SOME ASPECTS OF THE EPIDEMIOLOGY OF HEROIN USE IN A GHETTO COMMUNITY: A PRELIMINARY REPORT

United States Department of Justice
Law Enforcement Assistance Administration
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FOREWORD

In 1969, the Addiction Research and Treatment Corporation began a five year evaluation of the effects of inner city methadone maintenance clinics on drug users, crime, and the community as a whole. The project, which is being conducted in the Bedford-Stuyvesant section of New York is sponsored jointly by the National Institute of Law Enforcement and Criminal Justice and the National Institute of Mental Health. This is the first of a series of reports resulting from that project.

This report contains preliminary findings of a survey of attitudes towards crime and delinquency of residents of Bedford-Stuyvesant, a community which has some of the highest rates of heroin addiction in New York City. A primary purpose of the survey was to obtain a more precise estimate of the actual rate of drug use in the area as well as to obtain data on the social and economic factors which correlate highly with addiction.

Interviews with over 600 residents indicated a much higher rate of heroin use than the highest official estimates of 233 addicts per 10,000 persons. Forty-three percent of the respondents said that they knew someone who used heroin and 11 percent reported that a relative of theirs had used heroin.

Several of the findings concerning the social factors surrounding addiction are unexpected and strike at the stereotyped image of the heroin user as a member of the least educated and poorest part of the

community who is also likely to be a product of a broken home. Instead, survey findings showed that the percentage of respondents with high school or college training who reported heroin use in their families was twice that of those with only a grade school education. Respondents with incomes below $6,000 reported heroin users in their families significantly less frequently than did respondents with white collar occupations or annual incomes over $6,000. Survey results also showed a slightly higher rate of reported heroin use in households headed by males than in those headed by females (14 percent versus 11 percent).

Although the survey findings where are presented here in three individual reports are classified as preliminary, they provide a useful tool for researchers in drug addiction as well as those actively engaged in efforts to halt the spread of heroin addiction and to treat those already addicted.

Additional interim reports from this project covering other aspects of the research will be published as they are made available.

Any quotation or further publication of this report must be cleared with the researchers, since the project has not reached completion.

Martin B. Danziger
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INTRODUCTION

During the early part of 1971, the ARTC Evaluation Team conducted a survey of attitudes towards crime and addiction among residents of the Bedford-Stuyvesant/ Fort Greene section of Brooklyn, New York. One of the primary objectives of the study was to obtain some estimate of the epidemiology of drug use as well as to gain insight into the factors within the family that are correlated with drug use and specific attitudes toward drug use. The survey also addressed itself to the issues of criminal victimization, community awareness and attitudes toward treatment facilities and modalities.

In the following report, based on data obtained from this survey, three papers are presented which discuss the characteristics associated with drug use and contiguity with drug users and the effect of contiguity with drug users on perceptions and attitudes. The findings are based on reported knowledge of heroin users.

According to the New York City Narcotics Register, the community where the survey was conducted has some of the highest rates of heroin addiction in the city. This is confirmed in the study by the very high proportions of respondents who have personal knowledge of drug use among acquaintances, friends and family members.

Although it is reasonable to suspect a tendency for respondents to deny an intimate knowledge of drug users, the openness of information obtained surprised even the most optimistic members of the research staff. Forty-three percent of the respondents reported personally knowing at least one person who has used heroin at least once. More than one in five report that their own friends have tried heroin, and almost 13% admit that a relative or family member has used heroin. These figures provide a substantial basis for identifying some of the factors associated with susceptibility to the contagion of drug use and for analyzing the impact of contiguity with heroin use on perceptions and attitudes toward the drug problem.

Focus

The three papers in this report focus on three issues. The first paper, "Social and Ethnic Patterns of Reported Heroin Use and Contiguity with Drug Users," is concerned with determining where addicts come from in the community by relating respondents' acknowledgment of heroin use by a family member or relative to their socio-economic status, family structure, and ethnic group. Since heroin use is associated with contiguity with drug users, respondents are also classified

according to the extent to which they know reported heroin users. The relationship between contiguity and socio-economic status, ethnic group membership, and length of residence in the community is then shown.

"Contiguity as an Influence on Perception of Drug Use," the second paper, discusses the perceptions that area residents have about the extent of heroin use in the community. The author considers the relationship between estimates of the extent of heroin use and several demographic characteristics of respondents, as well as the effect of contiguity with heroin use on respondents' perceptions.

An examination of the degree to which respondents feel that a member of their family could become addicted to heroin is presented in the third paper, "Community Attitudes Towards Drugs: Perception of Susceptibility to Heroin Addiction". The relationship between this feeling of susceptibility to addiction and the extent to which respondents see environmental and economic conditions as contributing to the addiction problem is also discussed.

Summary of Findings

The findings of the three studies can be summarized as follows. The relationship between reported use of

heroin by family members or relatives and social and ethnic classifications yields some surprising results. The rate of reported use varies among the different ethnic groups. Puerto Ricans have the highest rate, followed by "other blacks," with whites or British West Indians showing the lowest proportion, depending on age group. Age is in itself a factor in the reporting of heroin use; younger respondents in general and within each ethnic group reported a higher rate of heroin use. When socio-economic status is considered, it is seen that the reported use is greater among higher status individuals. Reported use is not higher in incomplete families and, except in Puerto Rican families, families with a female head of household show a somewhat lower rate of reported heroin use.

Contiguity parallels the relationship shown to exist between reported drug use and with ethnic groups and socio-economic status. It is also related to length of residence in the community and is substantially less among migrants over the entire sample and within ethnic groups (except Puerto Ricans who have too few native born). For migrants under 30, contiguity increases with length of residence.

The findings of the study of perception of drug use show that Puerto Rican and black respondents

believe there is more heroin use in the area than do white and British West Indian respondents. Age also influences perception, with younger people having a higher estimate of drug use than older people. There is, however, no consistent relationship between either sex or socio-economic status and estimates of heroin use.

When contiguity is introduced to determine its influence on estimates of drug use, it is seen that contiguity bears a stronger relationship to estimates than race-ethnicity* or age. Furthermore, when contiguity to drug use is introduced into the relationship between socio-economic status and estimates of use (for black respondents) we see again that respondents with high contiguity have much higher estimates of heroin use than do respondents with low contiguity.

