, such programs may be developed and implemented, resulting in improved outcomes for Alaskan women, and more effective use of therapist time. This, in turn, benefits treating professionals and society by providing cost-effective, efficient treatment that allows these women to be productive members of society.

Conclusion

The women included in the present study reported multiple past traumas, life stressors, or disenfranchised grief. The most common of these were parental substance abuse (81%), parental divorce (65%), and childhood interstate moves (63%), as children, and legal issues (84%), employment issues (79%), domestic violence (74%), mental illness (72%), and romantic partner substance use (72%) as adults. The most commonly reported PTSD criterion was hyperarousal which was described by 84% of the women. Finally the most common coping strategies described by the women in the current study included medicating and seeking support from nonprofessionals, and then compliance, engaging in healthy leisure activities, counseling, and setting boundaries.

The finding of the current study supported the self-medication hypothesis and also the susceptibility hypothesis. Results of this study, with the support of previously conducted research, indicate that the establishment of a trauma-informed treatment may be beneficial to women who are being treated for opioid-dependence, even in the absence of a PTSD diagnosis. The findings supported the encouragement of support from

nonprofessionals and professionals alike, not just for abstinence, but also in order to share stories with others who may be able to relate to the traumas, life stressors, or disenfranchised grief experienced by their peers. The results of this study also supported the establishment of a specialized, integrated treatment for substance abuse and mental health issues, and the use of a therapeutic workplace as part of that treatment. The implementation of such measures may effect positive social change by providing substantial assistance in the fight against opioid dependence by women.

References

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed. revised). Washington, DC: Author.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Alaska Department of Health and Social Services, Division of Behavioral Health, Section of Prevention and Early Intervention Services. (2013). State epidemiologic profile on substance use, abuse, and dependency–2007-2011. Retrieved April 11, 2015, from http://dhss.alaska.gov/dbh/Documents/Prevention/EPI2013.pdf

Alaska Network on Domestic Violence and Sexual Assault. (2006). *2006 Annual report: Working in Alaska communities for: Safety, justice, advocacy and education, violence prevention*. Juneau, Alaska.

Anda, R. F., Butchart, A., Felitti, V. J., & Brown, D. W. (2010). Building a framework for global surveillance of the public health implications of adverse childhood experiences. *American Journal of Preventive Medicine*, *39*(1), 93-98. doi:10.1016/j.amepre.2010.03.015

Anda, R., Felitti, V., Bremner, J., Walker, J., Whitfield, C., Perry, B., … Giles, W. (2005). The enduring effects of abuse and related adverse experiences in childhood: A convergence of evidence from neurobiology and epidemiology. *European Archives of Psychiatry and Clinical Neuroscience, 256*, 174-186. doi:10.1007/s00406-005-0624-4

Appleyard, K., Berlin, L. J., Rosanbalm, K. D., & Dodge, K. A. (2011). Preventing early

child maltreatment: Implications from a longitudinal study of maternal abuse history, substance use problems, and offspring victimization. *Prevention Science*, *12*(2), 139-149. doi:10.1007/s11121-010-0193-2

Avant, E. M., Davis, J. L., & Cranston, C. C. (2011). Posttraumatic stress symptom clusters, trauma history, and substance use among college students. *Journal of Aggression, Maltreatment & Trauma, 20*(5), 539-555. doi:10.1080/10926771.2011.588153

Bachman, R., Zaykowski, H., Lanier, C., Poteyeva, M., & Kallmyer, R. (2010). Estimating the magnitude of rape and sexual assault against American Indian and Alaska Native (AIAN) women. *Australian and New Zealand Journal of Criminology*, *43*(2), 199-222. doi:10.1375/acri.43.2.199

Back, S., Dansky, B., Coffey, S., Saladin, M., Sonne, S., & Brady, K. (2000). Cocaine dependence with and without posttraumatic stress disorder: A comparison of substance use, trauma history, and psychiatric comorbidity. *The American Journal of Addictions, 9*, 51-62. doi:10.1080/10550490050172227

Beck, A. (1967). *Depression: Causes and treatment*. Philadelphia, PA: University of Pennsylvania Press.

Beck, A., & Weishaar, M. (1989). Cognitive therapy. In A. Freeman, K. Simon, L. Beutler, & H. Arkowitz (Eds.), *Comprehensive handbook of cognitive therapy* (pp. 21-24). New York, NY: Plenum Publishing Company.

Bandura, A., & McDonald, F. J. (1963). Influence of social reinforcement and the behavior of models in shaping children's moral judgment. *The Journal of*

Abnormal and Social Psychology, *67*(3), 274-281. doi:10.1037/h0044714

Birnbaum, H., White, A., Schiller, M., Waldman, T., Cleveland, J., & Roland, C. (2011). Societal costs of prescription opioid abuse, dependence, and misuse in the United States. *Pain Medicine, 12*(4), 657-667. doi:10.1111/j.1526-4637.2011.01075.x

Black, M., Basile, K., Breiding, M., Smith, S., Walters, M., Merrick, M., … Stevens, M. (2011). *The national intimate partner and sexual violence survey (NISVS): 2010 Summary Report.* Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

Bradley, R. (2007). Parenting in the breach: How parents help children cope with developmentally challenging circumstances. *Parenting: Science and Practice*, *7*(2), 99-148. doi:10.1080/15295190701306896

Bremner, J., Davis, M., Southwick, S., Krystal, J., & Charney, D. (1994). Neurobiology of posttraumatic stress disorder. In R. Pynoos (Ed.), *Posttraumatic stress disorder: A critical review* (pp. 43-64). Lutherville, MD: Sidran Press.

