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THE LIFE CYCLE OF ADDICTION: A CONCEPTUAL FRAMEWORK FOR
THE EXAMINATION OF CAREERS IN DRUG ABUSE

City University of New York

PH.D.

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THE LIFE CYCLE OF ADDICTION:
A CONCEPTUAL FRAMEWORK
FOR THE EXAMINATION OF
CAREERS IN DRUG ABUSE

HAROLD ALKSNE

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requirements for the degree of Doctor of
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Abstract

THE LIFE CYCLE OF ADDICTION: A CONCEPTUAL FRAMEWORK FOR THE EXAMINATION OF CAREERS IN DRUG ABUSE

by

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This study was executed to test a theoretical framework by Alksne, Lieberman and Brill concerning a conceptual model of the life cycle of addiction which postulates that there is a process involved in entering into, continuing and leaving an addiction system, i.e., a way of life built around compulsive use of narcotics. The life cycle model suggests that addicts learn to tolerate the addicted state by a series of social supports and identities. Similarly, movement toward a drug free state requires support that would assist the individual in tolerating the condition of abstinence. Data were gathered on 249 adolescent patients first admitted to Riverside Hospital in 1955. Some of the attributes which were found to support the individual's withdrawal from the addiction system and movement into a condition where he is able to tolerate abstinence were found to be: Being White, female, better educated; movement away from the family of orientation toward greater autonomy; no deviance among other family members; rejection by the family of the patient's involvement in the addiction system; having a family which helps to ease tensions; having non-deviant associates; having stable sexual relationships; having the ability to engage in work that is stable, profitable and satisfying; having an arrest history that was focussed around narcotic rather than criminal charges; having used low doses of narcotics; having entered the life cycle of addiction at a later age, and having used drugs to manage untenable social conditions rather than for hedonistic purposes.

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I. INTRODUCTION

The report which follows is concerned with the development and perpetuation of narcotics addiction among adolescents in an urban center in the United States. It will specifically attempt to isolate some of the social factors which are associated with the onset of such behavior and examine their persistent influence in causing young people to return to addictive behavior or, as will be explained later, to the addiction system.

Some Background on the Problem

The statement that narcotics addiction in the United States is a complex medical, sociological, psychological, legal, and social problem is becoming cliché. That it is in large measure a unique product of our own history and values has been well-documented by such writers as Lindesmith (12), Schur (17) and Musto. (14).

In the light of our present concern with the social factors associated with the initiation and perpetuation of addiction, there is value in examining, if only briefly, some of the history of addiction particularly as it has affected the problem in the United States.

The cultivation and preparation of opium was known to the Sumerians as early as 7000 B.C. The cultivation and collection processes described by them in their clay tablets are essentially the same as are used today. From at least that time to the present opium represented an important item in the pharmacopoeia of these people. The Arabs are believed to have brought opium to China in the eighth century (2 , p. 134), and its presence subsequently spread from there to India, where its use was thought

to have been even greater than at its point of origin.

In the mid eighteenth century the British began to trade Indian produced opium with Chinese coastal cities over the vigorous efforts of the Emperor to establish its prohibition. It was later to become the centerpiece of a geopolitical struggle between the British and Chinese which resulted in a series of "opium wars" occurring sporadically between 1839 and 1860, ending with the defeat of the Chinese. (2 , pp. 139-40).

Opium was known as a medicine in Europe since the time of Christ but was not in extensive use until it was imported on a large scale by the East India Company. It was carried to the American Colonies in the eighteenth century and became an accepted ingredient in household remedies. (13, p. 5).

In 1805 the Germans developed a system for deriving morphine from the opium base, and the French produced codeine and other alkaloids of opium by 1832. The refinement of opium into these derivatives was followed quickly by their ready adoption in the medical field in part because of the prevailing misconception that they were free of the addictive qualities characteristic of opium. The modern hypodermic needle was developed by Taylor (1839), Rynd (1845), and Wood (1853), and further expanded the applications of morphine in medical practice. Heroin, a drug of keen interest on the current addictive scene, was developed in 1898, again with the belief that it was not addictive. (13 p. 6).

The first widespread use of hypodermically injected morphine in the United States occurred during the Civil War, when, through often indiscriminate use of the drug, many injured men were returned to civilian life

with what was called "the Army disease". Recent investigation has raised questions concerning the magnitude of the problem during this period. (14 , p. 6). Nevertheless, during this time such addicts were seen simply as having a medical problem, and it was possible for them to have ready, inexpensive access to opiates at local pharmacies. The use of opiates and opiate derivatives continued to increase in the succeeding forty or fifty years because they provided an effective means of alleviating the pain of the chronically ill and of many women's ailments which were not under medical control during that period. Although more physicians were now becoming concerned with the problem of addiction management in their practices, the social context within which addiction existed appeared relatively free of moral and ethical judgments concerning the personal character of the addicted individual. Up until the early part of the twentieth century addiction, although seen as a growing medical problem, was not seen as a social problem of wide scope.

Yet it must be noted that, in the same way as local prohibition against alcohol preceded the passage of a federal statute (7), the Volstead Act of 1919, there were several local laws leveled at narcotics control. "As early as 1862 California enacted a statute dealing with the administration of drugs with intent to facilitate commission of a felony. The first state law seeking to control the use and distribution of narcotics is said to be that enacted in Nevada in 1877." (1 , p. 21). These few statutes, however, may have reflected the presence of local problems and attitudes toward prohibition in general.

Until about 1920, addictive narcotics continued to be easily avail-

able to those who chose to use them either with or without medical supervision. Estimates were made, unfortunately without reliable evidence, that the numbers of addicts in the United States constituted hundreds of thousands of people.

Because of the growing problem of narcotics addiction in the world and because of its past role in international power struggles (The Opium Wars), The Hague Convention of 1912 recommended that member parties establish local legislation controlling the distribution and sale of narcotic drugs. In 1914, the United States passed the Harrison Act which established the mechanism, through the United States Treasury Department (1915), which required that a small tax be levied against the production and sale of drugs. This provided the initial device for the newly created Federal Narcotics Bureau of the Treasury Department to become an enforcement bureau in limiting the use of drugs both in legal and illegal contexts. The five years following the passage of the Harrison Act saw few changes in the practice of physicians toward their drug addict patients. Essentially, they continued in their then traditional orientation of viewing addiction as a medical problem over which they had always had proper jurisdiction.

This was soon to change. In the years 1916 to 1922 the Federal Bureau of Narcotics initiated court action against several physicians who had reportedly violated the regulations of the Bureau by providing prescriptions to addicts. Convictions followed. With the support of these convictions the Federal Bureau of Narcotics extended its regulatory powers in limiting the physician's right to prescribe narcotics only in cases where a specific medical condition demanded that a strong analgesic be used to reduce pain. This concurrently limited the private physician's use of nar-

cotics with respect to any maintenance doses for addicts. By 1919 a system of treating addicts through temporary opiate maintenance clinics was established throughout the United States, but these were finally closed in 1923 because of criticisms of poor management. (1, pp. 217-19). Such criticisms were probably fueled by the growing public prejudice against addicts and efforts to help them.

In 1925 the Supreme Court reversed the previous lower court decisions in one case, thus providing the legal basis for physicians to continue in their traditional role of caring for the addict as a sick person. But by this time the die had been cast. The middle 1920's through the middle 1930's were characterized by a dramatic withdrawal of the physician from treatment of the narcotics user. (10). In 1929 Congress authorized the establishment of Federal narcotics "farms" which later became United States Public Health Service Hospitals for the treatment of addiction. (2, p. 220).

A black market began to grow up around the procurement of addictive drugs, and the Federal Narcotics Bureau became the single most important agency in dealing with the addict. (10). The rehabilitation of the addict was dominated by correctional authorities whose therapeutic facilities were indeed limited. A hiatus in the medical management of the addict existed until 1935 when the Federal Narcotics Hospital in Lexington, Kentucky, was opened under the Federal Act of 1929 for the exclusive treatment of voluntary and convicted patients. Awareness of the threat of addiction continued to grow in the public mind under the carefully orchestrated public information program of the Federal Bureau of Narcotics.

World War II was responsible for a significant reduction of addiction in the United States because of less accessibility of drugs. Prior to the war addiction was seen as a problem primarily affecting adults. In the

period following World War II, there was an apparent increase in the prevalence of drug addiction in an ostensibly new population. By 1952 the public in New York City was advised that this problem had reached epidemic proportions among adolescents in certain neighborhoods.

In response to this, the authorities of the City of New York established a treatment facility for adolescent narcotics users on North Brothers Island - the Riverside Hospital. This was the same hospital used to treat addicts in the early 1920's. The study which will be reported on here draws upon the patients from this Hospital for its information concerning the character of narcotics addiction among adolescents.

It is difficult to reconstruct exactly what happened to public attitudes toward the addict since the modification of his legal status during the twentieth century. But it does seem clear that in recent history the three factors of 1) the increase of law enforcement power over the addict, 2) the withdrawal of the physician from the out-patient management of the addict, and 3) the association of black market activity and criminality with the addict's maintenance of his addiction have led to a marked change in the role the addict performs in our society. In the nineteenth century the addict's image, if there was a clear image at all, was that of the wounded hero come home with the physical and emotional marks of battle or the old grandmother rocking slowly on the porch taking comfort from her opium-laced bottle of "Doctor Brown's All-Purpose Elixir." The addict as a child of darkness was more often relegated to his opium pipe on the edges of society - someone alien and not to be trusted because of a total immorality and decay of character. These two types of images evidently had always been present, but the reality was that relatively few persons with a physio-

logical addiction were viewed in the latter context in the earlier history of opiate addiction in the United States.

The passage and subsequent implementation of the Harrison Act, though allegedly responsible for an overall reduction in the prevalence of addiction, has, by ad hoc definition, made the addicted person who is in illegal possession of drugs a criminal. The needs of such persons to purchase drugs on a black market has further deepened their involvement in deviance as they utilize illegal means to support their habits.

It is clear that use of and addiction to drugs need not necessarily be associated with a deviant way of life. The characteristics of the persons who were addicted in nineteenth century America testify to this. The experience of the British since the Hague Convention of 1912 also supports this point. The British supported their agreements at the Hague Convention by passage of a "Dangerous Drug Act" which was strikingly similar in content to the American Harrison Act of 1914. A person found in illegal possession of drugs, i.e., without a physician's prescription, was subject to penalties comparable to those found in the American law.¹ However, a very substantial difference in implementation of these laws followed. While in America the law enforcement personnel of the Federal Bureau of Narcotics took over almost all the control in this area, in England the physician never relinquished his right to treat addicted patients. The consequence of this was that the British addict escaped the problem of a criminal labeling because he was addicted. (17, pp. 71-2). In fact, the reports which

¹The concern of the present discussion is with individual possession. However, the original regulatory narcotics laws were only nominally concerned with individual possession. Their intent was primarily to exercise national and international control over the manufacture and distribution of narcotics.

are available suggest that the majority of addicts on whom information is available are persons who are productive members of society. Criminality has not generally been associated with British addiction until quite recently. (17, pp. 122-40).¹

Several implications may be drawn from these observations. First, where addiction is viewed as a social problem, the individuals classified as addicts are not only characterized by having a peculiar physiological condition but also a particular status. This status has specific role prescriptions which will be in some measure determined by the society within which they are found. It would seem that the values associated with such things as escape or hedonism have a great deal of bearing upon the status given to persons who employ these as adaptive devices. It is not an altogether unique observation that the etiology and negative consequences of such problems as alcoholism, narcotics addiction, prostitution, and the like, are in the main socially generated and functionally related to an understanding of the problem.

Yet with respect to a problem such as narcotics addiction it needs reinforcement. There appear to be segments of the lay, and sometimes professional, opinion that contend that because there are certain common characteristics associated with addiction, i.e., a drug and a predictable physiological development of tolerance and dependence on the drug, one can

¹For an opposing point of view, see Granville W. Larimere and Henry Brill, "The British Narcotics System; Report of a Study", New York State Journal of Medicine, 69:107-115, January 1, 1960. (11). This is a report concerning observations during a 10-day visit to Great Britain in which the authors observed an increase in reported addicts and a change in their characteristics in the direction of greater deviance. The first observation was made from British records and the second on the basis of personal observation and not a survey.

easily identify and classify "the addict" as a particular type of an individual. Thus, the addict for this segment of the population is a "sick person who needs treatment." Others, particularly law enforcement personnel, see their addicts as involved predominantly in criminal activities and hence contend that they are criminals. This black-and-white, either/or orientation to the character of the addict has done little to expand our understanding of him as a total social being.

Even among some who do view and attempt to deal with the addict in terms of a multi-causal framework we find another peculiar bias. If one thing has been common to most of the personnel assigned to deal with this problem, it has been to view addiction in the rather static framework of the addict's addiction to or abstinence from drugs. It has been suggested that this focus upon drug use per se narrows our capacity to perceive the full range of the problems of the addict. (3).

The uni-dimensional, on-off approach has limited our inclination to explore the more dynamic aspects of addiction to drugs, specifically, how one enters into addiction and the different paths by which one might leave the world of addiction.

There is a need to view narcotics addiction¹ in the broader framework of a behavioral and career system (16) rather than as a symptom or symptom pattern. Ideally, such a systems analysis should be carried out on an interdisciplinary level, but the various behavioral sciences have evidently neither achieved the rapprochement nor the technical ability to

¹For purposes of this study, addiction will involve only the opiates and their derivatives.

do this. In any event, the present work will represent a somewhat more modest effort than the ideal.

It will be the purpose of this study to view the problem of addiction in terms of manifest social behaviors (to include work, criminality, heterosexual activity, family life, etc.) and their relationship with the addict's encounter with drugs and the subsequent involvement with the addiction system.

Some Definitions of Drug Addiction

Since this report will be concerned with drug addiction and some of the social behaviors associated with it, it is of value to spell out what some of the authorities in this field believe constitutes this phenomenon. As more and more work has been done in this field, the definition of what constitutes this condition has become less specific and more controversial.

A definition and description of opium addiction which represented an earlier and precise system of classification was given by Himmelsbach and Small in 1937:

Addiction to opium and similar drugs embraces three intimately related but distinct phenomena: 1) Tolerance; 2) Physical dependence; and 3) Habituation.

Tolerance is defined as a diminishing effect on repetition of the same dose of the drug, or, conversely, a necessity to increase the dose to obtain an effect equivalent to the original dose when the drug is administered repeatedly over a period of time. Physical dependence refers to an altered physiologic state, brought about by the repeated administration of the drug over a long period of time, which necessitates the continued use of the drug to prevent the characteristic illness which is termed abstinence syndrome. Habituation refers to emotional, psychologic, or psychical dependence on the drug - the substitution of the drug for other types of adaptive behavior. Habituation is closely related to the drug's euphoric effects, i.e., relief of pain or emotional discomfort. (8).

The preceding definition is traditional in its emphasis upon the

requirement of the physiological processes of tolerance and dependence in any explanation of addiction. The definition implies the presence of compulsion and repetitive use of a drug. In this context, Chein reinforces the belief that the factor of craving should be an essential factor in our determination of whether an individual is a true addict. (4, p. 27). This type of definition has been particularly useful to the clinician in that it concentrates on the measurable individual reaction to the drugs and thereby facilitates diagnosis. Yet it has been seen as unsatisfactory because it tends to be limited to opiates, their derivatives and synthetics. In addition, it is not generalizable to many of the drugs considered to have properties which lead to powerful psychological dependence such as the amphetamines. Alcoholism is poorly fitted into this category since the development of physiological dependence and its expression in the final phase of late stage or acute alcoholism affect only a small proportion of persons believed to be alcoholics. Marihuana is excluded because there is no evidence of either the growth of physical tolerance or dependence.

The awareness that something akin to addictive properties might be associated with a wide variety of substances led to the support of the belief that the opiates might represent one end of a continuum of substances all of which might be conceived of as having a dependency liability for the substance abuser.

Vogel, Isbell and Chapman state: "Drug addiction may be defined as a state in which a person has lost the power of self-control with reference to a drug, and abuses the drug to such an extent that the person or society is harmed." (18). They further indicate that one or more (not necessarily all three) of the factors of tolerance, physical and/or psychological de-

pendence and habituation had to be associated with the substance in order for it to be considered as potentially addictive. With the modification of criteria for the definition of addiction, such substances as alcohol, tobacco, cocaine, marihuana, and coffee could be considered as potentially addictive.

But, perhaps, more important than the expansion of the list of potentially addictive substances was the fact that the medical community had introduced a social element into the conception of drug addiction in becoming concerned with the "extent to which the person or society was harmed." Actually, physicians and law enforcement people have never been especially concerned with the extensive repetitive use of substances which have had the pharmacological powers to addict among such people as terminally ill cancer patients. Among these people the use of the drug is not seen as either a threat to the person or society. It was, rather, a treatment modality of considerable importance that had side effects of developing tolerance (as have numerous other "non-narcotic" drugs) and dependence. But far more important for our purposes is the implication in the newer definition that factors quite outside of the pharmacological and psychological action of a drug must be considered in our designating a person as an addict. The new element, of course, involves some kind of classification of the effect of the drug in modifying the individual's relationship with others in his social system.

This trend toward broadening the base of the definition for drug addiction and drug abuse is seen in the statement of Jaffe when he writes:

Addiction will be used to mean a behavioral pattern of compulsive drug abuse characterized by overwhelming involvement with the use of a drug, the securing of its supply, and a high tendency of relapse after withdrawal. Addiction is thus viewed as an extreme on

a continuum of involvement with drug use and refers in a quantitative rather than a qualitative sense to the degree to which drug use pervades the total life activity of the user. In most instances it will not be possible to state with precision at what point compulsive use should be considered addiction. Addiction in this frame of reference cannot be used interchangeably with physical dependence. It is possible to be physically dependent without being addicted and to be addicted without being physically dependent. (9, p. 286).

It is of substantial concern to us that a leading pharmacologist/psychiatrist, writing in the leading medical textbook on the use of drugs in treatment, places so much emphasis on the social factors which need to be considered in diagnosing addiction almost to the extent of voiding the earlier conceptions of this condition. Of special interest is his emphasis on the need to understand how the use of the drug relates to "the total life activity of the user."

A question that may now be asked is: How has this more recent view of narcotics addiction been implemented in medical practice? The work of Dole and Nyswander is of relevance here. These investigators used methadone hydrochloride in the treatment of heroin addicts with long histories of personal and physical deterioration and with a deep past involvement in an addict way of life.

Before methadone was used in drug maintenance treatment, it was employed in inpatient facilities to support the withdrawal of addicts from heroin. It functions to reduce withdrawal distress during heroin detoxification which ordinarily lasts between three and fourteen days. The length of the withdrawal period is determined by the intensity of the patient's heroin drug dependence. Methadone is given in gradually reduced doses until the physical symptoms of narcotic addiction disappear, and then it is withdrawn. Methadone is itself addictive, but its use in the withdrawal

regime does not provide sufficient time for the development of addiction to this drug. Actually, methadone hydrochloride, under its trade name of Dolophine ("dollies"), was one of the drugs used by some addicts as a substitute or supplement to heroin on the streets at the time the data for this study were gathered.

It is this drug that Dole and Nyswander used in treating heroin addiction. Their treatment approach involves the transfer of addiction from heroin to methadone. The process of treatment originally required the inpatient stabilization of the addict on such high doses of methadone (100 to 150 mg. per day) that it blocked and made ineffective the euphorogenic effects of doses of heroin. Current practice of methadone maintenance treatment is done on an outpatient basis and involves doses in a lower range of 40 to 60 mg. It also had the effect, for the Dole-Nyswander treatment group, as well as for others, of markedly reducing the patients' criminal involvement and improving their social adaptation to non-deviant groups. (6).

These investigators concluded that, "Patients who before treatment appeared hopelessly addicted are now engaged in useful occupations and are not using diacetylmorphine (heroin). As measured by social performance, these patients have ceased to be addicts." (5).

There is no question that controversy still revolves around the question of whether or not the patients in the drug maintenance programs remain addicts while in treatment. But this question is not at issue here. Rather, the particular orientation to the concept of addiction which derives out of this work continues to reinforce our belief that a more ade-

quate understanding of addiction in our society will depend upon our knowledge of associated social and psychological processes.

The present study, in part, will function to examine some of the social factors associated with addiction. The adolescents selected for study are persons who have fulfilled the requirements of the earlier definitions, i.e., persons who have developed tolerance and finally dependence on heroin. This uniform identification of subjects will provide a base from which it will be possible to compare different social characteristics of addicts. The underlying assumption of the study is that we may expect to find varying degrees of involvement with addiction-related behavior in a group with this generic designation.

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Chapter II

THE SOCIAL BASES OF DRUG ABUSE

It is the position of the sociologist that the addiction phenomenon and its more general definitional descendant, substance abuse, is as much a social construct as it is a medical condition. This statement is made with the recognition that a better understanding of the function of an interrelated complex of physical, psychological and biochemical processes within the human organism will probably present us with the most immediately negotiable solutions to the problem as it is now expressed in our society. Yet the dramatic growth of dependence on a variety of old and new substances suggests that the forces associated with the increase in prevalence of substance abuse are less likely to be found in our recognition of new physical and psychological processes than those that are social. Recent experience with social experimentation directed toward developing "The Great Society" has been disappointing. However, if we are eventually to come to a comprehensive approach to the changing problem of substance abuse, social factors will have to be involved.

Thousands of substances may be viewed as possible objects which may be "abused". (5, p. 1x.) Whether or not they are so considered entails a social definition relating to the perceived negative consequences of the compulsive use of a particular substance at a point in time. The extent to which the consequence is considered negative is related to the degree to which it appears to threaten the norms and stability in the society. Should the behavior and its consequences be viewed as a relatively mild violation of the norms or merely idiosyncratic it will call up mild or no negative sanctions, depending on the role performed by the norm violator in the social system. Should the norm violation be seen as a serious threat

to the welfare of the society, community and violator, probably in that order, then it is likely that the mechanisms of social control will be brought into play to label the individual "deviant" (drug or substance abuser) and return him to conformity. Thus our definition of what is deviant and in this case, substance abuse, depends on a perception that a problem exists and that in some way it negatively affects the social network that constitutes the fabric of society.

In the tradition of the simpler, 'pre-literate', society the values that governed the life of the people were generally universally internalized. In such, now almost mythical, contexts the perception and control of offending behavior was readily accessible and effective. In our own social system, the networks of sub-groups that make up the society at large with their differing values, norms and life styles, there is less consensus concerning the infallibility of universally applicable norms and the effect their violation may have on the stability of the society. Therefore, our definition of what is substance abuse is inevitably related to who is involved in the perceived substance abuse and who makes the judgment.

Any entry into scientific investigation must be preceded by a definition of the problem about which we want explanations. If the investigator begins with premises that are unclear and do not have the benefit of consensus, then developing a universally applicable theory or set of findings becomes less feasible. I would suggest that our movement from a relatively concrete physical definition of addiction to one that is more diffuse and all-inclusive, substance abuse, has led to difficulties. The movement from the concept of addiction to that of substance abuse was, in part, based on the assumption that there is a commonality between various forms of com-

pulsive behavior which, if studied together, could ultimately lead to a comprehensive, general theory explaining dependence on all substances. The concept is new and awaits exploration through cross substance studies.

Unfortunately, we see no rush on the part of behavioral scientists to enter this broader area of scientific exploration. The reasons for this inertia are relatively obvious. Most of us are reluctant to give up the equity we have in developing the skills of specialization in a particular aspect of our work without new rewards. Those rewards, for most of us, come from the support of our work from institutional and governmental sources. There appears to be a time lag between institutional recognition of the potential values of the newer concept of substance abuse and readiness to support new research in this broader framework. Establishing priorities for research support is a political process depending on members of existing interest groups which, like the scientist, may see a threat in changing the framework within which they operate. Whether we are able to avoid the broader influences of social interest or not, we should acknowledge their probable influence on what and how we investigate social problems.

Whatever the potential the concept of substance abuse holds for the future of this field, we still discover that the lack of precision that now prevails has led to a diffuseness in our theoretical orientation. This diffuseness has been based on the fact that individuals involved in scientific study of the social dimensions of drug abuse are left to respond to social priorities rather than clear scientific criteria. Unlike physical/medical observations concerning human behavior, there is considerable variability in our observations of social behavior.

In explaining the social bases of drug abuse (I will use this term

alternately with narcotics addiction), the sociologist has generated different classes of theory based on observations of different groups at different points in time. Much of the controversy and conflict among theorists is probably a consequence of the fact that many of our theories are temporally and spatially bound. If we appreciate the fact that our observations are the consequence of different settings and conditions, we may better be able to derive from them the commonalities. Thus, the fact that a theory of anomie is apparently not relevant in all settings and for all substances abused should not be viewed as a failure but rather the first step in developing a general understanding of the drug abuse phenomenon as a variable condition.

The Drug Abuser as an Object

The sociological perspective on drugs and drug use suggests that the meaning of drugs is affected by the social context within which they are used. Opiates provided in supervised medical settings take on different meanings from heroin or illicit methadone use on the street. Weil indicates that the effect of drugs on the user is dependent both on personal and social influences. (45, pp. 70-1). Observers of drug use similarly focus their perceptions on the basis of the peculiar vantage points from which they look at the phenomenon.

One of the sources for the variability in explanations of drug abuse phenomena is that different categories of caretakers of the problem perceive it and its significant characteristics from the perspective of their functions in managing or controlling drug abuse and the drug abuser. How they perceive, manage and exercise control of drug abuse and rationalize their professional activities through the use of theory is likely to be af-

fectured by the socially determined interests of the institutions they serve. In effect, the support of theory becomes political.

One of the perspectives on drug abuse that is supported by the medical community involves the idea that abuse is a consequence of the lack of medical supervision of the use of the drug. So long as a drug is prescribed and used in the context of a medical regime, it is generally viewed as appropriate, iatrogenic addiction notwithstanding. However, if the patient uses drugs outside the system of sanctions and controls of the physician, this is likely to be labeled as drug abuse. This observation is not made to void the substantial sophistication physicians bring to dealing with the problems in this area but rather to point out that physicians as well as other caretakers view their role in the context of medical and social control and territoriality.

Communities as aggregates of the public present a particularly difficult set of problems for those who seek to provide service to drug abusers. Increasing rejection of the drug abuser as a morally deficient, marginal individual has led to increasing difficulties in providing funding for treatment programs, and, once funded, resistance to the location of programs in communities. In this context, drug abuse is keyed to the idea that those who suffer the problem may be instrumental in threatening the stability, security and image of their community. Thus, the dominant reaction of communities to the drug abuser involves exercising techniques of control and, that failing, exclusion of the drug abuser from their life space.

The needs of government to exercise power and to develop public policy generally reflect or purport to reflect the attitudes of the community. As a consequence, government power is also focused toward the goal of control

of the drug abuser through the myriad of bureaucracies that deliver services to the people. Out of the theoretical explanations that are rendered by the social scientist, those that suggest that structure, or "rational authority", needs to be provided for the drug abuser tend to be favored. (9). Despite the questionable success of programs involving mandatory commitment of addicts to treatment, this approach continues to surface from time to time. The pervasiveness of the belief that addicts need external systems of control to return to conformity with community norms and values may be a factor in gaining greater support for the drug-free therapeutic community as compared with methadone maintenance approaches to treatment.

The role of the police as an instrument of social control needs no explanation. Once again sociological research is used to rationalize the community's concerns through police action. Social research which focuses on epidemiology is repeatedly employed to justify extension of the police role in control of substance abuse. Disease, its spread and control, become the preferred framework for increased police action. The concept of contagion is highlighted to give scientific credibility to police crackdowns.

We recognize that different substances change in terms of their meaning to society during different periods of time. Tobacco, coffee, tea, ether and a host of the other psychoactive substances available to man have variously been viewed as symptomatic of evil, disease, mania, and a general threat to the system (5). Many have vacated their profane role because of changes in public attitude, but some, like the opiates, continue as objects which "justify" stigmatizing those who use them.

Dogma and theology have been used to justify the actions of govern-

ments in the past. Science and theory have taken over this function in formulating public policy today. In all of this, the rationalization that large scale intervention with drug abuse is based on humanitarian concerns for people suffering the problem, one cannot avoid the awareness that the systems we employ deal with the drug abuser as an object.

Major Theoretical Frameworks for the Consideration of Drug Abuse

Structural Approaches.

Sociologists generally share a common framework in their analysis of social groups and the phenomena that emerge from them. In various ways, the character of the individual's social experience formulates the individual personality and all of the behaviors that make him a human animal able to function with varying degrees of competence in the life space allocated to him. However, different groups of sociologists tend to focus on specific areas of human experience with markedly different interpretations of their development and meaning.

American Sociology continues to be dominated by the "structural-functional" orientation that finds its roots in the work of Weber (44), Durkheim (14), Radcliffe-Brown (32), Malinowski (26), Parsons (30) and, most recently, Merton. (28). Although none of these formidable figures in the history of sociology had done any empirical work in drug abuse per se, their influence is felt in the research and writing of many of those who come after them.

Functionalism is based on the assumption that society - the social system - is built on commonly shared values, norms, role expectations and interactions which permit humans to relate in a mutually acceptable framework. In a stable, unchanging society there is a proper "fit" between all

elements and institutions. Ideally, values, norms, expectations and appropriate behaviors are commonly shared with all elements having complementary functions. Deviance rarely emerges, and when and if it does it is dealt with with absolute certainty. In some instances, as is the case with the Plains Indians, there is an institutional incorporation of individuals' behavior for those who do not wish to comply with the requirements of the male role - the berdache. (12, p. 535). In other cases, the individual is ostracized, or exiled. The model was built on observations of preliterate societies in which little external contact was present and little change occurred. It views society as a system.

Complex societies may also be viewed in this functionalist mode. In order for us to continue functioning as a group, be it the total society or an individual segment of it, some "rules of the game" must be developed and adhered to. Such "rules" permit us to get through each day without grievous harm to ourselves or others.

But complex societies have complex science and technologies that stimulate change, sometimes radically. Under such conditions the systems of norms and values that support social control become less pervasive and deviant behavior becomes more possible.

A key concept used by functionalists in examining deviance, and drug abuse in particular, is that of anomie. Originally developed by Durkheim in his classic study, Suicide, (15), it describes a situation in which individuals detach from the values and norms of the society in which they live. Such a state of "normlessness" creates a condition of alienation of the individual from the major institutions in the system. Such alienation may become intolerable and lead one to suicide.

During the early part of the twentieth century the paired concepts of anomie and alienation became favored explanations for a host of problems. Loneliness, the problems of immigrants, crime, mental illness and of course drug abuse fitted nicely into the mold.

In the late 1930's, Robert K. Merton took his cue from this condition of anomie and moved it forward to develop an analytic system which explains its place in the development of various deviant behaviors. He created his famous paradigm on "modes of adaptation" which seeks to rationalize the emergence of various forms of deviant behavior in terms of a structural failure of the social system to meet the needs of groups within it. He points out that societies require certain appropriate institutionalized means for achievement of culturally supported goals. (27). Merton suggests that a state of anomie emerges because the social system emphasizes goals but may not provide the means to achieve them for minorities, the poor, the newly arrived and in some cases those who have not connected with what they feel are appropriate success tracks in the American system. This process is most likely to occur under conditions of social change.

Most people adapt or, in Merton's terms, respond to such change through conformity, accepting the means and goals of the institutional structure. Some, usually a small proportion, do not, and move toward alternative approaches to adaptation which are often viewed as deviant.

The second form of adaptation is that of innovation, in which the goals of the system are accepted but the means are not. The third is ritualism, where the socially approved means are emphasized and the goals are given less emphasis. The fourth is retreatism, one that is most frequently associated with alcohol and drug abuse; this has the individual

rejecting both the means and goals of the system. The final mode of adaptation is that of rebellion, which has the individual rejecting both the means and goals of the system, as does the retreatist, but substituting new means and goals as an effort to create a more acceptable system.

A direct theoretical descendant of the work of Durkheim and Merton is found in Delinquency and Opportunity by Cloward and Ohlin. (11). These authors accept Merton's contention that deviance is associated with lack of opportunities to achieve goals legitimately. They add, however, that not only do members of the lower class have a problem of differential legitimate opportunity and consequently experience anomie but also experience differential access to illegitimate goals. Their approach explains, in part, why the vast majority of persons in a disenfranchised group will not become involved in deviant activities. Only a proportion of the population develops an access to opportunities to become involved in a criminal subculture. Cloward and Ohlin suggest that most lower class youth are not integrated into a subculture of crime. They indicate further that a conflict subculture may provide goal achievement opportunities to some young people. The conflict subculture is represented in violent delinquent gang activity where individuals may achieve status and a reputation by demonstrating willingness to fight and risk injury to themselves. Cloward and Ohlin finally postulate that a third sub culture, the retreatist subculture, exists, where the only requirement is the willingness to use drugs. Young people who are unable to become engaged in the criminal or conflict subcultures are most likely to become involved in the retreatist subculture. Thus, those who are unable to achieve success in the conventional community or in either of the delinquent subcultures are likely to be candidates for

the retreatist subculture. Cloward and Ohlin suggest that the candidates for this are "double-failures".

A series of criticisms have been directed at the anomie oriented theories. Some suggest that concentration on adaptive responses and opportunities among those in the lower class of society places serious limitations on the use of these theories. It is difficult to apply them to those who are among the affluent. Further, one can raise questions concerning the applicability of a theory generated almost exclusively by observation of specific urban ghetto populations to a pluralistic American society varying by regional and cultural experiences.

In using the anomie approach, one could easily view the street addict's involvement in the life style of addiction as both retreat and rebellion. It requires little argument to justify the characterization of opiate use as movement away from active engagement with the means and goals of the social system, i.e., a movement toward passivity. Yet if one is to competently carry out the "addict role" the individual must actively reject society's norms and values and seek new ways of managing his life space. Similarly, those who have worked extensively with street addicts will have little difficulty in recognizing the innovative and often aggressive approaches some addicts develop in order to support their habits. So Merton's various modes of adaptation thesis could separately be applied to various aspects of the addict life style. But viewed together the assumption that the drug dependent person is primarily a retreatist is called to question.

Lindesmith and Gagnon (25, pp. 164-5) point out that those most at risk to addiction during the nineteenth century were not characteristically the disenfranchized who were cut off from the achievement system of their

time. They were more likely to be white than black, women rather than men, and middle class as compared to lower class. Winick (48) suggests that the anomie-retreatist model does not apply to all contemporary high risk populations. His study of doctor-addicts found that physician's use of drugs had an instrumental rather than retreatist function. They used them to reduce pain, fatigue and generally to continue doing their jobs. Similarly, our explanation of marihuana use through an alienation model is becoming less credible as it becomes more normative among achievement-oriented young people in higher education.