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*The term "racial-ethnic" is used throughout the text to indicate that both race (black/non-black) and ethnicity (British West Indian, Puerto Rican, others) are being considered simultaneously. For our purposes we will consider four categories: Black British West Indians, all other blacks, Puerto Ricans (regardless of race), and all others. The last category is almost totally white, and therefore we will refer to it as such. It should be noted, however, that the category may also include small numbers of Orientals or others not elsewhere classified.

Non-British West Indian blacks are referred to in the text as blacks. The reader should of course be aware that British West Indians, who are discussed separately throughout, are not included as blacks for purposes of the discussion.

The same groups that report high contiguity and high estimates of heroin use in the community are also the ones who express the greatest feeling of susceptibility to drug addiction according to the findings of the third study. Further, there seems to be no correlation between attitudes toward the environmental and economic effect of the community and susceptibility to addiction. Only a minority of respondents felt that their environment contributed to addiction, and of these, the majority did not believe their family was susceptible to addiction.

Sample

The sample area is the Bedford-Stuyvesant/Fort Greene area of Brooklyn, New York, served by the Addiction Research and Treatment Corporation, a multimodality methadone maintenance program located in the community.* The area is characterized by high rates of addiction. All but one of the health areas in Brooklyn identified as high addiction tracts are within the sample area, with rates in individual tracts ranging from 69.7 to 233 per ten thousand, compared to an overall Brooklyn average of 66.2, reflecting the diversity in contiguous areas within this community (Narcotics Register (1969)).

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*This survey is part of the evaluation program of the Addiction Research and Treatment Corporation located in the Bedford-Stuyvesant/Fort Greene area of Brooklyn.

A quota sample was used to obtain 612 interviews. The specifications called for an equal number of male and female respondents. Further, female respondents were to be evenly split between those who were employed and housewives. Males were to be equally divided between those above and those below 30 years of age. In the final sample 53% were female and 47% male, which conforms with the 1970 Census proportions for this area. Blacks from the British West Indies, blacks, Puerto Ricans, and whites are all represented in the community surveyed. British West Indians and Puerto Ricans were over-sampled to ensure sufficient numbers for comparative purposes. The final sample consisted of 275 American blacks, 145 British West Indians, 101 Puerto Ricans and 89 whites.* The responses of blacks and whites are weighted so as to give them the sample representation in the total warranted by their representation in the community.

British West Indians include persons who were born in the Caribbean Islands formerly under British suzerainty, or are the offspring of West Indian parents. There are important differences in culture between the islands in the West Indies; however, they form a

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*Ethnic group patterns are examined for all major themes to ensure that they are consistent with aggregative patterns. See footnote in Chart I.

cultural complex with similar patterns of slavery and post-slavery social structure and economy (Rubin (1957); Lowenthal (1967, 1972)).* Most come from Barbados, Jamaica, Bermuda and Trinidad, with smaller numbers from Granada, the British Virgin Islands, British Guyana and other islands. British West Indians, while they are black and many are recent immigrants, have as a group made a very different accommodation to the United States. They tend to pursue home-ownership, stress education, and are disproportionately found in the professional, business and political leadership of the black community (Lowenthal (1967); Reid (1939)).

The focus is not on individual determinants but on the sociological conditions that can help explain differences in rates between sub-groups who reside in an area where addiction is prevalent and heroin readily obtainable. Insofar as there are substantial differences it will be possible in future reports to specify particular features in the culture and experiences of these groups that may contribute to the understanding of the process that leads to addiction.

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*According to Lowenthal (1972 [12]): "Resemblances from island to island are substantial and durable: West Indian social structure and ways of life vary from place to place, but their basic forms persist throughout the Caribbean. . . ."

SOCIAL AND ETHNIC PATTERNS OF REPORTED HEROIN USE AND CONTIGUITY WITH DRUG USERS

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INTRODUCTION

The spread of heroin addiction has reached epidemic proportions. It is intimately associated with the problem of street crime that is a central issue in American society. Heroin use is spreading from the confinement of the ghettoes and reaching all segments of society. The exact dimensions of the problem are still unknown but in some neighborhoods the visibility of addicts who congregate on street corners serves as a testimonial to the magnitude of the problem. Police, prisons and courts have had to accommodate to the very large numbers of addicts who are caught up in the criminal justice system. Vast programs have been set into motion at the federal and local levels in an attempt to halt the spread of addiction and to treat tens of thousands of addicts.

Yet, little is known about the factors leading to experimentation with heroin; or, except in very gross terms, who are the individuals most likely to become addicted. Some of our information is derived from studies of known addicts. This raises questions concerning their representativeness to the total addict population, some of whom may escape attention. And we are not even certain that the correct questions are

being asked of addicts that can contribute to our comprehension of the phenomenon of heroin addiction.

In this paper, instead of looking at addicts, we examine people who live in an area where heroin addiction, along with other forms of deviance, are endemic. Our effort is directed toward learning something about the social backgrounds of families where there is reported heroin use as well as the factors associated with close ties with other persons who have used heroin. The thrust of this report is to identify the characteristics that are associated with drug use and contiguity with drug users* and not to estimate rates of heroin use. Surveys are used to estimate rates of various types of drug use and tabulations are often present on gross social characteristics, such as age and race (Chambers (1971)).** Here, instead, we will locate the families of addicts in the cultural and social structure of the community and identify some of the mechanisms that contribute to the spread of heroin addiction.

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*We are dealing only with heroin use in this paper so that drug use refers only to this drug and not to other addictive drugs or substances that are abused by individuals.

**References are at the end of the article. Citations refer to the first author where there are multiple authors, and to the year of publication. Specific page references are indicated in brackets.

In the first part of this paper we will establish where addicts come from in the community, whether the social class backgrounds of families that acknowledge heroin use amongst kin differs from those who report no heroin use. Our object is to discern whether the information we have derived from studies of addicts is consonant with findings obtained from persons in the community. We do not have identified addicts, only the characteristics of respondents who report a family member or relative has used heroin. However, this can serve to provide us with useful indications of the backgrounds of addicts.

We then examine some more specific themes. One concerns the extent to which incomplete families, or female-headed households, contribute disproportionately to the reported rate of drug use. Again, we are observing respondents with kin who have used heroin but the patterns that occur can provide some leverage on the significance this may have for understanding drug addiction. We would expect if family structure is a crucial element in the etiology of heroin addiction, then there should be some relationship with the characteristics of the families where respondents report heroin use amongst kin.