Brett, E. (1996). The classification of posttraumatic stress disorder. In B. A. Van der Kolk, A. C. McFarlane, & L. Weisaeth (Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (pp. 117-128). New York, NY: Guilford Press.

Brewin, C. R., Andrews, B., & Valentine, J. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting & Clinical Psychology*, *68*(5), 748-766. doi:10.1037/0022-006X.68.5.748

Briere, J., & Scott, C. (2006). *Principles of trauma therapy: A guide to symptoms,*

evaluation, and treatment. Thousand Oaks, CA: Sage Publications, Inc.

Brown, V. B., Najavits, L. M., Cadiz, S., Finkelstein, N., Heckman, J. P., & Rechberger, E. (2007). Implementing an evidence-based practice: Seeking safety group. *Journal of Psychoactive Drugs*, *39*(3), 231-240. doi:10.1080/02791072.2007.10400609

Bryant, R. A., & Guthrie, R. M. (2005). Maladaptive appraisals as a risk factor for posttraumatic stress: A study of trainee firefighters. *Psychological Science*, *16*(10), 749-752. doi:10.1111/j.1467-9280.2005.01608.x

Calhoun, L. & Tedeschi, R. (Eds.) (2006). *The handbook of posttraumatic growth: Research and practice.* Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Campbell, J. (2002). Health consequences of intimate partner violence. *Lancet, 359* (9314), 1331-1336. doi:10.1016/S0140-6736(02)08336-8

Centers for Disease Control. (July 2010). Unintentional drug poisoning in the United States. Retrieved from http://www.cdc.gov/HomeandRecreationalSafety/pdf/poison-issue-brief.pdf

Centers for Disease Control and Prevention. (2013a, July). Prescription painkiller overdoses: A growing epidemic, especially among women. *Vital signs*. Retrieved from http://www.cdc.gov/media/dpk/2013/docs/prescription_ drugs/FACT%20SHEET_JULY_VS_PerscripPain_V5.pdf

Centers for Disease Control and Prevention. (2013b, July 2). Vital signs: Overdoses of prescription opioid pain relievers and other drugs among women – United States, 1999-2010. *Morbidity and Mortality Weekly Report, 62*, 1-6.

Centers for Disease Control and Prevention. (2015). Detailed state tables: Marriage and divorce trends. Retrieved September 16, 2016, from http://www.cdc.gov/nchs/nvss/marriage-divorce.htm

Charmez, K. (2006). *Constructing grounded theory*. Thousand Oaks, CA: Sage Publications.

Chilcoat, H. D., & Breslau, N. (1998). Investigations of causal pathways between PTSD and drug use disorders. *Addictive Behaviors, 23*(6), 827-840. doi:10.1016/S0306-4603(98)00069-0

Chun, S., & Lee, Y. (2010). The role of leisure in the experience of posttraumatic growth for people with spinal cord injury. *Journal of Leisure Research, 42*(3), 393-415.

Cloitre, M., Stolbach, B. C., Herman, J. L., van der Kolk, B., Pynoos, R., Wang, J., & Petkova, E. (2009). A developmental approach to complex PTSD: Childhood and adult cumulative trauma as predictors of symptom complexity. *Journal of Traumatic Stress*, *22*(5), 399-408. doi:10.1002/jts.20444

Cohen, L., Fouladi, R. T., & Katz, J. (2005). Preoperative coping strategies and distress predict postoperative pain and morphine consumption in women undergoing abdominal gynecologic surgery. *Journal of Psychosomatic Research*, *58*(2), 201-209. doi:10.1016/j.jpsychores.2004.07.007

Conroy, E., Degenhardt, L., Mattick, R., & Nelson, E. (2009). Child maltreatment as a risk factor for opioid dependence: Comparison of family characteristics and type and severity of child maltreatment with a matched control group. *Child Abuse & Neglect, 33*(6), 343-352. doi:10.1016/j.chiabu.2008.09.009

Corsini, R. (2002). *The dictionary of psychology*. New York, NY: Brunner-Routledge.

Cottler, Nishith, & Compton (2001). Gender differences in risk factors for trauma exposure and posttraumatic stress disorder among inner city drug abusers in and out of treatment. *Comprehensive Psychiatry, 42*(2), 111-117. doi:10.1053/comp.2001.21219

Creswell, J. (2007). *Qualitative inquiry & research design: Choosing among five approaches, second edition.* Thousand Oaks, CA: Sage Publications.

Creswell, J. (2009). *Research methods: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, CA: Sage Publications.

