

# *The Role of Attachment Style in Substance Use Disorder*

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**Abstract:** Substance use disorder (SUD) is a mental disorder that impacts the brain and behavior. People with SUD keep using the substance(s) despite knowing the harmful consequences. An individual's childhood environment is critical to later development and relationships. An individual's early relationships with their primary caregiver shape and develop their attachment style. There are two general attachment styles: secure and insecure. Additionally, an internal working model is the cognitive framework and representation of one's relationship and attachment with their primary caregiver that becomes a template for future relationships. As research regarding attachment style and substance use and SUD's relationship are scarce, this review investigated and demonstrated that insecure attachment might be a potentially significant factor in substance use and SUD. Subsequently, this review highlighted how the internal working model might also play a role in SUD. Finally, this paper can provide guidance for future intervention and treatment studies for SUD that target attachment style and the internal working model.

**Keywords:** attachment style, insecure attachment, substance use disorder, internal working model

## 1. Introduction

Substance use disorder (SUD) is a complex mental condition that impacts the brain and behavior, which causes uncontrollable substance use despite harmful consequences. These substances include licit and illicit drugs, such as depressants, stimulants, and hallucinogens. People with SUD have an unhealthy obsession with using particular substance(s) to the point where it impairs a person's ability to function in daily life. Individuals keep using these substances even when they know there will be adverse effects. Symptoms can range from moderate to severe, with the most severe symptoms of SUD sometimes called addictions. The growing-up environment in childhood is crucial as it influences future relationships and development. The different ways of engaging and acting in intimate relationships characterize attachment styles. An individual's early relationships with their primary caregivers have an impact on how an individual develops their attachment style. Secure and insecure are the two main attachment styles. More specifically, insecure attachment styles are further categorized into anxious, avoidant, and disordered attachment styles [1].

Regarding attachment style research, current findings agree that attachment theory is not only limited to the parent-child relationship but also throughout life. Previous research has suggested that children with secure attachment are consoled by a caregiver's closeness. When children can freely explore that outer world, they use attachment figures for support and assume that an attachment figure

will be available when they need help. However, the accessibility and responsibility of caregivers vary, and children with unresponsive or unavailable caregivers will develop an insecure attachment style. Accordingly, previous research has also introduced internal working models as the cognitive framework through which early attachment experiences affect individuals throughout their lives. Internal working models are mental representations of one's self in relation to others, impacting cognition and behavior in relationships. Internal working models are formed throughout childhood and become the assumed method of interacting socially with others. Consequently, these internal working models play a significant part in developing relationships in the future. Thus, this causes those with insecure attachment in childhood to have difficulty making emotional and deep relationships in adulthood. Existing research has also investigated the relationships between attachment styles and the development of psychopathologies, such as depression, anxiety, and the general inability to deal with stressful situations [1].

In terms of SUD research, findings from existing research agree that the predisposition to engage in substance use is not due to a single factor but rather individual differences and also the unique neurochemicals of different types of drugs. Consequently, current trends in research primarily focus on identifying and exploring how personality traits or other factors can affect substance use. In addition, new trends in research are currently investigating the underlying motivational processes and their association with SUD, such as weak inhibitory control being a pre-existing factor to, and a consequence of, SUD [2]. Due to this nature, current trends focus on flexible and adaptable framework interventions to develop a specialized treatment for a wide array of individuals with SUD.

Attachment style is likely to have an influence on the use of substances and the development of SUD. Those who have SUD have needs that are not being adequately fulfilled; thus, they partake in substance use in order to fulfill those needs in an unhealthy manner. For example, those with an insecure attachment from childhood would likely have difficulties developing relationships in adulthood due to the insecure internal working model. Consequently, they might engage in substance use in order to fulfill their lack of social connection and needs. However, there has been limited research assessing the association between attachment style and its influence on the use of substances and SUD. Thus, the review aims to understand better earlier attachment style and its connection with later substance use and SUD. In addition, this review can provide guidance in developing more effective interventions and treatments for SUD by changing the internal working model of attachment.