Heroin addiction is still concentrated in ghetto communities although there is increasing addiction in non-ghetto neighborhoods. Our understanding is intimately tied to the high prevalence of addiction in minority communities where poverty, joblessness and poor education are concentrated. But in most ghetto communities there are many groups who live together with very different life-styles and backgrounds. We already referred to social class but there are also marked ethnic variations. In addition to blacks, whites and Puerto Ricans we will also identify black British West Indians because of the evidence that their accommodation to American society is at variance with those of other blacks. We will observe whether residence in a community where drugs are easily obtainable has a differential impact on groups with different cultures.

Drug use, especially heroin use, is not a simple function of personal propensity. Even though there may be individual characteristics that predispose toward drug use a prior condition is accessibility to sources of supply. Introduction to heroin is almost always through direct personal contact with heroin users, with the exception of occasional medically-induced morphine addiction that may be replaced by heroin.

The prevalence of social networks for the induction of heroin addiction and for the maintenance of the drug subculture has been a widely reported observation.* For example, a Swedish psychiatrist, who studied the American drug problem, noted that the most important element in the spread of heroin ". . . is the tendency of addicts to persuade friends and acquaintances to use drugs. In their younger years, when the euphoric effects of drugs are strongest, addicts are the most fervent, contagious salesmen" (Dr. Niles Bejorit, quoted in the New York Times, May 8, 1972).

We therefore classified our respondents on the extent to which they know persons who are reported to have used heroin at least once, probably more often, who are acquaintances, friends, family members, and in a few cases, those who admitted they had used heroin. Insofar as contiguity with drug users is a precursor of heroin use we examine socio-economic status and ethnic group membership to see if they relate to contiguity.

We then examine the impact of community residence on contiguity with drug users in order to learn whether the seeming insularity of some groups to reported drug

*Other studies reporting similar observations are cited in Part II of this report.

use and to contiguity with drug users is a durable feature of their cultures; or, whether, it is simply a matter of time before the substantial differences between groups are likely to vanish.

I THE CHARACTERISTICS OF FAMILIES WHERE HEROIN USE IS REPORTED

Epidemiological information on heroin use is generally derived from information accumulated from addicts in treatment or who have been apprehended by the police. An inventory of their characteristics becomes the source of data on which we base our understanding of the nature of heroin addiction (Bates (1968); Chambers (1968); Ellinwood (1966); Nurco (1969); Scher (1967)). Depending on the particular source the precise figures vary, however, the overall pattern tends to reappear in most investigations. The demographic and social characteristics of addicts in recent years indicate they are disproportionately black (48% in New York City) or from some other racially or culturally distinctive minority group--Puerto Rican in New York City (21.5%), or Chicanos in the far West (Narcotics Register (1969); Scher (1967); Ball (1970) [93]). The addict's education is generally less than high school, he has a poor work history and, when working, is generally in low-paid unskilled employment (Chambers (1970)). Addicts are predominantly

young (almost seven out of ten known to the Narcotics Register in New York City are under 30) and about half, sometimes more, come from broken families (Bates (1968)). Families are generally large (Ellinwood (1960)) and many are from families of recent migrants: blacks from the South and Puerto Ricans from the Island (Bates (1968)). There are usually four or five male addicts for every female.

Chein and Rosenfeld, for example, state that the high incidence of juvenile drug use is in the "most depressed areas of the City, where family is disrupted, where the population is in the lowest socio-economic status . . ." (quoted in Ball (1970) [93]). Our understanding of heroin addiction, as distinct from other forms of drug abuse, hinges on the accumulated deprivations associated with recent migration, family break-up, minority group status, inadequate education and low-paid employment. This cluster of characteristics establishes the conditions for the explanation of heroin addiction. The characteristics of known addicts, when contrasted with the pattern of the general community, appear to confirm the thesis that addicts tend to come from the most deprived segments of the community.

Such investigations do not have access to "sucessful" addicts, those who manage their addiction while

remaining in the straight world and who may differ significantly from those who become known to the criminal justice or treatment systems.* Middle class heroin addicts may also be able to escape identification, although few suggest they are numerically substantial.**

Most heroin addicts come from ghetto cultures. An assessment of the traits of known addicts against the backdrop of the general population may be deceptive since the pattern of family life, education and employment is distributed in a very different way in ghetto communities than in the general population. The ghetto is a complex social system with class, ethnic and family patterns that are often obscure to those outside the culture.

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*There may be an analogy with the ecological fallacy noted by W.S. Robinson (1950) in the use of aggregated census data, where patterns observed across units may not pertain to individuals in the area. Thus, heroin addicts most often are from minority and slum communities, but it need not follow they are necessarily from the most deprived segments of these communities insofar as most ghettoes are heterogeneous, even if they are, overall, skewed toward poorer education, high unemployment and broken families.

**There are middle-class opiate addicts, many from the health professions or medically induced addiction. Here our concern is with heroin addiction.

The community where the survey took place, like many ghetto communities in the USA, is a patchwork of very divergent sub-groups. Long-term black urban residents live side-by-side with recent migrants from the rural South. There are clusters of West Indians who retain strong ties to a culture that is as different from American blacks as white ethnic groups are from each other (Reid (1939) ; Marshall (1960); Lowenthal (1967)). Puerto Ricans abut the area in distinctive clusters that reflect, even in the streets and shops, the very different life-styles of the Latin Caribbean. Islands of whites are still present, some from an older era and others who arrived more recently to seek housing in the projects or to purchase old brownstones. Some sections have the mournful desolation of a war-ravaged community while nearby are carefully nurtured private homes where black and West Indian middle-class residents reside.

Some Basic Correlates of Reported Heroin Use in Family Systems

Each respondent was asked whether he personally knew anyone who had used heroin. As can be seen in Table I, only 55% of the residents in the Bedford-Stuyvesant/Fort Greene area were able to report they knew no heroin users. Five percent of respondents

report all or more than half of the people they know have used heroin at least once, another five percent report less than half; and 33% know only a few. Therefore, 43% of the respondents report knowing someone who has used heroin. All of these persons will not be addicted; however, this suggests, first, that heroin use is pervasive and widespread in a community like Bedford-Stuyvesant and touches in some way more than two in five families. The magnitude of heroin use, while difficult to estimate with any accuracy, is likely to be greater than has been suggested (233 per ten thousand in the health area with the highest rate).