Crusto, C. A., Whitson, M. L., Walling, S. M., Feinn, R., Friedman, S. R., Reynolds, J., & Kaufman, J. S. (2010). Posttraumatic stress among young urban children exposed to family violence and other potentially traumatic events. *Journal of Traumatic Stress*, *23*(6), 716-724. doi:10.1002/jts.20590

Curtis, D. (2011). Protecting Native American women from violence is an uphill battle. *California Bar Journal*. Retrieved from www.calbarjournal.com/December2011/TopHeadlines/TH1.aspx

Dass-Brailsford, P. & Myrick, A. (2010). Psychological trauma and substance abuse: The need for an integrated approach. *Trauma, Violence, and Abuse, 11*(4), 202-213. doi:10.1177/1524838010381252

DeWit, D. J. (1998). Frequent childhood geographic relocation: Its impact on drug use initiation and the development of alcohol and other drug-related problems among adolescents and young adults. *Addictive Behaviors,* 25(5), 623-635.

doi:10.1016/S0306-4603(98)00023-9

Drug Enforcement Agency. (2011). *Drugs of abuse: A DEA resource guide*. Retrieved from http://www.justice.gov/dea/pr/multimedia-library/publications/drug_of_abuse.pdf

Doka, K. (Ed.). (1989). *Disenfranchised grief: Recognizing hidden sorrow*. Lexington, MA: Lexington Books.

Doka, K. (2002). *Disenfranchised grief: New directions, challenges, and strategies for practice*. Champaign, IL: Research Press.

Dong, M., Anda, R. F., & Felitti, V. J. (2006). Frequent moving linked with adverse childhood experiences. *Brown University Child & Adolescent Behavior Letter*, *22*(2), 4-5.

Dong, M., Anda, R. F., Felitti, V. J., Dube, S. R., Wiliamson, D. F., Thompson, T. J., … Giles, W. G. (2004). The interrelatedness of multiple forms of childhood abuse, neglect, and household dysfunction. *Child Abuse and Neglect, 28*, 771-784. doi:10.1016/j.chiabu.2004.01.008

Ehring, T. & Quack, D (2010). Emotional regulation difficulties in trauma survivors: The role of trauma type and PTSD symptom severity. *Behavior Therapy, 41*(4), 587-598. doi:10.1016/j.beth.2010.04.004

El-Bassel, N., Gilbert, L., Wu, E., Go, H., & Hill, J. (2005). Relationship between drug abuse and intimate partner violence: A longitudinal study among women receiving methadone. *American Journal of Public Health*, *95*(3), 465-470. doi:10.2105/AJPH.2003.023200

Ellis, A. (1962). *Reason and emotion in psychotherapy*. New York, NY: Lyle Stuart.

Ellis, A. (1994). Post-traumatic stress disorder (PTSD): A rational emotive behavioral theory. *Journal of Rational Emotive and Cognitive Behavior Therapy, 12* (1), 3-25. doi:10.1007/BF02354487

Evans-Campbell, T., Lindhorst, T., Huang, B., & Walters, K. L. (2006). Interpersonal violence in the lives of urban American Indian and Alaska Native women: Implications for health, mental health, and help-seeking. *American Journal of Public Health*, *96*(8), 1416-1422. doi:10.2105/AJPH.2004.054213

Faber, A. J., & Wittenborn, A. K. (2010). The role of attachment in children's adjustment to divorce and remarriage. *Journal of Family Psychotherapy, 21*(2), 89-104. doi:10.1080/08975353.2010.483625

Finkelstein, N., VandeMark, N., Fallot, R., Brown, V., Cadiz, S., & Heckman, J. (2004). *Enhancing substance abuse recovery through integrated trauma treatment*. Sarasota, FL: National Trauma Consortium and Center for Substance Abuse Treatment.

Follette, V. & Ruzek, J. (Eds.). (2006). *Cognitive behavioral therapies for trauma*. New York, NY: Guilford Press.

Ford, J. D. (2005). Treatment implications of altered affect regulation and information processing following child maltreatment. *Psychiatric Annals*, *35*(5), 410-419. Retrieved from http://search.proquest.com.ezp.waldenulibrary.org/docview/217052640?accountid=14872

Friedman, M. (2013, August 16). *Trauma and stress-related disorders in DSM-5*,

presented for the International Society for Traumatic Stress Studies. Retrieved from http://www.istss.org/source/Continuing Ed/webinar_details.cfm?mtg=WEB0813

Fullilove, M., Fullilove, R., Smith, M., Winkler, K., Michael, C., Panzer, P. G., & Wallace, R. (1993). Violence, trauma, and post-traumatic stress disorder among women drug users. *Journal of Traumatic Stress*, *6*(4), 533-543. doi:10.1002/jts.2490060409

Garb, H. (1998). Psychodiagnosis. In *Studying the clinician: Judgment research and psychological assessment* (p. 77). Washington, DC: American Psychological Association. doi:10.1037/10299-002

Gibson, L. (2014). *Acute stress disorder*. National Center for PTSD. Retrieved from http://www.ptsd.va.gov/professional/treatment/early/acute-stress-disorder.asp

Glaser, B. (1978). *Theoretical sensitivity*. Mill Valley, CA: The sociology press.

Glaser, B. & Strauss, A. (1967). *The discovery of grounded theory*. Chicago, IL: Aldine Publishing Company.

