Published in final edited form as:

Alcohol Clin Exp Res. 2015 July ; 39(7): 1118–1119. doi:10.1111/acer.12761.

Commentary on Maurage et al., Theory of Mind difficulties in patients with alcohol dependence

George Fein, Ph.D. [President and Senior Scientist]

Neurobehavioral Research Inc. Kihei, Hawaii, Adjunct Professor of Medicine and Affiliated Graduate Faculty in Psychology, University of Hawaii, Honolulu, Hawaii

Maurage and colleagues (Maurage in press.) conducted an interesting study that attempted to determine the nature of theory of mind (ToM) impairments in alcohol dependent (AD) individuals. They note that ToM impairments may involve either impairments in tracking the other person's beliefs or impairments in discounting one's own beliefs in order to attend to the other's beliefs (self-perspective inhibition). They used two false-belief tasks and found ToM deficit in about half of their AD sample. The deficit involves an impairment in tracking the other person's beliefs. AD individuals with this deficit also performed poorly on self-perspective inhibition, but the authors could not distinguish whether the deficit in belief tracking affected scores on the task involving self-perspective inhibition, or whether there was an additional impairment in self-perspective inhibition. The results were unequivocal, though, in showing that ToM impairments in AD are not primarily a problem in self-perspective inhibition.

The important question is, "What place does ToM play in our understanding of alcoholism, its etiology and treatment?" Addiction is so powerful because the brain regions and neural systems involved are central to our survival as human beings. These systems organize and motivate our emotional life and behavior. Babies are born helpless and dependent on their caregivers, with whom they are involved in an intimate give and take relationship. Childhood experiences (especially those with the caregiver) interact with our genetics to influence brain function and structure (Sullivan 2012). Healthy attachment depends on the child learning about the caregiver and how to elicit caregiver behaviors and emotional responses to support the child's safety, health, and development.

Savov and Atanaassov (Savov and Atanassov 2013) recently hypothesized that substance-addicted patients have a core severe impairment in mentalizing, associated with developmental deficits characteristic of borderline personality disorder and psychosomatic conditions. Our recent paper showed that borderline symptoms are characteristic of abstinent alcoholics, with a greater prevalence of lifetime and current (prior year) borderline symptoms in short-term (6-15 week) and long-term (greater than 1.5 year) abstinent alcoholics for all nine borderline personality disorder criteria (Fein and Nip 2012). Additionally, we found difficulty in establishing longer-term abstinence in women with anger-associated symptoms and abandonment-avoidance symptoms. Recent psychodynamic

models of addiction build on Khantzian's (Khantzian 2003) conceptualization of the self-medication hypothesis. These psychoanalytically oriented clinicians concentrate on the idea that individuals with addiction and alcoholism complain of being either overwhelmed by intolerable affects or cut off from their emotions. In this framework, drugs are used to help individuals regulate their impaired affective life (Wieder and Kaplan 1969). Continuous blocking of affect leads to emotions being treated as physiological attacks. According to Khantzian (Khantzian 2003), addicted individuals are not just searching for “escape”, but for a shield that protects them from excess anxiety.

Fonagy (Fonagy 2008) defines mentalization as “... a form of mostly preconscious imaginative mental activity, namely, interpreting human behavior in terms of intentional mental states (i.e., needs, desires, feelings, beliefs, goals, purposes, and reasons).” Intoxication impairs mentalization of one's own emotional states while deficits in mentalization may contribute to substance abuse under emotional stress caused by interpersonal conflicts. In this regard, Bouchard and Lecours (Bouchard and Lecours 2008) describe mentalization as modifying external and internal pressures and functioning as a psychic “immune system”. The psychoanalytic perspective sees addicted and alcoholic individuals without adequate mentalization abilities as not being able to acquire distance from affective pressure; they can suffer from heightened anxiety and depression secondary to a deep conviction that they are helpless in regulating external reality and internal emotional states. In this model, substance abuse is a coping mechanism that replaces mental processing of helplessness, apathy and emptiness, and brings back temporary control.

Maurage and colleagues (Maurage in press.) found that the ToM deficit was associated with measures of the severity of AD, but not to depression or anxiety. The lack of association of ToM deficits with depression or anxiety does not offer support for a self-medication model of alcoholism; however, it does not provide evidence against the self-medication model. AD individuals with ToM deficits may self-medicate with alcohol when confronted with significant negative affect and difficult interpersonal situations – it is not necessary for their anxiety and depression to be greater than that in AD individuals without a ToM deficit. More research is needed on the role of ToM deficits in relapse, especially relapse initiated by negative affective states and interpersonal conflicts. It also may be worthwhile to compare borderline symptoms in individuals with vs. without ToM impairments.

This model supports the potential efficacy of mentalization-based treatment and mindfulness based relapse prevention treatment for alcohol and drug use disorders. It may be of greatest potential efficacy in alcoholics with significant borderline personality disorder problems (Bateman and Fonagy 2010). However, it is important to note that half the AD subjects in the current study did not evidence ToM deficits, and thus, treatments based on a ToM model may not be appropriate or efficacious for all patients. Nonetheless, the current study points to the potential utility of this avenue of research into the etiology, phenomenology, and treatment of alcoholism and other addictions. Finally, it is important to not fall into the trap, that schizophrenia work fell into decades earlier, in blaming mothers for the development of the disorder. The presence of ToM problems does not necessarily provide evidence for problems in early child-care and nurturance.

References

- Bateman A, Fonagy P. Mentalization based treatment for borderline personality disorder. *World psychiatry*. 2010; 9(1):11–15. [PubMed: 20148147]
- Bouchard, MA., Lecours, S. *Mentalization : theoretical considerations, research findings, and clinical implications*. Vol. 302 p. F. Busch. New York: Analytic Press; 2008. Contemporary approaches to mentalization in the light of Freud's project; p. xviii
- Fein G, Nip V. Borderline Personality Symptoms in Short-Term and Long-Term Abstinent Alcohol Dependence. *Alcoholism: Clinical and Experimental Research*. 2012; 36(7):1188–1195.
- Fonagy, P. *Mentalization : theoretical considerations, research findings, and clinical implications*. F. Busch. New York: Analytic Press; 2008. The mentalization-focused approach to social development; p. xviii. 302
- Khantzian EJ. Understanding Addictive Vulnerability: An Evolving Psychodynamic Perspective. *Neuropsychanalysis*. 2003; 5(1):5–21.
- Maurage, FdTP., Tecco, JM., Lechantre, S., Samson, D. Theory of Mind difficulties in patients with alcohol-dependence: Beyond the prefrontal cortex dysfunction hypothesis. *Alcoholism: Clinical and Experimental Research*. in press.
- Savov S, Atanasov N. Deficits of Affect Mentalization in Patients with Drug Addiction: Theoretical and Clinical Aspects. *ISRN Addiction*. 2013; 2013:6.
- Sullivan RM. The Neurobiology of Attachment to Nurturing and Abusive Caregivers. *Hastings Law J*. 2012; 63(6):1553–1570. [PubMed: 24049190]
- Wieder H, Kaplan EH. Drug use in adolescents. Psychodynamic meaning and pharmacogenic effect. *Psychoanal Study Child*. 1969; 24:399–431. [PubMed: 5353372]