This set of theories has led to a number of action applications. Much of the work that has developed in delinquency prevention is based on the premise that opportunity systems must be changed to reduce the alienation that confronts people. The major efforts in drug and delinquency prevention programs, e.g., Mobilization for Youth and the Model Cities Programs, are direct derivatives of these functionalist models. They are based on the premise that the deviant can be influenced through modification of the system of means and goals to re-enter the legitimate avenues of achievement. On a lesser scale community groups have supported efforts that propose "Reasonable Alternative Programs" (RAP) for those on the fringes of deviance. For whatever reason - insufficient funding, lack of community or political commitment or weakness in the theoretical basis for these programs - they are yet to demonstrate a significant effect in preventing deviance and drug abuse.

Despite the theoretical weakness in the functionalist models and the disappointments in their application to action programs, they have had a great deal to do with how we view those who vary from the ideal norms of

American society. Few behavioral scientists would deny the influence of the social structure on the generation of deviance and drug abuse.

Process Approaches

At the turn of the century, Gabriel Tarde introduced learning theory to explanations of crime and deviant behavior. He observed that those who develop criminal careers were fostered in a "true seminary of crime" as unsupervised youngsters who "like bands of sparrows associate together, at first for marauding, and then for theft, because of lack of education and food in their home." (41, p. 84). He felt that criminal behavior was learned through a process of imitation of others whom the novice viewed as superior to himself and who in effect became role models. (41, p. 94). The idea that "bad" associates support the movement toward norm violation is part of folk wisdom. What Tarde and others have done is to isolate the elements that go into that social learning process. This approach adapts handily to drug abuse problems, especially those involving "the street addict".

Sutherland's theory of "differential association", first published as part of a textbook in 1939, focuses as does the work of Tarde on the genesis of crime and delinquency. He indicated that delinquency and crime were likely to emerge at times of social disorganization when normative controls cease to have a dominating influence on the individual's behavior. Under such conditions some groups are likely to respond positively to deviant attitudes and values present in the community. First, Sutherland suggested that criminal behavior (substitute drug abuse) is learned in interaction with others through communications occurring in intimate groups. The learning that is involved in such groups focuses on the technology of initiating and maintaining the deviant behavior. For the drug abuser this

involves learning how to use the drug for its maximum effect (the ritual of use) and learning how to maintain that use. (Purchase, dealing drugs, theft, prostitution, avoidance of arrest, the development of an argot to facilitate communication, and the use of hospital detoxification and other services to manage their habit and avoid, if only temporarily, street pressures represent some aspects of that technology.) (40, pp. 83-94). Learning also involves the acquisition of motives, drives, rationalizations and attitudes that facilitate the addict role. Finestone summarizes some of these attributes in his piece describing the ideology of the "cool cat". (17, pp. 3-13).

A critical phase in Sutherland's process of becoming a delinquent or drug addict occurs when the individual internalizes an excess of definition favorable to the violation of law (or norms) over definitions unfavorable to violation. For the drug abuser, and here we can readily see the process in operation with the street addict, alcoholic and compulsive overeater, the central life interest of the individual focuses on maintaining and rationalizing continuance of the compulsive use of the substance without concern for the mechanism of social control and the negative sanctions imposed by the community, friends and family. The entire process of differential association moves the individual toward the development of an addict self image. But it is at this point, when there is an excess of definitions favorable to the violation of law or norms, that that image becomes crystalized.

In his own statement of the theory, Sutherland suggests some cautions in viewing this as an absolute, unidirectional process. He points out that differential associations may vary in frequency, duration, priority and in-

tensity. Street addicts use terms that reflect relative degrees of involvement with addict life styles: The drug abuser, irregular use ("chipping"), the drug addict (regular use), the "junkie" (deep involvement with addiction) and the "dope fiend" (involvement to the extent that the maintenance of the addiction is virtually the only life interest). They also point out that they may move between these different degrees of involvement on the basis of intensity of drug dependence and social conditions in their environment that support or negate full involvement.

Critics attack the Sutherland differential association approach on a number of fronts. Sutherland and Cressey (40, pp. 83-95), themselves, provide a convenient summary of some of these statements. Critics argue that it is defective because it omits consideration of free will, is based on a psychology of rational deliberation, ignores the role of the victim, does not take account of "biological factors", is not interdisciplinary, is too comprehensive because it is applied to deviants and non-deviants as well, and on and on. The extensive critical attention given the theory is some testimony to the interest behavioral scientists continue to have in it.

Despite the vigorous controversy concerning the validity of the differential association approach within the community of sociologists it has found a following among those involved in the rehabilitation of drug abusers. If the drug abuser must engage in a process of learning or secondary socialization in order to effectively take a deviant or addict role, it would follow that such individuals must also engage in a different process of secondary socialization in order to develop the capability of taking on the roles required to return to conventional community involvement. Although little deference is given by the advocates of the therapeutic community approach to the work of Sutherland, the relationship is unmistakable.

Radical Sociology

Radical sociologists, or conflict theorists, share a common assumption with functionalist theorists - that something in the society, not the individuals themselves, is responsible for the generation of deviant behavior. In addition, they agree that deviance is a rational response to the institutional structure of society which slights those without equity or power. But here the advocates of the two positions vigorously part. The conflict theorists charge that the functionalists are fundamentally not concerned with making the society responsive to the needs of those who do not have equity and power in it and that on a de facto basis they are in support of the status quo in seeking ways of developing approaches to encourage or force the deviant to fit in. Their position is that people in society are more in conflict than in consensus and that the only way that problems can be reconciled is to give to the "have not" what they need through equalizing the distribution of the resources available in the society. (31).

The conflict theorists suggest that the legal system in the United States is controlled by those who have power and that the system functions to focus its control on the lower class as compared with the more privileged middle and upper class groups. Blumberg (7, pp. 4-5) points out that it is the powerless who are inevitably viewed as threats to the society and are targets of control. Historically, when we examine addiction in the nineteenth century, we find relatively little social concern with controlling this condition. During this period those who were recognized as drug dependent were not in the disenfranchised class. When we enter into the twentieth century we find that by accident or design increased controls are

associated with the shift from middle class to lower class drug abuse. Despite our awareness that drug abuse exists in the upper class, little attention has been directed toward its control.

A case history of this process may be seen in our social policy concerning marihuana use over the last forty years. When it was perceived as a lower class problem, there was substantial pressure to bring it under control through the use of punitive legislation. As the use of marihuana began significantly to enter into the life activities of middle and upper class students, we note a turn towards liberalization of control legislation. This may be pointed out despite the recent trend toward reestablishment of controls in some jurisdictions.

Cocaine use is another case in point. It was first declared a narcotic in 1914 under the provisions of the Harrison Tax Act and is currently classified as a Schedule II controlled substance (i.e., having a high abuse potential and little value in medical treatment). Reports of negative consequences concerning its use have appeared in the literature for over 100 years (38, pp. 5-29) yet government policy has given it scant attention. Several reasons may be responsible for this. First, there had been a sense that its prevalence relative to use of other controlled substances was relatively low. In addition, the users were found to be male, young adults who had a higher level of education and income than the general population (38, p. 19). The drug was the "champagne" drug of the jet set. Its high cost and relatively brief period of effect were viewed as providing a built-in, self-limiting control to its growth and popularity. Fashions of drug use and changes in distribution systems that now favor more widespread use of cocaine have increased its risk potential for all classes. We have seen

and should continue to see increasing government attention addressed to the problem as it leaves the closed habitat of the rich and increasingly moves onto the streets of the poor.

Musto (29, pp. 14-23), in his penetrating analysis of the history of the opium problem in the United States, points out that the American pharmaceutical association supported the licensing and control provisions concerning distribution of drugs as much to rid themselves of the competition of street drug hawkers and door-to-door peddlers as to improve the quality of their service to the public. The role of the pharmaceutical community in the development of control legislation is of interest from the conflict theory approach. National legislation controlling the rules of distribution of drugs was repeatedly opposed by the drug lobbies during the early nineteenth century (29, p. 58), because they were viewed as a force limiting a free market and a possible inhibition of profits.

Unlike the functionalists the conflict theorists feel that sufficient information is available for us to make judgments concerning more effective policy which would reduce the need for drug abuse. They are more interested in moving directly toward political action which would change the economic and legal structure of the society which they view as supporting the social basis for drug abuse and other deviant behaviors. It should be no surprise that they have received no support to test their orientation.

Labeling and Substance Abuse

The labeling perspective has become both a popular and controversial explanation for the development of substance abuse. As such, the approach does not constitute a theory in itself; it does not possess the comprehensive integrity required for that designation; rather it represents a development out of several theoretical positions which have been clustered

together to represent an "interactionist perspective". The approach is closely linked with conflict theory, although not a direct derivative of it. These two frameworks share the premise that the individual achieves the status of substance abuser as a consequence of having been defined as such by those who control society.

Becker (6, p. 9) holds that "social groups create deviants by making the rules whose infraction constitutes deviance, and by applying the rules to particular people and labeling them as 'outsiders'". The position draws our attention to the social process which designates deviance through group definitions and reactions. Advocates of the labeling perspective suggest that the phenomenon of labeling generates several problems for the deviant. Once the substance abuser is labeled and separated from assumedly conforming individuals in the society, several processes appear to be activated. First, the label itself tends to develop a structural separateness of the individual from significant community groups. The consequence of that separation may lead to stigmatization of the individual. Second, the separation and negative group pressures are likely to affect the individual's perception of himself, his self-image. (46, pp. 5-10). This process is, in part, supported by an observation concerning the subjective quality of reality by W.I. Thomas (43, p. 572) when he states that, "If men define things as real, they are real in their consequences." Merton (28, pp. 174-95) elaborates this notion in his development of the conception of "the self-fulfilling prophecy". He observes that, "The self-fulfilling prophecy is, in the beginning, a false definition of the situation evoking a new behavior which makes the originally false conception come true."

Duncan (13) argues that if the label and stigmatization by the social system are accepted by the individual, "This stigma acts to foster delinquent role enactment, isolates the youth from effective social control, cuts him off from many legitimate opportunities, and opens up illegitimate opportunities for him."

Lemert (22, pp. 40-1) suggested that a distinction should be drawn between primary and secondary deviance on the basis of the effect of the labeling of the individual on the individual's behavior after the labeling process has taken effect.

There is a growing recognition that labeling through the process involving people in the criminal justice system may have significant negative effect which may outweigh the value of the rehabilitation efforts within that system. The observation that prisons and detoxification facilities constitute "schools for crime" is not unique. Young addicts report that the principal benefits they received from institutionalization involves learning more about the technology associated with maintaining a habit. In effect, they learn to "professionalize" their status as addicts. The national policy expressed by the Law Enforcement Assistance Administration of the Justice Department appears to be based on the recognition that labeling can have a deleterious effect on the rehabilitation of the offender. The primary thrust of innovation dealing with offenders, and this includes those arrested for drug abuse, has been toward court diversion of all but the most serious offenders. Where the possibility of treatment outside of the criminal justice system exists this option is preferred by most judicial systems.

Critics of this orientation suggest that the labeling perspective

errs in overstating this process as a foundation for a growing problem in drug abuse. They indicate that the labeling theory does not expand our understanding of the "causes" of drug dependent behavior in the individual, i.e., the initial drug dependence is not seen as having been created by the labeling process. Others suggest that labeling may deter further deviance for a segment of the labeled population in instituting a process of social control on their subsequent behavior. Relatively little empirical testing has been carried out to assess these criticisms and those that have been conducted provide inconclusive evidence concerning the validity of the approach.

Despite this we find the labeling perspective can enrich our understanding of the interactive process which sustains deviant identity and behavior. Originally, the concept of differential association was not associated with the labeling perspective. But the use of the concept of labeling helps us to better appreciate the process Sutherland points out as essential in moving toward a criminal identity, i.e., the internalization of a deviant self-image. Labeling and change of self-image clearly support the development of values and norms which separate the individual from the rest of society and reinforce his deviant role.

Addict Careers

Social investigation has been addressed to understanding the process of becoming delinquent for over three quarters of a century. Hapgood (20) examined the process of becoming a thief in Autobiography of a Thief, published in 1903; Anderson (3) reported on the lives and histories of hoboes in 1923; the Gluecks (18) summarized 500 criminal careers in 1930; Shaw (35) presented a natural history of a delinquent career in his presentation

of the life of a "jack roller" in 1931; and Sutherland (39) looked at the process of learning to become a professional thief in his classic study of a professional thief in 1937. Anthropologists have long used a case history approach focused through the experiences of expert informants to understand cultural processes and change. (37). In general, few sociologists turned their attention to drug abusers until the 1940's. Prior to that time the literature was dominated by clinicians whose attention was directed toward identifying the psychiatric and physiological processes associated with addiction. (42).

In 1947 Lindesmith (24) published his work on Opiate Addiction in which he observed that the drug user was not to become addicted, even after physiological dependence had set in, until the individual made an association in his mind between the absence of opiates and the presence of withdrawal distress. At this point of psychological awareness a focused drug craving would ensue. He also suggested that linguistic symbols and cultural habits are associated with the development of the awareness. In effect, he anticipated some of the concerns which emerge out of the life style and subcultural analysis of the substance abuser which came after that time.

In the 1950's the drug abuse field was divided by two opposing perceptions concerning the outcome of those who were treated for narcotics addiction. Those involved in psychiatric, hospital-based treatment assumed, without benefit of patient follow-up studies, that psychiatric treatment and support could in most cases arrest the addiction process. Those involved with the criminal justice system, who repeatedly saw those under their jurisdiction return to drug use and deviant systems of supporting their drug habits, took a dim view of the outcome of drug dependence among their

clientele.

The reality of the chronicity of return to drug abuse was demonstrated by two studies reported by Alksne et al. (2) on adolescent addicts treated at Riverside Hospital in 1959 and Duvall, Locke and Brill (16) in 1963 on adults treated at the Public Health Hospital in Lexington. Both indicated an incredibly high relapse rate for treated addicts. The Alksne study, which will be summarized in Chapter IV, indicated that over 90% of the patients returned to drug use within periods of one day to over six months after treatment. Despite the dismal picture presented by these studies they in effect called for a re-evaluation of the most popular treatment approaches to drug abuse of that period. These studies suggest that treatment goals might better be developed in a framework of expecting relative abstinence and success rather than absolute success.

Somewhat prior to the studies of Riverside and Lexington treatment outcomes, Winick (47) postulated that addicts may in effect experience their drug dependence in the framework of a "life cycle of addiction". In a study of 7,000 cases in the files of the Federal Bureau of Narcotics, Winick found that addicts disappeared from the files as they grew older. He suggested that this was due to a process of "maturing out" of addiction. Ray (33) observed that degrees and involvement with the addiction process was supported by shared interpersonal and institutional experiences which lead to the development of addict values and self-image.

Alksne, Lieberman and Brill (1) amplified the concept of life-cycle in suggesting that individuals enter into addiction through a series of stages, each of which had to have social supports in order for the novice addict to move to subsequent stages. These authors indicate that before the individual can enter into the "life cycle of addiction" an "addiction

set" of predisposing social and psychological factors is necessary and that continuation of drug abuse until the individual enters the "addiction system" involves a process of stages. This approach will be elaborated in the next chapter. The concepts of the life cycle of addiction and the addiction system were later used by Brill (8) as the basis for elaborating a model of a de-addiction process.

Robins (34) and Winick (50) have summarized the current state of our knowledge concerning careers of heroin users. Among the factors that seem to be involved in structuring addict or drug abuse careers are methods of initiation of drug use, age of onset, social setting involved in initiating drug use and continuing subsequent use, work experience, degree of criminal involvement, family relationships, psychological basis and subsequent supports of use and treatment experience. The effect of some of these factors will be examined in this study.

Most of the research using the careers perspective has been conducted in connection with users of opiates. It has focused our attention on the fact that a wide variety of types of heroin users exist having different life experiences and different potentials for success in treatment/rehabilitation settings. The application of a careers analysis approach to other types of substance abusers may well expand our knowledge of the commonalities of social patterns that move people into dependency on certain substances, support that dependency and conceivably might be used to move the individual away from dependence on these substances.

Peer Group Influence and Attitudes

Considerable attention has been paid over the years to the interaction effect between peer group influence, attitudes and deviant behavior. Generally, investigators find a strong relationship among these factors.

Attitudes toward the deviant behavior and its acceptability to the individual allegedly predispose the individual to move toward its acceptance and involvement. Chein et al. suggest that there is a tendency for young adolescent heroin users to selectively perceive elements of the addict life as positive while screening out the negative elements. (10). The persistent problem in these studies in addiction is that the measure of attitudes is usually taken after individuals have become involved with drugs.

Peer influence represents a companion factor to that of attitudes and appears in studies of drug abuse (21). Involvement with marihuana, heroin and alcohol begins in adolescence when the individual is in a search for identity and purpose. For many, the young person's peer associations are a significant force in helping the individual define his present and future role in the social system. Where there is no major conflict between the role performances of the adolescent and the adult, the peer relationships may reinforce the early socialization experiences to conformity. Where there are conflicts between the role and value systems of adolescent and parents or where the parents are themselves not in consonance with the existing system, the peer group is likely to take on greater prominence as a systems producing and maintaining mechanism for the young person. In the latter situations the reliance on deviance is likely to be greater and the peer relationship is likely to be more predominant.

Andrews and Kandel (4) point out the importance of the interaction between parental, peer and attitudinal influences on the initiation and continuation of marihuana use among adolescents. Kandel's earlier work indicated that peer norms are important correlates of marihuana use and

strong predictors of initiation to marihuana.

Andrews and Kandel sought to amplify their understanding of the relationship between attitudes held by the novice marihuana user and confirmed user and the marihuana use itself. They hypothesized (4, p. 298), "That a person will not necessarily behave in a certain way either when holding an attitude or when experiencing social pressure favorable to the behavior, but generally will do so when individual attitudes and group norms are mutually reinforcing." They indicate that group differences are expressed in interaction terms. Using a cross-sectional sample of on-going vs. new using adolescents they sought to untangle the relative effects of parental role, peer relationships, attitudes to marihuana use and involvement of marihuana use itself. Using two time periods involving degree of use by young people, the investigators analyzed the interaction effects of these factors through a multiple regression process. They found that the effect of the number of friends using marihana was three to five times as large as attitudes. Marihuana use, when other variables are held constant, appears to be even less important when individuals are moving rapidly through the range of participation in the behavior. The fact that the interactions were found to occur at this particular developmental phase, suggests that strong social norms together with appropriate attitudes favor extensive involvement in the behavior.

The study by Robins (34) of heroin addiction in Vietnam may be of interest in this context. In Vietnam half of those who tried heroin did not become addicted to it. Of those who used at least five time, 73% became addicted. However, of those who were addicted in Vietnam and returned to use in the United States, only 28% of those who continued some use here be-

came readdicted within the first ten months after return. Of all of the soldiers who had been addicted in Vietnam, only 7% became readdicted at any time since their return. Winick (49, pp. 4-12) suggests that Vietnam veterans developed a high incidence of drug dependence because there was 1) easy access to dependence-producing substances, 2) disengagement from negative proscriptions about their use, and 3) role-strain and/or role deprivation. In interpreting the low re-addiction rate of Vietnam veterans, he believes that these factors which encourage high use and high rates of addiction in Vietnam were reversed when the veterans returned home. Therefore, the mechanisms which supported the original drug use and addiction were not present in the lives of those returning to their home community.

There exists a need for studies which follow the lead of Kandel who views the interpersonal context which supports drug abuse and Winick who examines the broader network of availability, norms and conditions of role performance associated with such use. While we have a great many studies identifying factors leading to the use or reuse, we are scarce on works that seek to examine the conditions and supports for abstinence.

The preceding material represents a sample of some of the theory and findings concerning the social bases of substance abuse. Factors involving social change, social class, ethnic identity, the role of the family, inter-generation transfer of deviance, past dependency history, work and other issues could not be explored in this chapter. Each affects the etiology and development of drug abuse. What does seem to be clear is that an appreciation of factors of this character is essential if we are to evaluate and deal effectively with substance abuse as a social problem. Some of these will be explored in the analysis which follows.

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(Chapter II)

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Chapter III

THE LIFE CYCLE OF ADDICTION: A CONCEPTUAL FRAMEWORK FOR THE EXAMINATION OF CAREERS IN DRUG ABUSE

There are several assumptions which will guide the analysis of data in the present work. The status definition for the drug abuser in the United States is supported by a series of interrelated sub-statuses and roles which are learned, most likely in a sequential fashion, and ultimately constitute a system of personal and social adaptation. For the specific population of addicts under study, the use of narcotic drugs is closely associated with criminal and other deviant social behaviors. These in combination create complexes of behavior or role sets which may be described as life styles. Addicts become involved in these role sets with varying degrees of intensity. For most addicts the use of drugs becomes a central life interest which tends to dominate their associations and activities. These may lead to patterns of behavior that can best be described as careers in drug abuse. (4, pp. 23-39).

Becker has suggested that this central life interest becomes so intense and focused that the group activities revolving around it become so compelling as to deserve the designation of a sub-culture. (4, pp. 79-83). The addict incorporates values which influence his behavior, skills to implement the central life interest of his addiction, and an argot to facilitate communication with other addicts which closes out the non-addict when he feels it appropriate. The concept of an addict sub-culture is useful largely as a descriptive device. It tends, however, to be time-bound in its emphasis on exploring the functional relationships of the

various elements of the sub-culture at a particular point in time. One may be led to believe that the addict is either a member of a sub-culture or not. Empirical observation would suggest that an absolutistic orientation may not be sound. Rather, it would seem that the addict's involvement with such a sub-culture would be dependent upon the relative intensity of his involvement with drug use as well as conventional groups.

It is felt that a somewhat different frame of reference might be more useful in the examination of addictive behavior, i.e., that of the addiction system. The addiction system represents the final stage entered into in the process of becoming an addict, in the total conceptual framework of a life cycle of addiction. This systems approach seems to offer promise for examining the social processes involved in becoming and being an addict.

This framework derives out of a larger descriptive model developed by Alksne, Lieberman, and Brill, which seeks to identify the stages through which drug users go before taking on the full status of being an addict and the conditions that are likely to be necessary for them to give up such a status. (1). The data for the model have been drawn from the cumulative experience of these three authors of the original life cycle paper and especially their experiences with lower-class street addicts. This limitation must be stressed, although the model may have the potential for broader use for other classes of addicts and deviants.

The Concept of a Life Cycle

The use of a life cycle or natural history concept as a descriptive tool is by no means new to sociological analysis, as was demonstrated in

the previous chapter. This kind of process analysis characterizes the theoretical contributions of Sutherland (23, pp. 83-95) and Cloward and Ohlin. (8). The earlier workers in the field relied heavily on the case history approach, often reaching back into the early childhood experiences of the deviant to explain the course of his subsequent behavior. The recent works are more concerned with the development of the deviant's role and its social supports rather than with the early predisposing factors to such development.

In much of this research, stress has been placed on the idea that a wide range of social roles is involved in the execution of deviant behavior and that these roles are learned as necessary supports for the deviant behavior. Further, these roles are acquired and are sufficiently manifested as to have both descriptive and predictive value. That is, one may associate different role sets with different types of repetitive norm violations. Put differently, different types of norm violators are likely to have different kinds of life styles.

The broader conceptual framework within which this analysis will proceed is that of the life cycle of addiction. The term "life cycle of addiction" first appears in the literature in an article by Winick (27) in which he states that as addicts become older they are likely to mature out and drop out of addiction. Winick's life cycle concept applies to the total life of the person and, although he does not specify the details of it, he suggests that a pattern of diminishing involvement with an addict way of life may be expected with aging.

The framework which will be used in this thesis is somewhat different from that developed by Winick. It concentrates not on the total life his-

tory of the individual and the relationship of drug use to it, but, rather, on the cycle involved in the development of the initial and subsequent addictions of the young drug user. It is apparent that an expansion of the Alksne, Lieberman and Brill life cycle concept could lead to an elaboration of that suggested by Winick. However, this would require a complex examination of the lives of older addicts. It seems more appropriate, at this point, to test the validity of the earliest manifestations of the cycle concept before moving ahead to view the problems from this longitudinal perspective. Thus, in this study, a portion of the life cycle of addiction concept will be tested on data drawn from adolescent addicts who were in the early stages of involvement with the process of becoming addicted and involved in the addiction system.

The Phases of the Life Cycle of Addiction

The process of the life cycle of addiction may be divided into four phases. Each of these phases may then be broken down further into several stages which are characterized by particular patterns of social, psychological and pharmacological factors.

The following are the four major phases in the life cycle of addiction:

Phase 1 - Tolerance for Potential Addiction

Phase 2 - Tolerance of the Addiction System

Phase 3 - Tolerance for Potential Abstinence

Phase 4 - Tolerance of Abstinence

The Logic of the Phases

The division of the life cycle of addiction into phases is based

on the recognition that addicts do not go from non-drug use directly into full addiction. Rather, a process of progressively greater involvement in addiction-oriented behavior seems to characterize the user's route in a commitment to an addict way of life or involvement in the addiction system.

Within some of the phases it is possible to discern several different stages as well. For instance, for Phase 1, one may discern three such stages. They are the experimental stage, the adaptation stage, and the physiological stage. Movement through these three stages appears to characterize the addict's preparation for involvement with and commitment to the addiction system. This phase is called the tolerance of the addiction system.

Movement out of the addiction system, once an individual has become committed to it, is known to be difficult. Treatment success with drug abusers was markedly improved since the early follow-up studies of 1960 because of the development of methadone maintenance treatment programs and therapeutic communities for those who are drawn into treatment. But even here, long-term abstinence and control of deviant behavior for most drug abusers remains an elusive goal. (18) (24) (22). In addition, we know that most drug abusers enter into treatment reluctantly. Of the estimated drug abusers in the community only a small proportion are in treatment at any point in time. This reluctance may, in part, be explained by the next phase of the life cycle concept.

The model does suggest that several stages must be passed through in order to achieve this abstinence, and these are encompassed in Phase 3, the tolerance for potential abstinence. Finally, the model indicates that

the ultimate goal of rehabilitation is for the addict to enter into the final phase of the life cycle of addiction: Phase 4, tolerance of abstinence.

Tolerance as a Behavioral and Socio-cultural Concept

The concept of tolerance is an essential element in all of the four phases that are meant to describe the process leading into and out of addiction. It is borrowed from the medical sciences and is ordinarily used in a context where the "normal" condition is called upon to tolerate a disruptive or foreign force or influence. Generally, it describes a condition where, after repeated use of a drug, the body system begins to adapt to it and requires higher doses in order to achieve the effect received from previous lower doses. After the body adapts to the higher doses, it requires the drug to achieve a sense of homeostasis or normalcy. Physiological dependence on the drug is demonstrated as being present when deprivation of the drug precipitates a crisis generally referred to as the "withdrawal syndrome." P.B. Dews summarizes the current scientific understanding concerning the components of tolerance as follows:

Three types of pharmacological tolerance can be recognized by the processes they involve: dispositional, physiological, and behavioral. Dispositional tolerance is conceptually the easiest to understand: As a result of exposure to a drug, the physico-chemical processes handling the drug in the body are so modified that reduced concentrations of the drug reach the receptive cells, whose modification produces the pharmacological effects of the drug. (9, p. 19).

Physiological tolerance is a change in the receptive cells, or in cells functionally related to them, such that the effects of a dose of the drug are reduced, even though the receptive cells are subjected to the same concentration of the drug. The changes must be in the specific cells related to the pharmacological effects of the drug. Physiological tolerance may lead to a shift in the dose-effect by one log (10) unit or more to the right. Rarely is much more known about the mechanism.

Behavioral tolerance to a drug is a change in the effect of the drug due to alteration of environmental constraints. In common parlance, subjects learn to cope with the effects of the drug, but "learn" is an undesirable word as it seems to point to a specific process, a gratuitous and meaningless extension. (9, p. 20).

Carder (6, p. 90) similarly reinforces the position by stating that "behavioral tolerance applies to those phenomena in which tolerance development is influenced by environmental variables."

In a recent discussion of tolerance in The Textbook of Medicine, Millman (17, p. 587) makes a direct link between the increase in tolerance levels, the development of drug dependence and life style. He points out that, "The urban street addict with little access to legitimate sources of money or drugs, must devote all of his time and energy to the acquisition of heroin to support his addiction ("habit"). Involvement in the 'junkie' subculture, with its own language and behavior systems ensures his supply of drug and provides transmission of skills, information, and ideology that makes it possible to live as an addict." It is of considerable interest that one of the leading textbooks used in medical education now incorporates a sociological dimension to its interpretation of a concept that was once viewed as almost exclusively physiological.

An underlying assumption in the life cycle of addiction approach is that as the individual develops a physiological and psychological tolerance of addiction he must also develop a tolerance and adapt to the socio-cultural requirements of an addict way of life which may violate the norms internalized in his early socialization. The individual first grows to tolerate the addiction system and then becomes dependent on it much as he does to the physical sequelae of repeated opiate use. Withdrawal from both the physiological and socio-cultural aspects of the addiction must be

supported by a "new" orientation to the tolerance for potential abstinence (Phase 3) and then tolerance for abstinence itself (Phase 4). Although all the phases will be summarized here, the current study will concentrate only on Phases 1 and 2.

The following will present some of the factors associated with the life cycle of addiction. The life cycle concept attempts to elaborate on the factors which support the process of how the individual is carried on through to full involvement with an addict way of life. As a model, it suggests that certain structural and interactive supports are present to help move the young person toward and into the addiction system. It is not intended to answer the question of primary etiology or of why he in particular originally entered into the process.

This latter question has commanded the attention of the psychologist and psychiatrist somewhat more than the sociologist. The weight of their professional opinion would have it that the initial predisposing factors to addiction are individual rather than group centered. (2)(3). Some opinions concerning what may support such a predisposition to the initiation and continuation of the use of narcotic drugs are presented here under the general category of the addiction set.

The Addiction Set

Epidemiological studies have established that addiction to narcotic drugs is not distributed at random. During the decade that data were gathered for the Riverside Study, the highest risk population to opiate drug addiction can be described as being predominantly male young adults living in highly selected depressed neighborhoods in large metropolitan

centers. They lived in such close proximity, as in East Harlem, New York City, that a census conducted by an agency serving that community was able to locate 558 opiate users within a four-block radius of its office. (26). Although this is an impressive number of addicts, it still represents a small percent of all persons living in that community.

Even in high-risk areas to drug abuse, where most adolescents are knowledgeable about addiction and sources for the acquisition of such drugs appear to be everywhere, only a small proportion of the youth actually experiment with and continue to use drugs. Under conditions where there appear to be easy accessibility to drugs such as in several communities in New York City at the time of this study, it is felt that differential predispositions to use drugs may be strongly influenced by emotional and social factors.

It appears that there are combinations of emotional and social factors that support a differential predisposition to use opiates. Thus, the emotional factors function to support individual differential predispositions, and the social factors support a differential opportunity structure to enter into drug addiction. In combination, they constitute the addiction set of the individual.

One of the most popular psychoanalytic interpretations concerning the etiology of drug addiction is one originally published by Rado in 1933 which holds that those who become addicted are fixated at the oral level of their psychosexual development. (19, pp. 64-80). The position is rationalized by the observation that drugs are most frequently ingested by an oral or intravenous route which could be considered pre-oral (21, pp.

43-57), and that the drug experience can be compared to an oral (20, pp. 25-39) or alimentary orgasm. (7, pp. 117-28). The validity of this classical position has recently been questioned by Kaufman (14), a psychiatrist who has worked extensively with street addicts in New York City.

Gerard and Kornetsky (12) move away from the early position of Rado by focusing on the addict's ego and superego pathology, problems with narcissism and other psychopathology. They bring the psychoanalytic approach closer to an appreciation of social factors in observing that heroin use was "adaptive and functional" in helping the user overcome crippling adolescent anxieties generated by the prospect of facing adult role expectations without adequate preparation.

According to Ehrenwald (10) an addict may be embedded in a family constellation where a dominating, seductive mother may increase her control through the pathological manipulation of her son in the face of a weak father or the absence of a father. He further contends that there is evidence that intergenerational factors may play a role in the transfer of forms of illness from parents to children and outward into the community as well.

Another orientation which is often supported by clinicians in the addiction field is that such delinquency-prone children may be acting out the unconscious wishes of their parents. (15). The psychiatric literature generally supports the belief that addicts are afflicted with a persuasive underlying depression and difficulties in coping with their sexual and aggressive feelings. (5). Although observations such as those cited support the notion that personality factors are likely to be associated

with the risk potential to drug abuse, they do not justify the assumption that there is an addictive personality any more than did other earlier studies convincingly support the assumption that there is a unique criminal personality. These works do, however, indicate the possibility that a segment of the population may be more susceptible to involvement with drugs because of problems of personal emotional adaptation.

Westermeyer (25, pp. 23-39) provides a summary of other predisposing factors to addiction as follows:

1. Chemically dependent individuals are more likely to be "last borns" or "later borns". "Last borns" are more likely to become chemically dependent because they are more at risk to parental loss at an early age than first borns.
2. Those who lose one or both parents at some time during their childhood are more likely to become chemically dependent. Disturbed family dynamics following the loss of a parent may play a role.
3. Those whose biological parents are alcoholic are more likely to become alcoholic whether they are raised by the biological parent or not. Those who are born of non-alcoholic parents and raised by alcoholic foster parents are less at risk to alcoholism.
4. "Unstable family life" may be a predisposing factor to chemical dependency.
5. A "role model" theory states that parents, by their behavior, establish roles that the children are apt to subsequently emulate. Where one or both parents respond to problems by excessive use of alcohol or drugs, the children may subsequently do so as well.
6. Chemically dependent individuals often demonstrate personality

traits such as hostile dependence, impulsive and rebellious behavior, with a tendency to be unconventional and less conforming than others. One year following the establishment of abstinence, chemically dependent persons cannot be distinguished from the general population by psychometric tests or psychological interviews.

7. Socioeconomic mobility has been associated with chemical dependency in several studies whether it is upward mobility or downward mobility.

8. Migration plays a role in chemical dependency. First generation Irish immigrants have a higher rate of alcoholism than those Irish people in Ireland.

9. Ethnicity plays a role in chemical dependency. Chinese and Jews have low rates as compared with Irish and American Indians. Scandinavians, Slavic and German peoples have lower rates than Latin-Americans. Groups with low rates of chemical dependence tend to use alcohol at ritual or quasi-religious times.

The list of predisposing conditions which may contribute to the formation of an addiction set certainly could be expanded but those presented here should demonstrate some possible components. A more complex set of predisposing conditions may be constructed from the theoretical positions presented in the previous chapter.

In some communities, especially where legal authorities are seen as oppressing agents, the defiance of law can become an accepted way of life. For some within such communities, use of drugs and the anticipation of association with a role model of a successful pusher or pimp with access to women and money becomes more desirable than the life and achievements they may see possible within their community through legitimate ac-

cess routes. The achievements and problems of peers and parents may not be viewed as models to be emulated. Through the use of drugs, they may be able to avoid the seemingly impossible requirements of entry into the competitive world of the middle class and instead achieve on their own terms in a world that seems to provide more opportunities for them.

