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ARTICLE

A Developmental Model of Addictions, and Its Relationship to the Twelve Step Program of Alcoholics Anonymous

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Abstract—*A shift in the psychoanalytic literature is seen to have taken place in the 1960s, when psychoanalysts abandoned the psychoanalysis of patients suffering from addictions. This was due to poor outcomes, and assertions such as Kohut's, that addiction was not analyzable. The author asserts that there is a similarity in the psychological part of all addictions, and that this is seen in his work with addicted patients, including psychoanalysis of addicted patients. Addiction is presented as a pathological solution to a fixation during separation-individuation. This conceptualization helps to explain why such varying previous psychoanalytic formulations have been offered. The addictive solution to a fixation during separation-individuation is compared and contrasted to a similar fixation seen in patients suffering from borderline personality disorder and patients suffering from pathological narcissism. The developmental model presented clarifies how denial of addiction can be an interpersonal expression of an intrapsychic defense.*

Keywords—addiction; psychoanalysis; narcissism; borderline; transitional object.

INTRODUCTION

THE END OF AN ERA in the psychoanalytic approach to addictions came in 1964 with the publication of Herbert Rosenfeld's critical review, "The psychopathology of drug addiction and alcoholism." He asked whether there was a consensus of opinion among the authors of the psychoanalytic literature, and concluded, ". . . there is agreement among the majority of authors on the importance in both drug addiction and alcoholism of oral factors, narcissism, mania, depression, destructive or self-destructive impulses and perversion, such as homosexuality or sado-masochism."

One gets a sense from reading the literature over the years that psychoanalysis of addicted patients was abandoned because the heroic, but also misguided, efforts of the earlier psychoanalysts led to a lack of success. For example, the Menninger Foundation's Psychotherapy Research Project demonstrated that their drug addicted and alcoholic patients had few positive outcomes (Wallerstein, 1986). Psychoanalysts of the 1900 to 1964 period took on their patients with what now seems like an archaic treatment—short analyses and underdeveloped theory. They lived in a world lacking a separate academic field of addictionology, and the awareness of addiction contributed to by the size and ubiquitousness of today's Twelve-Step programs.

The modern era features a surprisingly discontinuous set of contributions by psychoanalysts. The most prominent feature of the current analytic literature is the paucity of articles on addiction. This most common mental illness is relegated to the status of a minor topic.

The second theme of the current psychoanalytic literature on addictions is a devaluation or dismissal of papers from the period that ended in 1964. Drive and ego psychology based formulations are in disfavor. In a 1974 article, Wurmser cited his "notable" influences with studies appearing from 1963 on and stated, "Earlier works . . . seem outdated and barely applicable to most categories of drug abuse seen nowadays." Zinberg (1975) said, ". . . there are no psychological profiles or consistent patterns of internal conflicts or phase-specific developmental sequences that can be put fore-

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ward as the determining factor in the history of drug use and addiction." Khantzian and Mack (1989) stated, "[In] early psychoanalytic theory . . . oral drives were invoked as the main motivation for alcoholic drinking, an explanation most psychodynamic clinicians would now find embarrassingly unuseful."

I suggest that psychoanalytic constructions of models of development, with applications for both theory building and treatment, have been gradually expanding. Therefore, earlier thinking on addiction should now be reorganized, taking advantage of the insights and understandings of earlier generations of analysts. Addiction is an age old problem. Our theories change, not because of the evolution of new categories of drug abuse, but because our sophistication has increased.

The source of the following ideas is psychoanalysis of patients with active addictions (the word addiction is defined below), such as Mr. A. of the previous article (Johnson, 1992), performed with full understanding and knowledge that an addictive process is present. This kind of psychoanalysis could never have been accomplished without extensive prior training in addictions, and extensive prior experience with addicted patients treated in a Twelve-Step milieu.

Addiction will be described as a central link in the psychopathology of fixations during separation-individuation, lying midway between borderline personality disorder and pathological narcissism. This delineation of arrested development will necessitate a great deal of complexity. The model recasts earlier psychoanalytic theories of addiction using formulations of Winnicott (1958) on the transitional object, Kernberg on pathological narcissism (1974, 1975, 1984), Stoller on gender identity, the fetish, and epidemiology of perversion (1985a, 1985b), Mahler, Pine, and Bergman on separation-individuation (1975) as well as other authors cited in the text. Because of this centering of the model within still-fluctuating theories of early fixation, I am sure that the theories I use will also be superceded, for example as suggested in the critiques of Winnicott's transitional object by Brody (1980) or of Mahler's separation-individuation by Stern (1985). Readers will have to adjust dynamics or complexes I suggest, in light of their models, as I have adjusted much of the analytic literature on addictions according to mine. Older articles on addictions may then be viewed as descriptions of struggles which often failed because psychoanalysis lacked its current sophistication and emphasis on countertransference as a barrier to effective treatment (Loewald, 1986).

DISCUSSION

Defining Addiction

Defining what an addiction is has proved a formidible task. Cahalan (1988) was skeptical ". . . regarding the practicality of using any one sequence of development of symptoms as characterizing clinical alcoholism." Wurmser (1974) considered this problem, and used Webster's Dictionary to get his definition. Fenichel (1934) tried the concept of drug and "drugless" addiction. I am going to use a variation of a naturalistic method Stoller (1985a) used in surveying the perversions seen in everyday life and cultural activities. I suggest we look at the self-help groups which base their treatment on the Twelve Steps of Alcoholics Anonymous (Table 1). (The value of using the Twelve Steps as part of our understanding is further described in a later section of this paper.) We then come up with a number of addictive behaviors which are listed in Table 2, along with the self-help group which is used by a large number of people to treat that addiction. Millions of individuals are in a process of recovery from their addictions on the basis of the groups which are built around these steps. The Twelve Steps address neither biological substrate, physical dependence, genetics, culture, social ills, poverty, or any other attributes which are often associated with addiction.

I add, on the basis of listening to so many addicted patients describe their behavior as recreational and fun, that an addiction is related to a pleasurable activity. This conceptualization is based on a constant progression from fun to self-abuse which is the result of dysregulation.

A third component of an addiction is a denial sys-

TABLE 1
The Twelve Steps of Alcoholics Anonymous

1. We admitted we were powerless over alcohol—that our lives had become unmanageable.
2. Came to believe that a Power greater than ourselves could restore us to sanity.
3. Made a decision to turn our will and our lives over to the care of God as we understood Him.
4. Made a searching and fearless moral inventory of ourselves.
5. Admitted to God, to ourselves, and to another human being the exact nature of our wrongs.
6. Were entirely ready to have God remove all these defects of character.
7. Humbly asked Him to remove our shortcomings.
8. Made a list of all persons we had harmed, and became willing to make amends to them all.
9. Made direct amends to such people wherever possible, except when to do so would injure them or others.
10. Continued to take a personal inventory and when we were wrong, promptly admitted it.
11. Sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out.
12. Having had a spiritual awakening as the result of these steps, we tried to carry this message to alcoholics and to practice these principles in all our affairs.