## **2. General Relationship between Childhood Attachment and Later Substance Use**

Substance use may increase the risk of developing SUD. As substance use is one of the early signs of SUD, it is essential to explore attachment style and substance use's relationship to develop early prevention and intervention strategies. Secure attachment in childhood can be a protective influence in decreasing the likelihood of engaging in substance use. This is because securely attached individuals tend to develop healthy relationships and a stable role in society. As a result, they are less likely to participate in substance use as their needs are being fulfilled in a healthy manner. Accordingly, in the study by Serra et al., secure and insecure attachment and its effect on substance use were explored using a series of questionnaires, tests, and measures in a large sample of undergraduates (mean age = 19.62 years) [3]. The findings demonstrated a significant association between insecure attachment and the use of licit and illicit substances. In addition, the results suggested that polydrug use was especially significant among insecurely attached individuals. Therefore, Serra and colleagues demonstrate that insecurely attached individuals are more likely to engage in substance use during college than those with a secure attachment.

Consistent with the above discussion, Fairbairn and colleagues explored the relationship between substance use and secure and insecure attachment through a meta-analysis of 34 longitudinal samples with a total of 56,721 participants [4]. As this is longitudinal research, when children are followed up

from childhood to adulthood, this can indicate a more causal relationship between substance use and secure and insecure attachment. The samples' average age at the start of the studies was 15.4 years. Additionally, the longitudinal follow-up took an average of 3.8 years and lasted anywhere from 1 month to 20 years. The results indicated a significant prospective correlation that individuals with early insecure attachment were more likely to use substances later than securely attached individuals. In addition, the results demonstrated that earlier insecure attachment preceded increases in substance use. Hence, Fairbairn et al. indicate that early insecure attachment could likely be a causal factor in later substance use.

### **3. Insecure Attachment as a Risk Factor to Substance Use Disorders**

#### **3.1. Attachment Style, Social Support, and Substance Use**

The parenting environment can vastly influence one's attachment. For example, suppose a child is growing up in an environment where their parents both have SUD. In that case, the parents will likely not be able to fulfill the role of parents adequately, leaving the child with disorganized attachment. Meulewaeter et al. investigated the parenting experiences of mothers in recovery from SUD with 23 mothers (25 to 49 years) through in-depth qualitative interviews, reflecting on their parent-child relationships [5]. The results demonstrated that the vast majority of mothers experienced trauma as a child due to dysfunctional parenting, such as parents with SUD, which was linked to their disorganized attachment. The results demonstrated that this led to substance use as a way of self-soothing and a sense of control, leading to substance use disorder. Consequently, the results demonstrated that substance use disorder among the mothers played a factor in dysfunctional parenting and subsequently contributed to disorganized attachment processes in offspring. Overall, the findings indicate that disorganized attachment can result from underlying trauma and increase the possibility of SUDs.

Effective communication is vital when forming a healthy relationship. In particular, emotions play an essential role in communication and, thus, in developing a healthy relationship. Ścigala and Ścigala investigated the potential relationships between adult attachment style, alexithymia (i.e., one's inability to identify and describe emotions experienced), and dissociation in alcohol use disorder (AUD) in a large sample of participants (18-68 years) by utilizing a series of questionnaires, surveys, and screening tests [6]. In addition, one group was a control group of those who had not been treated for alcohol addiction. Another group was inpatient participants who recently underwent addiction treatment programs, therapies, and preventions. The results demonstrated that in comparison to securely attached individuals, those with insecure attachment have a significantly higher prevalence of AUD and the severity of its symptoms. Moreover, the results suggest that alexithymia was a mediator in the effect of secure or insecure attachment on the level of AUD. This study highlights that when an individual with insecure attachment also has difficulties in communication, they cannot form healthy relationships. Consequently, they do not have enough social support for their needs which links back to the increased likelihood of developing SUD.

Consistent with the above evidence, Zakhour et al. explored attachment styles and alexithymia's relationship among those with AUD in a large sample of participants (mean age = 30.3 years) using a set of questionnaires, tests, and scales [7]. The findings demonstrated a significant positive relationship between insecure attachment and alexithymia. The significant results also indicated that higher levels of alexithymia and insecurely attached individuals were related to higher AUD. In addition, alexithymia was linked with increased rates of alcohol intake and desire for alcohol. Therefore, Zakhour et al. indicate that the likelihood of alcohol consumption and AUD is reduced when an individual is securely attached.