It is suggested here that those who have special psychological needs to escape and those who see the structure and opportunity to implement such an escape are more likely to take the first taste of a prohibited drug and continue in its use.

Data from the present study cannot test hypotheses concerning the psychological aspects of the addiction set. However, it will be possible to examine some of the social factors that compose the addiction set which appear to be associated with the young addict's entry into and withdrawal from the addiction system. Such factors as ethnicity, education, work orientation, self-image and family relationships will be relevant in this context.

Phase 1 - Tolerance for Potential Addiction

Experimental Stage

This phase in the path to full involvement in the addiction system may begin with early experimentation with relatively easily available substances such as airplane glue, ether, barbiturates, and amphetamines. In the 1950's and 1960's the prevailing belief was that marihuana use was predictive of later heroin use. The data generated on this during the last decade casts serious doubt on that assumption. (13).

Initiation into the use of heroin tends to begin with the technique of sniffing the powdered drug. The approach requires less skill and psychological commitment than the use of the needle. Despite this, we found,

in this Riverside population, 28% beginning drug use directly with the needle. This would suggest that such young people had a particularly strong addiction set to involvement with heroin. We would predict that they would subsequently be more likely to enter the addiction system and demonstrate less of a tolerance of abstinence at a later date.

Within the experimental stage the potential addict begins to build relationships with addicts and to develop skills concerning the acquisition, use, and support of a habit. He also begins to develop a self-image as an addict. Some users, because of weakness in their addiction set or counter influences within the social group, are unable to tolerate the new self-image and drop out of the life cycle of addiction.

Adaptational Stage - Regular Use

The adaptational stage is characterized by more frequent use of increased doses of heroin. At this stage the commitment to the addiction system becomes more intense. The user discovers how regular drug use may enable him to satisfy his emotional and social needs. Conflict concerning identity as an addict is markedly reduced or eliminated. If it is not, some users may find it difficult to maintain themselves in the addiction system and drop out.

Physiological Stage - Addicted

During the adaptational stage, the repeated use of drugs requires that more and more of the substance is required to achieve its original effect, i.e., their tolerance builds. After this point the addict develops a dependence on the drug, being unable to stop its use without suffering withdrawal. Discomfort is associated with withdrawal from the drug despite the fact that the dosage levels at which the user is addicted may be quite

low. At this stage the addict develops an increasing tolerance for the self-image of the "junkie". The self-image is strongly negative, with community and family contributing support to the low self-esteem of the addict.

All the components of full involvement in the addiction system are now present. The addict has now developed the skills, attitudes and contacts which permit him to identify as a member of an addict sub-culture. And, further, the mythology of addiction, one supported both by the professional and lay public at the time of this study, has it that "once an addict, always an addict."

Parenthetically, it should be added that some persons seem to be able to use narcotics to the point of physiological drug dependence without proceeding through the life cycle of addiction. One group, of course, is represented by patients who receive their narcotics through legitimate medical personnel. These patients are likely to be similar to those who were under the treatment of physicians for addiction prior to the regulation of narcotics by federal authorities. These are not in jeopardy with the law and are not encouraged to enter into the peculiar adaptations of street addicts through the life cycle of addiction. Others who do not enter into the life cycle are professionals with easy access to drugs, e.g., physicians and nurses and others who are able to acquire drugs without fulfilling the role expectations of the addiction system.

Transitions to the Addiction System

It has been suggested that the adaptational stage provides the user with the role components to support both his addict behavior and attitudes.

He realizes he is addicted after associating his withdrawal symptoms with the cessation of continuous drug taking. (16, p. 191). He recognizes and identifies with the stereotype of the "junkie" and adjusts to the needs of using theft, sale of drugs, and other "hustling" syndromes to support his habit. He has become socialized to the role requirements of the street addict status in the addiction system. He has in effect internalized the "generalized other" for the roles in the system. Thus, the movement into the addiction system is analogous to a process of secondary socialization.

The position of the Alksne, Lieberman, Brill model of the life cycle of addiction is that users of drugs seem to move back and forth through the early stages of Phase 1 - Tolerance for Potential Addiction. Many seem to reflect an unwillingness to accept the reality factors of increasing criminal behavior and alienation from their earlier and primary identification and contacts. At this point, the addict seems to vacillate between an acceptance of the addiction system and avoidance of it. Public hospitals for the treatment of addiction provide both the ways of avoiding and maintaining addiction.

Avoidance Detoxification

Avoidance detoxification is often used by the addict when he is unwilling to move into full commitment in the addiction system. The addict leaves the streets to avoid continuing addiction and to resume a life more characteristic of the previous drug-free state. Their stated motivation supports their desire to remain drug free. Withdrawal from the drugs, however, simply returns the addict to the point of entry into the life cycle of addiction given that his environment has not markedly changed. Generally, he returns to his community without having modified his original addic-

tion set. He re-establishes interpersonal contacts which support his previous adaptations as a user, and he suffers the negative valuation of himself by the community. As the addict repeats the process of the avoidance detoxification it begins to take on the character of maintenance detoxification.

Maintenance Detoxification

This form of detoxification is used by the addicts to maintain their way of life as addicts. The addict's use of drugs on the streets often reaches the point where the cost of drugs becomes so high that he cannot obtain enough money to maintain his habit. Or he might have the need to escape the streets because they become "too hot" for him. He may sense that the police are searching for him or he might have alienated members of his own group and require temporary sanctuary. For whatever specific reason, the addict uses the hospital as a mechanism to maintain and protect his addict status rather than to change it. The unique quality of this detoxification is that "competent" addicts learn to use the hospital as a device to continue using drugs at a later point.

In addition, the detoxification hospital provides a segregated environment within which an addict sub-culture is maintained. In it addicts may reinforce their identity with the addiction system. Discussion of drugs is continuous. The addict or novice user may learn of better places to buy drugs or new approaches to "hustling" illegally to support his habit. Many addicts indicated that they made connections with new "crime partners" in the hospital. Others in Riverside developed alliance with girls for whom they later became procurers.

Thus, at the very least, the addict can return to the streets in

better health, without old pressures and with an ability to enjoy the hedonism of his drugs more than when he left the streets, having "kicked" his habit down. In addition, he may re-enter the community with skills and contacts he did not have before. The maintenance detoxification therefore functions to support the addiction system and the patient's competence as an addict.

Phase 2 - Tolerance of the Addiction System

After a period of exposure to narcotics use on the street, the young user finally incorporates the individual and socio-cultural values and the technology that are associated with narcotics use in our society. Such internalization of values has been demonstrated in cases where illegal substances have been used in group situations. Becker (4) and Finestone (11) have described the process involved in the internalization of values associated with marihuana and heroin respectively. These include a rationale for the unique values of the addiction adaptation, particularly as they support the addict's perception of himself as being above the "square" in society.

Within this phase the addiction system provides status achievement for the addict and gives him positive values for a way of life generally condemned by social norms. He does not ride the crowded subway to an unsatisfying job. He can avoid the hard realities of the world at least for a time and be "hip" while his peers much suffer the "square" existence. The socialization of the user into the addiction system is slow.

It is not completely a positive experience. Part of the socialization is carried out by agencies of the larger social system. His self-image as a "junkie" is reinforced by arrest, hospital detoxification or civil

commitment. Many of these systems are punitive as are the reactions of relatives, friends, and the community. Yet the increased engagement of the addict in the system becomes a unique and rational security system.

The continued involvement with the addiction system begins to support it as a "generalized other". Particularly in this culture, this process of socialization has led to a constriction of the addict's social involvements to those supported by the addiction system.

The addiction system has become normal to him in somewhat the same way as has the dependence of his physical system to the narcotic substance. In short, such an addict functions in a system of social and psychological values that rationalizes addiction as a way of life with strong group supports.

Transition to Abstinence

The model of the life cycle of addiction proceeds further to suggest that in order to avoid or eliminate the addict's tolerance of the addiction system he must be taken through several stages of re-socialization before he can once again tolerate the condition of abstinence from drugs. The model indicates that it is a fallacy to believe that being drug free is equivalent to being a recovered or, in the tradition of A.A., a recovering addict. A crucial aspect of being addicted is being involved in the system supporting the addiction. This system does not disappear with the withdrawal of the drug and remains to rationalize the addict's return to drugs. This is one of several supports for the addict's return to narcotics after full detoxification.

The model only suggests the processes that might be activated before the addict might tolerate abstinence. A necessary support for a time

might involve chemotherapy which has no associated social and psychological components such as are present in the addiction system. The methadone treatment program which provides the addict with maintenance dosage levels of methadone represents one such approach. Addicts with deep involvement in crime, anti-social behavior, and notable failure in abstaining have responded favorably to this substance. When the rationale for engaging in the addiction system, i.e., the hustling and social relations, are removed from the addiction system, these users begin to respond favorably to the return to the "square" environment. They work, go to school, and become "decent citizens." Similarly, therapeutic communities systematically function to disengage the drug abuser through a carefully orchestrated process of secondary socialization.

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(Chapter III)

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Chapter IV

BACKGROUND OF THE STUDY AND CHARACTERISTICS OF THE STUDY POPULATION

History of the Problem

The phenomenon of adolescent narcotic drug use and abuse is not new to the United States. According to a report concerning the operation of the New York City Narcotic Clinic published in February, 1920, "Most - in fact 70% of the addicts, in our clinic, are young people (9 percent, or 743 out of a total of 7,464, were in the 15-19 age groups)." (6). The clinic in question was established to provide confirmed addicts with maintenance doses of drugs on the assumption that these particular patients could not adapt without such doses. The fact that one out of every ten such patients was an adolescent is impressive, especially in the light of a prevailing assumption that adolescent addiction first surfaced in the late 1940's.

After the collapse of the ambulatory care clinics in the early 1920's, relatively little attention was given the adolescent addict. If they appeared and were dealt with in public or other facilities, no efforts were made to report on this. During the late 1920's and early 1930's the activities of the Federal Bureau of Narcotics caused both private physicians and public facilities to withdraw from the treatment of an addict. The physician considered with apprehension the extension of law enforcement's influence on his treatment of the addicted patient. The extension of the power of the Federal Bureau of Narcotics through administrative and regulatory law and the support of this by the courts left a vacuum in the treat-

ment of the addicts in the United States. Few physicians wished to risk their careers because of the addict. (7).

To fill this vacuum, the United States Public Health Service established one hospital in Lexington, Kentucky, and another in Fort Worth, Texas, in 1935, for the treatment of voluntary adult addicts and those convicted of federal narcotics law violations. The action taken, ignoring the adolescent addict, suggests that no great pressure was felt to provide for their needs through such facilities.

The coming of World War II committed people's interests in areas away from narcotics. The problem showed no marked growth. Perhaps, if anything, it was reduced because of the increased difficulty in moving contraband heroin into the country under wartime conditions. (8, p. 229). The Lexington and Fort Worth hospitals continued to provide services for addicts coming to them largely from metropolitan centers throughout the country.

In some cities, local hospitals provided treatment for addicts. Zimmering and his associates (9) reported that "over the past nine years (1941-1950) the psychiatric division of Bellevue Hospital admitted an average of 20 persons a year with either heroin or morphine addiction.. From 1940-1948 not a single adolescent was diagnosed as an addict." He points out, however, that "In 1949, there was one, and in 1950 six cases of heroin addiction among adolescent boys and girls. During the first two months of 1951, 65 boys and 19 girls were admitted with heroin addiction. The ages ranged from 14 to 20 years of age."

While not a single case of addiction was reported to the school health service until the summer of 1950, the beginning of the school year brought

with it the awareness that the narcotics problem was growing to threatening proportions in some areas of New York City. However, Chein (5, p. 33) has estimated that 107 new cases of adolescent boys having a problem with drugs came to the attention of both the hospitals and courts in 1949. In 1950 there were 461 new cases; in 1951, a high of 805 new cases; and in 1952, 546 young addicts were added to the list of known cases. Between 1949 and 1955 a total of 3,447 adolescent males were first known to be involved with drugs.

By 1951 the needs for hospitalization of adolescent addicts exceeded the physical and professional capabilities of Bellevue Hospital in New York City. A search for new facilities turned up Riverside Hospital, located on North Brother's Island in the East River. This hospital, first used to treat addicts in the early 1920's and later tuberculosis patients, had been unused for years. It now was to serve the needs of the younger addict as it had thirty years before.¹

¹Statistics on the prevalence of addiction are highly questionable. At the time the data were gathered for the present study (1959-1960), the estimate provided by the Federal Bureau of Narcotics for New York City was about 100,000. This estimate remained constant until 1970 when the Addiction Services Agency began to use estimates that ranged between 150,000 to 300,000 addicts. Estimates of addiction among the young also have varied from high levels to points of apparent near extinction of the problem. This is likely to be a function of unreliable data. However, if it is not, it would suggest that differential risk to addiction over time may actually be a cyclical matter, somewhat like the near disappearance of violent gang activity in the 1960's and then reappearance in 1970.

The Hospital Program and Its Patients

The Riverside Hospital was opened for the care of young addicts from the age of 14 to 20 years in June, 1952. Despite the fact that hospitals and clinics had handled adolescents previously, virtually no information was available in the literature concerning the treatment of the adolescent drug user. Visits were made by Riverside staff to the Public Health Service Hospital in Lexington, Kentucky, to observe their methods and procedures. The Lexington Hospital addiction treatment program was to become the initial model for Riverside. Departures and innovations were expected as they were required to satisfy the treatment needs of a younger addict population.

All patients, both voluntary and involuntary, were referred to Riverside through the Narcotics Term Court of the Magistrates Court System. A patient could be entered through a petition for admission brought to the court by a parent or other responsible adult. The patient thus might enter the relationship either voluntarily or involuntarily. A condition of acceptance of the petition by the court was that the young addict would remain under and respond to the authority of the Hospital for a period of three years or be declared a "wayward minor" and thereby be required to respond to both the orders of the Hospital and the Court or suffer juvenile or criminal court proceedings. Although the writer knows of no case when a Riverside patient was declared a wayward minor, this legal structure was the earliest precedent for the legal approach of commitment of addicts not under criminal charges to treatment.

Referral to Riverside was initiated independently by either the Juvenile or Criminal Courts as well. If an adolescent offender was found

to be an addict after being charged with theft, criminal possession or sale of drugs, or other offense, the Court could temporarily waive the criminal proceeding pending outcome of treatment at Riverside Hospital.

Need for Evaluation of Program

The operation of Riverside Hospital was funded on a 50-50 basis by the City and State of New York. In 1959 the Interdepartmental Health Resources Board of New York, acting in the interests of the State, contracted with the Columbia University School of Public Health and Administrative Medicine to conduct a follow-up study with a view of examining the post-hospital community adjustment of the Riverside patient. The work was begun in August, 1959. It was designed and executed by the author with the consultation of Ray E. Trussell, M.D., M.P.H., and Jack Elinson, Ph.D., respectively, Dean and Director of the Research Unit at the Columbia School of Public Health and Administrative Medicine.

During the earlier discussions concerning the purposes of the study, there was some hope expressed that it might serve to evaluate the treatment results of Riverside Hospital while presenting a picture of post-hospital adjustment. It was immediately evident that this could not be done, since to do so would require equivalent groups selected at random among narcotics users, one group going to Riverside and one not so admitted. Such a group of non-treated addicts would have been difficult to identify and locate, especially on a post hoc basis.

A more general design was developed that sought to answer a series of questions which would provide a more precise description of the adolescent users' post-hospital behavior. The study was oriented to generate data that would provide information concerning the use of narcotic drugs after a treatment experience in terms of the range of variables which might

be associated with such use of drugs.

When the study was begun, it was designed to provide two levels of data for analysis. The first was to satisfy the needs of describing the post-hospital adaptation of a group of patients treated at Riverside Hospital. The second was to execute an analysis such as that which will follow.

The Study Population (3)

The period during which data were gathered for this study was characterized by an endemic spread of addiction, i.e., it affected selected areas of large metropolitan areas and involved heroin as the drug of choice. According to Bourne (4) it was not until the 1960's that we could properly describe the situation as a "mushrooming, epidemic spread" of heroin use, and the late 1960's and 1970's when the primary heroin addict began to give way to the dominance of the polydrug abuser in the courts, clinics and hospitals of the United States. The addicts reported on in the study which follows provide a less complicated addiction condition for examination than prevails for the current drug scene in that we are able to deal with one primary substance of abuse - heroin.

The study population is drawn from a cohort of 247 male and female adolescents who were first admissions to Riverside Hospital in 1955 for the treatment of heroin addiction. Information concerning pre-hospital experiences and characteristics is available for the entire group. Information on the post-hospital experience of the group is available on 213 patients.

Considerable follow-up information derives out of an extensive questionnaire interview administered to 147 of the patients who were originally

admitted to Riverside Hospital in 1955. During the course of the study it was established that eight out of the 147 of the patients who were interviewed had never been addicted to narcotics. These eight did not constitute a group that was qualitatively the same as those who had experience with full addiction.

This group of eight patients has been dropped from the analysis which will be the dominant concern of the present work. Criteria for inclusion of patients in the study as addicts requires physiological involvement with drugs of sufficient duration and intensity as to cause dependence on the narcotic drug and consequent withdrawal symptoms on cessation of use of the drug of choice, heroin. This condition had been verified by clinical examinations at Riverside Hospital on admission to the Hospital.

The list summarizes the sub-groups of the original first admissions to Riverside in 1955 for whom different levels of information were gathered.

Total Group (Pre-Riverside and Hospital Records)	247
Institutional Experience Analysis Group (Post-Hospital Records Available)	213
Total Number Interviewed	147
Number Found Not Addicted before or after Riverside	8
Total in the Interview Analysis of the Study	139

Sources of the Data Available for Analysis

The following represents the data that are available for analysis:

1. Data from the Hospital intake records concerning early institutionalization, education, employment, family relationships, and pattern of narcotics use prior to first hospitalization taken from patient and/or family.

2. Psychiatric diagnosis of patient determined by the Hospital team.

3. Social Service Exchange information concerning social service contacts for patient and family for a period up to 15 years prior to hospitalization. A Social Service Information Exchange report was received for each patient.

4. Institutional information was derived from an extensive survey of institutional contacts that were experienced by the patients subsequent to their first hospitalization at Riverside Hospital. Included were re-hospitalizations at Riverside, hospitalizations at Lexington Hospital, short-term jail experiences as well as long-term sentences in City and State facilities. Information was also derived from the Division of State Mental Hygiene for patients who had been institutionalized in State mental hospitals. The City Department of Health provided information on patients who died in New York City during the follow-up period. In combination, 774 such events were recorded for 218 of the 247 (88%) in the original study group.

5. Survey data: The 139 persons who provided the greatest part of the social data used in this analysis were involved in an interview lasting between an hour and a quarter and three hours. This interview provided a description of the addict's behavior before and after hospitalization in

the following areas:

- a. Narcotics behavior
- b. Criminal behavior
- c. Employment
- d. Sexual behavior (while on narcotics and off)
- e. Social and familial behavior (while on narcotics and off)
- f. Relationships to authority figures (after only)
- g. Aspirations and expectations (after only)

Patient Contact

Patient contact for this group was made difficult by the nature of the problem of drug addiction. The gathering of information for the study depended heavily on the cooperation of City, State, and Federal agencies. These agencies extended their services in both the use of their records to identify the subsequent institutional history of the addicts with their agencies, and in permitting the use of their personnel in the actual search for the addicts of concern to the study. Several private agencies throughout the City also assisted. Because of this, it was possible to interview or gather some kind of information on 95% of the 247 adolescent drug users in the study.

Characteristics of Patients in Follow-Up

It was decided that the follow-up should be concerned with all new admissions to Riverside Hospital during 1955. Selection of patients from that year provided time for the Hospital to have developed standardized approaches to the treatment of the adolescent user. It also provided a

group whose post-hospital experiences spanned a period of two to three years.

The group of first admissions to Riverside numbered 247 patients. Of the total, 42% were recorded as white, 25% black, and 32% Puerto Rican; 83% were males; 80% were born in the continental United States; 17% in Puerto Rico; and 3% elsewhere.

It might be helpful to know something about the drug and criminal background of the study group. The average age for beginning use of marijuana or heroin was 15.7 years; one of ten in this group began drug use at age 14 or younger; three began at age 11. For the total, a little over half, 54%, reported drug use for two years or more prior to hospitalization.

Three-fourths of the group had been arrested between one and seven times before hospitalization. The average age at hospitalization was 18 years.

An average of 2.7 months was spent in Riverside on first admission there. One out of ten spent less than one month, and one stayed 15 months.

Records Findings

The record analyses, based on information from Riverside Hospital and the State Department of Correction, showed that 67% of the 247 patients were arrested by the police one or more times, and 63% were re-hospitalized at Riverside Hospital one or more times. On combining data from these two sources, it was found that 86% of the group had either been re-hospitalized for treatment of narcotics use or re-arrested by the police, or both, one or more times. Knowledge about the remaining 14% follows:

Four percent had continued difficulty with narcotics use, the police, or both.

One percent had post-hospital adjustment difficulties which were not necessarily associated with the use of narcotics or with crime.

Two percent died without record of post-hospital drug use or police contacts.

Four percent were not identifiable in the records search.

Four percent had no new experiences in institutions and were believed to have had no apparent difficulties in post-hospital adjustment.

Thus, about nine out of ten patients re-involved themselves in activities that customarily would return them to the authority of the courts or to hospitals responsible for the treatment of narcotics addiction. For a total of 6% there is no information available on behavior which would permit an evaluation of the patient's post-hospital adjustment. Other than that 2% of them violated actuarial expectations concerning their death at an early age. Thus, for only nine cases, or 4% of the entire study group, is there information available which indicates that they had no difficulty with drug use, crime, or mental illness subsequent to their first treatment experience.

The preceding presents something of the types of new institutional contacts made by patients after their first hospitalizations.

On the average, a period of 27.9 months of new experience was available for follow-up study for this group of addicts. It was found that they spent a minimum average of 7.6 months in institutions after their initial release from Riverside. This means that at least 27% of their time was spent in an institutional setting. In further examination of these patients over the follow-up time, it was found that during any six-month period under study one could expect that more than one-half of the patients would have

spent some time in an institution. This was one reason why it was easier to make contacts with patients in institutions rather than in the community.

Interview Phase of the Study

The interview phase explored in detail the addicts' activities in the community after their first Riverside experience. One hundred and forty seven of the 247 patients who were first hospitalized at Riverside in 1955 were interviewed. Comparison of the characteristics of those interviewed with those not interviewed showed some differences. Table I shows that those interviewed were more likely to be black or Puerto Rican, male and unmarried. This difference is attributable to the fact that more Puerto Ricans and blacks were interviewed in jails and on readmission to Riverside for treatment.

Out of the 147 patients interviewed, eight had abstained from the use of narcotic drugs. The patients who did not return to the use of narcotics shared one common characteristic: All claimed that they were not addicted to narcotics when sent to Riverside. Four of these eight patients showed some difficulty in other areas of post-hospital adjustment, but not with respect to drugs. The eight non-addicted patients were excluded from the study because they did not fit the criteria required for inclusion.

The remainder of this section will be concerned with the 139 patients who admitted that they had returned to the use of narcotics. Nine out of ten of these patients returned to the regular daily use of narcotics; one out of ten reported no abstinence at any time while in the community; two out of ten abstained up to one month; and about a quarter of the total group managed at least one period of six months or more when not

TABLE I
Some Characteristics of Patients by which They were
Seen or Not Seen in Interview

Background Characteristics	P a t i e n t s					
	N u m b e r			P e r c e n t		
	Total	Inter- viewed*	Not Inter- viewed	Total	Inter- viewed	Not Inter- viewed
Total	239	139	100	100	100	100
<u>Ethnic Group</u>						
White	99	50	49	41	36	49
Black	64	41	23	27	30	23
Puerto Rican	76	48	28	32	34	28
<u>Sex</u>						
Male	202	124	78	84	90	78
Female	37	15	22	16	10	22
<u>Marital Status</u>						
Single	212	133	79	88	95	79
Married	27	6	21	12	4	21

*8 non-addicts excluded from this analysis

on drugs while in the community.

The research determined how soon the first dose was taken after release from the Hospital after the initial and subsequent hospitalization. About half returned to drugs within the first week after their first Riverside hospitalization. The patients were asked to think back to the several times they were released from Riverside and report their attitudes concerning return to narcotics. These data suffer from a possible retrospective bias but nevertheless show clearly the difficulties involved in motivation to abstain. In 39% of the cases, the patients felt they would definitely return to the use of drugs; in 19%, they felt they might return; and in 42%, there was an expression of belief that they would not return. In combining those who said they felt they would return with those who said they might return, it is seen that in six out of ten cases there was a proclivity to return at the point of release from hospitalization.

Patient's Control of Own Drug Use

Although we know that virtually all patients interviewed did return to the use of drugs, some did attempt to control their drug use while in the community. This is shown by the fact that about one-quarter of the group did succeed in abstaining for a period of six months or more. Another indication of this is found through examination of their attempts at detoxification without hospital supervision - "kicking in the street", as they put it. Two-thirds of the re-addicted group had attempted this at some time. These withdrawals were successful for a time in about half the cases. This observation must be qualified by the possibility that some of these voluntary withdrawals may have been encouraged by lack of funds to

support their habit or a temporary shortage of street drugs - 'panic in the streets.'

Cost of Narcotics to Patients

Patients interviewed and found to have returned to narcotics used \$352,000 worth during the 9.6 months' use reported per patient. This can be reduced to an average weekly cost of \$65 and a daily cost of about \$9, a figure which, for a confirmed user, was held to be small. Actually, the Riverside Study was one of the first investigations to demonstrate that estimates of daily street drug costs ranging from \$50 to \$100 were excessively high. During the period these patients were in the community, their total earnings as a group did not exceed \$200,000. On further analysis, it was found that, hypothetically, only one-quarter of the patients who returned to drug use earned enough to support their habit if all their income was spent on drugs.

Where did they get the money for this? Eighty-six percent admitted to a wide range of illegal activities for the specific purpose of supporting their habit. Seventy-four percent of the interviewed patients were arrested one or more times.

Employment

The employment history of the treated narcotic user is of special interest as a measure of community adjustment. Fifteen percent of those persons for whom this information is available were never employed after their first release from the Hospital to the time of their interview for the study. Further, the patients from Riverside did not manage to stay on

a job for long. Specifically, about three out of ten were never employed for more than one month. Only one out of ten was able to keep a job for more than one year. These findings were not surprising in recognition of the fact that the community experience of this group is punctuated by frequent re-hospitalizations and re-arrests. These institutional experiences and the addicts' return to the use of narcotics affect the length of time they are able to hold a job. (2, p. 14).

Consequences of the Riverside Study

At the time of the study the expectation of professionals in the addiction field was that, although prognosis for the addict was not generally good, some positive "cures" must indeed come from the efforts of good therapeutic intervention. Riverside Hospital appeared to provide that good therapeutic intervention. It had a good patient-staff ratio, a wide range of professional specialists operating under a team approach, a special school and work rehabilitation program, and an ample physical plant that was referred to by patients as the "country club". Patients could stay in this environment for extended periods of time, if this was therapeutically indicated, and they had access to follow-up therapy and other services after they left the Hospital.

It was a devastating blow to the staff of Riverside Hospital when the author personally reported the findings to them before they were released for publication. That virtually everyone treated at the Hospital returned to drugs or behavior that implied renewed drug use was a condition they had not anticipated.

The blow was all the more devastating when the Riverside report was

used as the principal justification for closing the doors of the Hospital to adolescents and returning them to the care of City hospitals where ostensibly they would be able to receive more professional care than had been given them at Riverside. The fact that in a technical sense this work could not assess the merits of what Riverside had done for its patients was discounted by the fact that virtually everyone returned to some form of narcotics use.

This preoccupation with the need to be absolutely drug free as a test of progress in treatment or relative health actually violated the then current idea that narcotics addiction was a chronic disease. If it were actually a condition similar to arthritis, tuberculosis, or diabetes, one would be willing to accept as good medical management the maintenance of a limited level of health. In narcotics addiction, we seemed to be saying that we wanted all or nothing at all. We expected to see addicts as fully abstinent or consider them complete failures.

Actually, the Riverside data indicated that some addicts showed greater relative success in staying away from drugs and other norm-violating behavior than other addicts. While three out of ten patients abstained from drugs for less than a month, another four out of ten managed abstinence periods of over four months. Many addicts managed to keep jobs, and some maintained conventional social relationships. The notion of the need to consider "relative success" in treatment was published by the author shortly after the Riverside Study was completed, but it has only recently begun to be employed in evaluation of program success. (1).

The need to redefine criteria for the determination of relative success or failure of treatment programs for addicts and the addicts them-

selves led the author and colleagues to begin to consider some of the elements involved in coming to that condition of success or failure. These concerns eventually were focused through the theoretical paper reported on in the last chapter. That paper, "A Conceptual Model of the Life Cycle of Addiction", (2) made the point that we might benefit from using the concept "tolerance of abstinence" as a measure of an individual's capacity to abstain from drugs and related norm-violating social behaviors. The body of the study which will be reported in the following chapters will seek to provide an empirical test of some of the elements spelled out in the life cycle approach to addiction.

The dependent variable which will be used in the test will be the tolerance of abstinence. Operationally, it may be defined as the relative capacity of the individual to remain in a drug-free state while in the community once he has been physiologically addicted to opiate drugs.

The Rationale for the Selection of the Dependent Variable

Theoretically, we assume an individual's capacity to abstain is related to his engagement in a non-drug or drug system. The central concern of this study will be to examine the correlates of a capacity to tolerate abstinence. In order to explore these correlates a dependent variable representing tolerance of abstinence must be established.

Several possibilities present themselves in the data that were gathered through the Riverside study. The Riverside experience represented the first hospital detoxifications these young people had gone through since the onset of their drug taking and addiction. Their first hospitalizations provide an analytic "zero" point in that it might be possible to use their discharge to the community as the point from which we might be-

gin to measure their ability to tolerate abstinence from drugs. Thus, the time before the patient takes his first shot of drugs after the first and subsequent hospitalizations might seem to be a measure of tolerance of abstinence. This would make sense only if the patterns of return, once the first shot was taken, were to be the same for all addicts. Actually, it is not the case that all addicts return to the use of narcotics in the same way. Some may take their first shot and then proceed to regular daily use almost immediately while others may use irregularly and take months before they return to regular daily use. Thus, the fact that two addicts initially return to drugs at the same time does not mean that their return represents the same attraction or avoidance of narcotic drugs. In addition, a number of the patients went directly from their treatment to jails or state correction facilities on warrants or convictions that were pending prior to hospitalization. Such conditions would provide an intervening variable whose effect could not be evaluated. A more uniform variable needed to be found to represent the addict's tolerance of abstinence.

It seemed that a better indicator of an addict's ability to tolerate abstinence was the longest period he abstained while in the community after his initial hospitalization at Riverside. It could incorporate those individuals who had experienced their maximum period of abstinence immediately after release from the hospital, at some subsequent time or after another institutionalization.

The variable of maximum period of abstinence was examined as far as distribution of addicts in our population into clusters of maximum abstinence periods. Thirty-one percent of the total sample showed a maximum

period of abstinence of under one month; 30% indicated an abstinence period of one to under four months, and 39% indicated a maximum period of four or more months since the first time they were admitted to Riverside to the time they were interviewed.

This breakdown suggests an internal logic for describing the concept of tolerance of abstinence. For addicts accustomed to adaptation to addiction as a normal way of life any period under one month of abstinence may conceivably be present as a result of normal street duress. A period of continuous abstinence of between one to three months would suggest that for such addicts there existed a proclivity to tolerate abstinence and remove oneself from the cycle of addiction. An abstinent period of four months and more would suggest a strong posture to become disassociated from the addiction system and to engage in some other kind of involvement. Operationally, we may designate this last group as being those most strongly oriented to tolerate abstinence.

Mode of Data Analysis

A balance index will be used throughout this study to examine the relationship between the independent variables and the dependent variable of tolerance of abstinence. The index will be established for all variables by determining the difference in percentage points between those who show a low tolerance of abstinence (under one month) and those who show a high tolerance of abstinence. If the difference favors low tolerators the index will have a negative value. If the difference favors the high tolerators it will have a positive value. If no difference exists, it will suggest that there is no probable interaction effect between the independent var-

iables and dependent variable. It would be possible to achieve the same effect by excluding the cases which demonstrate a middle range capability for tolerance of abstinence (one month but less than four) but these cases are displayed so that an examination of the distribution of the cases is displayed should this become useful for an interpretation of the index.

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(Chapter IV)

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Chapter V

DEMOGRAPHIC CHARACTERISTICS AND ABSTINENCE

On November 30, 1951, and March 13 and 14, 1952, two conferences were held at The New York Academy of Medicine under the sponsorship of the Committee on Public Health Relations of the Academy. The conferences were stimulated by the growing awareness that New York City was facing a "new" problem of drug addiction among adolescents, and it was felt that those with experience or an interest in this area should gather together to share their knowledge and experience. It was what has come to be popularly referred to as a "state of the art" conference.

Fifty-two authorities were invited to participate on two separate occasions. Their professional identifications permit us to classify them as follows (8 , pp. vii-x):

Psychiatry/Medicine (Psychiatrists, Pharmacologists, Health Administrators, etc.)	27
Criminal Justice (Police, Judges, Wardens)	13
Youth Services	6
Social Scientists	4
Schools (Principals, School Administrators)	3

This display of identities probably reflects the weight of professional influence (possibly with an under representation of criminal justice because of the site of the Conferences) which prevailed in the drug abuse field in the early 1950's. The Conference Proceedings show that only two of the four social scientists contributed or were called on to contribute during the three days of the Conference.

The largest number of contributions made by participants concerned the psychiatric nature of drug abuse, as understood at that time. References were made to the experiences with opium addiction of the literary figure Thomas DeQuincey in his Confessions of an English Opium-Eater, originally published in London Magazine in 1821. One distinguished authority reflected his sense for recent developments in the field when he strongly recommended "A little volume, The Narcotics Drug Problem, by Dr. Ernest Bishop, published in 1921" from which he said he had learned something about drug addiction. This was a time when the motion picture, "The Man with the Golden Arm", the first major film dealing with addiction, was gaining scandalized attention for its violation of the motion picture code censoring any efforts that sought to deal realistically with addiction matters.

Two other statements made at the Conference deserve mention for their reflection of attitudes concerning addiction. One by a Dr. Haven Emerson (8, p. 59) suggested, at the very least, a lack of enthusiasm for pursuit of narcotic drug interests when he stated, "I would say that more lives could be saved in New York City by a uniform reporting of all cases of obesity than by reporting just the cases of drug addiction." Another, by Dr. Fremont-Smith (8 , p. 83), probably best reflects the state of the art in drug addiction in 1952, when Riverside Hospital was reopened for the treatment of adolescent addicts. He said, "I can appropriately call attention to our ignorance as a whole and to the profession's ignorance of the facts and the ramifications of the problem."