TABLE 2
The Relationship of Pleasurable Activities, Addictive Activities, and Self-Help Groups

Recreational Behavior	Addictive Behavior	Self-Help Group
Drinking alcohol	Uncontrolled alcohol use	Alcoholics Anonymous
Gambling	Uncontrolled gambling	Gamblers Anonymous
Stimulant use (coffee)	Uncontrolled stimulant use (cocaine)	Cocaine Anonymous
Exercise, with endorphin release	Uncontrolled opiate use	Narcotics Anonymous
Eating	Uncontrolled eating	Overeaters Anonymous
Making love	Uncontrolled sexual encounters	Sex and Love Addicts Anonymous
Shopping	Uncontrolled buying	Debtors Anonymous
Working	Uncontrolled working	–
Being slim	Uncontrolled dieting (anorexia nervosa)	–

tem. Three patients have come to me complaining of noticing a physiologic dependence on alprazolam, given to them for panic disorder. They felt an urge for a pill every four hours, were horrified at this obviously physical process, and tolerated an outpatient withdrawal schedule despite the exacerbation of their anxiety. These patients were physiologically dependent without being addicted individuals. Their ego-dystonic reaction to physiologic dependence is in marked contrast to the addicted individuals who tolerate psychological and/or physiological dependence without making a conscious link between the sequllae and the addictive behavior. Without denial, addiction would not be possible. Therefore, I suggest the following definition of addiction.

"An addiction is an ostensibly pleasurable activity which causes repeated harm because a person involuntarily and unintentionally aquires an inability to regulate the activity, and has a persistent urge to engage in the activity. A psychological system, referred to as "denial," is created around the harmful behavior. Denial allows the addicted individual to continue this activity despite its detrimental effects."

This definition has two properties which make it valuable for the ensuing discussion. First of all, it makes explicit a conceptual link implicit in the literature of Twelve-Step groups modeled on Alcoholics Anonymous. For example, Overeaters Anonymous states, "OA believes that compulsive overeating is a threefold disease: physical, emotional and spiritual. We regard it as an addiction which, like alcoholism and drug abuse, can be arrested but not cured." (Introducing Overeaters Anonymous to the Medical Profession, World Service Office, Overeaters Anonymous, Torrance, CA.) Members of Overeaters Anonymous see compulsive overeating exactly as members of Alcoholics Anonymous see loss of control of drinking. This definition of addiction allows for flexible use of the term addiction, expanding its use from a narrow sector of addictions to the broad range of addictions seen in everyday life and addressed by the ever-expanding panoply of Twelve-Step groups.

Second, the definition is psychological in a way that is true to the phenomenon of addiction. Biological antecedents of certain addictions, such as a genetic predisposition to alcoholism, or absence of a flush response to drinking alcohol, contribute to choice of alcoholism as an addiction. Biological phenomena such as tolerance and withdrawal may be important to certain drug addictions. But biology will never explain gambling addiction, or a compulsive need to charge expensive items on one's credit card. This definition clarifies the internal and psychological essence of the addictive process.

The Interchangeability of Addictions

The addictions listed in Table 2 are observed to be interchangeable. For example, it is not uncommon for individuals addicted to heroin to lock themselves into a room with gallons of vodka and emerge several days later "cured" of their heroin addiction. Not surprisingly, one is likely to meet such "reformed" addicted individuals in an alcohol detoxification center. Rado (1981) addressed this issue by coining the term "pharmacothymia" to describe the need to be addicted. Vaillant (1966) described a shift from opiate addiction to heavy alcohol use as the most common outcome in subjects who stopped using opiates (as well as a shift to food, a minor tranquilizer, and marijuana). Articles in the literature which focus on one particular type of addiction have tended to describe the links with other addictions, such as alternating alcoholic and bulimic episodes described by Ceaser (1988), Benedek (1936), and Glover (1956a). Bergmann (1988), Fenichel (1934) and Abraham (1954a) described the psychological similarity between bulimic-anorexic disturbances and drug addiction. Fenichel (1934) linked drug addictions with "impulsive" behaviors such as gambling and called them "drugless addiction." In a similar way, Wurmser (1974) described a preexisting need for an addiction, and listed the possible results of the "addictive search" as "irresistible violence, food addiction, gambling, alcohol use, indiscriminant 'driven' sexual activity or running away." This search for an addiction as a solution to an underlying problem was described by Glover (1956b), Knight (1937), Robbins (1935), and Fenichel

(1934) and is related to Rado's (1981) concept of "tense depression." This "solution" to an underlying problem is the use of an addiction to help transition to adult functioning during adolescence, despite a fixation during separation-individuation.

The Relationship of Addiction to the Fetish and the Transitional Object

I suggest that choice of addiction is formed in part by chance, like a fetish. (Adventitious addiction was Wurmser's [1974] opinion and the relationship of a fetish and an addiction was first broached by Glover [1956a].) The type of fetish which a man adopts may be black underwear, shoes, or anything else which represents for him the woman's penis. A number of different objects may fulfill the same internal need. In a similar way, the particular addiction which is chosen is influenced by culture, intermediary metabolism, heredity, and availability; but it is in part luck, and many different addictive behaviors will serve the same internal need[1]. An addiction is a bio-psycho-social illness with complex manifestations. I believe that the field of addictions has been hampered by a preoccupation with particular types of addictions, in part, because their biology and social attributes are so different. But there is an underlying psychological sameness. There is no randomness in terms of the inner function of an addiction.

Addiction has two cousins, the transitional object and the fetish. The relationship of the three related entities had already been described in the psychoanalytic literature. Winnicott (1958) introduced the transitional object with the words, ". . . most mothers allow their infants some special object and expect them to become, as it were, addicted to such objects." He ended his paper with "Addiction can be stated in terms of regression to the early stage at which the transitional phenomena are unchallenged." He added as his next sentence, "Fetishism can be described in terms of a persistence of a specific object or type of object dating from infantile experience in the transitional field, linked with the delusion of a maternal phallus." Glover (1956a) described the similarity between fetishism and addiction as follows: "I would suggest that the association of fetichism and alcoholism implies a combined effort to establish friendly relations with external dangerous objects which, at an earlier stage, were thought of as existing within the patient's body. . . ." These formulations guide us to a stage of development where lack of reality testing, wish for merger, and lack of well established self-object differentiation lead to Winnicott's description of the "illusory experience" of the transitional object, and Winnicott's dictum ". . . it is a matter of agreement between us and the baby that we will never ask the question 'Did you conceive of this or was it presented to you from without?' " We are at a level of development where splitting is good/bad and me/you. Inner experience and external reality are beginning to exist, but have not yet been integrated in a way that can be thought about effectively and used to guide behavior adaptively.