When asked if they had ever been offered heroin, 13% of the respondents admit that they had been. Only 2%, however, acknowledge they had ever tried heroin. But 11% report that a relative or family member has used heroin at some time; and an even larger number, 24%, acknowledge that individuals they identify as friends have used heroin.* No effort was made to assess regular heroin use for either the 2% of the respondents who admitted they had used it, or for their kin. The index used in this

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*These figures cannot be used to estimate rates of drug abuse because the question only concerns whether respondents or friends have ever used heroin, and this is not the same as habitual drug use.

TABLE 1

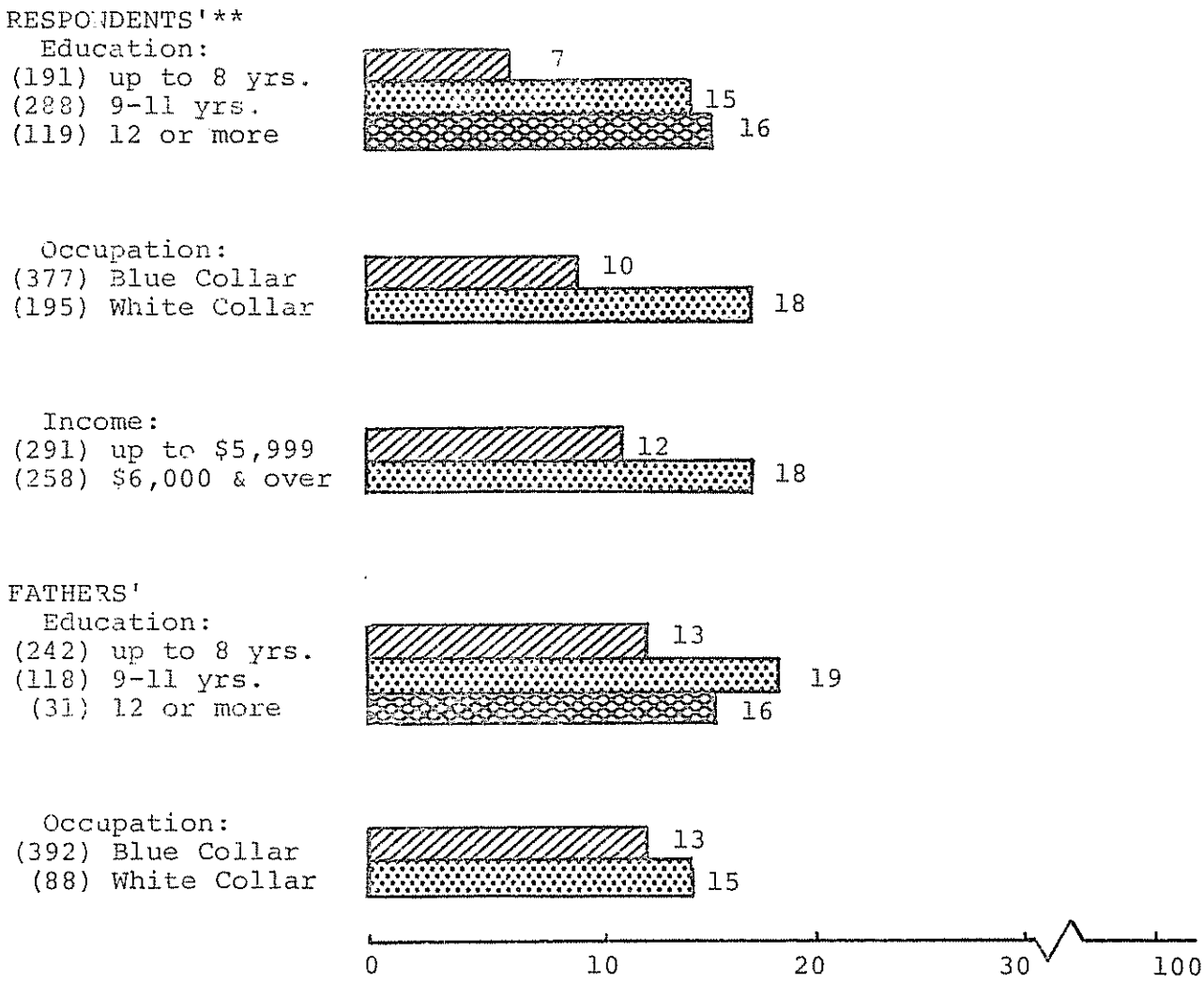
About how many of the people you know personally have used heroin at least once--almost all, more than half, less than half, only a few, or none?*

Almost all	1%
More than half	4
Less than half	5
Only a few	33
None	55
Don't know	2
	100%
	(612)

*These percentages may change slightly after sample is adjusted for over-sampling of BWI's and PR's. The necessary information will not be available from the Bureau of the Census until August 1972. As noted later BWI's report less drug use and PR's report more drug use than other groups.

CHART I

SELECTED BACKGROUND AND SOCIAL CHARACTERISTICS AND PERCENTAGE WHO REPORT RELATIVES OR FAMILY MEMBERS HAVE USED HEROIN*



*Includes 2% of respondents who admitted they had used heroin. Percentages may change slightly after sample is weighted for over-sampling of British West Indian and Puerto Rican residents. As noted later, similar patterns are replicated within ethnic groups so that the patterns cannot change substantially.

**Probability levels for differences as tested by χ^2 for three respondents' indicators are: Education($.05>p>.02$); Occupation ($.01>p>.001$); Income ($.05>p>.02$). No tests are reported for Fathers' education and occupation because of the large number of missing cases.

section consists of those who reported they had relatives or family members who had used heroin, or, where individuals admitted usage, they were also included.

This index helps us to identify those individuals who admit personal or kin use of heroin in order that they can be contrasted with those who do not do so. We can then identify some of the sociological characteristics that distinguish the families where addiction may be present from those where no kin usage is reported. The figures used here are probably underestimates, since it is unlikely that everyone is always aware when someone they know, or who may even reside with them is using drugs. Second, the tendency would be to avoid acknowledgment of heroin use rather than to assert it is being used when it is not.