Despite the presence of earlier contributions concerning the social components of addiction, by sociologists such as Thrasher (18), Brown (5),

Dai (9) and Lindesmith (13), there appeared to be little concern expressed by policy makers of the fifties for the value of social factors in managing and treating addiction. It was not until the failure of the psychiatric/medical model for dealing with addiction was demonstrated in the early '60's that sociologists were encouraged, through government financing, to contribute significantly to the growing literature in the field.

The following chapter will deal with some selected social and demographic characteristics of this adolescent addict group which seemed likely to affect their tolerance of abstinence. When data for this study were first gathered, the author held the belief that the demographic features of the addict's environment would have an influence on the continuance and discontinuance of his drug use. It was felt that differences should show up for such factors as age, sex, ethnicity, religious background, length of time lived in New York City, and highest grade completed. Since it was believed that many of these factors supported the adolescent's original use of drugs and continued to represent an influence on him when he returned to his community it was logical to believe that they would have an influence on his returning to drugs.

Behavioral scientists have identified certain demographic factors that are associated with alcohol abuse. In a study of Washington Heights in New York City (1) it was found that: men were far more likely than women to have a problem with drinking; Blacks more than Whites, Catholics more than Protestants and Jews; the unmarried more than the married; and the uneducated more than the educated. Srole, et al. (17) discovered that the populations most likely to be at risk to mental illness are

likely to be males, older, unmarried (divorced, widowed or separated) and more economically deprived. Both studies suggest that execution of marginal social roles may support dependence on substance abuse.

Winick (20 , pp. 1-17) has evaluated a series of existing studies to develop a picture of the individual who is most at risk to becoming a drug abuser. He suggests first that certain subgroups within society seem to have adapted to personal and social pressures through the use of drugs. Drug use is most common among persons who are minority group members and those who are lower class. Studies concerning physicians and musicians showed them to be at high risk to the use of opiates. Though both groups are characterized by different life styles and interests, both experience periods of intense tension which may be relieved by the use of narcotics.

Chein et al. (7 , p. 74) have pointed out that heroin addiction during the early sixties was characteristically a product of socially deprived urban ghetto life. They summarize their findings concerning social factors as follows:

As far as the social environment is concerned, the vulnerability of teen-aged males in New York City to the lure of narcotics is in the main associated in some fashion with living in areas of economic squalor, but other unwholesome aspects of the social environment also contribute in substantial measure. That is, conditions of economic squalor dominate the picture, but virtually the entire complex of unwholesome factors plays a contributory role. We had hoped, but not really expected, to discover one or two clear-cut factors that could account for the lure of narcotics; but, as usual, social causation is a complex affair.

Chein makes clear that he did not find a unique complex of social factors supporting the risk to becoming a drug addict. Rather, he was forced to conclude that the young abuser seemed to share the same total environment we customarily associate with the production of crime, delin-

quency and mental illness. At the same time he inferred that something in the quality of that total environment was contributing to becoming at risk to drug abuse.

Each of the previous citations suggests that involvement in drug abuse is not a random occurrence. Some special conditions or characteristics seem present in supporting the initial onset of drug abuse.

This chapter is not addressed to identifying the factors associated with the onset of drug abuse but rather its continuance or discontinuance after a person has become an addict and then been detoxified. The underlying assumption of the present analysis is that the independent factors or variables which seemed initially to support the person's movement toward the addiction system would continue to exercise an influence in re-entering him back into that system.

Specific factors have been selected for examination because they are felt to have a persistent effect on individual behavior. Such factors as ethnicity, place of birth, sex, time in New York City, religious identity and education are customarily identified as independent variables. They will be dealt with as such here.

Ethnicity

One of the more powerful predictive variables to emerge from the research experience of sociologists is that of ethnicity. Ethnicity, as it has come to be used in the contemporary urban scene, combines the factor of racial identity with nativity, i.e., White, Black and Puerto Rican. Although one might present some arguments against the rationale of combining Black and White Puerto Ricans as ethnically Puerto Rican, it cannot be denied that as status-role designations, they are likely to

have differential power in determining the individual's position in the social system and in affecting behavior.

In this area of ethnicity our expectations were that Blacks were most likely to manifest low tolerance of abstinence, the Puerto Ricans would show a medium tolerance, and the Whites the highest tolerance of abstinence. The logic underlying this follows from the assumption that membership in these different ethnic groups provides varying conditions of life which support the rationale for using and abusing substances. The rationale for hypothesizing that Puerto Ricans would be more successful in abstinence than Blacks, although both were minorities, was based on the assumption that their tenure in the ghetto and exposure to the "mark of oppression" was less than the Blacks.

TABLE V-1
TOLERANCE OF ABSTINENCE BY ETHNICITY
IN PERCENTAGES

Tolerance of Abstinence	Ethnicity			Totals
	White	Puerto Rican	Black	
Low	28	29	37	31
Medium	26	35	29	30
High	46	35	34	39
Total %*	100	99	100	100
N	50	48	41	139
Balance index	+18	+6	-3	+8

*Column percents may not equal 100% due to rounding error.

Table V-I displays the relationship between ethnicity and tolerance of abstinence after discharge from treatment at Riverside Hospital. The hypotheses proposed for this variable are given support by the analysis. The young, White heroin addicts demonstrate the greatest capability of maintaining long periods of abstinence while in the community, the Puerto Ricans fall into a medium range for tolerance of abstinence, and the Blacks show a low rate of tolerance of abstinence with scores respectively of +18, +6 and -3.

In interpreting findings concerning conditions associated with onset of drug abuse for a population of adolescent addicts gathered at about the same time as the data used in this study, Chein (6) found that although economic deprivation was present for both Puerto Ricans and Blacks it may perform a greater role in Black addiction. Gerard et al. (11) observed in a separate analysis of the Chein data that the family integration of Blacks showed greater impairment than that of the Whites and Puerto Ricans under study.

One observation made by clinicians who worked with the young addicts at Riverside was that Blacks appeared to use drugs for somewhat different reasons as compared with Whites. They felt that the use of drugs by Whites was more for psychological reasons, i.e., controlling acute states of depression, as compared to Blacks, who were more likely to be predisposed to such use because of overwhelming environmental problems. If one accepts their assumptions, then it may follow that psychiatric intervention may be more effective with White patients while it may be less effective for the Blacks for whom it can do nothing to modify the opportunity systems that continue on their return to the community. Data supporting

this hypothesis are at best scarce.

Whatever the explanation may be it is of interest that ethnic identity is a factor in post-treatment abstinence.

Residential Mobility

A persistent sociological explanation for deviant behavior is that deviant behavior is associated with urbanization, migration, and residential mobility. This assumption was held for addiction as well as crime and delinquency.

Ball and Bates (3) tested these assumptions on a group of 925 addicts who were first admissions to the United States Public Health Hospital in Lexington, Kentucky, in 1960. They found that addicts were not more mobile from birth to onset of addiction than the U.S. population and that they did not lead a more transient life after their initial hospitalization. Black addicts in that study were second-generation migrants to Northeastern centers, whereas the Puerto Rican addicts were first generation migrants. In both instances, the addicts were not more mobile than their respective base populations.

Another study, by Vaillant (19), drawing a sample population from the same Lexington Hospital for the following year, 1961, focussed on patients who were first generation New Yorkers. It found that individuals born in New York City but whose parents were not born in the Northern United States, had the greatest statistical likelihood of being admitted to Lexington; the data suggested that first-generation New York City residents had a rate of addiction three times that of immigrants. Thus, it would appear that parental rather than individual mobility is positively correlated with the incidence of drug addiction among individuals from lower socio-economic groups.

A study by Bailey et al. (1) found that a similar pattern prevailed which placed first generation New York City Irish-Americans at a greater risk to alcoholism than the Irish immigrants. Vaillant suggests that the roots of addiction are laid down before adolescence and that the immigrant's early life is spent in a social environment that matches his parents' while the child of immigrants may spend his years in a social environment at variance with that of his parents. This, he posits, may create family instability which may become a factor predisposing to drug dependence.

The young addicts in the Riverside population were distinctly products of the New York City environment. Seventy-five percent of all the patients either spent all of their lives or 15 or more years in New York City. Fewer than 5% had lived in New York for under five years. Since this is an adolescent to a young adult population, it becomes obvious that for the greater majority the significant period of primary socialization had to occur in the New York City environment.

Following the Vaillant findings, we assume that the longer the patient had lived in New York the lower would be his tolerance of abstinence.

The data on time lived in New York City were broken by "less than lifetime" and the "lifetime" of the addict. When the Whites, Blacks and Puerto Ricans are compared for time lived in New York (Table V-II) we find that differences emerge for Blacks and Puerto Ricans. For these two groups it is clear that those who did not spend their entire lives in New York City did better in their tolerance of abstinence as compared with those who spent all of their lives here. The picture is reversed for Whites

who show higher tolerance of abstinence if they lived in New York all of their lives. A comparison with Whites who were not native New Yorkers is stressed because of the small number in that category (five cases). It is assumed, though data are not available to establish this, that the Whites are more likely to be second or third generation New Yorkers as compared with the Blacks and certainly the Puerto Ricans, who are more likely to be first generation. In addition, the comparison is affected by the generally better tolerance capability of Whites.

TABLE V-II

ETHNICITY BY TIME LIVES IN NEW YORK CITY
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	White		Black		Puerto Rican	
	Less than Lifetime	Lifetime	Less than Lifetime	Lifetime	Less than Lifetime	Lifetime
Low	60	24	33	37	23	33
Medium	20	27	22	31	38	33
High	20	49	45	31	38	33
Total %'s*	100	99	100	99	99	99
N	5	45	9	32	26	21
Balance index	-40	+25	+12	-6	+15	0

*Column percents may not equal 100% due to rounding error.

Despite the unevenness of the findings concerning this variable, the analysis does suggest that location of early socialization experiences are likely to affect post-treatment abstinence.

Gender Identity

Finnegan (10, p. 121), in a survey of the available literature on women in treatment, indicates that until recently it was believed that few women were addicted and therefore few were found in treatment facilities. Of the total number of 139 treated addicts interviewed in this study, 15 or 11% were women. Thus the male/female ratio for the population was 8 to 1. It is not possible to determine whether women were underrepresented in the Riverside treatment population, but Finnegan suggests that they are underrepresented in current treatment programs because of a pervasive male-oriented bias. She believes that the dynamics of contemporary treatment programs do not accommodate the special needs of women.

The Women's Drug Research Coordinating Project (15) indicates that women addicts differ from men in terms of the problems they face when addicted. Women who commit deviant behaviors are more socially stigmatized than men. Women addicts have often been sexually abused. Even those addicts who have not chosen to support their habits through prostitution have often suffered considerable sexual and physical abuse. Some programs that deal with male and female clients are charged with sexism. Women's caucuses at the various National Drug Conferences provide an informal grapevine through which information concerning such sexual abuses is communicated. Some programs are alleged to offer sexual service by women residents as rewards to favored male clients.

Such systematic sexual exploitation was not known at Riverside Hospital, but sexual exploitation of both young men and women did occasionally

surface. Homosexual exploitation of younger patients by older, more "savvy" patients, who were given responsibility for ward management as part of hospital practice were reported to this researcher. Women were similarly used by males. The Director of the Hospital periodically received communications from the Warden of one New York State correctional institution for women concerning women sent directly from Riverside to the prison complaining of pregnancies which must have been initiated while they were in residence at the Hospital.

Men, asked the question, "What did you get out of your stay at Riverside?" frequently answered that they succeeded in finding a "crime partner" with whom they could work after leaving the Hospital. Another response was that they recruited girls to work in their "stables" as prostitutes.

In the light of these conditions, we might expect that women might do more poorly than men in post-treatment abstinence. The data available must be evaluated cautiously since only 11% of those interviewed were women. The findings actually suggest that the women demonstrated a higher capability for tolerance of abstinence than men. (Table V-III).

TABLE V-III

SEX
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Sex		Totals
	Male	Female	
Low	31	33	31
Medium	31	20	30
High	38	47	39
Total %'s	100	100	100
N	124	15	139
Balance index	+7	+14	

In interpreting these findings we should remember that these women were young and of especial value to pimps and madams who protected their "stables" by carrying and supplying drugs for them. The role requirements of the addiction system for young women were probably less rigorous than those for men. We might speculate that women in these situations were under less tension and therefore better able to test themselves with periods of abstinence than men were.

Religion

Religious identity has been considered as a factor associated with alcoholism by several investigators. Snyder (16) points out that characteristics peculiar to Jews and their ritual use of alcohol tend to provide social controls which reduce the possibility that alcoholism will become an appropriate vehicle for escape. Bales (2) describes how the Irish Catholics develop use of alcoholism as a mechanism in support of conviviality and support of male roles. Jellinek (12) observes that different ethnic and regional groups which coincidentally show specific religious identities tend to express alcoholism differently. Anecdotal information is available suggesting that Jews are underrepresented among opiate addicts, as they appear to be in the Riverside population, but may develop heavy dependence on other substances, e.g. food, barbiturates and, recently, tranquilizers. Such studies as one by Palgi (14) on the traditional role and symbolism of hashish among Moroccan Jews in Israel suggests that it, like alcohol among American Jews, fulfills ritual needs for the Moroccan. A search of the recent literature demonstrates a relative lack of interest in religion as a factor which may affect the risk potential of individuals or groups to opiate addiction.

As a routine of hospital admission all patients entering Riverside Hospital were asked to indicate their religious identity. In this identification no information was gathered which indicated intensity of involvement. However, it is likely that these data are valid in identifying the religions in which the patient was reared. The Riverside population was composed of 70% Catholics, 26% Protestants, and 3% Jews. Only one patient indicated another religious preference. The Catholics were predominantly

Irish, and the Protestants, Black.

TABLE V-4
TOLERANCE OF ABSTINENCE AND RELIGIOUS IDENTIFY IN PERCENTAGES

Tolerance of Abstinence	Religious Identity				
	Catholic	Protestant	Jewish	Other	Total
Low	30	36	25		
Medium	33	25			
High	37	39	75	100	
Total Row %'s	100	100	100	100	100
N	98	36	4	1	139
Balance Index	+7	+3	(+50)		

The balance index shows only a modest difference for Catholics (+7) and Protestants(+3) with Jews providing too few cases to report. It may be suspected that where data have been gathered on religion by investigators in previous studies the findings may have been similarly lacking in significance and remain unreported.

Education

Hospital records were examined in order to clarify the educational situation for the total study population (interviewed and not interviewed = 247). It was found that 79% of the total group had not attended school at all during the entire year immediately preceding their first Riverside

hospitalization; 1% attended school irregularly; 17% showed regularity in attendance during the year preceeding, and information was not obtained for 2% of the group. During the year to which these data apply, the New York City Board of Education reported that only seven students were identified as addicted in the entire school system. During that period 43 of the patients who entered Riverside that year had been in attendance at the same schools.

The records also show that of those patients who dropped out of school, three quarters of them did so voluntarily. Attendance in school generally is incompatible with maintaining an addict life style.

Addiction then seems to abort the educational process and consequently the number of persons who complete their high school career are so small that validity of the findings may be questioned. Nevertheless it is of interest to note that comparing those who began high school but did not complete showed a lower balance index (+6) compared with those who did complete high school (+30).

TABLE V - 5
EDUCATION
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Education Completed			Totals
	less than high school	high school incomplete	high school completed	
Low	25	31	20	30
Medium		31	30	30
High	75	37	50	39
Total %'s*	100	99	100	99
N	4	124	10	138
Balance Index	(-50)	+6	+30	

*Column percents may not equal 100% due to rounding error.

Summary

A number of the background factors often associated with increasing risk to addiction were examined as to their continuing effect on return to or abstinence from drugs. Some differences are noted. Being White, female, somewhat better educated, have some influence on the individual's tolerance of abstinence. The data suggest that for Blacks and Puerto Ricans who migrated to New York City and ostensibly shared more in common with the social background of their parents there was a better capability for tolerance of abstinence.

In general, we can see differences showing in the data that suggest a rationale in returning to or abstaining from drugs. However, they were not impressive. It seems possible that once these young people become addicted some of the traditional influences on behavior begin to dissipate in the face of the career requirements for being involved in the life cycle of addiction.

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Chapter VI

FAMILY INTERACTION AND ABSTINENCE

For the lay public the family is often seen as the root of all that is good and much that is evil. Credence is given this position by behavioral scientists who point out that the values and norms that structure the individual's life adaptations are formed in the family. The psychoanalytic theorists join with the symbolic interactionists to suggest that these values and norms are mediated by conditions in the environment to create typical behavioral reactions and adaptations on the part of the individual. In other words, personality is a function of early family experience. The life cycle of addiction model suggests that predisposition to become addicted and to continue in addiction has some family supports.

One of the central concerns of the benchmark study on adolescent addicts, The Road to H, by Chein and his associates (6), was the interrelationship of the factors of family living, personality and the onset of narcotic drug use. In introducing the material on family background Chein is careful to spell out some of the limitations of his conclusions. He points out that the concept of addiction-proneness implies that such proneness is not peculiar to addicts only. One can talk only in terms of persons who have not yet become addicted.

On the basis of this rationale Chein selected an addict group and a control group. Chein's addict group was drawn from patients under treatment at Riverside Hospital in 1953, two years prior to the first admissions being studied in the present study. The control group was drawn from two parochial and three junior high schools in high-drug-rate neighborhoods. There were

30 addicts and 29 controls in this study. Interviewing was done with the families of these adolescents. The smallness of the samples must be considered in evaluating the findings. (6).

Chein approaches the family background of the addict and the non-addict by translating clinically observed personality characteristics into hypothetical early environmental conditions. In considering the male addict he hypothesizes that he suffers from "(1) a weak ego structure, (2) defective superego functioning and (3) inadequate masculine identification. In addition, the typical young addict's attitude usually involves (4) a lack of realistic orientation toward the future and (5) a distrust of major social institutions." (6). Chein's findings supported all five of the hypotheses.

Chein further observed that there was no father figure present at all in the homes of one half of the addicts for some significant period of time. Where a father figure was present he was often emotionally hostile or distant in his relationship to the male adolescent. In addition, Chein contends that a number of the fathers were themselves poor models for their sons in that they manifested personal difficulties as regards work, crime and alcoholism. (6). Finally, Chein summarizes his material by suggesting that the family settings of addicts are not such as to support the acceptance of discipline or the development of personal behavioral controls. (6).

He points out a methodological problem that affects his findings as well as the current tolerance of abstinence analysis. This is that it becomes difficult to determine whether the observed differences in personality

or family behavior for an addict and a matched group of controls are precedents for or consequences of the addiction process itself. The life cycle of addiction model suggests that the process of becoming an addict involves certain requisites in the family. It also indicates that inadequacies in the role of or absence of the father may support the use of narcotic drugs. In addition, we will find that dependency on agency assistance for the family as a whole seemed to increase during the time when the adolescent was becoming involved with the entry into the addiction system. Thus, we have reason to suspect that there is a symbiotic relationship between the problems faced by the addict and those of the entire family. The data on dependency history of the family were gathered through a records search.

The data on family relationships that are available for the Riverside group was gathered through interviews with the addicts on an average of 28 months after their first hospitalization. Some related to pre-hospital experience, e.g., age at which father left home. Other material was focused more on the addict's present or recent past, e.g., satisfaction with his last living arrangements. What follows explores the relationship between some aspects of family living and the tolerance of abstinence.

Dependency History and Institutional Experience of Riverside Hospital Patients

After several years of experience the Riverside Hospital professional staff began to build up some assumptions concerning the characteristics of the young addicts with whom they worked. It was apparent that the majority of cases came from slum communities in which the rates of addiction were high. They included such classically depressed neighborhoods as Central Harlem and East Harlem, and some areas in transition as were found along the West Side

of Manhattan along Amsterdam and Columbus Avenues.

These areas were multi-problem communities in that they were high not only in rates of addiction, but also venereal disease, infant mortality, delinquency, mental illness and welfare dependence. The professionals who worked with these young addicts seemed to feel that the majority of them emerged from families that have been chronically dependent and could best be described as "multi-problem" families.

Buell (4) was the first to demonstrate the intensity of difficulty faced by such "multi-problem" families. In his studies of four urban centers in the United States he found that approximately 6% of the population tended to use some 50% of all the social services offered in these communities. It appeared that when families got into trouble it was not simply because of difficulty in one area but in many which required the use of a variety of services.

The Riverside staff felt that the addict was likely to be both a product of a multi-problem family as well as a contributor to the family's problems. From this it would follow that the addict population should at least share some of the characteristics of the dependency prone populations described by Buell. Further, we may hypothesize that addicts who show the more severe multi-problem conditions in their families are less likely to demonstrate a subsequent ability to tolerate abstinence as compared with addicts whose families had not shown a social service dependency pattern.

Source of Dependency Data

These two assumptions were tested through the use of the Social Service Exchange. The Social Service Exchange was established as a clearinghouse for information on client contacts with any of its member agencies. It pro-

vided the member agency with information concerning any contacts had by the client or the client's family with any other member agency. Armed with this information the agency could request case summaries on the client's experience with other agencies.

It would work as follows: After a patient was admitted to Riverside Hospital, the records clerk would fill out a form specifying the names, ethnicity (Blacks, Whites, Puerto Ricans) ages, and last known address of the patient's parents as well as the name, age and ethnicity of the patient for whom the social service clearance was being requested. When the Exchange received this clearance request slip, they would search their files for any evidence of previous social service contact on the part of the patient or his family. If previous contacts were in the records, they would be noted on the back of the original request slip as to place of contact, what family member was involved and date and then returned to the Riverside Hospital. The fact of the request slip itself was noted on the client's family record or was the reason to begin a new record on which the first Riverside hospitalization would be noted as a first Social Service Exchange contact in the Social Service Exchange files. The Hospital would then request case summaries from the agencies with which the patient had previously had contact.

The member agencies of the Social Service Exchange include most of the professionally staffed agencies rendering service to people in the New York City area. These include the social work, counseling and psychiatric agencies of all religious denominations, and the courts and welfare. The membership of the Exchange was generally viewed as including virtually all the agencies that serve the dependency needs of multi-problem families in

this area.

Although Social Service Exchange clearances were made when the addicts first came to the Hospital, new clearances were requested in 1958 so that data in this area would be available both for the period before and after the patient's first hospitalization.

These Social Service Exchange slips were used for the special analysis of the dependency history of the Riverside addicts. The social service contacts were coded as follows: 1) their service function (welfare, family court, psychiatric counseling, or case work service, criminal court, other); 2) who received the service (the addict or another family member, and; 3) the time the service was rendered (prior to 1947, 1947-1950, 1951-1954, and 1955-1957).

Dependency and Onset of Addiction

It would be useful to examine the overall pattern of dependency of the addict and his family on helping agencies. Table VI-1 summarizes this experience for the Riverside population. First, we may address our attention to the question of whether these families had been chronic long-term users of helping agency services. It may be observed that for all the addicts under study 15.1% of their families recorded contact with these agencies prior to 1947. This would involve the pre-teenage period for our patients.

In the earliest period covered by a detailed breakdown, 1947-1950, there seems to be a relatively small proportion of the patients or their families using professional services or even the compulsory services of the courts. In almost all the categories of services covered, only about 5% of the cases had been involved with any of the agencies reporting to the Exchange. The exception to this figure is in the use of welfare services,

TABLE VI-1

RIVERSIDE PATIENTS AND THEIR FAMILIES HAVING HAD SOCIAL SERVICE EXCHANGE CONTACTS REPORTED WITH DIFFERENT TYPES OF AGENCIES FOR DIFFERENT TIME PERIODS BETWEEN 1947-1957 AND PRIOR TO 1947 IN PERCENTAGES (N=139)

Agency Contacts**	Years when Contacts Occurred			
	1947-50	1951-54	1955-57	ALL 1947-57
Social Service Contacts Prior to 1947	15.1%			
Welfare Contacts				
Patient	2.2	6.5	*	43.2
Family	12.9	15.1	20.9	
Family Court Contacts				
Patient	5.7	13.7	*	
Family	7.9	7.1	10.8	37.4
Psychiatric, Casework or Counseling Contact				
Patient	5.7	18.0	*	
Family	3.6	11.5	7.9	38.1
Juvenile and or Criminal Court Contacts				
Patient	5.0	39.6	*	
Family	6.5	18.0	10.8	57.6
Other SSE Contacts				
Patient	1.4	5.8	*	
Family	5.8	11.7	6.5	30.7

* Information was not obtained for this category

** All welfare contacts were considered to be family contacts unless the clearance specifically noted the patient as the focus of concern.
This analysis excludes initial and subsequent Riverside hospitalizations.

where 13% of the families of addicts had such aid between 1947 to 1950. Although it is not possible to compare this with a control population of families without addicts for relevant high risk communities, our knowledge that these patients come from deteriorated neighborhoods would suggest that welfare dependence for one out of ten of these families might not be excessive.

Descriptive information from the Riverside Study would further support the expectation that there might be greater welfare dependence. For 54% of the cases the father was not living in the home and in 58% of the situations where this had occurred he had left before the patient was 11 years of age. (1). This condition of the absence of the father in so many cases during the early years of the patient's life is likely to justify welfare assistance through the aid to dependent children status. Yet despite this, relatively few of the addicts' families, i.e. 15%, showed such an early dependency orientation.

The years of 1951 through 1954 immediately preceded the addict's first hospitalization at Riverside. It may be noted that there is an increase in the use of all types of agency services by both addicts and their families for this time period. The most marked increase is in the number of patients who are reported as having Juvenile or Criminal Court contact, from 5% to 39.6%. A large part of this court involvement is likely to be a consequence of the user's deepening involvement in the criminal aspects of the addiction system. Another interesting statistic is that during this period of time other family members increased their own court contacts from 6% to 18%. This may be supported by the fact that in 33% of the cases, the Riverside addicts reported other family members using drugs. (1). Thus, for this period of

1951 to 1954 an overall increase may be noted in agency involvement. Most of this increase, however, seems to be focused on the problems of the patient rather than the entire family.

The years of 1955 through 1957 show a drop in family involvement with psychiatric and counseling services, criminal courts and other social service agencies. It shows an increase in welfare and family court involvement on the part of some families. Idiosyncracies in the data gathering did not permit follow-up of patient contacts for that time period.

Finally, a cumulative count of all cases, combining the patient and family contacts, for the ten year period, 1947-1957, showed a low of 31% of all cases having had unspecified Social Service Exchange record to a high of 57.6% having contact with the courts. In summary, the majority showed some kind of agency contact (besides Riverside) to indicate a substantial degree of dependence on agencies. Of special interest is the fact that during the period when the adolescent addict begins to show difficulties prior to hospitalization similar difficulties are experienced by other family members. The assumption of a symbiotic relationship between the problems of the addict and his family is borne out. Further, the assumption that young addicts are associated with families experiencing a pattern of consistent agency dependency is not borne out by the available data.

Family Dependency History and Tolerance of Abstinence

The previous section suggests that the young addicts' involvement with drugs appears to be associated with increased family involvement with social services. Table VI-2 displays whether or not contacts with various agencies throughout the ten year period showed any association with the patients' post-hospital tolerance of abstinence. It would appear that family

contact with Welfare, Family Court or psychiatric services had little or no association with the patient's post-hospital abstinence behavior. There is an association between "other" Social Service Exchange contacts favoring those who had no such contacts, but because these included a variety of unspecified experiences, it is difficult to make judgments concerning those in this category.

TABLE VI-2

ALL AGENCY CONTACTS FOR FAMILY BY TYPE OF CONTACT FOR PERIOD 1947-1957
IN TERMS OF BALANCE INDEX REFLECTING TOLERANCE OF ABSTINENCE

	Contact Present between 1947-1957	
	YES	NO
All Welfare contacts	+10	+6
Family Court contacts	+8	+8
Psychiatric contacts	+8	+9
Criminal Court contacts	-2	+21
Other contacts	-7	+15

We do find differences in connection with whether or not other family members had Criminal Court contacts and the patients' tolerance of abstinence after treatment. For those patients who had family other than themselves involved with law violation there was a lower tolerance of abstinence (-7) as compared with those whose family had no such entanglements (+15). We find later in this presentation that patients who have other members in the family using drugs and assumedly more at risk to arrest are less likely to do well.

Family Relationships and Abstinence

During part of the interview an effort was made to get some indicators of the relationship patients had with their families. One very basic measure of this is whether or not the patient lived with his family. Because patients were so often in and out of prisons and hospitals for the treatment of addiction they were asked to indicate their living arrangements at the time of the interview or, if the patient was interviewed in an institution, immediately before institutionalization. Our expectation with regard to these data was that relatively few addicts would indicate their family of orientation as their most recent residence since most continued in their addiction and would prefer the freedom available in a residence away from their parents. This was not borne out for this group of young addicts where 101 or 73% of the study population were found to be living with at least one family member at the time of the interview. An additional 9% of the patients stated that they were living with their spouse either in their own home, in the home of parents, or in the home of unspecified other people, 6% with non-relatives. Some 12% contended that they lived alone in settings which varied from their own apartment to conditions of vagrancy in hotels or "flophouses".

During the period when these data were gathered there existed the belief that rehabilitation of those with psychological problems, and this included the addicted individual, would show a more favorable subsequent post treatment adjustment if he or she could return to a family of orientation which would provide an element of security. This position has since been modified.

The clinicians at Riverside began to observe that the family could

provide a psycho-social environment which encouraged rather than discouraged the young person's drug use. One explanation for the addict's continued dependence on drugs was given by psychiatrists who suggested that the addict might perform an important role in becoming a scapegoat so as to deflect attention from or rationalize the parents' own interpersonal incompetence. Since recognized full-blown addiction in an adolescent brings with it thefts from family, arguments about associates, contacts with "unsavory" personalities, the parents can point to these addict-related conditions as causing a disruption in their relationships with each other and the community rather than their own more basic incapacity.

Another theoretical position that may be linked with the previous assumptions is that the addict as a "delinquency-prone" adolescent may be acting out the unconscious wishes of his parents. (8). Clinicians report that family members of addicts show unusual resistance and defensiveness toward helping in a change program for their children. A case in point from the author's experience follows: One woman came to the after-care clinic protesting that it was unfair that the police so frequently stopped to search and harrass her son. He was a "good boy", she said, and should not be treated that way. She supported her contention of his "goodness" by pointing out that he was thoughtful and regularly gave her money to supplement her welfare income. This was seen as a positive attribute by her despite the fact that the boy had no source of legitimate income and was required to steal in order to support his habit and partially support his mother.

Residence with Family

A comparison is presented in Table VI-3 of those patients whose last living arrangement while in the community was with their families and those

who lived apart from their families. The data clearly point out that those young addicts who lived apart from their families were substantially better able to sustain longer periods of abstinence compared with those who lived with their families.

TABLE VI-3

PATIENT'S LAST NON-INSTITUTIONAL LIVING ARRANGEMENT
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Patient's Last Living Arrangement		Totals
	With Family of Orientation	Not with Family of Orientation	
Low	31	50	30
Medium	37	11	30
High	32	59	39
Total %'s*	100	100	99
N	101	37	138
Balance index	+1	+29	

* Column percents may not equal 100% due to rounding error.

Those addicts who lived with their family of orientation were asked whether they would prefer to live away from home. The 60% of this group who said that they would proved to be relatively high tolerators of abstinence (+7). The remainder who indicated satisfaction with life at home with a parent or parents demonstrated a poorer capability in tolerating abstinence (-3). The differences in group scores are not great, but they begin to point to a trend in the data suggesting that continued dependence on and proximity to families may not support abstinence.

Empirical evidence concerning the negative effect on treatment outcome of continued relations of addicts with their families has generally not been

available. However, those who direct therapeutic communities for the treatment of addicts have, for some time, been sensitive to the fact that families may play a role in undermining the recovery of the addicts who come to them for help. A standard practice of most therapeutic communities is to restrict all contact of the addict with the outside - particularly his family - until such time as staff could assess the role of the family in supporting the individual's dependency on drugs. At Odyssey House, a treatment center for adolescents, youngsters of thirteen, fourteen and fifteen are often completely restricted in their contacts with their families until staff feels they are in control of the social world of their young residents. When staff considers that it has the young addict well into program, they attempt to intervene with the addict's family by engaging them in group psychotherapy or in other activities that would support the program's goals. In the latter area, groups like "Parents of Daytop Village" have been engaged in group therapy to explore their past and present part in supporting drug dependence in their child.

In the life cycle of addiction framework the maintenance of one's career is related to executing different roles which support a particular life style. The roles played out within the family seem to be in some way a part of that support system. The therapeutic communities seem to appreciate this and attempt to cope with it.

The Role of the Father

For a little over half of the cases (54%) the father was not living in the patient's family of orientation. This figure compares very closely to that found for addicts by Chein et al. in The Road to H. (6, p. 273). It is difficult to judge whether this is an excessively high rate of ab-

sentee fathers for the communities from which these addicts come. Chein established that addicts during this period were concentrated in deteriorating ghetto communities and that broken families were characteristic of such communities.

Patients were asked whether their father was living in their family at the time of the interview. Generally, it was felt that responses received here referred to the presence or absence of the patient's original father and not to other males who might move in and out of the house taking the father role sequentially. However, since this discrimination had not been stressed in the original interviewing, we cannot be sure of the permanence and character of the "father figure" referred to by the patient. The responses relating to the presence of a father in the home (N=62) suggest where such a person was present in the home this was associated with a low tolerance of abstinence (-1) as compared to family situations where the father was absent (+18).

When it was established that a father was not present, the patient was asked to pinpoint the age the patient was when the father was no longer present. The fact that the patient was asked to identify the departure of a specific male figure considered to be the father gives some assurance that this person represented the original father figure. The findings concerning when in the life of the patient the father left is displayed in Table VI-4. It is clear that the absence of a father at an early age is associated with subsequent difficulty in tolerating abstinence after the individual became addicted. If the father left the home when the child was under the age of eight, he was least likely to show a good capability of abstinence. As the age at which father left increases, the probability for a better post-treat-

ment abstinence picture improves for the adolescent addict.

TABLE VI-4
AGE WHEN FATHER LEFT HOME
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Age When Father Left			Totals
	Under 8 Years	8 Years but under 14	14 Years and over	
Low	32	28	13	25
Medium	32	20	35	29
High	36	52	52	46
Total %'s	100	100	100	100
N	28	25	23	76
Balance index	+4	+24	+39	

One contention in the field is that the drug abuse problem begins during adolescence at a time when the youth enters an identity crisis. Such an identity crisis could be ameliorated by the presence of an effective role model. Another theory that may have relevance to the data is that female dominance is a factor in generating addiction proneness.