Unlike a transitional object, a fetish is adopted later, as an adolescent aid in achieving sexual intimacy. Let us consider the concept of splitting of the ego which was originally described in Freud's (1961a) paper on the fetish. According to the Glossary of Psychoanalytic Terms and Concepts (Moore & Fine, 1968), splitting of the ego involves the circumstance:

> . . . under which particular functions of the ego are set up against others, at least temporarily. For example, this occurs in the act of self-observation. One thinks, feels, and acts subjectively, but at the same time observes such behavior in a quasi-objective manner . . . the ego is split into sets of functions which can best be described as the observing aspect and the experiencing aspect. . . . More permanent ego dissociations are the cause of serious psychopathology. . . . One classic example is that afforded by the fetishist. He is consciously aware of the anatomy of the female genitals and behaves in accordance with that knowledge; but by requiring a fetish, a symbolic substitute for the female phallus, as a necessary prerequisite for his potency in sexual intercourse, he acts out an unconscious fantasy denying the difference between the sexes.

A fetish may be thought of as an expression of fear/wish for merger with the mother. The moral guilt that one must have no penis, as she does not, is compensated for by the fetish. As suggested by Stoller (1985b), the boy is fixated at the level of establishing gender identity. There is a triadic pre-Oedipal constellation where the father is wanted in order to help in the separation from mother. The father is seen as alternately fearsomely aggressive, having castrated the mother and threatening the boy, and ineffectually unconnected, unable to withstand the mother's demands that the boy stay merged with her. The use of a fetish during intercourse assuages the man's fear and guilt of being a separate kind of human, one who has a penis, while the woman does not. His castration anxiety is decreased by the fact that his experiencing ego sees the woman's penis/fetish. His fetish allows effective contact with the woman despite his experience of being merged; an identical, undifferentiated kind of human. His lack of internal controls of his aggression, his identification with the castrator father, need not come into play. Lacan's (1977) concept of "phallus" as an intru-

[1]Khantzian's (1985) self-medication hypothesis addresses whether a drug will also compensate for a depression, psychosis, or an inhibition. If it will, so much the better, but this property of a substance does not account for the urgency of the need. For example, most cocaine addicts do not have a depressive disorder (Weiss, Mirin, Griffin, & Michael, 1988).

sion of the symbolic into the realm of the imaginary, as the signifier of a complicated set of exploitative social and familial relationships, helps one to see the transformation from sex to aggression. (This use of a fetish to deny the difference between the sexes has also been described in a woman by Raphling [1989].)

Thus, the fetish is an expression of a conflict around the use of normal aggression during the separation-individuation phase of development. Aggression cannot be used to effectively declare oneself a separate person. However, this conflict is usually first expressed during adolescence, when separation from the family of origin is in progress.

An addiction is used to ward off a generalized sense of merger experienced under the aegis of the aggressive drive. (The complex of wishes and acts described below, in the context of splitting of the ego, is summarized in Table 3.) The individual who is forced to adopt an addiction is unable to tolerate the fear and guilt, the experienced aggression, of being a separate person. The addiction is an inanimate object/activity which undercuts an internal sense of power/dangerousness/separation. The addicted person has a split in his ego similar to that of the fetishist. He is consciously aware of being a separate person, but has an unconscious wish/fear of control/merger by another person, with resulting rage. There is a fetish-like quality where the addictive activity is like an inanimate object which compensates for the unconscious fantasy of being merged. It enables the individual to live in a way that is consistent with the observing ego's dictum that there must not be merger. This is possible because the addiction has become the most important object, the one on which the addicted person primarily depends.

Tolpin (1971) in her exposition on why the transitional object is used along with the mother, and is sometimes superior to the actual mother for smoothing or protection, explains that the transitional object is the object of idealizing libido and a memory back to the symbiotic phase of development when the mother was more comforting and all-encompassing[2].

There is a similar dynamic with an addiction. In the familiar denial of addiction, the addicted person will focus on this inner sense of the function of the addiction to prevent aloneness and anger about a perceived demand for merger. The person protects his inner sense about the addictive activity at the expense of repressing his perceptions of the harm which the addictive activity is doing. Merger with the addiction makes use (Winnicott, 1969) of other objects unnecessary. Idealization of the addiction has the same quality that Tolpin describes with the transitional object, regression to the comforting and all-encompassing symbiotic mother. In addition, idealization is used as a defense against fear of both the consequences of the addictive behaviors in reality, and the attacking mother part-object of fantasy. As with the fetish, there is a sense of inconvenience and embarrassment about having to use it to function effectively. But having the addiction is indispensable. Without it, the addicted individual experiences intolerable borderline dread of merger/rage or abandonment. In other words, addiction involves a regression to *oral phase* merger to avoid a fixation during separation-individuation. An addiction becomes a cherished object which allows the addicted person to avoid a dependent, interrelated mode of functioning. The individual's most important relationship becomes the one with the addiction. This way of living results in gradual deterioration of interpersonal relatedness. As time goes on, either the addicted individual gets treatment and relatedness becomes a focus of rehabilitation, or the individual is more and more isolated and incapable of interrelated living. An alcohol addicted individual will go through the painful physical part of withdrawal, yet not leave a detoxification center for a halfway house, but for the company of alcohol. A halfway house involves dependence, which is experienced as recreating the terrifying choice of control/merger or abandonment by people one depends on. To go back to the street and be able to get another drink involves only dependence on alcohol, which is experienced as described on the left-hand side of Table 3.

The addiction's function to reenact the angry, destructive relationship with the mother is the determining factor in its selection. Use of the addiction in a dangerous way is a declaration of independence, that the addict will make the decision to act against imagined parental contramanding; a wish for a parent to

TABLE 3
Splitting of the Ego in Addiction

View of the Experiencing Ego/Fantasy	View of the Observing Ego/Reality
The Addiction	
Is close (invites punishing mother to intervene)	Makes close relationships impossible (wards off fear of control/merger)
Creates pleasure (fusion with symbiotic mother)	Creates pain (punishment for wish to separate)
Gives a sense of omnipotence (regression to symbiotic period)	Makes one impaired (acts out the wish to be a dependent infant)
Is a rebellion which creates a feeling of separateness	Is a compliance with the attacking introject which undercuts the use of aggression needed to be separate

[2]The reader who at this point is considering Stern's (1985) objections to Tolpin and Mahler can probably find alternative theory and language for the wish to fuse with an ideal object, which leaves the thrust of these comments intact.

step in and regulate the self-destructive behavior, and it is a regression back to a state of symbiotic fusion with an ideal object. The internal sense of union with the symbiotic mother is enhanced by the expectation in fantasy that this behavior will bring the mother back to regulate the aggression.