In Chart I two groups of characteristics are presented: those of the respondents and of the respondents' fathers. The latter serve as indicators of the social origins of the families where heroin use has taken place.*

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*In all the charts and tables those cases where information was refused in the interviews are excluded to facilitate reading them. The number of cases will therefore vary slightly from one table to the next. In most instances the numbers are small; however, in a substantial number of cases respondents were unable or refused to give information on fathers' education (36%) or occupation (21%). Tables and charts using these indicators will have to be interpreted with caution.

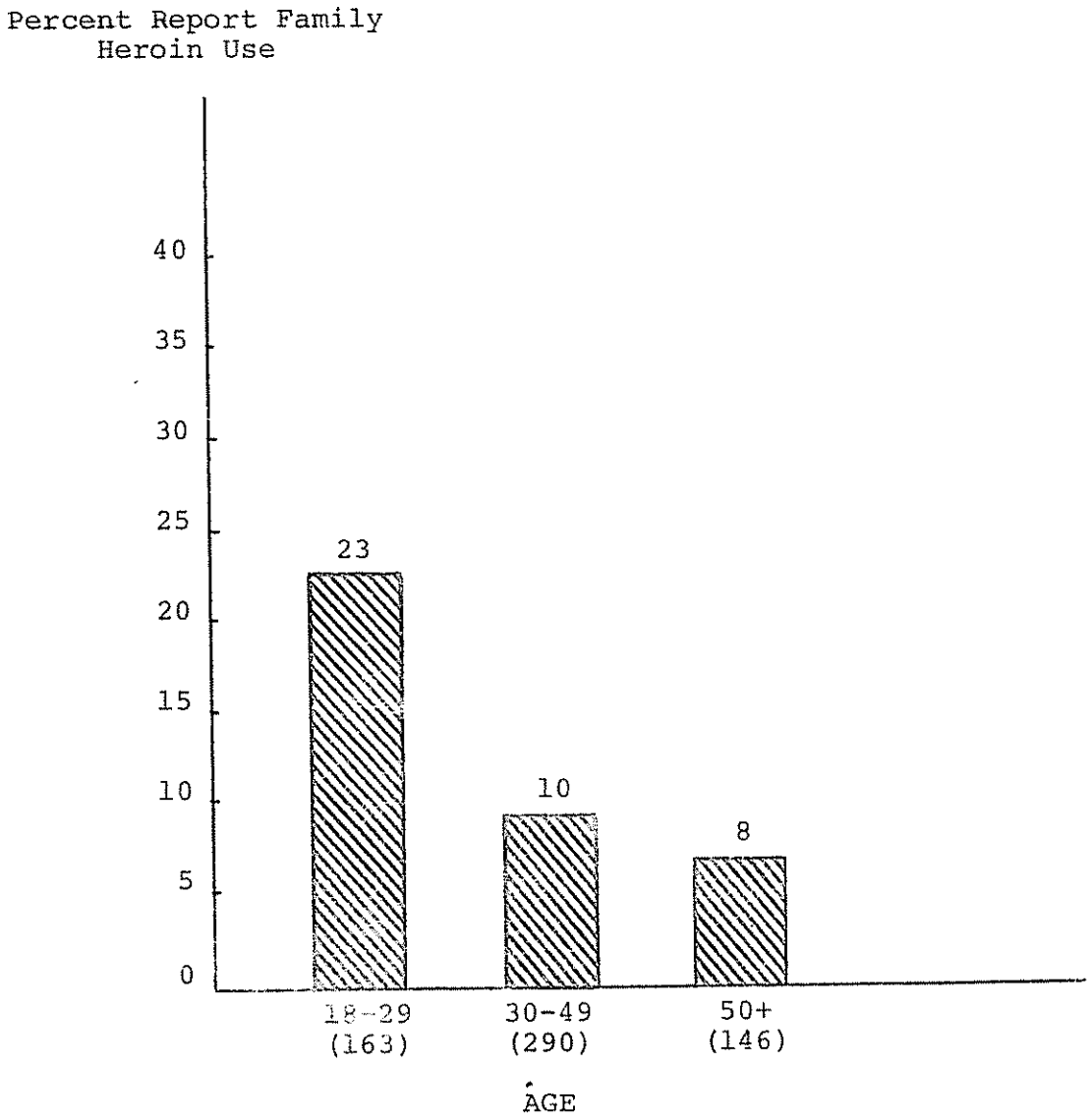
The pattern of reported heroin use within this community is the converse of what might have been expected. Respondents with only grade school education report heroin use in their families at about half the rate (7%) of those with some high school (15%), or those who graduated and who may have gone on to college (16%). Blue collar households report family use in 10% of the cases, while white collar respondents admit use in 18%. A similar pattern exists for income: 12% for families below $6,000 per annum; 18% where income exceeds $6,000. All differences are statistically significant.

If we look at the education and occupation of the fathers of respondents, although the differences are smaller,they are inconsistent with the thesis that the families of addicts are from the lowest stratum of the community. Numerically there would be more families with low education and occupation, reflecting the disporportionately large numbers with low education and blue collar occupations. There is, however, a somewhat greater likelihood, certainly an equal one, for addicts to come from families in the upper stratum on these two indicators of social background.

While we are not identifying the characteristics of heroin users themselves, or necessarily of the

CHART II

AGE AND PERCENTAGE WHO REPORT RELATIVES AND FAMILY MEMBERS HAVE USED HEROIN*



*Includes 2% of respondents who admitted they had used heroin.

immediate conjugal family, since relatives are included, the results presented thus far suggest that addicts--assuming that those who become known to their families as heroin users are often addicts--do not necessarily derive from the least educated and poorest segments of the community.

A careful assessment of patients at Lexington and Fort Worth by Ball and Chambers notes that recently addicts are increasingly from large urban ghetto communities. But they are not necessarily the most deprived, as indicated by comparing their educational achievement to that prevailing in their communities of origin, or as indexed by tests of general intelligence. They report: "The fact that opiate addicts are not educationally deprived and that..undoubtedly are above average in schooling for their respective neighborhoods is provocative." This is true despite the fact many addicts have left school as a consequence of drug use. For example, 22.8% of addicts never reached high school compared to 41.8% of the adult male population. On intelligence tests 16.9% were below 90 in I.Q. contrasted to 25% of the control subjects, while 12.9% were above 120 when only 8.9% of the control subjects were in that range. (Ball (1970) [11-12]). The subjects were addicts in treatment, unlike this study which relies on reported family use

of heroin. But the compatibility of their findings with the results of this survey lends credence to the thesis that heroin addiction is not a simple function of the accretion of various social deprivations.