The evidence suggests that the assumption of the need for a male role model for the addicts may have some credibility. It is difficult to say whether having the father in the home is always positive. It would appear that where there is a stable presence of the father there is a better prospect for abstinence as compared with where there is an unstable presence of a father.

The dynamics involved in family experience as a factor in addiction

and abstinence is obviously more complicated than can be dealt with using the presently available data. However, the relevance of such family dynamics should not be denied.

Patients' Activities with Family outside of the Home

An effort was made to determine whether the family and patient engaged in meaningful recreational activities with the family outside of the home. These recreational activities might have been trips to parks or other sites, visits to other family and friends, and so on. They were meant to discover whether the patient and members of the family had common experiences beyond their immediate interpersonal relationships within the home. Table VI-5 summarizes these data for all patients. It is especially interesting that those addicts who have taken up some kind of independent residence were among those who were more likely to have previously engaged in outside activities with their family. This suggests that those who live away from home may not in fact be those least capable of maintaining relationships with their family.

TABLE VI-5

PATIENT'S ACTIVITIES WITH HIS FAMILY OUTSIDE OF HIS HOME PRIOR TO HOSPITALIZATION BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Did Patient Do Things with Family		Totals
	Yes	No	
Low	30	35	32
Medium	32	32	32
High	38	32	37
Total %'s*	100	99	101
N	95	37	132
Balance index	+8	-3	

*Column percents may not equal 100% due to rounding error

It was felt that it might be of interest to evaluate changes in family activity before and after the first Riverside hospitalization. Those having activities prior to Riverside were compared to those not having activities prior to Riverside as to whether activity decreased, remained the same, or increased by the time of the follow-up interview. Table VI-6 displays these data in terms of a balance index presentation.

TABLE VI-6

ACTIVITIES WITH FAMILY BEFORE AND AFTER
FIRST RIVERSIDE HOSPITALIZATION

BALANCE INDEX BY SAMPLE SIZE

		Now		
		Less	Same	More
Before	Yes	-6 (61)	+15 (25)	(+100) (3)
	No	(-100) (2)	-5 (30)	(-100) (2)

Those patients who identified activities and involvement with their families before hospitalization and continued in such involvement demonstrated the highest capability for tolerance of abstinence (+15); those who said they had been involved with family activities prior to hospitalization but who followed with a reduction in activities showed a lesser capability for abstinence (-6). The post hospital balance index score for those uninvolved both before and after hospitalization approximates those who dropped in their involvement (-5).

The other possible combinations have too few cases to enter into a serious evaluation of their balance index scores. However, they can be looked at for their value in the context of a deviant case analysis approach. The two cases that had virtually no pre-hospital involvement and withdrew even

more from whatever family activities were going on did poorly (-100). Those three who had activities prior to hospitalization and reported an increase in activities showed a high level of abstinence (+100).

Other Family Members' Drug Involvement

Drug abuse is clearly a family affair. The literature demonstrates that those families where parents and other relatives misuse drugs are more likely to produce children who misuse drugs. (7, 2, 3). Studies find that there is a relationship between extensive use of over-the-counter drugs by parents and use of psychedelic substances by high school youth. (2 , p. 51, 7 , p. 84). Chein et al. (6 , p. 87) found that families where other members use illicit drugs were more likely to support the high risk potential of the child to street drug abuse.

In the Riverside data we have material on the illicit drug use of other family members. The data were gathered from Hospital records. It seems impressive that 27% of the patients in this study had family members who used illicit drugs. One could reasonably assume that where the immediate family environment contained a heroin user in addition to the patient this situation would reinforce the continued heroin use of the young addict.

Table VI-7 shows this relationship with great clarity. Those whose records showed another family member who used drugs demonstrated a poor capacity to tolerate abstinence after treatment (-19). Those who said that no other family member used drugs did substantially better in their abstinence (+17).

TABLE VI-7
 FAMILY NARCOTICS USE
 BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Family Narcotics Use				Totals
	Does another Family Member Use?		Who in the Family Uses?		
	Yes	No	Sibling	Other	
Low	46	26	48	50	
Medium	27	31	21	29	
High	27	43	32	21	
Total %'s	100	100	100	100	100.0
N	37	93	19	14	
Balance index	-19	+17	-6	-29	

This area is further explored by an examination concerning who in the family was involved in illicit drug abuse. The clinicians at the Hospital were especially sensitive to the probable influence of the use of drugs by older brothers and sisters, possibly because of the clinical concern with adolescent drug abuse rather than parental use. Therefore, we might expect an underestimate of the number of parents involved in illicit drug abuse. When we compare use of drugs by siblings and other family members, we find that siblings show a tolerance of abstinence score of -6 and other relative use, which would include both parents and other relatives, show a markedly poor score for patient's post-hospital abstinence of -29.

These findings provide us with an opportunity to amplify the clinical impressions concerning the interactive effect of patient and family pathology. It is obviously bad for the patient's prognosis for abstinence to have another sibling using drugs, but it seems to be much worse if parents

or other relatives are so involved. This stimulates the formulation of a hypothesis which would suggest that in families where deviant role models are present among adults a modeling or socialization around these models is likely to occur which reduces the probability of abstinence in the adolescent.

Family's Attitudes toward Patients

The attitudinal environment in which the patient exists is likely to be of significance in supporting his capability for abstinence. An index of this was developed from the responses to a question: "How do you think your family feels about you?" The qualitative responses generated by the question were then coded in terms of whether the family responses were predominantly positively oriented, ambivalently oriented or negatively oriented. For those on whom this information is available, the majority (56%) indicated that their family felt positively about them. Thirty-three percent gave responses which implied ambivalence on the part of the families, and 11% indicated negative feelings on the part of the family.

There is a clear pattern indicating that positive attitudes toward patients were inversely related to post-hospital abstinence capability. Patients who believed that family felt positively toward them showed the lowest tolerance score (+5). Those who felt family was ambivalent showed a medium score (+10), and those who felt family had negative feelings showed a high score (+24).

TABLE VI-8

HOW FAMILY FELT ABOUT PATIENT BY
TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	How Family Felt about Patient			Totals
	Positively	Ambivalent	Negatively	
Low	35	25	15	30
Medium	25	40	46	32
High	40	35	39	38
Total %'s	100	100	100	100.0
N	68	40	13	121
Balance index	+5	+10	+24	

This finding provides another piece of evidence to suggest that the family might in some way be setting the patient up for return to drugs. The original life cycle conception of the family's role derives from previous work that indicated that the patient's role in relation to his family might be formulated in terms of the pathological needs that he fulfills for other family members. When family expresses acceptance of the patient, they inferentially accept the drug behavior as well.

Therapists often perform a role as parent surrogates. A regular practice on their part is to reinforce the statement to their addict patients that they like them and that they will continue to see them without regard to how poorly they do with respect to readdiction. The latent message in this kind of statement is that they will continue to tolerate the patient's use of narcotics. The same message must be translated by the addict from the positive family attitudes he perceives.

One orientation in the addiction rehabilitation field is that addicts

are of such a psychological character that their incapacity to control their obsessional thoughts about drugs and the immediate needs for their satisfaction through the compulsive use of those drugs must first be dealt with by exercising some kind of rational authority or coercion over their behavior. Part of the implementation of this rational authority would come from the expression of displeasure concerning any return to narcotics use or other deviance along with the continued reinforcement of the assumption that the patient would not return to drugs. Therapeutic communities clearly spell this out for their residents. They accept the individual and whatever failures that he may experience, but they reject the behavior that may have been associated with those failings.

Alcoholics Anonymous and the auxiliary treatment group for family members of alcoholics, AlAnon, expresses this orientation in the concept of "tough love". They repeatedly reinforce the notion that the offensive alcoholic behavior must be separated from the individual, rejected while the individual is accepted and given love. In their terms, "It is not the individual who is talking but the alcohol."

It is likely that some family members and therapists are unable to make such a discrimination and inadvertently fall into the trap of providing an opportunity structure which supports continuance of the addiction system.

Family's Response to Patient when He is Tense or Anxious

A further effort was made to determine the quality of the interaction between the patient and his family. The addict was asked, "What does your family do when you are not feeling good, are tense, mean or nasty?" The material on how the family handled the patient when tense or acting out was

coded for whether the actions of the family members were seen as aggravating the situation or easing the tension either through some action or simply by leaving the patient alone.

TABLE VI-9
FAMILY'S REACTION TO PATIENT'S TENSION
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Family's Reaction to Patient's Tension		Totals
	Reduces Tension or Leaves Alone	Aggravates/ Shows Hostility	
Low	30	33	31
Medium	32	40	35
High	38	27	34
Total %'s	100	100	100.0
N	62	30	92
Balance index	+8	-5	

Our hypothesis in this area follows the contention that family life which tends to reduce anxiety rather than create aggravation when a young addict is tense is more likely to support efforts made by him to be abstinent. Many of the patients found that they could not respond to this question because they had been involved with long periods of time in institutions or otherwise had no home life. Still others denied that they expressed such tensions at home. Table VI-9 summarizes the responses in this area. First, it might be observed that a total of 62 of the 92 or 53% of the patients for whom this question was relevant saw their families as being oriented toward tension reduction.

Table VI-9 indicates that families that respond to patient distur-

bance and acting out either by acts that reduce tension or by neutralization of the interaction by leaving the patient alone seem to support abstinence. Patients in such homes show a higher tolerance of abstinence score (+8) than those whose family takes action to aggravate the situation or otherwise expresses hostility (-5).

Once again we may draw a parallel with Al-Anon. Al-Anon encourages those close to alcoholics, family members and others, to withdraw from any confrontation with the alcoholic. Their contention is that family members should be present to support the alcoholic's attempts at abstinence or continuance of abstinence, but that they should not take a direct role in manipulating the situation to achieve abstinence. Tension and conflict situations should also be avoided. We may be seeing something of the same dynamics in the families of these adolescent addicts.

Characteristics of Patient's Most Recent Living Arrangements while in the Community

A common assumption of the community planner is that the physical environment within which individuals live will generate deviance, particularly as regards crime and delinquency. One indicator of the physical environment is the amount of living space available to members of the household. It was found that for the homes of these addicts the space available ranged from one to eight rooms. On the average, it was found that each patient lived in quarters where four rooms were available.

Further, the number of persons living in the last home or quarters of the patient was examined. Here it was found that an average of four persons were reported to have lived with the patient. Comparing the two figures,

we establish that each individual had an average of one room available. According to some housing authorities less than 1.5 room per person is considered to be overcrowding. The per person space available to addicts was under this ideal. Yet it does not appear that they suffered from excessive overcrowding.

TABLE VI-10
LIVING ARRANGEMENTS IN HOUSEHOLD
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	No. of Rooms Available				Size of Apartment	Persons in House	Rooms Per Person	Totals
	1-3	4	5-8	Total	\bar{X}	\bar{X}	\bar{X}	
Low	33	6	33	31	3.86	3.83	1.01	
Medium	18	34	39	31	4.21	4.13	1.02	
High	49	40	28	38	3.76	3.59	1.05	
Total %'s	100	100	100	100				100.0
N	45	35	57	137				
Balance index	+16	+14	-5					

These data were examined in terms of the tolerance of abstinence. Table VI-10 provides a picture of the size of households, number of persons in the household and the number of rooms available. It is apparent that the differences are slight. Yet we should observe that the high abstainers tend to live in smaller households with fewer people than those showing low abstinence. However, the ratio of rooms per person provides slightly more living units for the high abstainers as they compare to those with a low abstinence record. This situation is probably a function of the fact that the high abstainers are more

likely either to have recently established households with spouses or to be living alone.

TABLE VI-11
SHARING OF LIVING QUARTERS
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Does Patient Share His Room			Totals
	Yes, with Spouse	Yes, with Other	No, Has Own Room	
Low	8	36	32	32
Medium	8	34	32	30
High	83	30	36	38
Total %'s*	99	100	100	100.0
N	12	61	63	136
Balance index	+75	-6	+4	

*Column percents may not equal 100% due to rounding error.

An analysis was done to determine if the patient shared his room with another person. The responses were examined in terms of those who had their own room, who shared their room with their spouses and those who shared it with others. Table VI-11 summarizes these data. The findings follow logically on the information we have on size and use of rooms. There is apparently a strong association between addicts' living with their wives and abstinence. In addition, high abstinence is found among those who have their own room available. This is probably a function of living alone.

The general impression that these data give is that the addicts who still predominately are involved with their families of orientation are less

likely to show capability in tolerating abstinence than those who are moving toward some kind of independence or developing their own families.

Residential Stability

At the time the Riverside Study was conducted the professional staff and others felt that patients showed a great deal of residential instability. The assumed 'nomadism' of the population was examined by listing the number of addresses that the patients reported after their first hospitalization at Riverside. The data show that patients had an average of three addresses over the 27 months under study. This finding did not indicate as much movement as some had expected. However, the small number of residences reported by addicts may provide only limited support for a change of our view of residential instability and addiction.

A great many of the young addicts in this study did not use their homes in a fashion generally considered to be 'normal'. Specifically, they often did not return to their homes at times when they were 'high'. In these instances they shared quarters with other addicts, or wandered the streets until the effects of the drugs were sufficiently lessened so that members of the family might not determine they had taken narcotics. In other instances, they would wait until their parents or relatives had retired to sleep before returning home. The 'nomadism' that was observed for the addict did not involve permanent changes of address. Rather, it seemed more a movement into many temporary residences with a customary return to a permanent home situation. When the patients were interviewed for this study it was not feasible to gather data on the extent of this temporary residential instability. An analysis was carried out relating the number of permanent residences to abstinence.

TABLE VI-12
 NUMBER OF PATIENT'S ADDRESSES
 BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Number of Addresses		Totals
	One or Two	Three to Nine	
Low	27	37	31
Medium	29	32	30
High	44	32	39
Total %'s*	100	101	100.0
N	79	57	136
Balance index	+17	+5	

*Column percents may not equal 100% due to rounding error.

Despite the limitations of this approach, it is apparent in Table VI-12 that patients who showed the greatest amount of permanent residential stability also demonstrated the higher abstinence. Thus, of those who had between one to two addresses over the 27 months of observation, we find an abstinence index of +17. Those who had between 3 to 9 residences had a lower abstinence index of +5. The evidence gives support to the position that those with a high tolerance of abstinence are residentially more stable than those with a low tolerance.

Tolerance of Deviance and Family Life

The preceding indicates that the quality of family life is a factor supporting a tolerance of abstinence. Conversely, it is logical that an early return to narcotics use would be supported by a tolerance of deviance in the family. Such a tolerance of deviance in many addict families has

already been noted by Chein when he discovered that criminal and deviant behavior was not uncommon in the families of adolescent addicts. He made a particular point of indicating such difficulties for fathers of addicts. (6 , p. 273).

The Riverside Study did not generate detailed information on the roles performed in this area by the different family members. However, parents of addicts were interviewed by the clinical staff at Riverside at the time their sons and daughters were being admitted to the Hospital. They were asked to identify the time when they first became aware of their child's narcotic use. In addition, in a separate interview, the addict himself indicated when he began using narcotic drugs. A comparison of these two points in time is revealing. We discover that 54% of the total study group had used narcotics for more than two years prior to their original admission to Riverside Hospital. Yet it was found that in only a little over 6% of the cases could it be established that at least one family member knew of the patient's narcotics use activity for that time period.

These findings indicate that the presence of narcotics use is not easily recognized by the parent or family members, is ignored, or that such awareness of narcotics is repressed by parents of addicts. This seems to occur despite the fact that major changes are associated with the entry of the user into the addiction system. After a period of time the addict becomes more and more preoccupied with the problem of hustling for his drugs as his physical tolerance increases and he must raise more money to get a "high". He generally shows marked difficulty in school or drops out completely before becoming fully addicted. Parents themselves may become aware of property losses in their homes. The addict shows physical deterioration.

Finally, most addicts progress to using the drug intravenously ('main-lining') after a period of use and the marks of the needle ('tracks') become difficult to hide from anyone having close and regular contact with the user. Despite all of this, the majority of parents show this considerable delay period before becoming aware of their child's narcotics use and subsequent addiction.

For whatever reason, it is obvious that the families of many addicts showed a high tolerance of deviance in connection with the behavior of these adolescent drug users. Consciously or unconsciously many of the families default in their use of social control with their sons and daughters. A consequence of this is that an opportunity system is created in the families of these adolescents for their unhindered movement into the addiction system.

Summary

This chapter on the relationship between tolerance of abstinence and the family has demonstrated that a relationship does seem to exist between the conditions found in the family and the individual's capability of reducing his drug use. First, it appears that the family experiences greater dependency on social agencies as the adolescent develops dependence on drugs.

A pattern is seen wherein the individuals' movement away from the home and into conditions of greater personal autonomy is associated with greater capability of tolerating abstinence. In addition, evidence is available to suggest that the presence of addiction behavior in other members of the family of orientation is a powerful predictor of subsequent failure in ability to abstain on the part of the young addict.

In general, the material presented in this chapter suggests that the family plays a role in both supporting addiction and, under certain conditions, reducing it by the attitudes they express and the reactions they have to the addict. Thus, the family may be engaged in addiction treatment in reducing the involvement of the addict in the addiction.

The findings also provide support for the clinical approaches of the therapeutic community to addiction treatment. It also supports more detailed explorations into the relationship between the characteristics and functions of the family and use of drugs.

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Chapter VII

SOCIAL RELATIONSHIPS AND ABSTINENCE

The life-cycle of addiction model suggests that engagement in the addiction system is supported by special types of social relationships. The model indicates that those drug users who manifested a greater engagement in the addiction system do so because of support of deviant associations. If the thinking in the model is correct we should expect that the addicts who demonstrate a low tolerance of abstinence are likely also to show a tendency to be engaged in deviant associations both while off and on narcotics. Further, there is likely to be a constriction of their contacts with non-deviant peers. Conversely, we should expect that those patients who demonstrate a capacity to maintain long periods of abstinence are more likely to continue to maintain social contacts with non-deviant individuals and groups.

The drug users under study are adolescents or young adults. As such, they rely heavily on their peer group for reinforcement of norms and for conflict resolution. Who the young user has relationships with and the character of those relationships are likely significantly to affect his self-image and his capacity to both tolerate and receive support from the "square" world. The addicts seen in this research testify to the reciprocal relationship between their use of narcotics and acceptance in the community. Many of the young users said that after they had returned from a stay in a detoxification hospital or prison they felt a strong sense of social detachment from the non-deviant elements of their own community. They said that they felt or knew that mothers in their communities had in-

structed their children to stay away from them because they were "junkies". They felt that the air of suspicion was so great among those in the non-drug community that they could only feel comfortable after returning to full contact with the narcotics subculture.

It is difficult to assess the extent to which negative community attitudes represent a real force in the lives of these young addicts. Whether these attitudes are real or not (and our inclination is to believe that they are very real) they possibly provide the conditions under which a self-fulfilling prophesy may be carried out. That is, the addict feeling rejected will search for an area of involvement where he may be accepted, i.e., the deviant subgroup, and through this act justifies the rejection of the larger community.

The following material explores some aspects of the social and peer relationships of the addict, as these may relate to his tolerance of abstinence.

The Addict and His Pusher

A persistent myth in the narcotics addiction field is that the pusher is some kind of predator who seeks young people out in order to "turn them on" so that he might have a larger and larger market within which he might ply his trade of the sale of narcotics. This rarely seems to be the case.

Chein et al. established in their study of adolescent addicts that the initiation of the young user generally occurred in the context of his peer group through one of its members who became a user in some other social context. (1, pp. 149-53). The original Riverside findings support those of Chein. There is no indication in these researches that any seduction

or force was used in encouraging the adolescents to enter into drug use. Drugs were introduced as having positive value and, it appears to the author, were so readily accepted because they fulfilled a need in the lives of these young people.

Something should be said about the role characteristics of the pusher in the late 1950's. The term "pusher" is generic in the sense that it is applied to several classes of individuals who distribute drugs to users. The first and least understood category of pusher is the "pusher-runner". This young person generally is not involved in the distribution of drugs for direct financial profit. A group of users may combine their funds so that they can purchase drugs at something closer to a wholesale price. Especially in the early stages of their use some addicts will service this kind of group by going out on the street to purchase the required quantity of drugs. This act of making the connection for the purchase of drugs on the street placed the addict at great risk to detection, search and arrest by the police during this period when such searches would be carried out at random. For involving himself in this high-risk action the addict receives enough narcotics to supply his own needs. This "pusher-runner" role seems to require the least competence in the technology of being an addict. In fact, it has the quality of a dependent novice. While the addict does not consider this type of person a pusher, the police do, since when he is caught he is in possession of large enough quantities of drugs to imply the intention to sell narcotics.

Another category of pusher is the "pusher-user". This individual is generally engaged in the regular sale of drugs which he receives through a lower level distributor of narcotics. Many pusher-users do not succeed

in acquiring financial resources much beyond their own needs for their drugs. In some cases, pusher-users manifest more competence and can maintain an extensive and profitable narcotics trade with relatively little vulnerability to arrest. As in any occupational situation a wide range of competency and related statuses may be identified for the pusher-user. It should be noted that the right to act in the role of the pusher-user is controlled by a lower level dealer above him. The dealer may decide that he no longer wishes to distribute narcotics to the pusher-user at times when he is "strung-out" and facing the prospect of imminent withdrawal and is thereby vulnerable to the pressures of interrogation from the police. When the pusher-user is seriously addicted and in custody of the police he is more responsive to such pressures as might encourage him to expose the dealer. The addicts in this study reported that a popular technique used by narcotics squad detectives was to use an offer of narcotics diverted from previous arrests to addicts in withdrawal in exchange for information about dealers or help in setting dealers up for arrest. Exchange of freedom from prosecution for information also worked very well for street addicts with previous convictions who would face long prison sentences if convicted again.

The "pusher non-user" is known to play a role as a direct distributor of drugs to addicts on the streets. If he is competent, it is likely that those who manage the drug distribution network will move him to the level of a dealer.

Observations made during this study indicated a symbiotic and interchangable quality of the roles of the pusher and the user. Almost all of the Riverside patients had at one time or another sold narcotic drugs or

at the very least been runners in behalf of a group who used drugs. The dependence of the addict on the pusher is obviously great. If he does not himself distribute drugs he depends on the person who holds this role and is often referred to by the term "mother". One of a number of terms used by addicts for heroin is "white lady". The terms "mother" and "white lady" call up role images of protection and security.

TABLE VII-1
DID PUSHERS SEEK PATIENT OUT
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Did Pushers Seek Patient Out			Totals
	Often	Sometimes	Never	
Low	37	17	33	31
Medium	--	30	33	31
High	63	52	33	38
Total %'s*	100	99	99	100.0
N	8	23	105	136
Balance index	+26	+35	0	

*Column percents may not equal 100% due to rounding error.

The character of the relationship between the pusher and the user was examined in terms of the young addict's tolerance of abstinence. Table VII-1 relates abstinence to whether or not the patient stated that pushers sought him out in the community when he returned to it after a period of absence in prison or hospital. It is interesting to observe that almost eight out of ten of the Riverside patients said that pushers never sought them out after they had returned from some form of institutionalization.

Some 17% indicated that pushers had sometimes sought them out and only 6% stated that pushers often sought them out. These data do not support the contention that pushers find the need to stimulate the narcotics trade among those who have already had experience in intensive use of drugs. However, it is particularly interesting that the largest proportion of users who contended that pushers did seek them out were those with high abstinence scores (+26 and +35). The majority who said they were never sought out to buy drugs demonstrated low abstinence scores (0).

TABLE VII-2

WHY PUSHERS DON'T SEEK PATIENT OUT
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Why Pushers Don't Seek Patient Out		
	Seller's Market	Other	Totals
Low	37	28	34
Medium	28	43	33
High	35	28	32
Total %'s*	100	99	100.0
N	64	35	99
Balance index	-2	0	

*Column percents may not equal 100% due to rounding error.

These young addicts were asked why they either were or were not sought out by pushers after coming back into the community. Table VII-2 summarizes the material available on why the patients felt they were not sought out by the pushers. Approximately two-thirds of the addicts contended that there was no need for the pushers to look for the addicts be-

cause it was a seller's market and the addict needed the pusher more than the pusher needed the addict. The remaining 35% stated other reasons such as the belief that addicts would not turn you on, i.e., that they felt it was your responsibility, that they were fearful of the police or that they were friends and by this very fact did not have to seek them out but saw them in the context of normal social relationships. Both of the subgroups who reported that pushers did not seek them out scored low on abstinence and evidently did not need encouragement in pursuing drugs.

TABLE VII-3

REASONS PUSHERS SEEK PATIENT OUT
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Reasons Pushers Seek Patient Out				Totals
	For You to Push	To Sell to You	They Are Friends	Other	
Low	33	18	33	22	25
Medium	53	9	22	33	22
High	33	75	44	44	53
Total %'s*	99	100	99	99	100.0
N	3	11	9	9	32
Balance index	0	+55	+11	+22	

*Column percents may not equal 100% due to rounding error.

The reasons pushers seek patients out are summarized in Table VII-3. Even when the patients acknowledged that pushers might seek them out relatively few saw this as involving the need to sell to the patient. In about one out of ten cases the patient felt that pushers initiated contact in

order to re-engage the newly discharged patients in the sale of narcotic drugs to others. In about three out of ten of these situations the patients indicated that they would seek the patients out as friends. The largest single category, but yet not a majority, (34%), indicated that pushers sought them out to sell narcotics to them. When these data are examined for the relationship between abstinence and reasons for making contact with the patient we discover an interesting pattern. It may be observed that those who experienced overtures on the part of the pushers to sell for them were in the low abstinence category (0); those who said that pushers were their friends demonstrated a higher score (+11); and those who said that pushers were in touch with them to sell to them had the highest score (+55).

These findings provide some insights into the relationship among the user, the pusher and the addiction system. Those addicts who show the least potential for maintaining extensive periods of abstinence also appear least likely to see themselves under the influence of the pusher. They do not seek them out to buy. They are friends who are in touch to re-establish the young addict as a member of their group of pushers. Those addicts who have shown a low tolerance of abstinence apparently cannot see the actions of the pusher as being aggressive since the activity is wholly welcomed. On the other hand, Riverside patients who demonstrated a high tolerance of abstinence were likely to have experienced contacts with pushers that were viewed as an external pressure to return them to the use of narcotic drugs. To a limited extent, then, we are provided with evidence supporting the contention that low tolerators are more likely to identify with the addiction subculture as reflected in the role set of the pusher. The high tolerators of abstinence did not demonstrate such an identification with the pusher.

Leisure Relationships and Drug Use

The nature of the addict's leisure time relationships was examined through a series of questions concerning who the patient spent his spare time with and what he did in his spare time. The general hypothetical framework for the examination of these data would have it that the patients who demonstrate a greater capacity to tolerate abstinence were also more likely to be more greatly involved in purposive activities with others who were not involved with deviant activities.

TABLE VII-4

LEISURE RELATIONSHIPS WHILE OFF AND ON
NARCOTICS BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Usual Relationships while ON			Usual Relationships while OFF		
	Alone	With Others	Alone or Others	Alone	With Others	Alone or Others
Low	25	25	23	33	30	33
Medium	45	37	21	41	25	36
High	30	38	56	26	45	31
Total %'s	100	100	100	100	100	100
N	20	71	34	27	64	42
Balance index	+5	+13	+33	-7	+15	-2

Patients were asked whether they spent their leisure time primarily alone, alone and with others, or primarily with others. Table VII-4 summarizes these findings for periods of time when patients were off narcotics and when they were on. Generally, there is a slightly greater likelihood for patients to spend their leisure time with others when they are off nar-

cotics as compared to the times when they are on.

In comparing patterns of relationships when patients are on and off narcotics some differences emerge. Those with high abstinence scores are more likely to be alone or alternately involved with groups. Patients with lower abstinence experience are more likely to spend their time alone. This trend becomes somewhat more pronounced when we compare this with leisure relationships for periods when the patients are off narcotics. During such periods more of those with the lower abstinence potential move to isolating themselves. This suggests an interesting possibility - that those with a low tolerance of abstinence may have greater difficulty handling social relations when they are off narcotics compared with patients with higher abstinence scores. Those who spend their spare time alternately alone and with others show an even lower tolerance score. This finding is more difficult to interpret. We might speculate that persons who fall into this category find themselves in family or other group situations which are unavoidable while they would prefer to isolate themselves.

Patients were asked questions about the types of activities they engaged in during their leisure time when they were off and on narcotics. The materials generated through this question are classified into three categories. The first is referred to as "purposeful activity". This includes special activities with family, special interests of the patient (pigeon flying, baseball, etc.) and other organized activity that involve other people and agencies. Another group of patients were not specific in identifying their leisure time. Rather they said things like, "I just hang around", "I don't do anything too special; I might talk with some of the people around the block". These were classified as "aimless" activities de-

spite the recognition that one can be very busy being "aimless". A final category is applicable only to periods when patients were using drugs and where the question seemed somewhat inappropriate to them. In one way or another they expressed themselves as follows: 'Man, I ain't got no leisure time when I'm on drugs. I'm out there hustling the streets for drugs all the time.' This type of activity was simply designated as "hustling".

TABLE VII-5

TYPE OF LEISURE TIME ACTIVITY ENGAGED IN WHILE OFF AND ON NARCOTICS
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Activity while OFF		Activity while ON		
	Purposeful	Aimless	Purposeful	Aimless	Hustling
Low	23	26	33	31	41
Medium	31	31	6	31	31
High	47	43	61	38	28
Total %'s*	101	99	101	100	101
N	62	35	18	45	42
Balance index	+24	+17	+28	+7	-12

*Column percents may not equal 100% due to rounding error.

The material on types of leisure time activities provides some interesting information about the effect of drug use on such activity. About two-thirds of the patients contend that they engage in some kind of purposeful activity during their leisure time when they are off drugs. When addicts begin to use narcotic drugs and become re-involved in the addiction system it is apparent that there is a reduction in purposeful activities.

Table VII-5 shows that when the patients are using drugs, less than

17% continue involvement in such relatively purposeful activities. The others become engaged in aimless activities or contend that they are unable to engage in any leisure time activities because of "hustling" needs.

A comparison of types of activities while on and off drugs demonstrates a relationship of this factor and tolerance of abstinence. Those who are high tolerators of abstinence are more likely to be involved in purposeful activities while off drugs when compared with low tolerators. Although there is a marked drop in the number of young addicts who engage in such activity when involved with drug-taking, the pattern of purposeful activity continues to characterize those with a high potential for abstinence. Finally, those who say they are not able to sustain anything but "hustling" activity demonstrate exceptionally low tolerance of abstinence scores.

These findings indicate support of the notion that addicts may have differential involvement in the addiction system and "conventional" life orientation. Those who engage in more conventional activities sustain abstinence better than those who do not engage in such activities.

Sexual Relationships and Abstinence

The classical psychoanalytic position, which is beginning to weather badly with the passing of time, holds that there exists a psychological basis for addiction involving feelings of sexual inadequacy. They contended, among other things, that the psycho-sexual development of the addiction-prone individual was disrupted at an early age (oral) and that because of this, mature genital sexual adaptation becomes difficult. These early psychoanalysts also held that latent or active homosexuality predisposed the in-

dividual toward use of narcotic drugs. They were especially graphic in drawing the analogy between the use of the needle, as self-inflicted intrusion on one's own body, to gain satisfaction and the use of the penis in the homosexual act. As is often the case, this theory is male-oriented and does nothing to explain addiction among women. The psychoanalytic position is further diluted by the wide array of heterosexual involvements that are reported for this as well as other addict populations.

For the Riverside patient group only one male reported his sexual activity to be primarily homosexual, and this was when using drugs. Three other males indicated both homosexual and heterosexual involvement when off drugs. Bisexual involvement increases to 7 patients when using drugs. It is not possible, using the Riverside data, to determine the frequency or intensity of the homosexual involvement. All of the young addicts who reported such an involvement indicated that it was a quick, effective and safe method of earning money to support their habit, and that their sexual preference was heterosexual.

Presence or absence of sexual activity was examined for periods of time when the patient was off narcotics and assumedly without unusual pressures which might inhibit involvement in sexual contact. The data on presence of sexual activity and tolerance can be summarized as follows: The 78% of the cases who reported heterosexual contact only, demonstrated a tolerance of abstinence score of +20; the 5% who said that they were so rarely off drugs that the question was not relevant, showed a low score of -43, and those 11% who indicated no sexual contact also demonstrated a low score of -7. The other categories captured too few cases for analysis.

Sexual contact while on narcotics was also examined. Those who continued heterosexual relations without change showed a low positive score (+2); those who continued such activity on a reduced level showed a higher score (+19), but those few cases who increased their sexual activity when on narcotics showed a negative score of -4. Although the last category contains only 5 cases, it deserves some comment. One of the idiosyncratic effects of heroin use is that, for some, it permits erection but delays or prevents ejaculation. A number of the young addicts who experienced this phenomenon put it to "good" use to maintain themselves in the addiction system. They developed relationships with several women at a time, usually older than themselves, serviced them sexually, received financial contributions for such services, and moved on to the next encounter. This approach to supporting their habit was every bit as compelling as "doing business on the street" for the same purpose.

An analysis was done concerning changes in sexual activity. The data show that maintenance of the same sexual orientation when off and on drugs is associated with a better capability for abstinence. Thus, those reporting no sexual activity when on or off drugs showed a tolerance score of +10; those who had varied activities, +4 while on and off narcotics. Cases were classified in terms of the absence of any sexual activity, whether it was varied (occasional contact with different people), whether it regularly involved a "steady" girl and cheating, and whether it was confined to a steady girl only. These data are presented in Table VII-6.

TABLE VII-6

PATIENTS' SEXUAL RELATIONSHIPS WHEN OFF AND ON NARCOTICS EXPRESSED THROUGH THE BALANCE INDEX AND SIZE OF SAMPLE

		When Off Narcotics			
		None	Varied	Steady & Cheating	Steady, One Person
When On Narcotics	None	+10 (9)	(-100) (2)	(+100) (4)	(-100) (3)
	Varied	-11 (9)	+4 (33)	-13 (7)	(0) (2)
	Steady & Cheating	(-100) (2)	-- (0)	+21 (24)	+17 (6)
	Steady, One Girl	(-100) (3)	-- (0)	+25 (4)	+9 (22)

Those who consistently had a steady relationship scored +9, and those who were busy with a steady relationship while cheating scored highest in tolerance of abstinence (+21). Thus, it would appear that consistency in the types of sexual activity and intensity of such involvement is a factor in maintenance of addiction.

Summary

The examination of social relationships with pushers, group involvement during leisure time and sexual relationships indicates that ongoing

involvement with ostensibly non-deviant activities and group interactions is associated with the young addict's capability to tolerate abstinence.

References

(Chapter VII)

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Chapter VIII

WORK AND THE TOLERANCE OF ABSTINENCE

One of the key symbols of a person's place in his community is that of the job he holds. For the Riverside Hospital group, as well as for other persons released from treatment or correctional institutions, the successful maintenance of the job situation is seen as an important aspect of post-institutional community adjustment.