Golder, S. & Logan, T. (2011). Cumulative victimization, psychological distress, and high risk behavior among substance involved women. *Violence and Victims, 26* (4), 477-495. doi:10.1891/0886-6708.26.4.477

Gossop, M., Stewart, D., Browne, N., & Marsden, J. (2002). Factors associated with abstinence, lapse or relapse to heroin use after residential treatment: Protective effect of coping responses. *Addiction*, *97*(10), 1259-1267. doi:10.1046/j.1360-0443.2002.00227.x

Grubaugh, A. L., Zinzow, H. M., Paul, L., Egede, L. E., & Frueh, B. C. (2011). Trauma exposure and posttraumatic stress disorder in adults with severe mental illness: A critical review. *Clinical Psychology Review, 31*(6), 883-899. doi:10.1016/j.cpr.2011.04.003

Gudjonsson, G. H., & Sigurdsson, J. F. (2003). The relationship of compliance with coping strategies and self-esteem. *European Journal of Psychological Assessment*, *19*(2), 117-123. doi:10.1027//1015-5759.19.2.117

Guidubaldi, J., Cleminshaw, H. K., Perry, J. D., Nastasi, B. K., & Lightel, J. (1986). The role of selected family environment factors in children's post-divorce adjustment. *Family Relations: An Interdisciplinary Journal of Applied Family Studies*, *35*(1), 141-151. doi:10.2307/584293

Haller, M., & Chassin, L. (2014). Risk pathways among traumatic stress, posttraumatic stress disorder symptoms, and alcohol and drug problems: A test of four hypotheses. *Psychology of Addictive Behaviors, 28*(3), 841-851. doi:10.1037/a0035878

Heffernan, K., Cloitre, M., Tardiff, K., Marzuk, P., Portera, L., & Leon, A. (2000). Childhood trauma as a correlate of lifetime opiate use in psychiatric patients. *Addictive Behaviors, 25*(5), 797-803. doi:10.1016/S0306-4603(00)00066-6

Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress*, *5*(3), 377-391. doi:10.1002/jts.2490050305

Hien, D., Litt, L., Cohen, L., Miele, G., & Campbell, A. (2009). *Trauma services for*

women in substance abuse treatment. Washington, DC: American Psychological Association.

Holmes, T. & Rahe, R. (1967). The Social Readjustment Rating Scale. *Journal of Psychosomatic Research, 11*(2), 213-218. doi:10.1016/0022-3999(67)90010-4

Holtyn, A. F., Koffarnus, M. N., DeFulio, A., Sigurdsson, S. O., Strain, E. C., Schwartz, R. P., & Silverman, K. (2014). Employment□based abstinence reinforcement promotes opiate and cocaine abstinence in out□of□treatment injection drug users. *Journal of applied behavior analysis*, *47*(4), 681-693. doi:10.1002/jaba.158

Jacobs, K., & Sillars, A. (2012). Sibling support during post-divorce adjustment: An idiographic analysis of support forms, functions, and relationship types. *Journal of Family Communication*, *12*(2), 167-187. doi:10.1080/15267431.2011.584056

Kaplan, S., Lanier, A., Merritt, R., & Siegel, P. (1997). Prevalence of tobacco use among Alaska Natives: A review. *Preventive Medicine, 26* (4), 460-465. doi:10.1016/pmed.1997.0165

Kelly, M. M., Tyrka, A. R., Price, L. H., & Carpenter, L. L. (2008). Sex differences in the use of coping strategies: Predictors of anxiety and depressive symptoms. *Depression and Anxiety*, *25*(10), 839–846. doi:10.1002/da.20341

Kelly, A., & Yuan, K. (2009). Clients' secret keeping and the working alliance in adult outpatient therapy. *Psychotherapy: Theory, Research, Practice, Training*, *46*(2), 193-202. doi:10.1037/a0016084

Kessler, R., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. (1995). Posttraumatic stress disorder in the national comorbidity survey. *Archives of General*

Psychiatry, 52 (12), 1048-1060. doi:10.1001/archpsyc.1995.03950240066012

Khantzian, E. (1985). The self-medication hypothesis of addictive disorders: Focus on heroin and cocaine dependence. *American Journal of Psychiatry, 142,* 1259-1264. doi:10.1176/ajp.142.11.1259

Khantzian, E. (1999). *Treating addiction as a human process*. Northvale, NJ: Jason Aronson.

Khantzian, E. & Albanese, M. (2008). *Understanding addiction as self-medication: Finding hope behind the pain.* Lanham, MD: Rowman & Littlefield, Inc.

Kohlenberg, B., Tsai, M., & Kohlenberg, R. (2006). Functional Analytic Psychotherapy and the Treatment of Complex Posttraumatic Stress Disorder. In Follette, V. & Ruzek, J. (Eds.), *Cognitive behavioral therapies for trauma* (pp. 173-197). New York, NY: Guilford Press.