Three Disorders Generated by a Fixation During Separation-Individuation: Borderline Personality Disorder, Pathological Narcissism, and Addiction

For an individual forced to adopt an addiction, separation-individuation has been disrupted in a way that is slightly different from the standard borderline. The parents do not disrupt the process of separation-individuation through threats of withdrawal. They interfere with the formation of the superego. This can be done if the parents hypervigilantly scan the child for evidence of their projected aggressive impulses. When the child experiences derivatives of the aggressive drive, he is *caught* and humiliated. In addition, parental absence or inconsistency prevents the internalization of controls of aggression. The child is then not able to become autonomous because of inability to modulate his aggressive drive. When faced with aggressive urges or angry feelings, the ego is overwhelmed. The child must return to the parent for help controlling his aggression, a helplessness which he resents enormously. During childhood this results in clinging passivity, or hyperaggressive dyscontrol[3]. With the onset of adolescence, the new surfeit of aggressive energies is terrifying until the institution of the use of the addiction. It reduces the addicted person's power. Aggressive feelings are soothed and comforted by the addiction through a combination of discharge and physical impairment. These individuals are unable to feel autonomous without their addicting substance/behavior. When with it, the individual glorifies in its omnipotent symbolization of the mother of the symbiotic period. While intoxicated, or while busy with another addictive behavior such as gambling, eating, sex, etc., the individual feels whole, independent, and reassured. This inner experience ends with warm memories of the addicting substance/behavior, and an urge to return to it at the earliest possible time. The addictive activity involves a regression of the experiencing ego back to a prestructural phase of development, and is the source of Simmel's familiar aphorism "the superego is soluble in alcohol." At the same time, the addictive behavior contains within it punishment for hostility which is in itself a breakdown product of the aggressive wish to be separate, similar to *regressive clinging* in the borderline individual. The superego is not experienced internally and symbolically, but is acted out with the environment. Addictive behaviors include provocations calculated to have others be punishing.

This again, is no more than an expanded restatement of Winnicott's explanation, "Addiction can be stated in terms of regression to the early stage at which the transitional phenomena are unchallenged." We are adding in Freud's concept of how a fetish operates, which Winnicott undoubtedly was aware of, and putting all three into a category of phenomena which reenact a relationship with the mother, require the presence of a symbolically cathected object/activity, and in which an underlying dynamic is splitting of the ego.

We can now articulate three solutions to the borderline quandry of not being able to complete separation-individuation. The patient who suffers from DSM-III-R borderline personality disorder stays related to the internal mother, and must act out their dynamics with a living person. Alternating merger and regressive clinging with brief, unsuccessful attempts to separate, the borderline patient comes to analysis demanding the safety of constant and unconditional love. Shaprio (1978) described the borderline dilemma as being faced with a mother who says either, "A minute ago you didn't want me, now I don't want you," or "You think you can manage on your own, well go ahead." The analyst works to help the borderline patient develop adequate mastery of the aggressive drive to enable the patient to go on to a separate existence. Affect tolerance and regulation, development of recall memory, resolution of splitting and projective identification, are all part of the work.

The patient suffering from pathological narcissism comes to analysis having mastered his fixation in a pathologic way, through the development of the grandiose self. The narcissistic patient is not dependent on the mother, as the borderline patient is. The narcissistic patient has used what he had, a functioning superego/ego ideal, and made this his most important relationship, before all humans. This is now an internal relationship anchored in fantasy rather than reality. When threatened by affects and drives from within, or disruption of his inner homeostasis by interactions from without, the narcissistic individual seeks refuge in his morals and self-measured greatness. This adaptive step, of having the mother represented in his imagination as an inner structure, leads to superficially smoother functioning and presentation for treatment later in life. The analyst engages in a two step process, as described by Modell (1988). First the analyst must endure being alone during the sessions, and work to make the grandiose self ego dystonic. As it breaks down with the aid of the analyst's interpretations, underlying borderline dynamics emerge (Kernberg, 1984).

In the case of an addicted individual, the analyst is presented with a patient who has a preexisting relation-

[3]A prospective study by Cloninger, Sigvardsson, and Bohman [1988] found these traits during latency in subjects who later developed alcoholism.

ship with an addictive substance/activity. This use of the concept of addiction is then within the tradition of object relations in which Kernberg (1975) describes the use of the pathological grandiose self. Addiction also arises in the context of borderline personality organization. Splitting, denial, omnipotence, projection, and projective identification are ubiquitous defenses. As in Kernberg's conceptualization of the grandiose self, the use of an addiction enables the individual to function on a level which is superficially more accomplished than the borderline level. As happens with the grandiose self when it is given up, when the addiction is given up in analysis, borderline mechanisms and dynamics become more apparent. This accounts for the more recent emphasis on affect intolerance in works such as Krystal and Raskin (1981) or Khantzian and Mack (1989). In fact Wurmser's (1974) description of addicted patients' "defects in affect defense" contain descriptions of patients who meet all eight DSM-III-R diagnostic criteria for borderline personality disorder. As in Modell's description of interactions with narcissistic patients (1975), the analyst can be dispensed with because of the use of this other thing. The narcissistic individual has something soothing with him all the time, his pathological grandiose self, so even within the sessions he can withdraw from the analyst and be comforted. An addiction is not as handy. If the patient experiences merger/control from the analyst, and is no longer able to tolerate the anxiety of direct contact with the analyst, he will go home and be with his addictive substance/activity. Thus, attempts to analyze an addicted patient can be difficult because the patient is actively drinking, gambling, eating, etc.

In the condition where the addicted person is protecting against borderline dread of the choice control/merger or abandonment in relationships, the level of anxiety involved in adopting the addiction is overwhelming. Distasteful, frightening, or even life-threatening behaviors are tolerated for the sake of maintaining the addiction because the alternative is overwhelming anxiety. This accounts for why so many descriptions of addicted patients include many or all of the DSM-III-R criteria for diagnosing borderline personality disorder and why *affect intolerance* is a common state of addicted individuals, especially in early sobriety. However, despite addiction being a pathological adaptation, this is not a statement that "addicted individuals are borderlines." The addictive solution to this fixation is like the narcissistic pathological grandiose self of Kernberg (1975). Having bridged this level of fixation with a pathological adaptation, a variety of levels of ego organization will be found.

There also does not have to be an either/or choice. Someone with narcissistic psychopathology may also use an addiction if their grandiose self is not strong enough to envelope the amount of borderline fear with which they are coping. This has been described by Adams (1978). He describes the use of a drug "to prevent fusion with the mother imago."