When the field work for the Riverside Study was being carried out, a strong consensus was that addicts were essentially unemployable. Clinical observation supported the feeling that addicts could not be expected to keep jobs when they were using narcotics, because the effect of the drug was such as to incapacitate them in a work situation. This belief persisted despite the fact that information was available for patients on ambulatory care with heroin or morphine maintenance doses in Great Britain indicating that most patients in this situation did continue employment. When the problem of work and addiction was discussed with the young Riverside addicts a number of them were clear in expressing the difficulties related to maintaining both a place in the world of work and the addiction system. One young man spoke to this point specifically when he said, "When I've been using drugs for awhile I can't take the time to work."

The original Riverside follow-up study sought to examine the relationship between the cost of narcotics and the amount of income those patients who were interviewed accrued. (1). This material will be reviewed in greater detail in the chapter on crime which follows, but it will not come as a surprise to learn of the logistical problems the addict faces in order to support the most modest habit. This chapter will examine selected aspects

of the young addict's work experience and the relationship of these to the individual's tolerance of abstinence.

Characteristics of Last Employment

How did patient get his job? Table VIII-1 analyzes the way in which the patient got his last job. It indicates that four out of ten of the patients got their jobs as a direct consequence of information from or a recommendation by a relative or friend. The second largest group stated that they moved into their last job through an agency that required a fee for that service. The remaining persons used newspaper ads, New York State Employment Agency and other agencies for information about potential jobs. It may be noted also that about 20% of the patients were never employed during the course of the study period. When these data are examined as to the relationship of pathways to employment and abstinence some differences emerge. Relatives are more heavily used by those showing a high tolerance of abstinence (+23). The fact that relatives are available, have access to information to help the addict and are willing to do so, tells us something about the social network within which the particular addict interacts. It would be reasonable to propose a hypothesis that those who do not use this access route to work, experience a world in which potential primary group support is weak or antagonistic to the addict.

TABLE VIII-1
 HOW PATIENT GOT HIS LAST JOB
 BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	How Patient Got His Last Job							Totals
	Relative	Friend	Advertise	Agency	Paid	Other	Never	
			ment	N.Y.St.	Agency		Worked	
Low	29	32	60	50	27	6	50	32
Medium	19	45	20	13	27	29	25	28
High	52	22	20	37	46	65	25	40
Total %'s	100	100	100	100	100	100	100	100.0
N	21	22	5	8	15	17	20	108
Balance index	+23	-10	-40	-13	+19	+59	-25	

Use of the paid agency is a relatively positive approach to employment. It may suggest two things about the individual who takes this action. First, such agencies are seen as being able to broaden the possibilities for employment since they are in business to make money by placing people in jobs for a fee. The applicant for a job has to be psychologically ready to follow through on a job referral or the use of this kind of facility makes little sense. Finally, the applicant must use part of his income after being employed to pay the employment agency fee. All of these conditions would lead us to believe that those patients who used this route to employment were committed in their search for work. These assumptions would lead us to expect that such individuals were also more likely to be willing to detach themselves from the role requirements of the addiction system. We did indeed find that patients who used the paid agency demonstrated a high tolerance of abstinence with a score of +19.

Those groups using friends or the free New York State Employment Agency to get their last jobs showed low capability in tolerating abstinence. It is difficult to make judgments about use of friends since information beyond this identification was not gathered. However, we do know something about the use of the State Employment Agency by the Probation Department as a control mechanism over those clients referred to it by the courts and many of our patients were under such court supervision. Probation officers focus on the employment of their charges as a central goal of client supervision. They require that the probationer bring back a weekly verification of their efforts to search for a job. One of the easiest ways to fulfill this requirement is to check with the State agency, get their verification and check out. Addicts who use this approach may be unmotivated and without marketable skills and may in fact use it as a mechanism to avoid re-entry into a conventional life and work. But sometimes things do go wrong and some of the patients find work in this fashion.

Longest Time Held Job

Without the assistance of a control group, it is difficult to determine whether the work experience of our population is essentially different from other groups drawn from similar communities and backgrounds during the same period of time. Adolescent and particularly minority young people have difficulty in finding jobs presently and when these data were gathered. All young people tend to experience an early period of occupational instability either because of the temporary nature of the work that employers provide them or because they move from job to job as part of their exploration of their own role potential in the employment world.

TABLE VIII-2

LONGEST TIME EMPLOYED ON ANY JOB SINCE FIRST HOSPITALIZATION
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Longest Time Employed on Any One Job							Totals
	Never worked	Under One Mo.	1 < 3 Mos.	3 < 6 Mos.	6 < 12 Mos.	1 to 2 Years	2 Years & More	
Low	50	58	30	32	13	20		32
Medium	25	17	49	29	29	10		30
High	25	25	21	38	58	70	100	38
Total %'s*	100	100	100	99	100	100	100	100.0
N	20	12	33	34	24	10	2	135
Balance index-25		-33	-9	+4	+45	+50	+100	

*Column percents may not equal 100% due to rounding error

Acknowledging this limitation it may still be useful to look at some of the work experiences of the Riverside patients. The longest time any job was held is a reasonable indicator of potential for occupational stability.

We may observe in Table VIII-2 that 15% of the Riverside patients had never held a job. Combining those who never worked with those whose longest job was held for under three months, we find that almost one-half of the study group had little extended exposure to any one job. The remaining patients hold jobs from between three months to as much as two or more years. A reading of the tolerance of abstinence scores provides us with a clear display of the relationship between work stability and tolerance of abstinence. Putting aside the possibility of different motivations and job skills, it would appear that the job stability is strongly related to the ability

of young addicts to abstain from drugs.

Type of Work Last Held

The types of work performed by the addicts reflect their degree of involvement and competency in the work market. The last job that was reported by the patient was classified into clerical, sales, crafts, operatives, service or labor and examined as to relationship to tolerance of abstinence.

TABLE VIII-3

TYPE OF JOB LAST HELD BY PATIENTS
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Type of Job Last Held by Addicts						Totals
	Clerical	Sales	Crafts	Operatives	Service	Laborers	
Low	42	33	23	22	25	24	28
Medium	35	33	15	31	33	32	31
High	23	33	62	47	42	44	41
Total %'s*	100	99	100	100	100	100	100.0
N	26	6	13	32	12	25	114
Balance index	-19	0	+39	+25	+17	+20	

*Column percents may not equal 100% due to rounding error.

There seems to be a relationship between the skills level required in the execution of jobs held by patients and their tolerance of abstinence as follows: Crafts (+39); operatives (+25); service (+17) and laborers (+20). The declining scores may also be associated with declining identity with the

job. Those involved in the crafts might see a better prospect for the future for themselves through training, apprenticeship, journeyman and eventually full status as a member of a crafts union. Those working as service operatives and laborers are likely to view their work as dead-end jobs.

The group whose last job was classified in the clerical category had the lowest abstinence score (-19). Clerical work offers a degree of protection from detection of drug use for the worker. The skills level for the entry level workers is low as are the salaries. Probationary periods are usually provided so that it might take some time before poor work performance is challenged. Low visibility can be maintained in executing the kinds of jobs required in the entry level jobs. Finally, drug taking can be re-established without easy detection. Thus, early return to drug-taking may be given a better opportunity to begin in such a setting.

Job Satisfaction

The patients were asked how they felt about the job they held for the longest time period. The patients were asked to rate their own feelings about the jobs as enthusiastic, satisfied, indifferent or rejecting. Thirty-six percent of the patients under study indicated that they were either indifferent or rejecting of the jobs they last held. Forty-three percent were satisfied with their work. Twenty-two percent classified as enthusiastic.

Table VIII-4 presents these responses in terms of their tolerance for abstinence. It is clear that those who showed the higher capability in abstinence also expressed greater satisfaction concerning their work.

TABLE VIII-4
 ATTITUDES TOWARD LONGEST JOB HELD
 BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Attitudes toward Longest Job Held				Totals
	Enthusiastic	Satisfied	Indifferent	Rejecting	
Low	20	33	33	18	29
Medium	36	24	37	46	32
High	44	43	30	36	39
Total %'s	100	100	100	100	100.0
N	25	49	30	11	115
Balance index	+24	+13	-3	+18	

This supports the contention that those who are less alienated from conventional systems of goal achievement and can experience satisfactions from them are more likely to move away from addiction and experience extended periods of abstinence.

Average Weekly Salary Earned

Obviously a substantial part of the gratification a worker receives from his job comes from the salary he earns. Table VIII-5 presents the average weekly salary reported by respondents for the first year after being treated by Riverside Hospital. This time period is selected in order to provide the largest number of cases for representation in this part of the study. During the course of the interview each patient was asked to provide information on time periods employed, types of jobs held and income for each job. This material was recorded on a special employment form (Appendix F) from which computations on work and income were done.

TABLE VIII-5

AVERAGE WEEKLY SALARY DURING FIRST YEAR AFTER HOSPITALIZATION
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Average Weekly Salary after Riverside					Totals
	Under 40	40-49	50-59	60-69	70 and more	
Low	20	37	30	22	43	30
Medium	53	39	20	17		30
High	27	24	50	61	57	39
Total %'s	100	100	100	100	100	100.0
N	15	38	20	18	7	98
Balance index	+7	-14	+20	+39	+14	

The average salary for this group was relatively low, even for the period covered in the study. Many of the patients who were employed worked irregularly and often on a part-time basis. Their age, lack of experience and work skills did not command better paying jobs.

The tolerance of abstinence scores are generally higher for this table because it excludes those who did not work at all during the year after their first Riverside hospitalization and as was pointed out before they are low tolerators of abstinence.

The relationship between weekly income and abstinence capability is not clearly demonstrated in this analysis. This may be due to the fact that the jobs held were limited in income potential and often short-term.

Summary

The data that are available on addiction and work for the Riverside

population clearly suggest that there is a reciprocal relationship between the ability to abstain and the ability to engage in work that is stable, profitable and satisfying. Our experience suggests that this area perhaps more than any other reflects the direct consequences of the involvement in the addiction system. The conditions under which addicts must engage in the search for their drugs in our culture are such as to consume so much of their interest that their concerns and capacities are confined to the requirements of the addiction system. Despite this it is significant that some drug abusers demonstrate a capability to work and in fact do so when they are off narcotics and during their early stages of return to involvement with the addiction system.

References

(Chapter VIII)

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Chapter IX

CRIMINAL ORIENTATION AND ABSTINENCE

The relationship between criminality and narcotic addiction has been well established in recent years. Some early studies dating back to 1930 (2, p. 74), however, indicated that the relationship between the advent of addiction and criminality were not always simultaneous. Dai showed that in 81% of his cases no criminal record was available before addiction. John O'Donnell (3) executed a study of pre-addiction criminality by examining a sample of 266 White addicts who had been residents of Kentucky. In this retrospective study he discovered that before 1920 some 95% of the addicts did not show a previous criminal record. In reviewing subsequent decades he discovered that in the years between 1920 and 1929 77% showed no record of pre-addiction crime; between 1930 and 1939 65%; between 1940 and 1949 62% and finally between 1950 and 1959 55% of the respondents under study indicated no pre-addiction criminality. The impression that one gets from all of the data available is that criminality has become an integral part of the addiction scene only in recent years.

According to O'Donnell, "There is certainly a connection leading to crime from addiction. To become an addict one must have access to drugs, and outside of the health profession drugs are available mainly through contacts with criminals. Some prior contact with criminality is therefore a necessary condition to addiction of most addicts." (3).

O'Donnell and others would have it that despite the fact that addiction is considered a disease in the framework of medicine and law it is nevertheless an integral requirement of the American social and legal system

that the addict will become involved in criminality. An interesting discussion continues concerning whether addicts are "inherently" criminal or become criminal because of their need to supply their habit.

The present material will not deal with this problem but address itself to the relationship between degrees of criminal involvement as measured by arrests of young addicts and their proclivity to abstain from narcotic use.

During the period under study, 1348 patient months, or an average of 916 months of narcotics use per person, were reported by the Riverside group. (1). All of the patients reported using a group total of \$352,000 worth of narcotic drugs during this period of time. This figure may look somewhat excessive but it actually is not out of proportion to the expected cost of the narcotic for a confirmed user. On a per patient basis, the cost averaged \$2,534 for the period under study. Further, the average weekly cost was \$64, and the daily cost was \$9. According to most authorities in the addiction field this would be considered a small habit for the confirmed user, whether he be young or old. However, the experience in this study suggests this to be average rather than small.

In order to examine the relationship between earned income and cost of drugs, these two items were compared from the entire period that the patient was in the community. It was believed that this approach would assist in demonstrating the pressure that must be related to the need to support a drug habit. The following economic profile existed for the 139 patients in the study: \$202,000 was earned by all the patients who returned to use during an average 14.3 months in the community. The figures handled for salary represent gross income of the population before taxes. Therefore

it is an over-estimate of take-home pay.

As indicated above, the same group reported spending a total of \$352,000 for narcotics while in the community over the same period of time. These two figures show that the average addict who was under examination tended to overspend $1\frac{1}{2}$ times his reported legitimate income for narcotics use.

The relationship between salary and cost of narcotics was also examined in terms of the different period of times the patient spent in the community. Patients who were exposed to risk in the community for less than 18 months used narcotics valued at about $2\frac{1}{2}$ times their earned income during that period of time. For patients who spent more time in the community, there was a tendency for the cost of narcotics to approach the earned income and actually go below it. The 16 cases who were in the community for over two years had a ratio of expenditure of narcotics to income respectively .8 - .5 for the periods in question. This still constitutes a great pressure on the users, because income is not customarily earned during periods of intense drug taking. There is no evidence that addicts will save for these periods of time.

These data are interesting for the fact that they provide an insight into abstinence ability. Those patients who succeed in maintaining themselves in the community seem to progressively use less and less drugs when they are compared with those who spend less time in the community. The take-home pay of individual narcotic users was compared with the cost of narcotics. For the entire group of patients who had returned to drug use, a little over one quarter could hypothetically have paid for such use out of income. It is believed that this figure greatly over-estimates the number who might

find themselves in such a position. This statement is made on the assumption that the estimate does not consider the day-to-day living expenses which must come out of the earned income.

The Riverside patients who were interviewed were asked, "How do you support your habit?" Seventeen patients, or 14% contended they paid for their narcotics exclusively out of monies derived out of such legal sources as work, savings, or money from friends and/or relatives. Another 17 patients either were not asked or did not answer the question. The remaining 105, or 86%, of the cases admitted to some kind of behavior which if it had been detected would have subjected them to arrest and prosecution.

It should be clear then that most of the Riverside population of young addicts was clearly and deeply involved in criminality as a function of the maintenance of their addiction system. The analysis that follows will focus on the relationship between pre-hospital and post-hospital criminal involvement and subsequent tolerance of abstinence.

Pre-Riverside arrests and tolerance of abstinence

The fact of an arrest for an offense represents a good index of probable involvement in crime. West (4, p. 42) indicates that it is ordinarily not an isolated incident that brings about an arrest of a young person but a series of them. He indicates that arrest information is effective as a predictor of trouble in the area of deviance. While arrests are likely to be good indicators of criminality, the lack of arrests is not as likely to be a very strong indicator of conventionality. The fact of lack of detection does not necessarily indicate that the young people in question have been without experience of criminal activity. However, it is felt that one

can get a relative picture of the degree of involvement through the use of arrests. It is on that basis that they are used in the current analysis.

The data on the number of pre-Riverside arrests were collected through the use of a special form prepared for this purpose, the Hospital Records Form. (See Appendix B). The intake workers at the Hospital customarily recorded the arrest history of the patients. Their material could be corroborated with information derived through both probation reports and through the Social Service Exchange. Table IX -1 summarizes the material available on the number of pre-Riverside arrests of these addicts.

TABLE IX -1

NUMBER OF PRE-RIVERSIDE HOSPITAL ARRESTS
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Number of Pre-Riverside Arrests				Totals
	None	One	Two	3 to 5	
Low	24	39	35	28	31
Medium	30	24	46	24	30
High	46	37	19	48	39
Total %	100	100	100	100	100
N	54	38	26	21	139
Balance Index	+22	-2	-11	-20	

It is of interest that 39% of these adolescent patients had no previous Riverside arrests either for narcotic or non-narcotic charges. Some 27% of the patients experienced only one pre-Riverside arrest. The remainder, about 33% of the patients, showed between two and five arrests before

their first Riverside hospitalization. The mean arrest per patient for the total population is 1.2. Despite the youth of the population our knowledge of their deep involvement in narcotics addiction would suggest that such involvement might expose them to a greater risk of arrest. It is, however, apparently not the case that they were at that time in as much jeopardy with respect to this factor as might be expected.

The arrests were examined in terms of their relationship to the addicts' subsequent ability to tolerate abstinence. The data we have available indicate that the number of pre-Riverside arrests may be a predictor of subsequent tolerance of abstinence. The data show that a clear relationship exists between pre-Riverside arrest history and subsequent tolerance of abstinence. This is seen in an examination of the balance index which shows as almost a straight line function the positive relationship between pre-hospital arrests and post-hospital abstinence behavior. Thus, those with no pre-hospital arrests showed a balance index of +22; those with one arrest, -2, two arrests -11, three to five arrests, -20.

Pre-hospital criminal records of the patients were classified in terms of offenses which were narcotics charges. A narcotics charge is one in which the person is arrested for possession of drugs or "works" (paraphenalia for use of drugs) or sale of drugs. The non-narcotic charge would generally involve one of petit or grand larceny or in some cases such activities as loitering for the purpose of prostitution.

TABLE IX - 2
 NUMBER OF PRE-RIVERSIDE NARCOTIC AND NON-NARCOTIC CHARGES
 BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Number of Pre-Riverside Narcotic Charges						
	Number of Narcotic Charges			Number of Non-Narco- tic Charges			
	None	One	2 to 5	None	One	2 to 5	
Low	30	33	31	28	46	24	
Medium	30	36	8	26	27	48	
High	39	31	61	46	27	28	
Total %	100	100	100	100	100	100	100.0
N	87	39	15	88	26	25	139
Balance Index	+6	-3	+30	+18	-13	-2	

The material on non-narcotic or basically criminal charges (Table IX-2) suggests that there may be a further association between types of arrests and subsequent predisposition to abstain. Those whose early arrests are focused around the narcotics charges seem better able to abstain as they are compared to those whose arrests are primarily for non-narcotic charges. The pattern around types of arrests is not absolutely clear.

This may be due to the arrest practices of the police that prevailed during the time of the study. The Riverside addict reported that a customary practice of the police was to randomly stop known addicts on the street, take them into a hallway and search them, regardless of any evidence indicating that they were likely to be carrying narcotics. With this random action present, random arrests were also likely to come from this action.

Being an addict in New York meant being searched from time to time and being arrested part of that time. It can be inferred from these data that if an addict is involved in the addiction system he is likely to suffer arrests in connection with that addiction. This might happen independently of the degree of their involvement in the addiction system. On the other hand, it is likely that since an integral part of the addiction system is the subsystem of crime we would assume that those who show the greatest inclination toward engagement in the addiction system would be more characteristically into the criminal system. The findings in this analysis do lend credibility to the idea that there may be a variable involvement with the criminal system on the part of those who are subsequently able to tolerate abstinence as compared with more consistent involvement with criminality for those who tolerate it very little.

New Institutional or Police Contacts

During the course of the field work of the study information was collected from a wide range of official agency sources concerning the post-Riverside experiences of our patients. Records were received from Riverside Hospital, the State Department of Correction, the State Department of Mental Hygiene, the City Department of Corrections, the New York City Youth Board, the New York City Department of Health, Federal Bureau of Narcotics, the Social Service Exchange, and finally some information was gained through the use of a mail questionnaire to a small number of addicts for whom no other information was available. Each of these was coded on a special analysis form (See Appendix D) in such a way that they might be analyzed in terms of the presence of certain types of activities or certain combinations of activities. For purposes of the present analysis, the post-Riverside ex-

periences have been combined into types of new institutional experiences.

TABLE IX -3

NEW INSTITUTIONAL CONTACTS OF RIVERSIDE PATIENTS BY
TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	New Institutional Contacts					Totals
	Original Riverside Only	Police Only	New Riverside Only	Police and Riverside	Riverside and Other	
Low	17	35	17	39	17	32
Medium	17	23	35	27	17	27
High	66	42	48	34	66	41
Total %	100	100	100	100	100	100.0
N	6	26	23	59	6	120
Balance Index	+49	+7	+25	-5	+49	

As may be observed in Table IX -3, 5% of the total patient population experienced only one Riverside hospitalization, an additional 20% had subsequent re-hospitalization at Riverside for treatment of addiction; an additional 20% showed up with only new police experiences after their only Riverside hospitalization. About one-half of the addicts showed a combination of police and new Riverside experiences after their first hospitalization. According to the original Riverside analysis a total of 86% of all of the patients, interviewed and un-interviewed patients, (249) had new institutional experiences that indicated reinvolvement in crime and addiction. The original report also found that if one were to look at the Riverside population during any six-month period that patients were available for ob-

servation (i.e., were not dead and had been out of the hospital for two years, etc.) one would find that 50% of the adolescent addicts would be in some kind of institutional setting. These data established that the adolescent addict is to a substantial extent institution-prone.

The material in Table IX -3 provides a partial summary of the interviewed adolescent addicts' (N=139) different types of post-Riverside institutional experiences. It seems reasonable to classify those patients with only the original Riverside hospitalization and only subsequent Riverside hospitalizations as being primarily drug-oriented. If we examine the Table for those who have such a primary orientation as compared with those showing a greater criminal orientation as indicated through their subsequent contact with the police some differences become apparent. The drug-oriented patients seem to show a higher tolerance of abstinence. If we group the patients who have police experience and police and Riverside experience together it becomes apparent that they are more characteristically low tolerators of abstinence.

One cell in the Table is especially interesting for its support of part of the life cycle model. The category showing the poorest tolerators of abstinence are those who have had a combination of police and Riverside experience. It was pointed out in Chapter IV that the use of hospitalization as a device to maintain one's addiction is common. Hence it becomes reasonable to label the experience a "maintenance" detoxification. People leave the streets to come in from the "cold". They check into the hospital when pushers are out to get them or when they feel vulnerable to arrest. Such people apparently do not move into hospitalization experience as a function of their desire to be rehabilitated but rather as a consequence of

their need to manage their addiction in such a way as to continue drug use after leaving the hospital. We may speculate that those having a combination of police and new Riverside hospitalization experiences are those most likely to use the hospital for maintenance of their addictions. Their involvement in the addiction system involves both drug oriented institutional and police/correctional sub-systems.

The Addict's Expectations of the Future

The Riverside patients were asked two questions concerning their future orientation to the law and imprisonment, as follows:

What do you think the chances are that the cops and the law will leave you alone in the next couple of years or so?

NOT MUCH CHANCE _____
 SOME CHANCE _____
 A GOOD CHANCE _____

What do you think the chances are that a fellow like yourself has of staying out of jail in the next couple of years or so?

NOT MUCH CHANCE _____
 SOME CHANCE _____
 A GOOD CHANCE _____

These questions were asked to explore how adolescent addicts viewed themselves as fitting or not fitting into the criminal subsystem in the future. The original expectation was that addicts would rationalize or deny the probability that their involvement with drugs would predispose them to deeper involvement in what we, as professionals, would consider to be the negative/punitive aspects of the addiction system. It was commonly believed, at the time these data were gathered, that addicts would blatantly lie or at the very least selectively perceive their future prospects as a defense of their self-image and role projections as "cool/hip" people who

felt themselves to be somehow superior to those who had to subject themselves to the day-to-day requirements of a drab, poorly paid work world.

The previous section of this chapter casts doubt about any assumption of reality concerning the invulnerability of the addicts' life style to intrusion from police and judicial control. It is clear that at least for this group police, hospitals and courts were an integral component of their addiction system.

Having the information on institutional involvement from the early analysis available at this time we can now revise our hypothesis to suggest that the addicts' expectations concerning future involvement with the criminal subsystem would probably interact with their own recent experience with abstinence while in the community.

Generally, this reformulated hypothesis is borne out. With respect to "no cops" and "no jail" we find respectively 51% and 52% felt that there was a good chance that such contacts could be avoided. The other half felt they were at various degrees of risk to the occurrence of these conditions in the future. Thus, those who felt they had little chance (-11) or only some chance (-14) of avoiding the cops in the next two years demonstrated low tolerance of abstinence; those who felt that they had a good chance of avoiding arrest showed previous experience with a higher tolerance of abstinence (+7) at some time after hospital discharge. The data on probability of avoidance of jail are less clear but suggest that negative expectations are associated with those with a low tolerance of abstinence.

TABLE IX-4

ADDICTS' FUTURE EXPECTATIONS CONCERNING AVOIDING POLICE AND JAIL BY
TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Expectations about Avoiding Police and Jail							
	No Cops in Next Two Years				Will Not Go to Jail			
	Little Chance	Quali fied	Some Chance	Good Chance	Little Chance	Quali fied	Some Chance	Good Chance
Low	42	30	25	33	36	22	41	27
Medium	27	50	36	27	18	67	24	33
High	31	20	39	40	45	11	34	40
Total %*	100	100	100	100	99	99	99	100
N	26	10	28	67	22	9	29	67
Balance Index	-11	-10	+14	+7	+9	-11	-7	+13

*Column percents may not equal 100% due to rounding error.

A twenty year follow-up study of the original Riverside study population was conducted by Alksne (See Appendix G) using the data in the New York City Narcotics Register for the years covering 1955 to 1974. It was found that 54% of this group continued to demonstrate activity associated with problems of addiction fully 10 and 20 years after their original hospitalization. Of this group, 69 or over half of the at risk population (adjusted to account for projected loss of deaths) show such activity within the last three years of the follow-up.

It was not possible to match those patients who felt that they would continue to have difficulties with law enforcement with those who subsequently experienced such difficulties as expressed in their reappearance in the

Narcotics Register. But it nevertheless is impressive that about the same proportion, about one half of the original group who expressed such expectations, eventually experienced them.

Summary

The materials presented in this chapter on adolescent addict post-treatment experience with drug-related institutions, future expectations concerning them and tolerance of addiction suggests an interactional effect is present among these factors. Those who showed a deeper involvement with the criminal subsystem and anticipated that they would become so involved also demonstrated a low tolerance of abstinence. These data also suggest that a self-fulfilling prophesy might also be operative here.

References

(Chapter IX)

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Chapter X

DRUG EXPERIENCE AND THE TOLERANCE OF ABSTINENCE

This chapter will examine the characteristics of early and recent drug experience, drug costs, attitudes toward self, and perception of the future as these may relate with tolerance of abstinence.

How They Began Using Drugs

It is felt that those who enter into the use of drugs at an early age and directly by dependence on heroin and the hypodermic needle are more likely than others to be psychologically predisposed to the behavioral requirements of being an addict. It is not possible for us to reconstitute the psychological condition of our addict respondents. Instead, we might examine some of the conditions associated with the onset of drug use and attempt inferences concerning how these conditions might affect subsequent tolerance of abstinence.

Movement toward involvement with the addiction system clearly requires the young addict to overcome several aversions and neutralize certain negative conditions. First, it is reported by addicts that the initial use of heroin by youngsters is often associated with physical discomfort, nausea and sometimes vomiting. Addicts report that some who experiment with heroin give it up and do not try it again. Many push on for the second and third time until they achieve a positive effect. More experienced users assure them they will experience a high after the first negative reactions. With this assurance, they continue. Others who start by sniffing ("snorting") heroin, balk when they must move on to injecting themselves.

In many communities the heroin addict is viewed with such disdain as

to become a pariah. Community residents express anxiety concerning the threat addicts pose to their property and life style. In no instances with which I am familiar have I observed a community support for the addict. The response is more likely to mix a sense of pity with that of hatred. In recent years there have been instances of community members banding together in a movement of vigilantism to attempt to control addicts and pushers in their community. We could assume that such attitudes may be a deterrent for some to entering and continuing drug use.

Isador Chein (1) sought to examine the attitudes of peers and gang members to the addict. He indicated that the narcotics user and especially the narcotics addict possessed a particularly low status in the adolescent gangs. During the fifties, when this study was done, a great deal of status and security came to young people through identification with adolescent fighting gangs. Many of these gangs relied heavily on the aggressiveness and the reliability of their members in carrying out the roles that were required in gang fighting. The non-using gang members often sharply rebuked, punished and ostracized those within the gang who used drugs. This situation prevailed during the early phases of the spread of drug use.

Entry of drugs into the community was insidious. It was secretly carried by peers, permitted to develop and surfaced only after many were involved. Riverside patients reported that they engaged in gang activity and continued to find this of importance even after they began to use drugs in relative secrecy. When they became more involved in the requirements of the addiction system, many of these young people were unable to give the concentrated loyalty and effort to gang activities because of

a conflicting loyalty to the addiction system.

Thus, even the status-rendering value of the gang was in many cases voided by the need-fulfilling value of drug use for many young people. During the late fifties we observed that the aggressive gangs that had characterized that decade were beginning to disappear. It was felt that the downfall of many of these fighting gangs was associated with the growing prevalence of drugs among the youth in the communities in which the gangs had once flourished.

Age of Onset and Delay in Treatment

Rosenberg (2) contends that the earlier a youngster manifests behavioral problems which come to the attention of agencies and courts, the more likely is he to show emotional distress. Further, he observed that the earlier the onset of behavioral problems the greater the likelihood of continuance of such problems at a later age. This hypothesis stimulates us to predict that the age of onset of the young adolescent's use of drugs is likely to be associated with his subsequent capability of abstaining from drugs.

The age of onset of narcotics addiction was derived from two sources. It was established primarily through an interview and corroborated from an intake form utilized by Riverside Hospital for all patients. The research interview asked that the patient provide information on when and how he began to use any drugs. The Hospital records for the original study group of 247 indicated that one out of ten of the study group began their narcotics use at the age of 14 or younger. They also indicated that three boys reported beginning narcotics use at the age of eleven and that one of these

three had developed a habit that cost up to \$10 a day during this period. One of those eleven year old boys began his drug use by "mainlining" without having used any drugs before that time.

Table X-1 displays age of onset for this population in terms of those addicts who first started using drugs at the age of fifteen and under, and those who used it from the age of 16 and older. It is clear that those who began using drugs at earlier ages showed lower tolerance of abstinence scores as compared with youngsters who began using drugs at an older age (+10). The hypothesis that involvement in drug behavior at earlier ages supports low tolerance of abstinence is supported.

TABLE X-1
AGE OF ONSET OF DRUG ABUSE
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Age of Onset		Totals
	15 years and under	16 years and over	
Low	34	28	31
Medium	31	29	30
High	35	43	39
Total %'s*	100	99	100.0
N	71	68	139
Balance index	+1	+10	

*Column percents may not equal 100% due to rounding error.

Medical opinion has always held that early detection and treatment improves treatment outcome. This position is also held in the drug abuse treatment complex. In a previous chapter we noted the unusually long

elapsed time from the point at which the patient began drug use and the time family became aware of it. Similarly, we find many of the study patients experience substantial elapsed time periods from the age of onset to hospitalization. The records analysis indicated that few of the patients had received specialized treatment for addiction at other treatment facilities prior to Riverside. This makes sense, since Riverside Hospital was the only treatment installation for adolescent addicts during that time and most other psychiatric and medical facilities would refer such cases out to Riverside.

It is difficult for us to say why such long delays occurred in recognition and referral to treatment for so many of the young addicts. It might have been a function of the lack of adult control. It is possible that this combined with the young addict's resistance to treatment and denial that he had a problem supported delay. However, it is reasonable to assume that the adolescents who were referred to Riverside fairly soon after they began to use drugs were somewhat more likely to have been under closer adult control than those who continued in the community for as long as three years after the age of onset of their drug use before arriving at the Hospital.

Table X-2 presents material concerning tolerance of abstinence and period of time the addicts used drugs prior to first Riverside hospitalization. It is clear that those who experience earlier treatment manifest a higher abstinence score (+16) when compared to those who experience treatment delays (+3).

TABLE X-2

PERIOD OF TIME USING DRUGS PRIOR TO FIRST RIVERSIDE HOSPITALIZATION
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Time Using Prior to First Riverside		
	Less than 2 years	2 years and more	Totals
Low	30	32	31
Medium	24	31	29
High	46	36	40
Total %'s*	100	99	100.0
N	50	86	136
Balance index	+16	+4	

*Column percents may not equal 100% due to rounding error.

The findings around age of onset and delay of hospitalization have meaning as far as rehabilitation is concerned. Adolescent addicts should be identified as early as possible and similarly introduced to treatment quickly in order to abort the process of movement into the addiction system.

Type of Initiation of Drug Use

When the field work for this study was being carried out at Riverside Hospital the staff believed that there was a fairly standard sequence through which most young people went in order to reach the final stages of intravenous heroin use. It was believed that the addict characteristically began with the use of marihuana and followed with the sniffing of heroin, subcutaneous injection of heroin, and then, finally, the intravenous injection of this drug. It is interesting that this commonly held assumption concerning the "classical" pattern of initiation of drug use was found present in

only 13% or 18 out of the total of 136 patients on whom this information was gathered. Further, it should be noted that 15% or 20 of this patient group actually started using heroin by intravenous injection of the drug. These findings came as a surprise to staff at the Hospital when they were first presented. It seems that in this, as well as many other areas, clinical staff built up their expectations on the basis of a logic they had constructed rather than the reality of the addicts' lives. This staging of an addict's movement through the four types of drug use (marihuana, "snorting", "skin popping", and "mainlining") implies relative degrees of involvement at each stage. Our data show that users may enter this process at any point. We might therefore use type of initiation as being symptomatic of the readiness of an addict to enter into the addiction system. Those who move slowly through marihuana use and then to heroin show a greater caution in entering the addiction system compared with those who start their drug use directly with heroin.

Table X-3 shows the pattern of abstinence according to whether the patient's initiation to heroin use was delayed through use of marihuana or was not delayed. It is clear that those patients who delayed entry into heroin use were more likely to show better tolerance of abstinence (+17) as compared with those who first started with heroin (-3). It is reasonable to suggest from these findings that part of the addiction set of addicts is measured by the type of route taken to heroin addiction and that that route predicts subsequent abstinence capability.

TABLE X-3
 TYPE OF INITIATION OF DRUG USE
 BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Type of Initiation of Drug Use		Totals
	Through Marihuana	Heroin Only	
Low	26	35	29
Medium	30	32	31
High	43	32	40
Total %'s*	99	99	101.0
N	77	46	123
Balance index	+17	-3	

*Column percents may not equal 100% due to rounding error.

Cost of Drug Habit as a Measure of Involvement

One of the ideas about drug abuse that has always been stressed is the assumed magnitude of the cost of a drug habit. Addicts are referred to in the press as having habits costing \$50 to \$100 per day, which had to be supported through illegal means. Our data indicate that these high costs are more fictional than real. Our data indicate that drug habits are generally not the same for all addicts. Some addicts seem to have drug needs that escalate to astronomical figures, and we feel that this is rare, while most use relatively modest amounts compared to popular expectations.