Kranzler, H., Kadden, R., Burleson, J., Babor, T., Apter, A., & Rounsaville, B. (1995). Validity of psychiatric diagnoses in patients with substance use disorders: Is the interview more important than the interviewer? *Comprehensive Psychiatry, 36*, 278-288. doi:10.1016/S0010-440X(95)90073-X

Kreis, M. F., Gillings, K., Svanberg, J., & Schwannauer, M. (2016). Relational pathways to substance misuse and drug-related offending in women: The role of trauma, insecure attachment, and shame. *The International Journal of Forensic Mental Health, 15*(1), 35-47. doi:10.1080/14999013.2015.1134725

Kreis, M. F., Schwannauer, M., & Gillings, K. (2014). Relational risk factors for reoffending in women: A systematic review. *The International Journal of*

Forensic Mental Health, 13(4), 381-393. doi:10.1080/14999013.2014.962713

Lee, D. & James, S. (2011). *The compassionate mind guide to recovering from trauma and PTSD.* Oakland, CA: New Harbinger.

MacDonald, Z., & Pudney, S. (2000). Illicit drug use, unemployment, and occupational attainment. *Journal of Health Economics*, *19*(6), 1089-1115. doi:10.1016/S0167-6296(00)00056-4

Magdol, L. (2002). Is moving gendered? The effects of residential mobility on the psychological well-being of men and women. *Sex Roles*, *47*(11), 553-560. doi:10.1023/A:1022025905755

Matheson, K., & Anisman, H. (2003). Systems of coping associated with dysphoria, anxiety and depressive illness: A multivariate profile perspective. *Stress: The International Journal on the Biology of Stress*, *6*(3), 223-234. doi:10.1080/10253890310001594487

McCauley, J., Kern, D. E., Kolodner, K., Dill, L., Schroeder, A. F., DeChant, H. K., … Bass, E. B. (1997). Clinical characteristics of women with a history of childhood abuse: Unhealed wounds. *Journal of the American Medical Association*, *277*(17), 1362-1368. doi:10.1001/jama.1997.03540410040028

McFarlane, A. & De Girolamo G. (1996). The nature of traumatic stressors and the epidemiology of posttraumatic reactions. In B. A. Van der Kolk, A. C. McFarlane, & L. Weisaeth (Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (p. 130). New York, NY: Guilford Press.

Merline, A. C., O'Malley, P. M., Schulenberg, J. E., Bachman, J. G., & Johnston, L. D.

(2004). Substance use among adults 35 years of age: Prevalence, adulthood predictors, and impact of adolescent substance use. *American Journal of Public Health*, *94*(1), 96-102. doi:10.2105/AJPH.94.1.96

Miles, M. & Huberman, A. (1994). *Qualitative data analysis: A sourcebook of new methods*. Thousand Oaks, CA: Sage.

Miller, L (2007). Traumatic stress disorders. In Dattilio, F. M. and Freeman, A. (Eds.), *Cognitive behavioral strategies in crisis intervention, 3rd ed.* (pp. 494-527). New York, NY: Guilford Press.

Mills, K., Lynskey, M., Teesson, M., Ross, J., & Darke, S. (2005). Post-traumatic stress disorder among people with heroin dependence in the Australian treatment outcome study (ATOS): Prevalence and correlates. *Drug and Alcohol Dependence, 77,* 243-249. doi:10.1016/j.drugalcdep.2004.08.016

Mol, S., Arntz, A., Metsemakers, J., Dinant, G., Vilters-van Montfort, P., & Knottnerus, J. (2005). Symptoms of post-traumatic stress disorder after non-traumatic events: Evidence from an open population study. *British Journal of Psychiatry, 186*, 494-499. doi:10.1192/bjp.186.6.494

Najavits, L. (2002). *Seeking safety: A treatment manual for PTSD and substance abuse*. New York, NY: Guilford Press.

Najavits, L. (2007). Seeking Safety: An evidence-based model for substance abuse and trauma/PTSD. In K. A. Witkiewitz & G. A. Marlatt (Eds.). *Therapist's guide to evidence-based relapse prevention: Practical resources for the mental health professional* (pp. 141-167). San Diego, CA: Elsevier Press.

Najavits, L. (2009). Psychotherapies for trauma and substance abuse in women: Review and policy implications. *Trauma, Violence, and Abuse, 10* (3), 290-298. doi:10.1177/1524838009334455

National Institutes of Health Office of Extramural Research. (2014). Protecting human research participants - Beneficence: Assessing risks and potential benefits. Retrieved from https://phrp.nihtraining.com/beneficence/12_beneficence.php.

Neher, L. S., & Short, J. L. (1998). Risk and protective factors for children's substance use and antisocial behavior following parental divorce. *American Journal of Orthopsychiatry*, *68*(1), 154-161. doi:10.1037/h0080281

Norman, S., Tate, S., Wilkins, K., Cummins, K., & Brown, S. (2010). Posttraumatic stress disorder's role in integrated substance dependence and depression treatment outcomes. *Journal of Substance Abuse Treatment, 38*, 346-355. doi:10.1016/j.jsat.2010.01.013

Nunnink, S., Goldwaser, G., Heppner, P., Pittman, J., Nievergelt, C., & Baker, D. (2010). Female veterans of the OEF/OIF conflict: Concordance of PTSD symptoms and substance misuse. *Addictive Behaviors*, *35*(7), 655-659. doi:10.1016/j.addbeh.2010.03.006

Oledibe, M. (2014). *Outpatient quality study of integrated treatment of mental illness and substance abuse* (Doctoral dissertation). Retrieved from http://gradworks.umi.com/36/45/3645416.html. (Publication No. 3645416).