> The essential difference then, between narcissistic patients who use drugs as part of their symptom complex and narcissistic patients who do not, reside in the former's externalization of their pathology onto symbolic representations of their symptom complex in the form of chemical substances. This would suggest greater ego fragmentation than would be the case with nondrug abusing narcissistic patients who, by virtue of their having a more internalized defensive system, would have a less undifferentiated ego.

Thus, we have an analogous situation between Kernberg's narcissistic patients with a borderline level of ego functioning (1975, p. 266–269) and narcissistic patients with addictions. In both cases, narcissism is not adequately developed to contain the anxiety of fear of loss of object in the face of manifestations of the aggressive drive.

While both men and women are afflicted by DSM-III-R borderline narcissistic and addictive disorders, it is more common for women to be borderline and men to be narcissistic or addicted. I believe that the borderline solution has to do with ability to tolerate the continued presence of the mother (Olesker, 1990.) This can be abetted by the development of sexual wishes for males and a pact between mother and daughter (or one type of homosexual man and mother) both for and against these wishes. In order for a male to separate from the mother enough to begin to establish gender identity, and lacking a solid early development and/or helpful father, he has an extra motive to make a narcissistic or addictive adaptation. The preferred adaptation is the pathological grandiose self. A relationship with this internal structure allows the boy the separation to go on to a heterosexual object choice based on the mother. In the early situation of the individual who will be forced to adopt an addiction, the mother or parents have disabled the superego/ego ideal through this process of neglecting its adequate development and poisoning its functioning by insisting that they control it. While a narcissistic individual glories in his superego as different from all objects, the addicted individual views his as tied to the mother. To be moral is to be with the mother, to feel close and able to wield her booming, crushing judgement, but also to feel merged and angry. The preaddict is either passive and close so that the mother can regulate his aggression, or constantly hyperaggressive and provoking so that the mother can regulate his aggression. With the advent of adolescence and the adoption of an addiction, this individual reproduces this demand for external controls in a wider social network.

This conceptualization allows us to see how earlier analysts arrived at formulations about alcoholism or

addictions such as union with an ideal object/ideal mother (Freud, 1910; Freud, 1927b; Rado, 1933; Weijl, 1944; Wurmser, 1974), regression to the oral phase (Fenichel, 1934; Glover, 1928; Weijl, 1944), similarity to mania (Fenichel, 1934; Glover, 1956b; Rado, 1981; Simmel, 1928; Weijl, 1944), similarity to melancholia with punishment through the addiction (Benedek, 1936, Fenichel, 1934; Glover, 1956a; Simmel, 1928, 1949), and flight from reality (Freud, 1961b; Glover, 1956b; Simmel, 1928; Rado, 1981). The references to homosexuality (Abraham, 1954b; Fenichel, 1934; Glover, 1956b; Knight, 1937; Rado, 1981; Weijl, 1944) have to do with the experiencing ego's regression to a period before establishment of gender identity. While some male addicts fear homosexuality, what they are really talking about is their experience of indistinct gender identity.

Regression as a Mechanism Underlying Addictions

Finally, it must be mentioned that any point in development where a fixation occurs can also become a point of regression for an ego which functions at a higher level. Just as an addicted individual with a fixation during separation-individuation can regress to oral-phase functioning under the stress of needing to separate and be aggressive, a predisposed individual may regress to an addiction to resolve conflicts of a higher order. Addiction as a regression is often seen in cigarette smoking, and is the reason that many cigarette addicts, who do not have a second addiction which compromises daily living, can just quit, without major personality reworking and without the *dry but not sober* gravely compromised interpersonal functioning of individuals who abruptly cease an addiction with the separation-individuation level fixation.

Is Addiction and the Relationship with the Addictive Behavior/Substance Analyzable?

This developmental model of addictions throws into relief the shift which has occurred in psychoanalytic thinking. In 1959, Kohut stated:

> . . . addicts . . . rely on drugs, not, however, as a substitute for object relations but as a substitute for psychological structure . . . Their addiction must, however, not be confused with transference: the therapist is not a screen for the projection of existing psychological structure but a substitute for it. Now, inasmuch as psychological structure is necessary, the patient really needs the support, the soothing of the therapist. His dependence, however, cannot be analyzed or reduced by insight but must be recognized and acknowledged.

Vaillant, Zinberg, Khantzian, Mack, and other psychoanalysts who have published since the mid-1960s have written with a psychoanalyst's framework but without psychoanalytic observations. The unfortunate result of formulations such as Kohut's are that they take addictions out of the purview of psychoanalysis proper. They define addiction as inherently unanalyzable.

This developmental model is based on the experience of the psychoanalysis of patients with active addictions, and suggests that underneath this pathological adaptation lies a transference which is analyzable for some individuals. As with narcissism, one might expect that a variety of concomitant ego factors determine whether a patient can sustain psychoanalysis through the interpretation of this transference. As with narcissism, the orientation of the psychoanalyst within a theoretical framework of understanding the psychopathology, prepared to bear the anguish of countertransference feelings which result from interpersonal contact with the patient's defenses, helps the analyst sustain the treatment.

CLINICAL ILLUSTRATIONS

Mr. B.

Mr. B., a 40-year-old divorced man, was referred to me because of my expertise in alcoholism. His boss had told him to seek alcoholism treatment. His alcoholism had its onset two years earlier. He was cognitively impaired, frequently hung over, missed mornings or days at work because of his previous night's drinking, and smelled of alcohol when he reported for work in the morning.

Mr. B. had not had a drink in two weeks when he presented for treatment. He was delighted that his boss had taken such an interest in him as to notice his drinking. (Of course, this is unusual, and the reason is described below.) He was taken into weekly psychotherapy, and six months later began four times a week psychoanalysis.

The first two years of analysis featured a deathly dirge of detailed, completely unemotional facts about work, and an absence of any interpretable transference. Despite the abstinence from alcohol, he was fired from his job. He was treated so unfairly in this dismissal that he filed suit and won. He then began a series of briefer jobs, always with a sadistic male boss who he showed some initial wariness of, followed by intense engagement with a financially disadvantageous and emotionally painful outcome. His occupational instability threatened his ability to continue his psychoanalysis.