Information on the maximum cost of drugs for any period was gathered in the patient interview.

TABLE X-4
 AVERAGE DAILY COST OF DRUGS
 BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Average Daily Cost of Drugs				Totals
	Under \$5	\$5 to \$9	\$10 to \$14	\$15 and Over	
Low	18	34	38	33	32
Medium	28	30	23	44	29
High	54	36	38	22	39
Total %'s*	100	100	99	99	100.0
N	28	44	39	18	129
Balance index	+36	+2	0	-11	

*Column percents may not equal 100% due to rounding error.

This cost represents the largest amount of money ever spent on drugs by the addict for any period of time. We find that 3 out of 10 of the Riverside patients had at one time or another achieved a maximum daily cost of narcotics that exceeded \$24. Though not as dramatic as the hypothetical press costs, such a level of use creates a constant crisis and stress on the addict's ability to generate funds through illegal means. When we compare the maximum daily cost along the lines of the ability of addicts to abstain, we find no clear pattern that would establish high maximum cost with abstinence. Thus, low costs show an abstinence score of +5; medium costs +13; and high costs (0). The fact of varying maximal levels in the cost of drugs appears independent of an individual's capability of ultimately achieving complete abstinence from drugs. Extremely intense highs or less pressured lows appear to be somewhat more individual factors for which we cannot account in this analysis.

Another variable which is considered to be a better measure of the intensity of drug abuse is the average daily cost of drugs. This figure was computed after a complete review of the entire recorded post-Riverside history of drug use and cost of such drug use and computed for average cost of drugs for time using drugs. The initial data were gathered on a work form from which an average cost figure could be computed. (See Appendix C). The average daily cost of drugs for the Riverside population was \$9 per day. Although this is a far less dramatic figure than those quoted in the press it is likely to be more realistic. Yet it still remains a substantial problem for the addict to raise this kind of money, \$60 or \$70 per week, through illegal means. Another qualification should be suggested. The real cost of the drug on the market is, of course, often reduced by the fact that addicts may get their narcotics by "running" for a group of other addicts. "Running" means that the addict will take on the responsibility for purchasing the drug, thereby exposing himself to greater risk of arrest on the street, in order to get a "taste" of the drug as his fee. At times addicts will more aggressively push drugs and take care of their own needs from the surplus funds. Young prostitutes may be supplied drugs by their pimps from larger caches of less expensive narcotics. Thus, the \$9 reported may be the ideal market value and not the "retail value" of the drug. These different sources of the drug must be considered in weighing the validity of these data. Nevertheless, when we look at the average daily cost of drugs in relation to the tolerance of abstinence we discover a sharp and most significant relationship between the average daily cost of drugs and the addict's capability of abstaining.

The data displayed in Table X-4 almost express the association be-

tween a tolerance of abstinence and average daily cost of drugs as a straight line function. Thus, the less intense the average drug use as measured by the average daily cost of drugs the more likely is one to find the addict showing a high tolerance of abstinence (+36). Addicts whose habits exceeded \$14 per day had a low tolerance index of -11.

What Were the Patients Looking for in their Narcotics Use?

Patients were asked in the interview why they originally began to use narcotic drugs. The patients' responses varied greatly but could be coded into an expression of needs that were predominately motivated by curiosity, hedonism, intrapsychic or psychiatric reasons and external social reasons. Curiosity is relatively self-explanatory. Hedonism expressed some specific statement that indicated pleasure needs. Intrapsychic represents some aspect of emotional needs which might be satisfied by the use of drugs. External social factors represented situations they felt were imposed on them by the social world in which they existed. The largest single category into which the patients' responses fell was that of curiosity, with 47 or 36% of the respondents indicating that this was their original reason for using drugs. The second largest category, 20%, and one which is seen as relatively small considering the importance given it by psychiatrists, is that of personality problems. Hedonism as a perceived original stimulus was stated by only 13% of the Riverside group.

TABLE X-5
 STATED NEED FOR ORIGINAL DRUG USE
 BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Need for Original Drug Use					Totals
	Curiosity	Hedonism	Intra- psychic	External Social	Other	
Low	32	41	22	22	32	30
Medium	23	35	48	39	29	32
High	45	24	30	39	40	38
Total %'s	100	100	100	100	100	100.0
N	47	17	23	18	25	130
Balance index	+13	-17	+8	+17	+8	

As with a variety of other retrospective data, one must recognize that these responses are filtered through a wide range of intervening experiences that may distort the individual's memory and perception. Nevertheless, some of the responses follow the clinical expectations concerning drug addiction. Those who felt that conditions external to themselves stimulated the use did well (+17). Addicts who felt personal problems stimulated their drug use began to show lesser capability of tolerating abstinence (+8). Those who used because of curiosity were in the high range. Finally, the poorest tolerance potential is for the drug users who originally saw themselves as having sought out drugs in order to achieve pleasure (-17).

TABLE X-6

STATED NEED FOR RE-USE OF NARCOTICS AFTER PATIENT'S FIRST HOSPITALIZATION
BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Need for Re-use of Narcotics			Totals
	Hedonism	Intra-psyhic	External-Social	
Low	37	24	21	28
Medium	18	35	30	28
High	45	41	49	44
Total %'s	100	100	100	100.0
N	56	63	37	156*
Balance index	+8	+17	+28	

*The total number of responses exceeds 139 because some patients gave several answers.

Patients were exposed to a similar line of questioning concerning why they returned to narcotics use after their hospital experience. The largest group of patients responded that some kind of intrapsychic problem had stimulated return. The next largest indicated continued craving for the pleasurable effects of heroin. The most infrequent reason given for return had to do with some kind of external social situation that reappeared in the lives of the addicts. The responses displayed in Table X-6 demonstrate that addicts who perceive themselves as being drawn into reuse because of the pleasure involved were substantially less likely to abstain (+8) as those with psychiatric problems. Those who saw social conditions as a factor in their return to drugs had the highest score for tolerance of abstinence. (+28).

These findings tend to corroborate impressions concerning addict be-

havior. Addicts frequently say that the craving for the drug and its pleasurable effects is the most powerful and dominant influence in their life space. Similarly, the fact of the association between external social factors and tolerance of abstinence suggests that this group may not be as strongly under the influence of this search for pleasure. If they express a need for reuse as being an adaptation to some part of their world which can be controlled or can be changed, they can also expect their need for narcotics to be changed as well. On the other hand, the hedonists may provide less potential for social or psychiatric intervention. The findings amplify our concept of the addiction set in suggesting that stated needs for drugs going from hedonism, personality factors to social factors indicate declining degrees of expression of the addiction set.

The Addict's Perception of Self and Future Orientation

The patients were asked a question concerning whether they blamed themselves or others for their use of narcotic drugs. The purpose of the question was to get some sense for the extent to which these young addicts saw themselves as internally or externally motivated when it came to their drug use. Following the life cycle concept, we would expect that those who tended to blame others would be less able to abstain. They, in effect, say, "It's not my fault; it's somebody else's fault that I'm using drugs." Those who blame themselves show less a sense of impotence concerning their capability of controlling the world around them. The expectations in this area are justified in the findings. Table X-7 indicates that those patients who blame themselves are substantially more likely to show a good capability of tolerating abstinence (+14) as compared with those patients who tend to project the responsibility for the drug use onto others (-2).

TABLE X-7

ADDICTS' PERCEPTION OF SELF BLAME FOR
DRUG USE BY TOLERANCE OF ABSTINENCE IN PERCENTAGES

Tolerance of Abstinence	Perception of Blame		Totals
	Blames Self	Blames Self and/or Others	
Low	27	38	31
Medium	32	26	30
High	41	36	39
Total %'s	100	100	100.0
N	78	50	128
Balance index	+14	-2	

These findings are particularly interesting in the light of the experience of the therapeutic communities in recent years. Their orientation has it that one of the problems that most frequently blocks the rehabilitation of addicts is expressed in the projection of blame onto everyone but themselves, i.e., they rationalize. Therapeutic communities focus on the addict's personal responsibility for engaging in drug abuse and anti-social behavior. They do not permit the addict to rationalize his behavior in terms of uncontrollable external conditions or even uncontrollable personality malfunctions. The focus is on self blame and an effort to change the self in order to accommodate the needs of the society.

Patients were asked to indicate if given an opportunity to use drugs under certain conditions what would be their preferences. The options they could take were to be off entirely, to use once in awhile if they would not get "hooked", to use regularly without getting "hooked". The majority of

the cases stated that they would prefer to be off narcotics entirely. This group generally showed a better picture of abstinence than any of the others (+7). Very close to this group in performance were those who said that they would like to use once in awhile if they did not get "hooked" (+5). The group that showed the lowest tolerance of abstinence were those who said they would prefer to use drugs regularly in the future if they did not get "hooked" (-14). It appears as if a self-fulfilling prophecy is operating here.

Finally, patients were questioned concerning their own expectations about becoming readdicted to narcotics. The findings here are very clear. Those who expect to become readdicted had shown the poorest tolerance of abstinence (-56). Those who felt that they might become readdicted had low scores (-8), but not as low as those who felt they would return. Those who didn't know began to show higher scores (+5). Those whose expectations were that they would not become readdicted were those who demonstrated the highest tolerance of addiction. Certainly these findings demonstrate the interaction between the patient's expectations concerning his behavior and the behavior itself. If he feels he will become readdicted he becomes readdicted. If he feels he is not going to become readdicted he is likely to become less involved in addiction.

Conclusions

The findings of this chapter very strongly support the contention that the way in which an addict begins to enter the life cycle of addiction is highly predictive of whether he will subsequently be able to leave it. The entry at an early age makes exiting more difficult. We find that the more the adolescent avoids treatment the poorer will be his ability to tolerate

abstinence at a later time. Those addicts who enter the life cycle of addiction directly with heroin use show poor abstinence capabilities.

We find that there is an association between the intensity of use of drugs as it is measured by the cost of the drugs and tolerance of abstinence. The lower the tolerance of abstinence the more likely is the young person to use high doses of narcotics. Further, we find that there seems to be a relationship between tolerance of abstinence and expressed need for original use of drugs and need for reuse of drugs. Where the use is focussed on hedonism or psychiatric or personal reasons we find a young addict somewhat less able to abstain. Where he sees social conditions as associated with the drug need tolerance potential is high.

Finally, we discover that there is a strong element of a self-fulfilling prophecy involved in drug use of addicts. Those who would prefer to continue to use drugs regularly without getting "hooked" demonstrate the poorest abstinence potential.

This chapter provides support for the life cycle model in that it demonstrates that degrees of involvement in addiction related behaviors, the holding of certain attitudes toward self and others, and expectations of future behavior provide a series of indices of involvement in the addiction system.

References

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Chapter XI

SUMMARY AND CONCLUSIONS

This study was executed to test a theoretical framework by Alksne, Lieberman and Brill (1) concerning a conceptual model of the life cycle of addiction which postulates that there is a process involved in entering into, continuing and leaving an addiction system, i.e., a way of life built around compulsive use of narcotics. The model of the life cycle of addiction was based on the concept that addicts progressed through different stages in order to enter and become fully involved in the addiction system. In addition, the model suggests that the career into full involvement with the addict way of life entails a series of secondary supports for drug abuse and deeper involvement in such drug abuse which are largely of a social character. The dominant assumption guiding the construction of the model is that the process of becoming an addict and being an addict in our culture may well be as much a social process and condition as it is physical and psychological. The addiction system orientation suggests that involvement with drugs is more usefully explained by the notion of movement in and out of identity as addicts as compared with a more static use of a concept of membership in a relatively stable subculture.

The authors of the life cycle model suggest that addicts learn to tolerate the addicted state by a series of social supports and identities. Similarly, movement toward a drug free state requires support that would assist the individual in tolerating the condition of abstinence.

The various areas spelled out as supporting or reducing the tolerance of addiction are summarized here.

Demographic characteristics and the tolerance of abstinence. The study found that being White, female, better educated are attributes which support the individual's withdrawal from the addiction system and movement into a condition where he is able to tolerate abstinence. Recent migrants who share a common social background with their parents showed better capability for the tolerance of abstinence than those addicts whose socialization experiences were different from those of their parents. These factors were not as powerful as predictors for supporting the career requirements for becoming involved in the life cycle of addiction as those which follow.

Family interaction and abstinence. A relationship does exist, as was expected, between the conditions found in the family and the individual's capability of reducing his drug use. Families' dependence on social agencies is associated with the adolescent's developing dependence on drugs. A pattern is seen where the individual's movement away from home and possible supports for reliance on drugs into conditions of greater personal autonomy correlates with greater ability to maintain abstinence. Evidence was found to indicate that the presence of addiction behavior in other members of the family is a powerful predictor of failure to abstain on the part of the young addict. The family plays a role in supporting addiction or, under certain conditions, reducing it by the attitudes they express and the reactions they have to the addict. Higher abstinence was associated with families which helped to ease tensions and at the same time rejected the adolescent's involvement in the addiction system.

Social relationships and abstinence. There is an indication that presence of deviant associations militates against abstinence. The indivi-

dual's relationship to the pusher appears to be associated with continuance or discontinuance of involvement with the addiction system. Where they are viewed negatively there is a greater likelihood that tolerance of abstinence will be enhanced. The high abstainers viewed contact with pushers as external pressures to return them to the use of narcotic drugs. Examination of social relationships with pushers, group involvement during leisure time and consistency in sexual relationships indicate that ongoing involvement with ostensibly non-deviant activity and group interaction is associated with capacity to tolerate abstinence.

Work and tolerance of abstinence. Successful experience in maintaining a job situation is seen as an important aspect of post-institutional community adjustment. Many addicts were found to be employable even while on drugs. The way in which the addict found his job was associated with high tolerance of abstinence. Those who used relatives or paid agencies as sources of employment were more likely to demonstrate a high level of abstinence as compared with those who used friends or the New York State Employment Office. The study found that work stability was a good indicator of tolerance of abstinence. The types of work engaged in by the young addicts reflected different degrees of involvement and competency in the job market. Those working at more skilled activities and those who expressed greater satisfaction and had higher salaries were more likely to demonstrate a higher capability to abstain. Thus, it was established that a reciprocal relationship existed between the ability to abstain and the ability to engage in work that was stable, profitable and satisfying.

Criminal orientation. The data established that there is a clear relationship between degrees of criminal involvement and tolerance of abstinence. There was a relationship demonstrated between pre-treatment arrest history and subsequent tolerance of abstinence. In addition, those whose early arrests are focussed around narcotics charges only seem better to abstain as compared with those whose arrests indicate other types of criminal activity. Post-treatment involvement with the criminal system predicts low tolerance of abstinence.

The findings in the area of drug behaviors indicate that those adolescents who enter the life cycle of addiction at an early age are likely to demonstrate a low tolerance of abstinence as compared with those who are older when they first begin their drug use. There is also a clear relationship established between the costs of drugs and the pressures toward maintaining a habit; the lower the tolerance of abstinence the more likely is the person to use high doses of narcotics. The study also found a relationship to exist between tolerance of abstinence and expressed need satisfied by the original use of drugs and the reuse of drugs after treatment. Where hedonism is seen as the primary purpose of drug use, tolerance potential is low. Where drugs are used to manage untenable social conditions, the tolerance potential is higher. We further discovered there is a strong element of the self-fulfilling prophecy involved in the drug use of addicts. Those who state a preference for reinvolvement with drugs are more likely to become reinvolved. This chapter provides support for the life cycle model in that it demonstrates that degrees of involvement in addiction related behaviors, the holding of certain attitudes toward self and others, and expectations of their own future behavior are indices of potential either

for reinvolvement with the addiction system or withdrawal from it.

The overall pattern of findings suggests that the logic and elements of the life cycle of addiction model are sound.

Implications for future research. The relatively consistent findings concerning the validity of the addiction system concept as an orientation to understanding the careers of addicts suggest that similar processes might exist for other types of drug abusers. It would be useful to explore the application of such an analytic approach to, for example, barbiturate addicts, "speed freaks" and users of other psychedelic substances.

The use of the life cycle concept in this study focussed primarily on social factors. It may be that a richer understanding of the process of addiction might be elaborated by the development of an interdisciplinary approach.

In addition, a logical step out of the current study would be to utilize some of the factors of the addiction system which have predictive value in developing a more systematic prediction instrument.

Implications for Treatment and Rehabilitation. The findings strongly suggest that treatment and rehabilitation of drug abusers must rely heavily on developing mechanisms that negate the social support systems of addiction involvement. The therapeutic communities have intuitively developed some mechanisms to neutralize the social supports of addictive behavior. However, a series of additional approaches to encouraging tolerance of abstinence are suggested in such areas as social relationships, employment and family life.

Generally, the study was fruitful in carrying out an empirical examination of the validity of the conceptual model of the life cycle of addiction as it inputs into the career development of the addict.

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APPENDIX A

Riverside Patient Interview Summary

CONFIDENTIAL

Case Number _____

Date of Interview _____

Interviewed by _____

Patient Interview Summary

FOLLOW-UP STUDY

of

Adolescent Narcotics Users

After Hospital Treatment

COLUMBIA UNIVERSITY

School of Public Health and Administrative Medicine, Research Unit
21 Audubon Avenue, New York 32, New York

CONFIDENTIAL

NARCOTIC USE FOLLOWING RIVERSIDE DISCHARGE

				(No. of Riverside Discharges _____) (Time elapsed since 1st R.D. _____)		
				After 1st Riverside "Discharge"	After 2nd Riverside "Discharge"	After last Riverside "Discharge"
1. <u>Maximum frequency of re-use</u>						
None			1 _____	1 _____	1 _____	
Less than once a week, sporadic			2 _____	2 _____	2 _____	
Regular use once or twice a week			3 _____	3 _____	3 _____	
Regular use 3 or more times weekly but not daily			4 _____	4 _____	4 _____	
Regular use 1 or more times daily			5 _____	5 _____	5 _____	
2. <u>First shot taken following discharge</u>						
Within first week			1 _____	1 _____	1 _____	
A week but not a month.			2 _____	2 _____	2 _____	
A month but not 3 months			3 _____	3 _____	3 _____	
3 months but not 6 months			4 _____	4 _____	4 _____	
6 months but not 9 months			5 _____	5 _____	5 _____	
9 months but not a year			6 _____	6 _____	6 _____	
A year but not 18 months			7 _____	7 _____	7 _____	
Within 18 months but not 24			8 _____	8 _____	8 _____	
Within 24 months but not 36			9 _____	9 _____	9 _____	
3. <u>Time of resumption of sporadic use only</u> (Less than once a week, regularly or not)						
Within first week			1 _____	1 _____	1 _____	
A week but not a month			2 _____	2 _____	2 _____	
A month but not 3 months			3 _____	3 _____	3 _____	
3 months but not 6 months			4 _____	4 _____	4 _____	
6 months but not 9 months			5 _____	5 _____	5 _____	
9 months but not a year			6 _____	6 _____	6 _____	
A year but not 18 months			7 _____	7 _____	7 _____	
Within 18 months but not 24			8 _____	8 _____	8 _____	
Within 24 months but not 36			9 _____	9 _____	9 _____	

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2.

4. Regular use once or twice a week

	After 1st Riverside "Discharge"	After 2nd Riverside "Discharge"	After last Riverside "Discharge"
Within first week	1 _____	1 _____	1 _____
A week but not a month	2 _____	2 _____	2 _____
A month but not 3 months	3 _____	3 _____	3 _____
3 months but not 6 months	4 _____	4 _____	4 _____
6 months but not 9 months	5 _____	5 _____	5 _____
9 months but not a year	6 _____	6 _____	6 _____
A year but not 18 months	7 _____	7 _____	7 _____
Within 18 months but not 24	8 _____	8 _____	8 _____
Within 24 months but not 36	9 _____	9 _____	9 _____
Other type of resumption	0 _____	0 _____	0 _____
Weekends only	1 _____	1 _____	1 _____
Other than weekends	2 _____	2 _____	2 _____

5. Regular use 3 or more times weekly but not daily

Within first week	1 _____	1 _____	1 _____
A week but not a month	2 _____	2 _____	2 _____
A month but not 3 months	3 _____	3 _____	3 _____
3 months but not 6 months	4 _____	4 _____	4 _____
6 months but not 9 months	5 _____	5 _____	5 _____
9 months but not a year	6 _____	6 _____	6 _____
A year but not 18 months	7 _____	7 _____	7 _____
Within 18 months but not 24	8 _____	8 _____	8 _____
Within 24 months but not 36	9 _____	9 _____	9 _____
Other type of resumption	0 _____	0 _____	0 _____

6. Regular use 1 or more times daily

Within first week	1 _____	1 _____	1 _____
A week but not a month	2 _____	2 _____	2 _____
A month but not 3 months	3 _____	3 _____	3 _____
3 months but not 6 months	4 _____	4 _____	4 _____
6 months but not 9 months	5 _____	5 _____	5 _____
9 months but not a year	6 _____	6 _____	6 _____
A year but not 18 months	7 _____	7 _____	7 _____
Within 18 months but not 24	8 _____	8 _____	8 _____
Within 24 months but not 36	9 _____	9 _____	9 _____
Other type of resumption	0 _____	0 _____	0 _____

CONFIDENTIALGENERAL PATTERN OF NARCOTICS USE
SINCE FIRST RIVERSIDE "DISCHARGE"

7. Maximum time patient abstained from use _____
8. Average time patient abstained from use _____

NON-INSTITUTIONALIZED WITHDRAWALS

9. Has patient been addicted to narcotics? *YES _____
NO _____

*The following items pertain to addicted patients only

10. Has patient attempted any voluntary withdrawals? NO _____

*YES _____

**If patient has attempted voluntary withdrawals:

11. How many voluntary withdrawals have been attempted? _____

12. How many attempts at voluntary withdrawals have been
successful? (Successful--voluntary abstinence
after addiction for 8 days or longer.) _____

If any attempted withdrawals have been successful,
answer a through d:

- a. Generally, with anyone's assistance? *YES _____
NO _____

(*IF YES) With whose? _____

- b. Did anyone encourage him to kick the habit? YES _____
NO _____

IF YES, Who? _____

- c. What techniques were used?

- d. Give his or her reasons for withdrawal.

13. How many attempts at voluntary withdrawal have been unsuccessful? _____

(Unsuccessful attempt--voluntary abstinence for at least 24 hours, but less than 8 days.)

For unsuccessful attempts at withdrawal :

a. Generally with anyone's assistance? *YES _____
NO _____

*IF YES, With whose? _____

b. Did anyone encourage him to kick the habit? *YES _____
NO _____

*IF YES, Who? _____

c. What techniques were used?

d. Give his or her reasons for withdrawal.

CONFIDENTIAL

5.

ASK OF ALL PATIENTS

14. a. Type of narcotic most often used:

_____ Heroin _____ Other (which) _____

b. Was other type of narcotics used?

YES _____
NO _____

IF YES, List and describe use.

15. Methods used:

	a. Usual Initial Method	b. Usual Final Method	c. Method Most Often Used
Intravenous	1 _____	1 _____	1 _____
Subcutaneous	2 _____	2 _____	2 _____
Sniffing	3 _____	3 _____	3 _____
Other	4 _____	4 _____	4 _____

16. Maximum daily cost of narcotic

\$ _____

17. Average daily cost of narcotic

\$ _____

SUMMATION OF NARCOTICS USE

Number of Months in Community and Narcotics Use

18. Months in the community during 1st 12 months since
1st Riverside "discharge"

Time

19. Number of months not using narcotics

20. Number of months using narcotics

Frequency Cost

21. a. Sporadic use only

b. Regular use not daily

c. Regular daily use

Time

22. Months in Community during 2nd 12 months since
1st Riverside "discharge"

23. Number of months not using narcotics

24. Number of months using narcotics

Frequency Cost

25. a. Sporadic use only

b. Regular use, but not daily

c. Regular daily use

Time

26. Months in the community during 3rd 12 months since
1st Riverside "discharge"

27. Number of months not using narcotics

28. Number of months using narcotics

Frequency Cost

29. a. Sporadic use only

b. Regular use, but not daily

c. Regular daily use

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7.

Time

30. Total number of months in community since
1st Riverside "discharge"

31. Number of months not using narcotics

32. Number of months using narcotics

Frequency Cost

33. a. Sporadic use only

b. Regular use, but not daily

c. Regular daily use

34. Total cost of narcotics \$ _____

35. Have pushers sought out patient since initial "discharge" from Riverside?

Often _____

Never _____

Sometimes _____

(PROBE AND RECORD PATIENT'S REACTION)

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8.

36. Patient's usual relationships while taking narcotics since
1st Riverside "discharge"

Usually alone 1 _____

Usually with others* 2 _____

a. *If usually with others

With one other person, same sex 1 _____

With one other person, opposite sex 2 _____

With a group, same sex 3 _____

With a group, different sex 4 _____

No usual pattern 5 _____

Does not apply 6 _____

b. Companions usually the same from time to time 1 _____

Companions vary from time to time 2 _____

No consistent pattern evident 3 _____

(COMMENT ON THE STABILITY OF THE RELATIONSHIPS)

37. With whom did patient usually take narcotics?

a. Before first Riverside admission?

b. After first Riverside "discharge"?

c. After last Riverside "discharge"?

38. Patient's stated need for re-use

(PROBE AND RECORD VERBATIM)

a. Existing before 1st Riverside admission?

- 1. YES _____
- 2. NO _____

b. IF NO, In what ways has his need changed?

39. Need for re-use as seen by the interviewer

(LIST AND EXPLAIN)

Did same reasons apply prior to Riverside admission?

- 1. YES _____
- 2. NO _____

40. Present climate regarding narcotics use

M	F	S	S	P
o	a	p	i	e
t	t	o	b	e
h	h	u	l	r
e	e	s	i	s
r	r	e	n	s
			g	
			s	

Strong opposition	1	:	:	:	:	:
Mild opposition	2	:	:	:	:	:
Indifferent	3	:	:	:	:	:
Acceptance	4	:	:	:	:	:
Encouragement	5	:	:	:	:	:

PATIENT'S PRESENT ATTITUDE TO OWN USE

	<u>Severe</u>	<u>Moderate</u>	<u>Mild</u>	<u>None</u>
41. <u>Self-blame</u>	1 _____	2 _____	3 _____	4 _____
42. <u>Blames others</u>	1 _____	2 _____	3 _____	4 _____

43. Hedonism-Compulsion

- a. No explanation - cant help self 1 _____
- b. Compelled--but offers explanation 2 _____
- c. Voluntary, but with some elements of need 3 _____
- d. Take it or leave it 4 _____

44. Other attitudes and comments:

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11.

45. When he left Riverside the 1st time, did he feel that he would go back on drugs?

YES _____

NO _____

MAYBE _____

REASONThe Second Time?

YES _____

NO _____

MAYBE _____

The Last Time?

YES _____

NO _____

MAYBE _____

46. Gerard Judgmental Scale on Drug Use

	<u>For total period since 1st Riverside "Discharge"</u>	<u>For Present</u>
VERY GOOD	1 _____	1 _____
GOOD	2 _____	2 _____
MID-POINT	3 _____	3 _____
PCOR	4 _____	4 _____
VERY PCOR	5 _____	5 _____

USE OF ALCOHOL
SINCE 1st RIVERSIDE "DISCHARGE"

47. Patient's usual relationships while taking alcohol

When off Narcotics | When on Narcotics

Usually alone

1 _____

1 _____

Usually with others

2 _____

2 _____

IF USUALLY WITH OTHERS:

With one other person, same sex

1 _____

1 _____

With one other person, opposite sex

2 _____

2 _____

With a group, same sex

3 _____

3 _____

With a group, different sex

4 _____

4 _____

No usual pattern present

5 _____

5 _____

COMMENTS:

48. Companions generally the same from time to time

1 _____

1 _____

Companions vary from time to time

2 _____

2 _____

COMMENT ON THE STABILITY OF THE RELATIONSHIPS:

49. Frequency of use of alcohol since last Riverside "discharge"

Once a month or less

1 _____

1 _____

Twice a month to once a week

2 _____

2 _____

Two or three days a week

3 _____

3 _____

Four or more days a week

4 _____

4 _____

Daily

5 _____

5 _____

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13.

50. Does patient ever go on weekend binges?

YES _____

NO _____

IF YES, How often? Under what circumstances?

51. Patients stated need for use of alcohol

52. Interviewer's evaluation of patient's need

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PRESENT LIVING ARRANGEMENTS

53. In institution now? YES _____
NO _____

54. If not in institution now:
With spouse in own home 1 _____
With spouse in parental home 2 _____
With spouse in home of others 3 _____
In common-law or consensual relationship 4 _____
With parent or family member 5 _____
With non-relative of opposite sex 6 _____
With non-relative of same sex 7 _____
Alone 8 _____
In armed forces 9 _____

55. Living space available
How many rooms _____
How many people _____
Patient shares room YES _____
NO _____
IF YES, With whom? _____
Rooms to person ratio _____

IF IN INSTITUTION NOW, GRADE ON LAST LIVING ARRANGEMENT: _____ Date

56. Does living arrangement appear satisfactory? YES _____
NO _____
MAYBE _____

(PROBE FOR REASONS)

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15.

57. Has past living arrangement since 1st Riverside "discharge" been different from now (or last pre-institution)?

YES _____
NO _____

IF YES, in what way? (Has he lived with different friends, relatives, transient hotels, etc.)

58. Total number of addresses of patient _____

59. IF NOMADIC KIND OF EXISTENCE IS INDICATED, why does this appear to be so?
(COMMENT)

60. IF IN INSTITUTION:

Type of institutionalization:

- Self-referred, narcotic 1 _____
- Legal referral, narcotic 2 _____
- Legal referral, delinquency 3 _____
- Legal referral, delinquency and narcotics 4 _____
- Hospitalization, physical 5 _____
- Hospitalization, emotional 6 _____
- Other (What?) 7 _____
- Does not apply 8 _____

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61. a. IF NARCOTICS AND DELINQUENCY, AFTER RIVERSIDE, State offenses:
- b. IF FOR DELINQUENT BEHAVIOR ONLY, AFTER RIVERSIDE, State offenses:
- c. PRE-RIVERSIDE DELINQUENCIES, State offenses:
- d. PRE-DRUG USE DELINQUENCIES, State recorded and unrecorded offenses:
- e. Name of institution _____
- f. Time spent during current admission _____
- g. Estimated total time to be spent if
patient is a self-referral _____
- h. Total time in current sentence if
legal basis for referral _____
62. Total number of months since 1st Riverside "discharge" spent in
institution for:
- Narcotics only _____ months
- Narcotics and delinquency _____ months
- Delinquency only _____ months

POST-HOSPITALIZATION EMPLOYMENT

63. Current employment activity:

- | | | |
|------------------------------------|-----------|----------|
| Employed | Full time | 1. _____ |
| | Part time | 2. _____ |
| Not employed, looking for work | | 3. _____ |
| Not employed, not looking for work | | 4. _____ |
| In institution | | 5. _____ |

64. IF NOW EMPLOYED OR LAST JOB

a. Length of time at present position:

- | | |
|----------------------------------|----------|
| Less than one month | 1. _____ |
| More than one month but not 3 | 2. _____ |
| More than 3 months but not 6 | 3. _____ |
| More than 6 months but not 12 | 4. _____ |
| More than a year but not 2 years | 5. _____ |
| Two years or more | 6. _____ |

b. Kind of work _____

c. Type of industry _____

d. How did he get his job _____

e. Type of employment area:

1. Known high drug area _____

2. Not known drug use area _____

f. Employment gratification:

- | | |
|--------------|----------|
| Enthusiastic | 1. _____ |
| Satisfied | 2. _____ |
| Indifferent | 3. _____ |
| Rejecting | 4. _____ |

Why (FRCE)

g. Last weeks salary \$ _____

h. Weekly participation last week:

30 hours or more - full time 1 _____

15 or more hours but not 30 - part-time 2 _____

Less than 15 hours but some work 3 _____

65. IF NOT CURRENTLY EMPLOYED

Length of time unemployed between time of interview and last job:

Less than 1 month 1 _____

More than 1 but not 3 months 2 _____

More than 3 months 3 _____

Never employed since 1st Riverside 4 _____

66. Main reason left last job:

Narcotics use 1 _____

Couldn't get along with employer or co-workers 2 _____

a. Employer or supervisors 3 _____

b. Co-workers 4 _____

c. Both 5 _____

Didn't want to work 6 _____

Wanted to do something else, no definite job 7 _____

Enforced 8 _____

Better job 9 _____

Other _____

COMMENTS:

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19.

PATTERN OF WORK HISTORY

67. Length of longest time of continuous employment since
first Riverside "discharge"

Time _____

a. Kind of work _____

b. Type of industry _____

c. Chance of exposure to narcotics and to users:

Greatest potential 1 _____

Possibility 2 _____

Least likely possibility 3 _____

d. Weekly participation:

Full Time 1 _____

Part-time 2 _____

Sometimes 3 _____

e. Satisfaction:

Enthusiastic 1 _____

Satisfied 2 _____

Indifferent 3 _____

Rejecting 4 _____

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20.

SUMMATION OF EMPLOYMENT HISTORY

- 68. a. Number of months in community during 1st 12 months
since 1st Riverside "discharge" _____
- b. Number of months employed:
 - 1. Full time _____
MOS. _____
 - 2. Part-time _____
MOS. _____
- c. Number of jobs held _____
- d. Average salary per week \$ _____
- e. Total salary earned during 1st 12 months since
1st Riverside "discharge" \$ _____

- 69. a. Number of months in community during 2nd 12 months
since 1st Riverside "discharge" _____
- b. Number of months employed:
 - 1. Full time _____
MOS. _____
 - 2. Part-time _____
MOS. _____
- c. Number of jobs held _____
- d. Average salary \$ _____
- e. Total salary earned during 2nd 12 months since
1st Riverside "discharge" \$ _____

CATEGORIES OF MARITAL RELATIONSHIPS

72. If patient is married:

Living with spouse in own home; marriage regarded as happy by both members; both able to assume adequate marital responsibilities and roles. 1 _____

As above, but living with others, usually in parental home; active planning to set up own home. 2 _____

Either of above, but with less adequate role fulfillment on patient's part. Effort to secure help, recognizing difficulties. 3 _____

Patient indifferent to spouse; not fulfilling responsibilities, but not admitting this behavior and some interest in marriage continuing. 4 _____

Patient indifferent to spouse and to marriage. Likelihood of separation or abandonment admitted. Overt desire for marriage to disintegrate. 5 _____

Unknown 6 _____

Not married--does not apply. 7 _____

COMMENTS:

73. Does patient date persons of the opposite sex? YES _____
NO _____

74. In the following section, describe the general nature of the patient's heterosexual relationships. Specify the status of the girl or girls involved, and the roles they perform with respect to the patient. Also, attempt to specify the nature of the affectional relationships. What future orientation seems present in the situation?