Oviedo-Joekes, E., Marchand, K., Guh, D., Marsh, D., Brissette, S., Krausz, M., … Schechter, M. (2011). History of reported sexual or physical abuse among long-

term heroin users and their response to substitution treatment. *Addictive Behaviors*, *36*(1), 55-60. doi:10.1016/j.addbeh.2010.08.020

Patten, C., Windsor, R., Renner, C., Enoch, C., Hochreiter, A., Nevak, C., … Brockman, T. (2009). Feasibility of a tobacco cessation intervention for pregnant Alaska Native women. *Nicotine and Tobacco Research, 12 (2),* 79-87. doi:10.1093/ntr/ntp180

Pinel, J. (2006). *Biopsychology* (6th edition). Boston, MA: Allyn & Bacon.

Powell, B., Cooper, G., Hoffman, K., & Marvin, B (2013). *The circle of security intervention: Enhancing attachment in early parent-child relationships*. New York, NY: Guilford Press.

Preda, A. (2012). Opioid abuse clinical presentation. Retrieved from emedicine.medscape.com/article/287790 – clinical

Regev, R., & Ehrenberg, M. F. (2012). A pilot study of a support group for children in divorcing families: Aiding community program development and marking pathways to resilience. *Journal of Divorce & Remarriage*, *53*(3), 220-230. doi:10.1080/10502556.2012.663271

Riehman, K. S., Iguchi, M. Y., Zeller, M., & Morral, A. R. (2003). The influence of partner drug use and relationship power on treatment engagement. *Drug and Alcohol Dependence, 70*(1), 1-10. doi:10.1016/S0376-8716(02)00332-0

Roy, A. (2010). Risk factors for attempting suicide in heroin addicts. *Suicide and Life-Threatening Behavior*, *40*(4), 416-420. doi:10.1521/suli.2010.40.4.416

Sansone, R. A., Whitecar, P., & Wiederman, M. W. (2009). The prevalence of childhood

trauma among those seeking buprenorphine treatment. *Journal of Addictive Diseases, 28,* 64-67. doi:10.1080/10550880802545101

Sartor, C., McCutcheon, V., Pommer, N., Nelson, E., Duncan, A., Waldron, M., … Heath, A. (2010). Posttraumatic stress disorder and alcohol dependence in young women. *Journal of Studies on Alcohol and Drugs*, *71*(6), 800-818. doi:10.15288/jsad.2010.71.810

Segal, B. (2001). Responding to victimized Alaska Native women in treatment for substance use. *Substance Use & Misuse, 36*(6&7), 845-865. doi:10.1081/JA-100104094

Shorey, R. C., Fite, P. J., Elkins, S. R., Frissell, K. C., Tortolero, S. R., Stuart, G. L., & Temple, J. R. (2013). The association between problematic parental substance use and adolescent substance use in an ethnically diverse sample of 9th and 10th graders. *The Journal of Primary Prevention*, *34*(6), 381-393. doi:10.1007/s10935-013-0326-z

Silverman, K., Holtyn, A. F., & Morrison, R. (2016). The therapeutic utility of employment in treating drug addiction: Science to application. *Translational Issues in Psychological Science, 2*(2), 203-212. doi:10.1037/tps0000061

Speck, K. J. (2002). *A grounded theory of volition in recovery from substance abuse* (Doctoral dissertation). Retrieved from http://search.proquest.com.ezp.waldenulibrary.org/docview/305531772?accountid=14872. (UMI No. 3045536)

Solomon, Z., Laror, N., & McFarlane, A. (1996). Acute posttraumatic reactions in soldiers and civilians. In B. A. Van der Kolk, A. C. McFarlane, & L. Weisaeth

(Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (pp. 102-114). New York, NY: Guilford Press.

Stimmel, B. (2009). From addiction to abstinence: Maximizing the changes of success. *Family Court Review*, *47*(2), 265-273. doi:10.1111/j.1744-1617.2009.01253.x

Substance Abuse and Mental Health Services Administration. (2006). State Treatment Planning Areas: Marijuana, Cocaine & Pain Killers. Retrieved May 22, 2011, from http://www.oas.samhsa.gov/subState2k6/cocaine.htm#AK and http://www.oas.samhsa.gov/subState2k6/dependence.htm

Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2009, February 5). *The NSDUH Report: Trends in Nonmedical Use of Prescription Pain Relievers: 2002 to 2007*. Rockville, MD.

Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2010, June 18). *The DAWN Report: Trends in Emergency Department Visits Involving Nonmedical Use of Narcotic Pain Relievers.* Rockville, MD.