The turning point came when we understood together that he was a *workaholic*. He had begun a pattern during adolescence of working in an addictive way. There were suggestions during his first year of college that drinking alcohol or gambling might become his addiction of choice. He had engaged in both to the detri-

ment of his academic performance. However, he chose a hyper-moralistic engagement in work which became more and more destructive to him. Drinking and gambling disappeared as significant activities. Instead, he imposed on himself a gradually escalating involvement in work, which constantly diminished his ability to engage in relationships. Deadlines became a reason to work around the clock and sleep in his office.He was offended by coworkers who had personal duties which interfered with late nights and weekends of work to meet deadlines. His wife complained that he wouldn't speak to her, and that she had to take him out to dinner to get a word with him. She insisted on a divorce. He lost his involvement with his children. Initially a gifted athlete, by 40 he hypertensive, sedentary, obese, and beginning to develop bursitis, arthritis, and sciatica. Drinking reemerged with symptoms as a secondary addiction coming in at age 38 to intensify his struggles to meet deadlines and accomplish work.

Mr. B. found abstaining from alcohol easy because he was stubbornly clinging to the addiction he really depended on, work. A physician who was content to send Mr. B. to Alcoholics Anonymous, and who claimed that his abstinence from alcohol was a therapeutic success, would have missed the main diagnosis, and sent Mr. B. to a therapy where his main addiction was not the focus of treatment.

The understanding that his work was an addiction precipitated a major depression which responded to medication, but several months later he became suicidal. His deterioration was arrested by increasing awareness of why he felt so bad, and what had caused his work addiction in the first place. Gradually, he elaborated his childhood experience, for the first time articulating that he grew up with a brutal father who beat him, murdered his pets, and had an 11-year incestuous relationship with his younger sister. The maternal transference became increasingly interpretable. I was the passive mother who had allowed him to be with his sadistic father/bosses without protection. For the first time in his life, he discussed the beatings with his mother. She initially accused him of being confused. She told Mr. B. that he must be remembering a neighbor. Mr. B's mother knew that this neighbor beat his children because Mr. B's mother was a close friend of his. When the sister confronted the mother with the incest, the mother elaborated a new view of what it had been like living in their house, including her frequent fear that the father would murder her.

Mr. B. is engaged in a process of tuning in to his feelings, and those of others, as his analysis continues. He has joined a stable firm where he believes people are well treated. He has regular hours. He chose to remain abstinent from alcohol over the first four years of his psychoanalysis, and then resumed drinking without a single episode of loss of control over the next year.

Ms. C.

Ms. C. is a 29-year-old childless woman referred because her husband and her mother were worried about her drinking. During high school, she began an intensifying history of loss of control of her drinking, with mood changes, frequent blackouts, and saying and doing things she would never have done sober. Over several years before presenting for treatment, she had added frequent cocaine use, and all-night partying, which left her so exhausted that she couldn't work, and had to quit her job. Admission of a close friend to a hospital for cocaine detoxification had led to cessation of cocaine use before beginning treatment.

The initial phase of three times a week sessions, which involved use of the couch and free association, established our understanding that she had alcoholism. One of the parameters of our discussion included liver function tests, which are shown, over the early course of her treatment, in Table 4.

The transference relationship revolves around a controlling, double-binding mother. Drinking too much was accompanied by a satisfying feeling of rebelliousness; "I shouldn't have another drink. I'm going to anyway." Ms. C. became completely able to control her drinking. In addition, she has been able to control her eating (She was not fat, but she has lost considerable weight because she does not say things like, "I shouldn't eat pizza. I'm going to anyway."). Her defiant urge not to exercise gave way to a regular workout schedule. She became completely abstinent from cigarettes after intensive work on the denial of her nicotine addiction. These issues were taken up and resolved within the context of a transference wish/fear to control and be controlled by her analyst and her husband. Her treatment ended after 454 hours extending over four years.

Mr. D.

Mr. D. was a 35-year-old man whose wife had requested that he talk to me about his drinking. He worked at

TABLE 4
Ms. C.'s Liver Function Tests[a]

Elapsed Time of Treatment	SGPT	SGOT	Comments
5 months	34	24	Active denial
6 months	71	37	Active denial
9 months	13	17	Abstinent for two weeks
$10\frac{1}{2}$ months	9		Moderated drinking
17 months	10		Moderated drinking
26 months	14	19	Two days after returning from a month-long vacation

[a]Lab normals: SGPT 7-30, SGOT 9-25.

home as a highly successful business analyst, and devoted major effort to playing in an amateur jazz band. While he worked, he enjoyed drinking coffee and then beer, all day, and smoked three packs of cigarettes. He denied all symptoms of alcoholism, except that a physician had told him that he had "jaundice." In fact, his twelve beers per day were causing mild elevations of the serum glutamic oxaloacetic transaminase (SGOT) and serum glutamic pyruvic transminase (SGPT) which we had drawn after the first visit.

When Mr. D. was informed that his heavy drinking was compromising his liver, he immediately cut down to no more than six beers per day, checked that this caused no effect on his liver enzymes, and maintained this lower level of consumption on four-year follow-up.

Mr. D. came for eight more hours to work on his cigarette addiction. We found that smoking was a positively regarded family tradition, that both parents and both siblings smoked. He had begun his addiction as an adolescent, as he was preparing to go away to college. He had quit for several months on two previous occasions, returning to cigarette use the first time as an important relationship was breaking up, and on the second occasion on the way to the hospital while in agony after a serious fall. His brief psychotherapy involved examining his conscious feelings about his smoking, setting a date, and coming in after smoking cessation to examine the change in life and to stay conscious of his continuing predisposition to relapse. On four-year follow-up, he continued abstinent from cigarettes, and had further decreased his beer drinking, although it continued to be an enjoyable and entirely asymptomatic pastime.

Mr. D.'s use of alcohol was not addictive, since there was no denial system. His addiction to cigarettes represented a regression of ego functioning under stress, and was therefore easily treated.

CONCLUSION

Applications of the Developmental Model

This developmental conceptualization of addiction helps with a number of relevant and pressing issues. It helps to separate one's thinking about physiological dependence, the pleasure of drug use, and addiction. Anyone can develop physiologic dependence. It is a physical illness which results from a disturbance in homeostasis induced by withdrawal of a drug to which one's body/neurotransmitters are habituated. Physiologic dependence can be the result of a fixation during separation-individuation, such as in alcoholism. It can also represent a transient regression during adolescence, as in the case of a teenager who responds to the stress of separation from his family with a regressive use of cigarettes abetted by peer pressure and easy drug availability. The articulation of the difference between physiologic dependence, addiction due to a regression, and addiction due to a fixation, helps direct the researcher into different areas to expand knowledge of each illness. Rats, cats, monkeys, and mice are good biological substrates with which to study the wish of animals to repeatedly dose themselves with psychoactive substances. Humans enjoy the same alterations of their neurotransmitters. Animals also can be used to help us understand the physical changes which occur when a substance, to which neurotransmitters have been habituated, is withdrawn.