Additional information is provided by a survey of a sample of residents in New York State where respondents who admitted using heroin were identified. The report, which notes some inevitable biases in the sampling procedure, also observed comparatively high educational achievement, stable employment, larger middle-class contingent among those who acknowledged heroin use than had been expected (Chambers (1971)).

Heroin use is more common among younger people. Younger people are also more likely to have been offered heroin and to have some knowledge about it including the ability to recognize persons who might be users. We would therefore expect that our younger respondents would more often report heroin use by family and relatives, and even by themselves. In Chart II the respondents' age is examined against the proportion who report family and relative use of heroin.

Almost one-fourth of the respondents between 18-29 (23%) report heroin use in the family compared to 10% between ages 30-49, and somewhat lower percentages

after that. This suggests that the respondents' age may influence some of the findings presented earlier. Since younger people are better-educated and more often in the ranks of white-collar workers, the relationship we have observed might be a function of age rather than socio-economic status or of its components. In each case where age was introduced into the relationship between background factors and reported heroin use, including socio-economic status, education and occupation, the basic patterns we have already observed are maintained. (Tables are not presented.)*

Family Structure

When family patterns of known addicts are reported, there is almost always some notation made of the proportion who come from broken or incomplete families. The proportion varies from 40% (Ellinwood (1966)) to as high as 68% (Chambers (1968)). In part this reflects the ethnic and age variations in different programs. These figures are generally given as data, and there is no particular effort to interpret them. However, the almost

*The tables are not presented because they essentially reproduce the patterns observed in the subsequent sections of this paper. We also examine, with a somewhat different index, but one that includes the information in the index used here, and replicates the patterns we have already observed, that age does not eliminate the relationships already uncovered.

uniform presence of this figure in the several studies suggests that some significance is attributed to the high incidence of incomplete families. The presence of many blacks in most programs, of course, largely accounts for the generally high rates. When separate figures are presented for white and black addicts the proportions are higher for the black addicts (Chambers (1968)).

The overall rate of incomplete families in the sample is about 40%, with blacks somewhat higher than the overall community average. The significance of this fact is not altogether clear. The black family, particularly the lower class black family, is in many ways a different structural adaptation to the historical and economic conditions encountered. The rate need not imply, as it might for other cultural groups, a concomitant pathological situation, (Hill (1971)). If we compare intact and single-parent families, contrary to expectations, in intact households family or relative usage of heroin is 14%, and 10% for single-parent households, an insignificant difference.

If we examine the sex of the head of the household, we find that male-headed households have slight, but insignificantly higher, reported prevalence of heroin users amongst kin (14%) than female-headed households (11%).

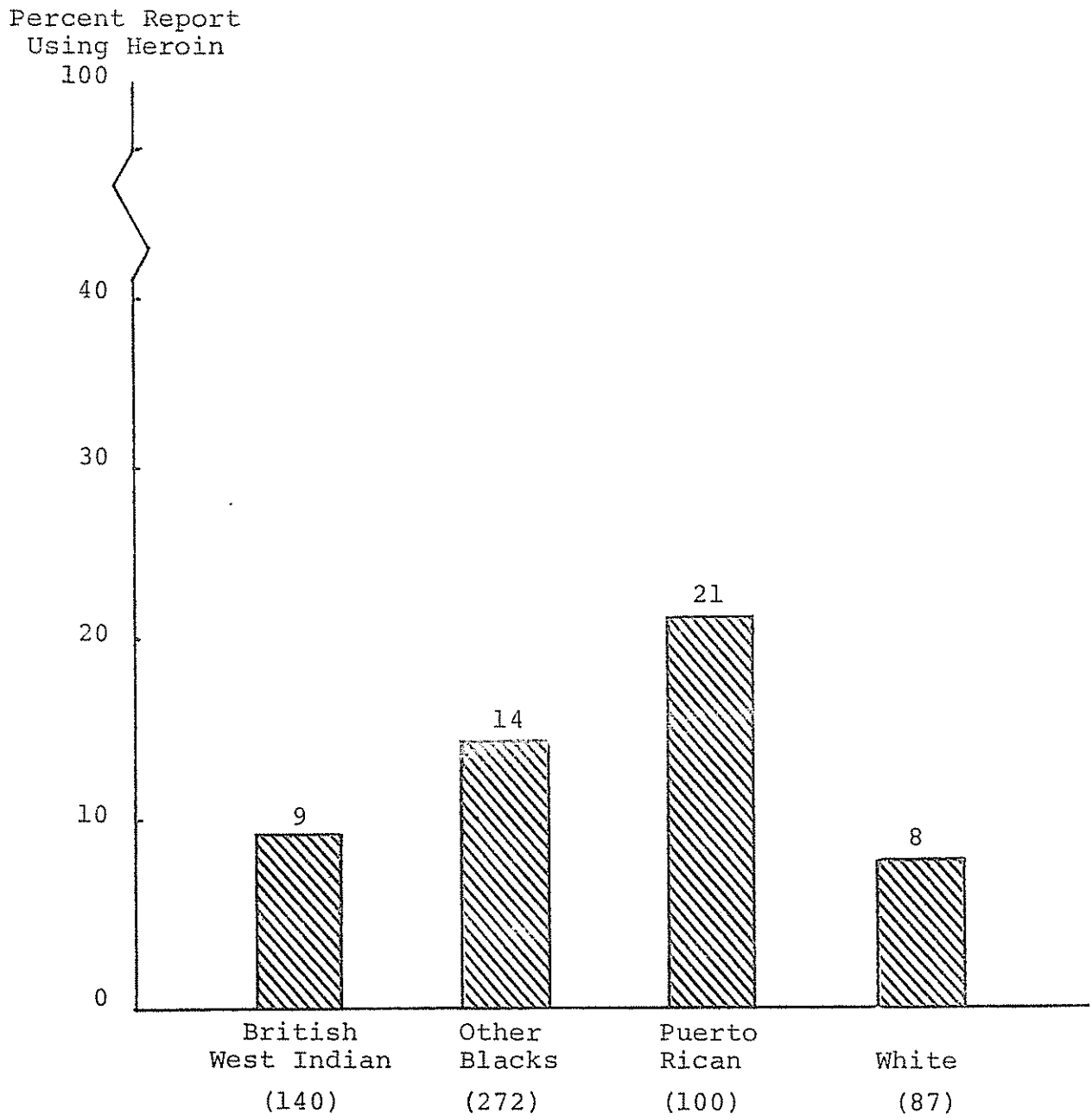
Within the various ethnic groups in the sample, although more black households are headed by females (38%), the index values are even more sharply divergent from what might be expected: 17% kin usage of heroin in male-headed black households, and only 9% for those headed by a female. The variations are less sharp, but in the same direction, for British West Indians and whites. Puerto Ricans, however, diverge from this trend. Female-headed homes (23% of the Puerto Rican households) have a higher reported percentage: 31% in female-headed households compared to 19% for households headed by males. This might, of course, reflect the Latin family structure and the patriarchal pattern that is prevalent. Incomplete family structural patterns would not appear to account for reported family and kin usage and may only be significant under particular social and cultural conditions, as is suggested by the Puerto Rican departure from the general trend.