WHILE OFF NARCOTICS, Describe:

WHILE ON NARCOTICS, Describe:

CURRENT PEER RELATIONSHIPS
and
LEISURE TIME PATTERN

75. a. Leisure time relationships:

Usually alone. No frequent contact
with other than family members

Usually with others--other than family

Sometimes alone; sometimes with others

While off Narcotics	While on Narcotics
1. _____	1 _____
2 _____	2 _____
3 _____	3 _____

76. IF USUALLY ALONE, How is leisure time spent?

a. WHILE ON NARCOTICS

b. WHILE OFF NARCOTICS

77. IF USUALLY WITH OTHERS--OTHER THAN FAMILY-- How is leisure time spent?

a. WHILE ON NARCOTICS

b. WHILE OFF NARCOTICS

c. HOW DOES PATIENT SUPPORT HIS HABIT?

79. Primary leisure time contacts:

While off Narcotics | While on Narcotics

Most often with:

A non-deviant person, non-deviant activities

1 _____

1 _____

A deviant person, probable deviant activities

a. No drug use

2 _____

2 _____

b. Probable mutual drug use

3 _____

3 _____

More than one person. Group seems drifting-sporadically attending community centers, dance halls. Probably some deviant activities

a. No drug use

4 _____

4 _____

b. Probable participation in drug use

5 _____

5 _____

A group that is more socially attuned. Have a closer and more predictable attendance at and more participation in community organizations such as settlement houses, church groups, "Y" groups, PAL

a. No deviant activities and no drugs

6 _____

6 _____

b. Possible participation in drug use

7 _____

7 _____

79. a. IF MOST OFTEN WITH ONE OTHER PERSON

With same sex

1 _____

1 _____

With opposite sex

2 _____

2 _____

b. IF MOST OFTEN WITH MORE THAN ONE PERSON

With a group of same sex

1 _____

1 _____

With a group of opposite sex

2 _____

2 _____

With mixed group

3 _____

3 _____

RELATIONSHIP WITH COMMUNITY AGENCIES

General Assistance Orientation:

80. a. Thinking back over the years and the places you lived, what kind of people have helped you out the most?

b. What sort of things did they do for you?

Pre-Riverside use of Agencies:

81. a. Before you first went to Riverside, did you use any neighborhood recreation or social work centers?

YES _____

NO _____

b. IF YES, What kinds of things did you do there?

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27.

Post Riverside Use of Agencies:

82. Since you have been out of Riverside, have you used any of these or other agencies?

1. NO _____
2. YES _____
3. YES BUT LESS _____
4. YES BUT MORE _____

a. IF YES, Which ones? What did you do there?

b. IF NO, Why haven't you been using them?

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28.

Attitude toward the Agencies:

83. Generally, what do you think about these places?

84. Did any of them know about your taking drugs?

YES _____

NO _____

a. IF YES, Have any of them ever tried to help you since you've been taking drugs?

YES _____

NO _____

b. IF YES, Which agency? How?

85. What do you think places like that can do for you, or maybe for other people who take drugs?

SUPPORTIVE FAMILY RELATIONSHIPS

COMPLETE THE FOLLOWING SECTION FOR THE FAMILY OF ORIENTATION

86. Is father living at home?

YES _____

NO _____

a. If patient is not living with father, how long has he not been doing so? _____

b. What age was patient when he ceased living with father? _____

c. Reason why patient is not living with father:

Father died

1 _____

Father left patient's home

2 _____

Patient left father's home

3 _____

Other

4 _____

COMMENT ON CIRCUMSTANCES:

87. Who is patient living with?

Relationship to Patient

Age

Sex

88. a. Generally, how do you think your family feels about you?

b. How do you feel about this? (PROBE)

89. Did you ever do things with your family outside of your home?

YES _____

NO _____

IF YES, Describe

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31. 243

90. Has this changed since you have started taking drugs?

YES _____

NO _____

IF YES. How?

91. Most families have fights and arguments in the home.
Tell me about those that happen in yours.

(Describe) (Who is involved?) (What seems to cause them?)

92. Do you contribute to household expenses?

YES _____

NO _____

IF YES, In what way?

93. What does your family do when you are not feeling so good,
are tense, mean, or nasty?

REFERENCE GROUP

101. a. Thinking about the people you know or know about, what kinds of people do you dislike the most? Who are these people? Give me some examples of people like that.

b. Why don't you like them?

102. a. Thinking about people you know or know about, what kinds of people do you like to be around? (SPECIFY) Give examples of these kinds of people.

b. Why?

103. Who are the four or five people you respect the most?

104. If you had to make up your mind about something very important, what kind of person would you talk to?

105. There are things that everyone dislikes about his own group. Can you think of anything that annoys you about:

a. Your own family? _____

b. Your friends? _____

c. Your native group? (Puerto Ricans, Negroes, Jews, etc.) _____

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34.

PRESENT AND FUTURE ORIENTATIONEmployment Orientation:

106. a. Were you working at a regular job before you were sent to Riverside?
- YES _____
NO _____
- b. How much were you making a week? \$ _____
107. a. Are you working at a regular job now?
- YES _____
NO _____
- b. How much are you making a week? \$ _____
108. a. Do you think, say a year from now, that you will be working at a regular job of some kind?
- YES _____
NO _____
- IF YES, What?
- c. How much do you think you will be making a week, a year from now?
- \$ _____
109. What kind of job would you like to be working at--say a year from now?
110. Try to think way ahead into the future--figuring you got all the breaks, what kind of a job do you think you would want to have?

Institutional Orientation:

111. a. Were you ever arrested or sent to jail or reform school anytime before the time you were sent to Riverside for any reason?

YES _____
NO _____

b. IF YES, Give reasons and institutions:

112. a. Have you been arrested since the first time you went to Riverside?

YES _____
NO _____

b. IF YES, Give reasons:

113. a. What do you think the chances are that the cops and the law will leave you alone in the next couple of years or so?

NOT MUCH CHANCE _____

SOLE CHANCE _____

GOOD CHANCE _____

b. Why do you feel that way?

114. a. What do you think are the chances that a fellow like yourself has of staying out of jail in the next couple of years or so?

NOT MUCH CHANCE _____

SOLE CHANCE _____

GOOD CHANCE _____

b. Why do you feel that way?

Narcotics Orientation:

115. What was the pattern of narcotics use just before entering Riverside Hospital for the first time in 1955?

S RW R2W RD

116. What is the pattern of use of narcotics now--at the time of interview?

S RW R2W RD NONE

117. Would you like to be off drugs entirely, or would you like to be able to take them once in a while when you feel like it; or would you just as soon take them regularly as long as you don't get hooked?

OFF ONCE IN A WHILE NOT GET HOOKED

Why? (PROBE)

118. a. Do you think you will get hooked again?

YES _____

NO _____

b. Why? (PROBE)

Family Orientation:

119. Family relationships prior to Riverside hospitalization:

Without serious
problems

Some serious
problems

Many and extensive
serious problems

120. Family relationships after Riverside hospitalization:

Without serious
problems

Some serious
problems

Many and extensive
serious problems

121. Thinking about how you were raised, what mistakes do you feel your parents made with you?

COMMENTS:

122. If you had your own family, would you like to raise your children differently from the way you were raised?

YES _____

NO _____

Why:

123. Do you think that you really will raise your children differently?

YES _____

NO _____

How is that?

CONDITION OF PATIENT AT TIME OF INTERVIEW: _____

124. We believe that you as a person know the narcotics problem better than any of us. We are interested in some of your impressions in handling this situation. Supposing that you had the power to do whatever was necessary in correcting this problem, what would you suggest?

PROBE EXTENSIVELY

(IF BOY APPEARS VERY INTERESTED IN INTERVIEW AND LIKELY TO COOPERATE IN THE FUTURE, ASK HIM IF HE WOULD BE WILLING TO PARTICIPATE IN FUTURE GROUP RESEARCH MEETINGS.

MAKE COMMENTS

APPENDIX B

Riverside Patient Records Summary

C O N F I D E N T I A L

Case Number _____

Date of Recording _____

Recorded by _____

Patient Records Summary

FOLLOW-UP STUDY
of

Adolescent Narcotics Users

After Hospital Treatment

COLUMBIA UNIVERSITY

School of Public Health and Administrative Medicine, Research Unit
2. Audubon Avenue, New York 32, New York

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RECORDS SUMMARY

PRE-RIVERSIDE USE OF NARCOTICS

- 1. a. Age at which patient first began narcotics use _____
- b. Age at which patient was first hospitalized for narcotics use _____
- 2. Total number of months using narcotics prior to 1st Riverside Hospitalization _____

3. Pattern of Earliest Drug Use (including marijuana)

<u>Type of Narcotic</u>	<u>Method</u>	<u>Average Dose</u>	<u>Length of time Elapsed Prior New Usage</u>

COMMENTS: IF A CLEAR PATTERN OF PROGRESSION IS NOT EVIDENT, EXPLAIN:

4. How did patient first begin narcotics use;
Abstract FROM RECORDS

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5. Associations while taking narcotics

a. With whom did the patient usually take narcotics?

B. Under what circumstances did the patient usually appear to take narcotics?

6. Note any information on leisure time activities with users and/or non-users.

7. Is there a record of another family member or relative taking narcotics?

YES _____

NO _____

IF YES, Who? Explain circumstances.

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SUMMATION OF PRE-RIVERSIDE NARCOTICS USE

Number of months in community and narcotics use

			<u>Time</u>
8.	<u>Months in community during 1st year preceeding 1st Riverside Hospitalization</u>		_____
9.	Number of months not using narcotics		_____
10.	Number of months using narcotics		_____
		<u>Frequency</u> <u>Cost</u>	<u>Time</u>
11. a.	Sporadic use only		_____
b.	Regular use, but not daily		_____
		_____	_____
c.	Regular daily use		_____

			<u>Time</u>
12.	Months in community during 2nd year preceeding 1st Riverside Hospitalization		_____
13.	Number of months using narcotics		_____
14.	Number of months not using narcotics		_____
		<u>Frequency</u> <u>Cost</u>	
15. a.	Sporadic use only		_____
b.	Regular use, not daily		_____
c.	Regular daily use		_____

			<u>Time</u>
16.	Months in community during 3rd year preceeding 1st Riverside Hospitalization		_____
17.	Number of months not using narcotics		_____
18.	Number of months using narcotics		_____
19.		<u>Frequency</u> <u>Cost</u>	
A.	Sporadic use only		_____
B.	Regular use, but not daily		_____
		_____	_____
C.	Regular daily use		_____

DELINQUENCY HISTORY

20. Pre-Riverside Delinquency Arrest History

<u>Date</u>	<u>Offense</u>	<u>Disposition</u>	<u>Months in Institution</u>	<u>Name of Institution</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

21. Post Riverside Delinquency Arrest History

<u>Date</u>	<u>Offense</u>	<u>Disposition</u>	<u>Months in Institution</u>	<u>Name of Institution</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

22. Other Institutionalizations

<u>Dates From - To</u>	<u>Reason for Institutionalization</u>	<u>Name of Institution</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

CONFIDENTIAL

EMPLOYMENT YEAR PRIOR TO 1st RIVERSIDE HOSPITALIZATION

- 23. a. Number of months in community during 1st year preceeding 1st Riverside Hospitalization _____
- b. Number of montns employed _____
 - 1. Full time _____
 - 2. Part-time _____
- c. Number of jobs held _____
- d. Average salary per week _____
- e. Total Yearly Salary _____

24. List the types of jobs held by the patient. _____

SCHOOL HISTORY

25. Was patient enrolled in school during the year proceeding 1st Riverside hospitalization

YES _____

NO _____

IF YES, What School? _____

For how many months? _____

IF THE PATIENT HAS LEFT PRIOR TO 1ST RIVERSIDE HOSPITALIZATION, FOR WHAT REASON? WHEN?

CONFIDENTIAL

FAMILY RELATIONSHIPS

26. What appeared to be the family's reaction to patient's narcotics use prior to 1st Riverside Hospitalization? Abstract any statement by any family member from the case record.

APPENDIX C

Narcotics Pattern Work Sheet

NARCOTICS PATTERI WORK SHEET

Date of 1st Discharge _____
 2nd Discharge _____
 1st Shot _____
 2nd Shot _____

Case No. _____
 Name _____

Time	U S		Regular Weekend	Regular 2 or 3 Times Wkly	# More times daily	Type of Narcotic	Method	Dosage	Types of Withdrawal	# of weeks or mos. on drug	Taken with whom
	Sporadic	#									
1 Within first week											
2 1 wk. but not a month											
3 1 month but not 3 months											
4 3 months but not 6 months											
5 6 months but not 9 months											
6 9 months but not 12 months											
7 12 months but not 15 months											
8 15 months but not 18 months											
9 18 months but not 21 months											
10 21 months but not 24 months											
11 24 months but not 27 months											
12 27 months but not 30 months											
13 30 months but not 33 months											
14 33 months but not 36 months											

APPENDIX D

Mail Questionnaire for "Hard to Reach" Riverside Patients

Columbia University

SCHOOL OF PUBLIC HEALTH AND ADMINISTRATIVE MEDICINE
OF THE
FACULTY OF MEDICINE

RESEARCH UNIT

21 AUDUBON AVENUE, NEW YORK 32, N. Y.

MARK AN "X" IN THE BOX FOR YOUR ANSWER LIKE THIS

1. Have you been employed since the first time you were at Riverside? YES NO
2. Are you working now? YES NO
3. Are you now married? YES NO
4. Have you used drugs since the first time you were at Riverside? YES NO
5. Have you received any special treatment for drug use after Riverside? YES NO

NAME: _____

APPENDIX E

Institutional Experience Code Form

CASE NUMBER			PRE-RIVERSIDE						POST-R.H.		
			CHARGES		CONVICT.		MOS. IN INSTIT. FOR CRIME		TOTAL OBS. TIME		
			NARC	OTHER	NARC	OTHER					
ARR.											
1	2	3	4	5	6	7	8	9	10	11	12

RIVERSIDE
Follow Up Study 259
Institutional Experience
Code Form

DATE	MOS. POST R.H.	EVENT	TYPE CONTACT		GENERAL ORDER		CLASS ORDER		EVENT ELAPSED TIME		EVENT DURATION		TIME INTERVAL		MAX. INT. BETWEEN EVENTS		TYPE CRIME		DISPOSITION
			13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
	0	1ST RIVERSIDE																	
	1																		
	2																		
	3																		
	4																		
	5																		
	6																		
	7																		
	8																		
	9																		
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	36																		
	37																		

APPENDIX F

Employment Form

APPENDIX G

A Twenty Year Follow-up Study of Adolescent Addicts
Treated at the Riverside Hospital, New York City

A Twenty Year Follow-up Study of Adolescent Addicts
Treated at the Riverside Hospital, New York City*

Harold Alksne**
Asst. Professor of Sociology
C.W. Post College (L.I.U.)

The follow-up study of adolescent addicts who were first treated at Riverside Hospital dealt with first admissions to that hospital for the year 1955. This study, by Alksne, et al., was one of the first to demonstrate the intractability of addicts to the hospital based psychiatrically oriented treatment of that time. All but one of this unique population of young addicts on whom information was obtained appeared to have returned to the use of heroin from between one day to six months after their release from hospitalization. The one who successfully abstained from the use of heroin claimed to have done so because of the intervention of his guardian angel through spiritualism.

The Riverside study was one of the first to confront workers in this field of drug abuse that a new evaluation and reality testing was needed in connection with our work with opiate users. Several new concepts concerning the treatment of drug abusers emerged from this research. One was that it was unreasonable to expect immediate and absolute abstinence from a population of narcotic addicts. Specifically, it might be more fruitful to develop evaluation criteria which incorporate the concept of relative abstinence as a measure of relative success.

*The Author wishes to express his gratitude to Robert Newman, Assistant Commissioner for Addiction Programs, New York City Department of Health, for permission to use the Narcotic Register for this study and Margot Cates, Director and Alex Tyton, Chief Statistician of the New York City Narcotics Register for their work in processing the data and recommendations concerning analysis.

**Director of Research and Program Planning, PACT/NADAP, New York City

A theoretical concept to emerge from this work was that it may be important to develop a "tolerance of abstinence" in the process of returning to a drug free state much as it was essential to develop a tolerance and dependence to the condition of addiction. Further, it was suggested that heroin addiction might follow cycles with addicts moving in and out of the addiction system.

Characteristics of the Original Population

Riverside Hospital was first established for the treatment of addiction in adolescents in 1952 on North Brothers Island, in the East River. The facility had earlier been used as a public health hospital for the treatment of tuberculosis. Earlier still, during the 1920's, it was used to treat narcotics addicts.

Those who organized Riverside in 1952, apparently believing that this was the first time adolescents had come for treatment, sought guidance from the then well-established Public Health Hospital for the treatment of addiction at Lexington Hospital. The Riverside Hospital developed a psychiatrically oriented program focused through a team approach, with a membership from a variety of specialists. The hospital had a high staff-patient ratio and by most standards adequate facilities which included its own special public school located on the Island.

The cohort understudy was composed of the 247 first admissions to the hospital for the year 1955. Of the 247 patients in the original group, 42% were white, 26% negro; 83% were male; 80% were born in the continental United States, 17% in Puerto Rico, and 3% elsewhere. Twenty-seven patients or 11% were married at the time of first hospitalization. Only 6% of the total group completed high school and in fact, 79% had not attended school at all during the entire year prior to entering the hospital.

53% began their drug use with marijuana followed by some method of heroin use ultimately leading to intravenous injection. It is striking that, according to the clinical record, 39 patients, or 15% began drug use by intravenous injection of heroin with no other drug use preceding it. Thus, almost half of these young addicts began their drug use in a fashion other than the "classical" marijuana route. The average age for beginning use of marijuana or heroin was 15.7 years; one out of 10 began at age 14 or younger; three began at age 11. All total, 135 or 54% reported drug use for two years or more prior to hospitalization.

The average age at time of hospitalization was 18.1 years, with four patients being admitted at age 15 and 53 at age 20. An average of 2.7 months per person was spent in Riverside Hospital on first admission. Twenty-one patients (9%) spent less than one month and one stayed nearly 15 months.

The Original Follow-up

The original follow-up study of the 247 involved a three year period. Fifty-seven, or 64%, of the original group were rehospitalized at Riverside, one-hundred and twenty-nine, or 82%, of these within the first year. Only 4 patients reentered after an absence of at least two years. Of one-hundred sixty-five who were re-arrested, 105, or 63% had such difficulty within the first post hospital year.

A minimum estimate of time spent in some type of institution after discharge for the first time from Riverside Hospital indicates that at least 25% of the time available to the group was spent in some institution: hospitals for treatment of addiction, mental hospitals, and prisons. The original follow-up established: during any six month period, at least one-half

of these young people had a stay in an institution dealing with addiction.

Summary of Original Riverside Follow-up

In summary, the findings of the first post-Riverside Hospital behavior of the study group show the following:

86% had continued difficulty with narcotics use, the police or both, according to the records sources;

4% had continued difficulty with narcotics use, the police, or both, according to sources other than records;

1% had post-hospital adjustment difficulties which were not necessarily associated with the use of narcotics or crime, according to records sources;

2% died without record of post-hospitalization, drug use, or police contacts;

4% were not identifiable in the record search;

4% were found to have had no new experiences in institutions and were believed to have had no apparent difficulties in post-hospital adjustment.

101% Total (adds to more than 100% because of rounding)

Thus, about 9 out of 10 patients re-involved themselves in activities that customarily would return them to the authority of the courts or to hospitals responsible for the treatment of narcotics addiction. For a total of 6%, there is no information available on behavior which would permit an evaluation of the patients' post-hospital adjustment.

For only 9 cases, or 4% of the entire study group, was there information available which indicated that these patients had no difficulty with drug

use, crime or mental illness subsequent to their first treatment experience. Finally, of those 9 cases we discovered that 8 of these patients had never been addicted to heroin at the time of their hospitalization.

These findings thus established that virtually no one succeeded in fulfilling the goals of treatment: total abstinence.

Methodology

The original Riverside population which has just been described has been followed over a 20 year period, between 1955 and 1974, through the use of the Narcotics Register of the City of New York. Names, last known addresses, ages, ethnicity, names of fathers, and maiden names of mothers were submitted to the Narcotics Register for computer clearance. All agents or agencies that may deal with addicts are required by law to report their contact with them to the Register. Over 500 separate agencies report cases known or suspected by them to be narcotics addicts. Reporting is mandated for all programs receiving state or city funds. Despite the mandatory requirements for reporting, Mary Snow³ found substantial omissions in both death and institutional reports in connection with a test of Winick's maturing out theory conducted by her through the N.Y. State Drug Abuse Control Commission. The material presented in this study does not benefit from such additional outside follow-up information. Thus, although comparisons will be made with both the Winick and Snow findings, they are presented with some caution concerning reliability.

The Winick⁴ and Snow⁵ studies focus their analyses on cases which have become inactive over the course of time in order to test the concept of "maturing out" of addicts. Although material will be presented concerning inactivity or "maturing out" in this study, this will not be the central interest. Rather, the focus here will be on the reoccurrence of addiction

related behavior. However, in the course of examining re-addiction material, some interesting questions and possible amplification of the "maturing out process" will be presented.

FINDINGS

Background Information

The material in Winick's original, highly stimulating work on "maturing out" of addiction indicated that upwards of 65% of cases found in FBI records during the 1960's disappeared from that registry of addicts after a five-year period. The average age of the "maturing out" found by Winick was 35.1 years. A similar study carried out on the New York City Narcotics Register records by Snow indicated substantially fewer addicts experiencing this process, with 23% maturing out at a slightly younger age of 33.8. A follow-up study conducted by Valiant indicated clear support for the idea that addicts tend to reduce or withdraw from their addiction as they grow older. Valiant found that although 90% of a Lexington population originally returned to drug use after hospitalization, 46% were found to be drug-free 12 years later while in the community, or at least at last contact prior to death.⁶ The fact that age of survivors and continued involvement in addiction are inversely correlated is reasonably well-established in the literature.

The present study seeks to examine the addiction activity of the original 239* Riverside patients who were established as being addicted on intake to that hospital. Table I displays a summary of all contacts of addicts with agencies reporting to the Register by year of reports. It also indicates the number and proportion of Riverside patients in each of the different types of reporting categories. Thus, information is obtained concerning death, law enforcement (i.e. arrest and imprisonment) and general treatment facilities (i.e., detoxification in hospital, clinics, special rehabilitation clinics, drug-free facilities such as

*8 patients were excluded from the sample because they were never addicted to narcotics.

Deaths of Addicted Patients

There were 11 deaths reported to the Bureau of Records for the original Riverside population. This amounted to almost 5% of the total -- a proportion far in excess of mortality expectations for that young adult population. The Narcotics Register reports a total of only 13 deaths for this population for the entire 20 year time span used in this follow-up. Seven of these deaths are in the last three years. The Register does not pick up the deaths originally reported for the 3 years of the original follow-up.

If we assume the 11 deaths in the first three years of the period to be valid and the 7 deaths reported in the last three years as also being valid, we can reasonably assume a regression line permitting us to estimate a yearly reduction of deaths by one for each three year period. Table I displays an at risk population for purposes of computing activity rates in programs for the twenty year period follow-up period.

Using this means of computing deaths, we find the projected number of deaths to be 51 or 21% of the original Riverside group. It is the author's impression that these estimated age specific death rates are likely to be under estimates for a group whose members continue in behavior that places them at greater risk to addiction related diseases. In addition we would be naive to ignore the higher probability of death due to violence associated with doing their business of being addicts.

Continued Drug Involvement of Patients

Perhaps the most striking feature of these data is that a total of 128 of the original 239 Riverside patients, or 54% continued to demonstrate activity associated with problems of addiction fully 10 and 20 years after their original hospitalization. Out of this active group, 69 or somewhat over half show such activity within the last 3 years. Throughout the present study it is assumed

that whatever data error is present is in the direction of under reporting. Despite this 3 out of 10 of the original Riverside adolescent group continue to reappear as having difficulties in coping with their addictive needs.

Pattern of All-Agency Reports

Summary Table I displays all reports to the Register concerning the Riverside population from 1955 to 1974.

The Register was not officially established until 1964, and material included prior to that date reflects incidental rather than systematically collected data. This fact is demonstrated in this table, with few or no reports showing in the various categories prior to the 1964 date. However, beginning in 1964, we discover a clear and uniform pattern that indicates that about 1/4 of the original Riverside group repeatedly reappear in the Register in the second decade after their original treatment.

Law Enforcement and Criminal Justice

The picture drawn from reports concerning law enforcement and corrections involvement indicates that between 1 to 2 out of 10 of the Riverside patients enter into these facilities each year. Unfortunately this study does not have the capability of identifying for these patients time spent out of community in state or local correctional facilities, and therefore, it is not possible to adjust downward the at risk population for each category accordingly. The first three year follow-up established a high arrest and conviction rate for this group. We must assume that if these patients continue to tangle with the law, they are likely to suffer continued, and in some instances long term confinement in state prisons or in the late 60's and early 70's New York State Drug Abuse Control Commission Facilities. It would be fair to estimate that new law enforcement contacts have some cumulative effect on reducing those at risk in the community in the year of the report as well as the subsequent year. This would probably increase the rate of involvement in institutions by

a factor of one or two, bringing our arrest and institutionalization picture closer to that found immediately after Riverside.

All Other Types of Treatment

The Narcotics Register reports its data according to a category identified as All Types of Treatment. This category includes a variety of different activities such as detoxification in hospital counseling and referral services, as well as special treatment programs run by the state. The rather consistent pattern of large numbers of clients using these treatment facilities is again striking. Again, between 13 and 18% show use of these facilities during the years between 1964-1974. It may be of some interest to note that there is a pattern of reduction in utilization of the at risk population in all categories for the year 1973. This apparently is a reflection of the overall pattern demonstrated in the city and in the United States concerning the reduced utilization of facilities by addicts during the alleged "peaking" of addiction around that time.

Methadone Maintenance Treatment Programs

Thirty-four of the original Riverside population were reported as being involved with Methadone Maintenance Treatment Programs within the last decade. This amounts to 17% of the population considered to be at risk in the community. The reports of involvement with methadone treatment begin in 1967 with 2% and move to a high in 1972 with a total of 13% of those on the Register. Again, since methadone maintenance treatment requires long term involvement after the initial entry into treatment and report to the register, we can expect an under estimate of involvement of methadone patients on the Register record.

It may be pointed out that 29 of the 34 Riverside patients who are reported as entering into methadone treatment had shown new reports as

relevant to their addiction other than the Riverside hospitalization prior to entering into methadone treatment. It therefore appears that there is a high probability that these Riverside methadone maintenance treatment patients had experience with other modalities before moving over to methadone.

Drug-Free Treatment Programs

Drug-free treatment programs were available to Riverside patients from the mid-60's on. Despite the extensive follow-up period relatively few of this group seem to use therapeutic communities and other drug free programs. During 1970 we find that 8 of the Riverside patients had entered into a drug free treatment system. Prior to and after that year, substantially fewer appeared in this treatment modality.

Ethnicity and Age of Onset of Drug Use as Factors in Activity on the Narcotics Register

Ethnicity and age of onset of drug use are considered to be variables having effect on recidivism to drug abuse. In her follow-up study of narcotics Register cases, Mary Snow⁷ found that inactive or unreported cases were more likely to be white and female. The differences are not striking but they may reflect a slightly greater advantage for the white over the black.

The findings for the Riverside group indicate that of those who did have new reports, Puerto Ricans were more likely to reappear in the last 5 years of the study as compared with blacks. Whites were the least likely to reappear. (See Table II).

The same materials were examined for the age of first hospitalization. It was hoped that this would partially reflect the factor of onset of serious pressure or difficulty with drugs. For whites, those hospitalized later seemed to show greater recidivism. For blacks, this didn't seem to make any difference, and for hispanics, those hospitalized early showed somewhat

greater recidivism. This picture is somewhat ambiguous and speculation as to etiology would be unwise at present.

Maturing Out and the Riverside Patients

If this extended Riverside follow-up is compared with the studies by Winick and Snow on maturing out, the data could be viewed as supportive of each other. Winick finds an attrition of 65% of the cases reported to the FBI in 1955 by the end of 1960. Snow suggests a less dramatic drop of 23% disappearance of cases from the Register between 1964-1968. The Riverside data, unable to track patients during the first 10 years of post hospital experience, discovers that 46% of the cases are not identified in the register during the second decade of the follow-up.

However, the findings become more interesting when we examine the pattern of reentry of the active Riverside patients to the Registry. If the maturing out theory is continuous, as is inferred by Winick, the greatest number of Riverside patients should appear at the beginning of the observation period in 1964-1965. We should then find a decrease in patients active through the ten year period that follows.

The data are strikingly at variance from our expectations (Table III). Rather than a reduction in the proportion of cases most recently reported, we find that the reverse is true. The number of Riverside patients who appear in the registry during the last ten years, progressively increase with time, so that a greater proportion of them are identified as active as they become older.

Since these data are drawn from the same data pool by Snow which are further used to support the work of Winick with the FBI, we cannot identify a bias because of the data source.

It is difficult to explain away the reverse pattern of reappearance or recent appearance of Riverside addicts on the Registry. The fact that data for the first decade of our follow-up is missing puts us at a great disadvantage. However, if we assume that our addicts or a good proportion of them matured out between the ages of 18 to 28, having been involved in an average of 13 years of addiction, this might in part explain this phenomenon. It is possible that the maturing out process takes on a cyclical rather than a linear character under certain conditions and for some populations. A proportion of the addict population may terminate drug use independently or with the help of treatment intervention, exist without drug supports, find that as they are not achieving satisfactory life goals and thereafter begin to deteriorate. Some of these may then become re-involved with the institutions of addict care.

Another Anomaly

The original Riverside hospitalization was excluded in the follow-up report. Therefore, all entries represent new experiences over a 20 year period. If we review the data as presented, we discover that for 15 cases or about 7%, the record within the Narcotics Register indicates absence of activity for the first 15 years after Riverside, but return to some kind of narcotics difficulty during the last five years. If this finding is not a statistical artifact of some kind, it may further amplify the Winick maturing out concept as suggested before.

Discussion

This twenty year follow-up of first admissions during the year 1975 demonstrated the durability of addicts in maintaining involvement with addictive systems. Despite the fact that almost half the original Riverside population does not reappear on the New York City Narcotics Register

subsequent to their original Riverside hospitalization inferences may be drawn to suggest that substantially more are likely to continue to be involved with addiction or the consequences of addiction in death, involvement with treatment or incarceration.

One finding involves the suggestion that Winick's "maturing out" concept of addiction possibly represents one of several processes of leaving the life cycle of addiction. It is suggested that "maturing out" may be linear as in the Winick model, but that such a process may involve a cyclical process of involvement, uninvovement, re-involvement, in possibly different ways and in different time frames.

TABLE I

NUMBER OF ORIGINAL RIVERSIDE PATIENTS REPORTED FOR EACH TIME PERIOD, AND EACH CATEGORY OF REPORTING BY PERCENT OF PATIENTS AT RISK FOR EACH PERIOD

Year of Report	x Age	Patient At Risk Adjusted for Death	SOURCES OF REGISTER REPORTS						All Types Addiction Treatment	Private & Public MMTP	Drug Free Programs
			Register Deaths	Reports--All Agencies	Law/Corrections	Private & Public MMTP	Drug Free Programs				
1955	18	239		7	3%	1	--				
1956	19			12	5%						
1957	20			2	1%						
1958	21	228		3	1%						
1959	22			4	1%	2	1%				
1960	23			5	2%						
1961	24	218		15	7%			11	7%		
1962	25			16	7%			12	5%		
1963	26			30	14%			8	4%		
1964	27	209		39	19%	8	4%	13	6%		
1965	28		1	51	24%	25	12%	27	13%	1	
1966	29		1	63	30%	45	21%	30	14%	1	
1967	30	201	1	62	31%	46	23%	28	14%	3	
1968	31			17	9%	5	3%	11	5%	1	
1969	32		1	58	29%	33	16%	27	14%	7	
1970	33	195	3	55	28%	22	11%	32	16%	10	
1971	34		3	56	29%	24	12%	35	18%	15	
1972	35		3	51	26%	27	14%	31	16%	26	
1973	36	188	4	40	21%	12	6%	25	13%	26	
1974	37			29	15%	9	5%	21	11%	15	

TABLE II

RIVERSIDE PATIENTS MOST RECENTLY REPORTED
 BETWEEN 1970 - 1974 FOR EACH CATEGORY
 BY AGE AT FIRST HOSPITALIZATION

	WHITES		BLACK				HISPANIC					
	Age at First Hospitalization											
	-18	18+	-18	18+	-18	18+	-18	18+	-18	18+		
	16	29	16	23	17	27						
	#	%	#	%	#	%	#	%	#	%		
ALL CASES	9	56	19	65	12	75	17	74	16	94	19	70
DEATHS	1	6	3	10	2	12	2	9	1	6	--	--
LAW/ENFORCEMENT	2	12	3	10	1	6	2	9	3	18	5	18
ALL TREATMENTS	5	31	10	34	6	37	10	43	7	41	11	40
RESIDENTIAL AND AMBULATORY TREATMENT	0	--	1	3	--	--	--	--	1	5	--	--
METHADONE MAINTENANCE TREATMENT	2	12	7	24	3	19	4	17	4	23	7	25
TOTAL ETHNIC GROUPS	45	35%			39	31%			44	34%		

TABLE III

NUMBER OF RIVERSIDE PATIENTS FIRST, AND MOST RECENTLY REPORTED TO
THE NARCOTICS REGISTRY AND PERCENT AND MEAN REPORTS PER ABUSER

Time Period	\bar{x} Age	Total Reported Abusers	Reports Per Abuser	First Time Reported	Most Recently Reported
			\bar{X}	N=130 %	N=130 %
1954 and Earlier		4	1.0	3.1	
1955	18	7	1.6	4.6	
1956	19	12	1.1	6.9	
1957	20	2	2.5	0.8	
1958	21	3	1.3	0.8	
1959	22	4	1.3	1.5	
1960	23	5	1.3	1.5	
1961	24	15	1.3	9.2	
1962	25	16	1.4	6.2	
1963	26	30	1.5	13.1	
1964	27	39	1.5	9.2	4.6
1965	28	51	1.7	9.2	3.8
1966	29	63	2.1	7.7	3.1
1967	30	62	2.4	4.6	6.2
1968	31	17	1.2	4.6	2.3
1969	32	58	1.9	4.6	8.5
1970	33	55	1.8	8.5	9.2
1971	34	56	2.4	2.3	9.2
1972	35	51	2.9	.8	16.2
1973	36	40	2.2	.8	14.6
1974	37	29	2.9	0.0	22.3

FOOTNOTES

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