Addiction is indigenous only to human populations. Human genetic studies may reveal that variations of intermediary metabolism or neurologic function predispose individuals to certain addictions. But the psychology of addiction, and the social conditions which propitiate addiction as a common illness/adaptation of individuals within a group, can only be studied through investigations involving people.

The developmental concept guides our understanding of interpersonal processes. Addiction is either a fixation or a regression to separation-individuation, with a specific defect in the superego's ability to regulate the aggression which is needed to separate from the mother. This pathological solution becomes clinically evident when the individual begins the developmental transition from dependence on his or her family of origin to more independent living. Splitting of the ego facilitates adoption of an addiction. The addicted person uses *denial* to protect their addiction.

It can now be seen that denial is our word for an interpersonal expression of an intrapsychic defense. When in contact with a concerned family member or caregiver, the addicted person will use projective identification to hold on to their experiencing ego part of the split, and have the outside person hold the observing ego/reality side of the split. Family or physicians of addicted individuals are invited in to be moralistic and try to control the person's aggression. Denial does not work unless through judgement, grandiosity, and lack of clear self-object boundaries, the caring individual participates in the defense. Once the caring individual is involved in this system of projective identification, the addicted person fights to establish autonomy and to ward off merger, resulting in hostility towards the caring individual. The splitting of the ego is now experienced in an interpersonal context, denial. (Intrapsychically, the dissociated states alternate over time.) Refer back to Table 3 to see how wonderful the addiction is to the person who suffers from it, and how horrible it is to the observer. The projection of responsibility for self-care described above, is a reenactment of the early relationship with the mother, a more accurate portrayal of this dynamic than Mack's (1981) concept of "defects in self-governance."

The developmental model helps us to understand Twelve-Step programs. They take into account the dy-

namics which are described above (see Table 1). They recognize the overwhelming amount of anxiety which the addictive behavior has been addressing. They offer support for abstinence and carefully abjure the moralistic control of superego function which resulted in the addiction. In Step One, the individual recognizes the relationship with the addictive substance/behavior explicitly, and accepts that it is an outside entity over which he has no control. This step addresses the splitting of the ego and the difficulty perceiving inside and outside. The transitional object equivalent would be saying, "Mommy gave me the blanket and it is something that comes from her, not me. I do not control it." Steps Two and Three involve the "religious experience" of envisioning an inner good, caring object. This is a *leap of faith* for individuals whose experience has been with a not *good enough* mother, who could not facilitate their sense of separation. Their expectation of a close relationship is to be attacked and undercut.

This idea of recognizing an unworkable negative transference, and searching for a "transforming" religious experience, was suggested to Mr. R., one of the founders of Alcoholics Anonymous, by Carl Jung, following Mr. R.'s unsuccessful treatment with Jung (Wilson, 1958). As Bill W. explains, "hitting bottom" involves being so defeated by one's addiction that one is willing to try being completely dependent again, this time on a Twelve-Step program.

Steps Four through Ten are a set of instructions for how to develop superego controls. They have a workbook-like quality with plenty of interpersonal activity required. Steps Eleven and Twelve build the ego-ideal. Helping other people to recover from their relationship with an addictive substance/behavior becomes a sublimation of the continuing urge to reunite with the internal punishing object.

Identifying the specific type of character issues which result in an addiction, and the overwhelming nature of the hateful transference which is likely to result from psychotherapy or psychoanalysis, helps the psychoanalyst make a more informed decision about the nature of treatment which is to be offered to an addicted patient. A decision whether to pursue individual treatment, Twelve-Step treatment, or an amalgam, can now be made in a more informed manner. Psychoanalysis with an addicted patient involves substituting for the addiction in the transference. Patients chosen for psychoanalytic treatment will have a hateful urge to destroy themselves and their analyst, so they must have balancing ego strengths. Mr. A., described in the previous article (Johnson, 1992) as well as Mr. B. and Ms. C., represent individuals who engaged in horrific active addictive behaviors, which were accompanied by intense countertransference feeling as they associated to addictive behaviors during psychoanalytic hours. These individuals also possess dramatic strengths of intelligence, relatedness, relative intactness of work and love relationships, financial resources, and ability to use the relationship which exists in psychoanalysis. I have sent over 5000 patients to Twelve-Step programs, I am a veteran of many years treating addicted patients, and I have had frequent supervision by training and supervising psychoanalysts to help me contain my responses.

This paper then, does not advocate psychoanalysis as the definitive treatment for addiction. However, for some patients with addictions, it may be the treatment of choice. In addition, psychoanalysis affords a fresh vantage point from which the disease of addiction can be further understood.

REFERENCES

Abraham, K. (1954a). The first pregenital stage of the libido. In *Selected papers of Karl Abraham.* (Douglas Bryan and James Stachey, Trans.). New York: Basic Books. (Original work published 1916)

Abraham, K. (1954b). The psychological relations between sexuality and alcoholism. In *Selected papers of Karl Abraham.* (Douglas Bryan and James Strachey, Trans.). New York: Basic Books. (Original work published 1908)

Adams, J.W. (1978). *The psychoanalysis of drug dependence.* New York: Grune and Stratton.

Benedek, T. (1936). Dominant ideas and their relation to morbid cravings. *International Journal of Psychoanalysis*, **17**, 40–56.

Bergmann, M.V. (1988). On eating disorders and work inhibition. In H.J. Schwartz, (Ed.) *Bulimia: Psychoanalytic treatment and theory. Madison, CT: International Universities Press.*

Brody, S. (1980). Transitional objects: Idealization of a phenomenon. *Psychoanalytic Quarterly*, **49**, 561–605.

Cahalan, D. (1988). *Understanding America's drinking problem.* (p. 19) San Francisco: Jossey-Bass.

Ceaser, M.A. (1988). Anorexia nervosa and bulimia: An integrated approach to understanding and treatment. In H.J. Schwartz, (Ed.) *Bulimia: Psychoanalytic treatment and theory.* (pp. 111–126) Madison, CT: International Universities Press.

Cloninger, C.R., Sigvardsson, S., & Bohman, M. (1988). Childhood personality predicts alcohol abuse in young adults. *Alcohol: Clinical and Experimental Research*, **12**, 494–505.

Fenichel, O. (1934). *Outline of clinical psychoanalysis* (pp. 294–312). New York: Norton.

Freud, S. (1961a). Fetishism. In J. Strachey (Ed. and Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 21, pp. 149–157).

Freud, S. (1961b). Humor. In J. Strachey (Ed. and Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 11, pp. 159–166). London: Hogarth Press, (Original work published 1927)

Freud, S. (1961c). On the universal tendency to debasement in the sphere of love (contributions to the psychology of love II). In J. Strachey (Ed. and Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 11, pp. 179–190). London: Hogarth Press. (Original work published 1910)

Glover, E. (1956a). On the etiology of drug addiction. In *On the early development of mind.* New York: International Universities Press. (Original work published 1932)

Glover, E. (1956b). The etiology of alcoholism. In *On the early development of mind.* New York: International Universities Press. (Original work published 1928).