Substance Abuse and Mental Health Services Administration. (2014). National Center for Trauma-Informed Care & Alternative to Seclusion and Restraint: About NCTIC. Retrieved from http://www.samhsa.gov/nctic/about

Suh, J., Ruffins, S., Robins, C., Albanese, M., & Khantzian, E. (2008). Self-medication hypothesis: Connecting affective experience and drug choice. *Psychoanalytic Psychology, 25*(3), 518-532. doi:10.1037/0736-9735.25.3.518

Temple, M., Fillmore, K., Hartka, E., Johnstone, B., Leino, V., & Motoyoshi, M. (1991). A meta-analysis of change in marital and employment status as predictors of

alcohol consumption on a typical occasion. *British Journal of Addiction*, *86*, 1269-1281. doi:10.1111/j.1360-0443.1991.tb01703.x

Thompson, R. J., Lizardi, D., Keyes, K. M., & Hasin, D. S. (2008). Childhood or adolescent parental divorce/separation, parental history of alcohol problems, and offspring lifetime alcohol dependence. *Drug and Alcohol Dependence*, *98*(3), 264-269. doi:10.1016/j.drugalcdep.2008.06.011

Tirch, D. (2012). *Compassionate mind guide to overcoming anxiety*. Oakland, CA: New Harbinger.

Tuten, M., & Jones, H. E. (2002). A partner's drug-using status impacts women's drug treatment outcome. *Drug & Alcohol Dependence, 70*(3), 327-330. doi:10.1016/S0376-8716(03)00030-9

UAA Justice Center & Alaska Council on Domestic Violence and Sexual Assault. (2010, September). *2010 Alaska Victimization Survey*. Retrieved from http://justice.uaa.alaska.edu/research/2010/1004.avs_2010/1004.01.avs.pdf

US Census Bureau. (2014) State and County QuickFacts. Retrieved from http://quickfacts.census.gov/qfd/states/02/0283080.html

US Department of Health and Human Services' Office on Women's Health. (2008). *The healthy woman: A complete guide for all ages*. Washington, DC: Government Printing Office.

Uram, S (2011, July 19). Different Trauma. The Meadows of Wickenburg [Video file]. Retrieved from http://www.youtube.com/watch?v=ewJBeN95OeY

van der Kolk, B. (2002). In terror's grip: Healing the ravages of trauma. *Cerebrum, 4*, 34-

50. New York, NY: The Dana Foundation. Retrieved from http://www.dana.org/Cerebrum/2002/In_Terror's_Grip_Healing_the_Ravages_of_Trauma/

van der Kolk, B., McFarlane, A., & Weisaeth, L. (Eds.). (2007). *Traumatic stress: The effects of overwhelming experience on mind, body, and society.* New York, NY: Guilford Press.

Warner, M., Chen, L. H., Makuc, D. M., Anderson, R. N., & Miniño, A. M. (2011). Drug poisoning deaths in the United States, 1980-2008. *NCHS data brief*, (81), 1-8.

Weybright, E. H., Caldwell, L. L., Ram, N., Smith, E. A., & Wegner, L. (2016). Trajectories of adolescent substance use development and the influence of healthy leisure: A growth mixture modeling approach. *Journal of Adolescence, 49,* 158-169. doi:10.1016/j.adolescence.2016.03.012

Wiechelt, S. A., Lutz, W., Smyth, N. J., & Syms, C. (2008). Integrating research and practice: A collaborative model for addressing trauma and addiction. In B. E. Bride & S. A. MacMaster (Eds.), *Stress, Trauma, and Substance Use* (pp. 102 - 113). New York, NY: Routledge.

Windle, M. (2000). Parental, sibling, and peer influences on adolescent substance use and alcohol problems. *Applied Developmental Science*, *4*(2), 98-110. doi:10.1207/S1532480XADS0402_5

Wuest, J., Ford-Gilboe, M., Merritt-Gray, M., Varcoe, C., Lent, B., Wilk, P., & Campbell, J. (2009). Abuse-related injury and symptoms of posttraumatic stress disorder as mechanisms of chronic pain in survivors of intimate partner violence.

Pain Medicine, *10*(4), 739-747. doi:10.1111/j.1526-4637.2009.00624.x

Young, R. & Joe, J. (2009). Some thoughts about the epidemiology of alcohol and drug use among American Indian/Alaska Native populations. *Journal of Ethnicity in Substance Abuse, 8*, 223-241. doi:10.1080/15332640903110443

Yufik, T., & Simms, L. (2010). A meta-analytic investigation of the structure of posttraumatic stress disorder symptoms. *Journal of Abnormal Psychology*, *119*(4), 764-776. doi:10.1037/a0020981

Zubin, J., & Spring, B. (1977). Vulnerability: A new view of schizophrenia. *Journal of abnormal psychology*, *86*(2), 103-126. doi:10.1037/0021-843X.86.2.103

Appendix A: Client Notice

CLIENT NOTICE

This notice describes how medical and drug and alcohol related information about you may be used and disclosed and how you can get access to this information. Please review it carefully.

General Information

Information regarding your health care, including payment for health care, is protected by two federal laws: the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), 42 U.S.C. 1320d et seq., 45 C.F.R. Parts 160 & 164, and the Confidentiality Law, 42 U.S.C. 290dd-2, 42 C.F.R. Part 2. Under these laws, XXXXXXXXXXXXX may not say to a person outside AFS that you attend the program, nor may XXX disclose any information identifying you as an alcohol or drug abuser, or disclose any other protected information except as permitted by federal law.