### 3.2. Relevant Factors in the Relationship

The secure attachment internal working model represents a part of frustration tolerance (FT). FT is the ability to withstand obstacles and stressful situations. For example, it feels stressful when going through an unfamiliar situation, but those with a secure internal working model would feel secure and tolerate these situations. Ramirez-Castillo et al. evaluated personality traits and FT in a sample of those with diagnosed SUD (20 to 63 years) through a set of questionnaires and therapeutic strategies, therapeutic community (TC) and ambulatory treatment (AT) [8]. Compared to the control sample, the clinical sample indicated a significantly lower FT than the control sample. Between the clinical groups, FT was significantly higher in AT. In addition, anxiety and PTSD, characteristics frequently related to insecure attachment, were also lower in AT than in TC. Therefore, the findings indicate that the lack of frustration tolerance might be a factor in the insecure internal working model, subsequently impacting the likelihood of SUD.

In the study by Le and colleagues, the researchers investigated insecure attachment and heavy drinking's relationship. The researchers also assessed whether insecure attachment might be a mediating factor in the association between adverse childhood experiences and harmful drinking [9]. The participants (25-65 years) were primary care patients and completed a series of surveys and questionnaires. The results suggested that insecure attachment was moderately associated with harmful drinking. In addition, the study demonstrated a significant mediating role for insecure attachment between adverse childhood experiences and harmful drinking. Therefore, these findings suggest that an insecure attachment internal working model might mediate childhood adversity and alcohol use's relationship. Likewise, a secure attachment internal working model might reduce adversity's negative influence and the likelihood of alcohol use. This indicates that adversity itself will not necessarily cause substance use but rather how an individual's internal working model perceives and interacts with their environment, which has a more significant influence.

As discussed above, attachment and the internal working model can influence later development. Accordingly, if the internal working model is better understood, it would be possible to change the internal working model. In a group of SUD outpatients (16-69 years), Gidhagen et al. assessed the relationships between attachment styles and substance use [10]. The outpatients filled out a series of questionnaires before and after different psychological treatments. The outpatients were divided into the directive, reflection, or supportive psychological treatment. The significant findings demonstrated that compared to typically developing populations, those with insecure attachment styles were more prevalent in SUD outpatients. The results indicated that significantly fewer outpatients had an insecure attachment at the end of the treatment. Therefore, Gidhagen et al. suggest that the internal working model of attachment can be changed through intensive psychological treatment.

### 4. Conclusion

As evidenced by the above discussions, early insecure attachment might be a causal factor to later development of substance use. In particular, individuals with insecure attachment generally have trouble forming relationships, which negatively impacts their ability to fulfill their social and emotional needs. This leads insecurely attached individuals to turn to substances as a way to satisfy their needs, connecting to the increased likelihood of developing SUD. Accordingly, the internal working model also influences the possibility of developing SUD. Plus, the internal working model, and hence attachment style, can also be changed through intensive psychological treatment. Overall, these findings demonstrate that attachment style, and thus the internal working model, plays a role in substance use and SUD. Hence, developing interventions and treatments focusing on changing the internal working model might be beneficial for individuals with SUD.

However, there were some limitations with the above studies. Most studies did not investigate the contribution of individual personality traits to attachment style and its relationship with substance use. For example, sibling studies with siblings who grew up in the same environment can provide more information regarding individual differences and their contribution to SUD. Moreover, the intervention studies regarding the change in the internal working model did not follow up, so it would be difficult to examine whether the intervention resulted in a long-term change or only for a brief period. Accordingly, it will be helpful to have sibling comparison studies to evaluate the possible individual differences that might contribute to substance use and SUD. Future studies targeting the internal working model should conduct longitudinal studies to assess its long-term effectiveness. This review can provide some guidance to the design of prevention and intervention programs for at risk children and adolescents.

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