Johnson, B. (1992). Psychoanalysis of a man with active alcoholism. *Journal of Substance Abuse Treatment*, **9**, 111–123.

Johnson, B. & Clark, W. (1989). Alcoholism: A challenging physician-patient encounter. *Journal of General Internal Medicine*, **4**, 445-452.

Kernberg, O. (1974). Further contributions to the treatment of narcissistic personalities. *International Journal of Psychoanalysis*, **55**, 215-240.

Kernberg, O. (1975). *Borderline conditions and pathological narcissism*. New York: Jason Aronson.

Kernberg, O. (1984). *Severe personality disorders: Psychotherapeutic strategies*. New Haven: Yale University Press.

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

Khantzian, E.J. & Mack, J.E. (1989). Alcoholics Anonymous and contemporary psychodynamic theory. In M. Galanter (Ed.), *Recent developments in alcoholism, Vol. 7. Treatment research* (pp. 67-89). New York: Plenum Press.

Knight, R.P. (1937). The psychodynamics of alcoholism. *Journal of Nervous and Mental Diseases*, **86**, 538-548.

Kohut, H. (1959). Introspection, empathy and psychoanalysis. *Journal of the American Psychoanalytic Association*, **7**, 459-483.

Krystal, H. & Raskin, H.A. (1981). Drug dependence: Aspects of ego function. In H. Schaffer and M.E. Burglass (Eds.), Classic contributions in the addictions, (pp. 161-172). New York: Brunner-Mazel. (Original work published 1970)

Lacan, J. (1977). The signification of the phallus. In A. Sheridan (Ed.), *Ecrits, a selection*. New York: WW Norton. (Original work published 1958)

Loewald, H.W. (1986). Transference-countertransference. *Journal of American Psychoanalytic Association*, **34**, 275-288.

Mack, J.E. (1981). Alcoholism, A.A., and the governance of the self. In: M.H. Bean & N.E. Zinberg (Eds.), *Dynamic approaches to the understanding and treatment of alcoholism* (pp. 128-162). New York: The Free Press.

Mahler, M.S., Pine, F., & Bergman, A. (1975). *The psychological birth of the human infant: Symbiosis and individuation*. New York: Basic Books.

Modell, A.H. (1975). A narcissistic defense against affects and the illusion of self-sufficiency. *International Journal of Psychoanalysis*, **56**, 275-282.

Modell, A.H. (1984). *Psychoanalysis in a new context*. New York: International Universities Press.

Modell, A.H. (1988). The centrality of the psychoanalytic setting and the changing aims of treatment: a perspective from a theory of object relations. *Psychoanaltyic Quarterly*, **57**, 577-596.

Moore, E.B. & Fine, B.D. (Eds.), (1968). *A glossary of psychoanalytic terms and concepts*. New York: American Psychoanalytic Association.

Olesker, W. (1990). Sex differences during the early separation-individuation process: Implications for gender identity formation. *Journal of the American Psychoanalytic Association*, **38**, 325-346.

Rado, S. (1981). The psychoanalysis of pharmacothymia (drug addiction). In: H. Schaffer & M.E. Burglass (Eds.), *Classic contributions in the addictions* (pp. 77-94). New York: Brunner-Mazel. (Original work published 1933)

Raphling, D.L. (1989). Fetishism in a woman. *Journal of the American Psychoanalytic Association*, **37**, 465-492.

Robbins, B.S. (1935). A note on the significance of infantile nutritional disturbances in the development of alcoholism. *Psychoanalytic Review*, **22**, 53-59.

Rosenfeld, H.A. (1965). On drug addiction. In H.A. Rosenfeld (Ed.), *Psychotic states-A psychoanalytic approach* (pp. 128-143). New York: International Universities Press. (Original work published 1964)

Shapiro, E.R. (1978). The psychodynamics and developmental psychology of the borderline patient: A review of the literature. *American Journal of Psychiatry*, **135**, 1305-1314.

Simmel, E. (1928). Psychoanalytic treatment in a sanitorium. *International Journal of Psychoanalysis*, **10**, 70-89.

Simmel, E. (1948). Alcoholism and addiction. *Psychoanalytic Quarterly*, **17**, 6-31.

Stern, D.N. (1985). *The interpersonal world of the infant*. New York: Basic Books.

Stoller, R.J. (1985a). *Observing the erotic imagination*. New Haven: Yale University Press.

Stoller, R.J. (1985b). *Presentations of gender*. New Haven: Yale University Press.

Tolpin, M. (1971). On the beginnings of a cohesive self: An application of the concept of transmuting internalizations to the study of the transitional object and signal anxiety. *Psychoanalytic Study of the Child*, **26**, 316-352.

Vaillant, G.E. (1966). A twelve-year follow-up of New York narcotic addicts: IV. Some characteristics and determinants of abstinence. In H. Shaffer & M.E. Burglass (Eds.), *Classic contributions in the addictions (pp. 463-480). (Original work published 1966)*

Wallerstein, R.S. (1986). *Forty-two lives in treatment*. New York: The Guilford Press.

Weijl, S. (1944). Theoretical and practical aspects of the psychoanalytic therapy of problem drinkers. *Quarterly Journal of Studies on Alcohol*, **5**, 200-211.

Weiss, R.D., Mirin, S.M., Griffin, M.L., & Michael, J.L. (1988). Psychopathology in cocaine abusers, changing trends. *Journal of Nervous and Mental Diseases*, **176**, 719-725.

Wilson, B. (1958). Alcoholics Anonymous – beginnings and growth. In *Three Talks to Medical Societies by Bill W., Co-Founder of Alcoholics Anonymous* (pp. 5-17). New York: Alcoholics Anonymous World Services.

Winnicott, D.W. (1958). Transitional objects and transitional phenomena. In D.W. Winnicott, *Collected Papers*. New York: Basic Books. (Original work published 1951)

Winnicott, D.W. (1969). The use of an object. *International Journal of Psychoanalysis*, **50**, 711-716.

Wurmser, L. (1974). Psychoanalytic considerations of the etiology of compulsive drug use. *Journal of the American Psychoanalytic Association*, **22**, 820-843.

Zinberg, N.E. (1975). Addiction and ego function. *Psychoanalytic Study of the Child*, **30**, 567-588.

Zinberg, N.E. (1981). A study of social regulatory mechanisms in controlled illicit drug users. In H. Shaffer & M.E. Burglass (Eds.), Classic Contributions in the Addictions (pp. 277-300). New York: Brunner-Mazel. (Original work published 1977)