Ethnic Group Membership

In this and the next section ethnic group membership and the propensity for heroin experimentation will be examined. Four groups are identified: British West Indians, other blacks, Puerto Ricans, and whites. We have already noted that British West Indians are from several Caribbean Islands that were former British

CHART III

ETHNIC GROUP MEMBERSHIP AND
PERCENTAGE WHO REPORT RELATIVES OR
FAMILY MEMBERS HAVE USED HEROIN*



*Differences as tested by χ^2: (.02>p>.01).

possessions. While they constitute a similar cultural area, differences among the Islands are obscured when combined. Other blacks, also, consist of urban residents and recent migrants from different areas of the South with significantly variant experiences. Migrants will be sorted out later in the analysis where we will observe some important trends. Whites in this sample consist of members of diverse ethnic groups with different cultures; however, the paucity of cases compels that they be combined in a single category.

We can see in Chart III that there are substantial differences in the proportions reporting heroin use among family members and relatives. Whites and British West Indians are least likely (8% and 9% respectively), other blacks 14% and Puerto Ricans have the highest reported usage, 21%. These differences are statistically significant.

Other factors, such as age and variations in the socio-economic status of these groups, may account for the differences between these groups. These differences exist, as we can see in Tables 2 and 3 by examining the frequencies in the brackets. British West Indians are more often in the middle-class than other blacks or Puerto Ricans, and are much more often homeowners than all other groups. Puerto Ricans in this community are

TABLE 2

ETHNIC GROUP, AGE AND PERCENTAGE WHO REPORT RELATIVES OR FAMILY MEMBERS HAVE USED HEROIN

Ethnic Group	Age 18-29		30-49		50 & Over		% Difference
	Percentage Who Report Heroin Use						
British West Indian	14	(28)	9	(69)	4	(46)	10
Other Black	22	(81)	10	(126)	10	(62)	12
Puerto Rican	41	(27)	13	(61)	[17]	(12)	24
White	15	(27)	6	(34)	4	(26)	11
High-Low Difference	27		7		13		

Bracketed percentages are based on fewer than 20 cases.

TABLE 3

ETHNIC GROUP, OCCUPATION AND PERCENTAGE WHO REPORT RELATIVES OR FAMILY MEMBERS HAVE USED HEROIN

	Occupation				
	White Collar		Blue Collar		%Difference
	Percentage Who Report Heroin Use				
British West Indian	16	(55)	4	(80)	+ 12
Other Black	24	(80)	10	(183)	+ 14
Puerto Rican	[37]	(14)	19	(69)	+ 18
White	7	(46)	10	(41)	- 3

Bracketed percentages are based on fewer than 20 cases.

also younger, with relatively few respondents over 50 years of age.

In Table 2 the ethnic groups are sorted by age. In each case younger persons between 18-29, are much more likely to report heroin usage amongst kin. Yet, the differences between the ethnic groups are retained. In the youngest age group the lowest percentages are found in whites (15%), and British West Indians (14%), while blacks report 22% and Puerto Ricans the very high proportion of 41%. At increasing ages there is a sharp decline, and the absolute differences between groups is also narrowed, although the pattern between groups continues to assert itself.

Table 3 presents the occupational breakdown of each ethnic group and the percentage reporting heroin usage. There are very few Puerto Ricans in white collar occupations; however, the differences we have observed earlier in Chart I manifest themselves clearly in three of the groups: British West Indians, other blacks, and Puerto Ricans. Only among whites is there a reversal, although the differences are slight, with more blue collar households reporting heroin use amongst kin (10%), compared to white collar workers (7%).

Whether occupation, education or the two indicators of social origins are used (fathers' education and

occupation), the pattern of ethnic variations continues to be manifested (Tables not presented). In the next section some further documentation with a different index, contiguity with drug users, will also demonstrate the vitality of ethnic patterns in association with heroin usage. The latter index essentially reproduces the associations already observed, although it is substantively different

II. CONTIGUITY WITH DRUG USERS

Some forms of opiate addiction may be inadvertent or medically induced. Heroin addiction, however, is almost always introduced to the prospective user by friends or even family members. When the respondents were asked who offered them heroin, in four of five cases it was friends or relatives. When addicts at the Addiction Research and Treatment Corporation were asked who introduced them to heroin it was almost always friends, sometimes older siblings or family members. In a study of addicts at two federal treatment centers Ball and Chambers report that opiate addiction ". . .is similar to both juvenile delinquency and venereal disease. As with delinquency it is a peer-group phenomenon pursued in a recreational or street setting. . .transmitted by personal contacts which are

intentional" (Ball (1970) [76]). It is rarely the pusher looking for customers who induces the novitiate drug user to experiment with heroin.

Therefore, a condition for heroin usage is contact with persons who are using drugs, whether they are friends or family members. All persons who are offered heroin do not necessarily try it and others, after a few experiences, may cease before becoming addicted. The intervening processes are therefore of paramount importance. But a prior condition, and one that contributes to the understanding of the epidemiology of heroin addiction, is stable contact with persons who already use heroin.