XXXXXXXXXX must obtain your written consent before it can disclose information about you for payment purposes. For example, XXX must obtain your written consent before it can disclose information to your health insurer in order to be paid for services. Generally, you must also sign a written consent before XXX can share information for treatment purposes or for health care operations. However, federal law permits XXX to disclose information *without* your written permission:

1. Pursuant to an agreement with a qualified service organization/ business associate;
2. For research, audit or evaluations;
3. To report a crime committed on XXX' premises or against XXX personnel;
4. To medical personnel in a medical emergency;
5. As allowed by an authorizing court order.
6. Physical or sexual abuse or neglect committed against a child or elderly person
7. Suicidal or homicidal threats or attempts
8. Internal Communications

For example, XXX can disclose information without your consent to obtain legal or financial services, or to another medical facility to provide health care to you, as long as there is a qualified service organization/business associate agreement in place.

Before XXX can use or disclose any information about your health in a manner which is not described above, it must first obtain your specific written consent allowing it to make the disclosure. Any such written consent may be revoked by you in writing.

Your Rights

Under HIPAA you have the right to request restrictions on certain uses and disclosures of your health information. XXX is not required to agree to any restrictions you request, but if it does agree then it is bound by that agreement and may not use or disclose any information which you have restricted except as necessary in a medical emergency.

You have the right to request that we communicate with you by alternative means or at an alternative location. XXX will accommodate such requests that are reasonable and will not request an explanation from you. Under HIPAA you also have the right to inspect and copy your own health information maintained by XXX, except to the extent that the information contains psychotherapy notes or information compiled for use in a civil, criminal or administrative proceeding or in other limited circumstances.

Under HIPAA you also have the right, with some exceptions, to amend health care information maintained in XXX' records, and to request and receive an accounting of disclosures of your health related information made by XXX during the six years prior to your request. You also have the right to receive a paper copy of this notice.

AFS may deny a client request for amendment if it determines that the information or record:

- **Was not created by an XXX employee**
- **Is not part of a designated record set**
- **Is accurate and complete**

A client whose request for amendment is denied, may pursue the next appropriate level of the client grievance procedure.

XXX' Duties
XXX is required by law to maintain the privacy of your health information and to provide you with notice of its legal duties and privacy practices with respect to your health information. XXX is required by law to abide by the terms of this notice. XXX reserves the right to change the terms of this notice and to make new notice provisions effective for all protected health information it maintains. Any revisions to this policy will be distributed to you at your next scheduled session or appointment.

Complaints and Reporting Violations
You may complain to XXX and the Secretary of the United States Department of Health and Human Services if you believe that your privacy rights have been violated under HIPAA. You may file a complaint if you believe your privacy rights have been violated by completing a complaint form (available at the front desk) and following the steps of the Grievance Procedures. You will not be subject to retaliation for filing such a complaint.

A violation of the Confidentiality Law by a program is a crime. Suspected violations of the Confidentiality Law may be reported to the United States Attorney in the district where the violation occurs.

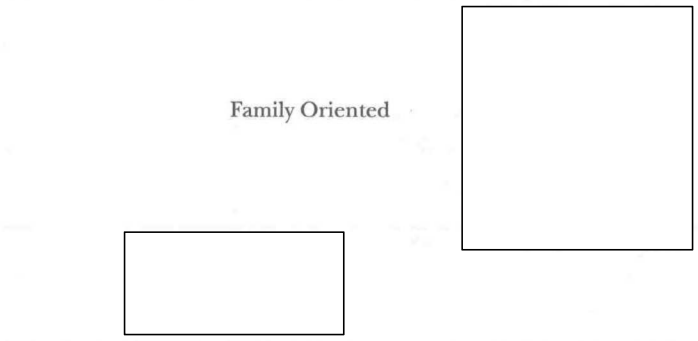
Contact
For further information, contact *XXX by telephoning XXX-4000.*

Effective Date
8/03

Acknowledgement
I hereby acknowledge that I received a copy of this notice.

Dated: _____ Patient Signature:_____

Appendix B: Letter of Cooperation



December 26, 2014

Dear Faith Golden,

Based on my review of your research proposal, I give permission for you to conduct the study entitled The Subjective Experience of Trauma and Significant Life Stressors in Alaskan Women with Opioid Use Disorders within [redacted] Behavioral Health Treatment Center. As part of this study, I will provide you access to AKAIMS, the electronic database in which we store client demographic information and treatment notes. I authorize you to collect and analyze data from the records of past clients who meet the inclusion criteria of your study, and to disseminate the results in your dissertation as approved by the Walden University Institutional Review Board (IRB).

AKAIMS includes identifying information, including names and dates of birth, and it is expected that you will keep this information confidential by recording only the necessary information required to conduct your research in your research database. It is understood that you may temporarily develop a key code in which you connect a research participant ID number to a name as your research database is developed. It is expected that only you will have access to this key code, and that it will be destroyed once your research database is built.

We understand that our organization's responsibilities include allowing you to access to the electronic database, which contains narrative data from the records of clients who meet the inclusion criteria for the study. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting, and that this plan, pending University approvals complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB and [redacted]

Sincerely,

Donn A. Bennice

Donn A. Bennice, Ph.D.
President/CEO

[redacted]