An index, Contiguity with Drug Users, was constructed from the information described in the previous section.* Anyone who reported not knowing anyone who used heroin was assigned a score of zero, or if he indicated only acquaintance with someone who used heroin, he was scored 1. If he also indicated that he had

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*The four items are: "About how many of the people you know personally, have used heroin at least once--almost all, more than half, less than half, only a few, or none?" "Do you think any of your friends have ever tried heroin?" "What about your relatives--including members of your immediate family--have any of them ever tried heroin?" "Did you ever try it?"

If the response to the first item was other than "none", it was considered a "yes" response. A "yes" response to each of these questions was scored as one point, creating a scale that ranged from 1 to 4. A respondent was classified as "low contiguity" if his score was 0 or 1, "high contiguity" if his score was 2 or more.

TABLE 4

DISTRIBUTION OF RESPONSES ON
CONTIGUITY WITH DRUG USERS INDEX

	%	N
None	56	344
1	16	97
2	19	117
3	8	46
4	1	6
	100	610

friends who used heroin, or if a family member or relative had, he was scored one for each such admission. Finally, those who admitted they had used heroin were also included so that an individual's score could range from zero to four.

In Table 4 we see that 56% of the respondents report no contact with drug users, not even acquaintances.* At the other extreme, including those who answered affirmatively to all four indications, we find only 1% of the respondents. For the succeeding analysis the proportion who have a score of two or more on the contiguity index, or the top 28%, will be considered"high".** In each cell of the Table the base on which the percentage is computed is in brackets alongside the percentage figure.***

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*The slight difference in percentage from that noted in Table 1 is due to the slight change in base and rounding errors.

**If we retained the complete index in all Tables the same patterns would be observed; however, the Tables would be much more complex. Since the focus is on the patterns that will be observed, and not on any precise estimates of rates, the use of the truncated form of presentation is readily justified.

***In order to explore many of the patterns in succeeding sections it is necessary to examine three and four variables simultaneously. Because the pattern of each ethnic group on occupation, age and place of birth is often skewed the base for some percentages is less than is adequate. The analysis focuses on eliminating alternate interpretations of some of the observed patterns. In sufficient numbers of cells the frequencies are adequate so that, with appropriate caution, they can be usefully examined. Where percentages are based on fewer than 20 cases the percentages are placed within square brackets.

TABLE 8

AGE, LENGTH OF TIME IN COMMUNITY AND PERCENTAGE HIGH ON CONTIGUITY WITH DRUG USERS

	Length of Time in Community			
	Under 5 Yrs.		5 or More Yrs.	
Age	Percentage High on Contiguity			
Under 30	40	(104)	68	(46)
30 and over	20	(149)	21	(267)

heroin and contiguity with drug users. Migrants are somewhat older than natives. In Table 7 natives are compared to all migrants, irrespective of ethnic group. They are, in turn, separated into those who are under and over 30 years of age. We observe, first, that a very substantial 77% of natives under 30 are high on contiguity with drug users, compared to only 28% of those over 30 years. The distinction between migrants and natives is retained for persons of different ages. While younger persons do more quickly become acquainted with drug users, their rate is less than half of their age-mates who are natives.*

If acculturation to the community is associated with increased contiguity we would expect that the length of time one is resident in Bedford-Stuyvesant/ Fort Greene would be related to the number of drug users with whom one is acquainted. In Table 8, persons under 30 are compared to those over 30 for different periods of time they are resident in the community. For younger persons, longer residence in the community is associated with higher rates of contiguity. Of those persons under 30 who have been in the community for less

*If we examine natives and migrants within ethnic groups the pattern we have seen is generally retained, except that young migrant British West Indians have an inordinately low rate (4%), compared even to other migrant groups. But many percentages are based on too few cases for very reliable comparison between different groups.

TABLE 9

PLACE OF BIRTH,* AGE, LENGTH OF TIME IN THE COMMUNITY AND PERCENTAGE HIGH ON CONTIGUITY WITH DRUG USERS

		Length of Residence in Community			
		Under 5 Yrs.		5 or More Yrs.	
		Percentage High on Contiguity			
Under 30	Native	70	(23)	83	(24)
	Migrant	30	(81)	50	(22)
Over 30	Native	33	(15)	27	(60)
	Migrant	19	(134)	19	(207)

*Natives are U.S.A. born, and for blacks, New York born; migrants are foreign born except for blacks, who are migrants from other States, primarily the South. See footnote in table 6.

TABLE 10

ETHNIC GROUP, AGE, LENGTH OF TIME IN COMMUNITY AND PERCENTAGE HIGH ON CONTIGUITY WITH DRUG USERS

	Age	Length of Time in Community			
		Under 5 Yrs.		5 or More Yrs.	
		Percentage High on Contiguity			
British West Indian:					
	Under 30	10	(21)	[80]	(5)
	30 and over	11	(47)	11	(65)
Other Black:					
	Under 30	48	(50)	60	(30)
	30 and over	20	(56)	24	(126)
Puerto Rican:					
	Under 30	[57]	(14)	[100]	(7)
	30 and over	38	(26)	41	(37)
White:					
	Under 30	42	(24)	[67]	(3)
	30 and over	23	(22)	16	(38)

than five years, 40% are high on contiguity, compared to 68% of those who have been in the community for at least five years. Persons over 30, on the other hand, show no substantial differences in contiguity with drug users as residence increases in length.

Younger people, therefore, are the ones who are most likely to become acquainted with drug users sooner. As their tenure in the community increases most of them do become acquainted with persons who are using heroin. Older persons, on the other hand, seem to be inured to the likelihood of getting to know persons who are using heroin even as their residence in the community is extended.

If we control by age in order to compare natives and migrants as their residence in the community is extended, we see that the basic patterns we already noted are retained (see Table 9). Young natives know addicts in seven of ten instances, and this high figure is increased to 83% after five years of residence. Migrant younger persons are much less likely to know addicts (30%), but even here the rate is similar to that of older natives, and much higher than older migrants (19%) recently resident in the community. But while older persons retain their rate as residence increases we see

that younger migrants increase considerably, to 50%, or a 20% increase in contiguity. This is still less than for natives, but it is apparent that these differences tend to merge for younger people who migrate into the community from abroad, or, for blacks, from the Southern states.

Table 10 reveals this same pattern within each ethnic group. Many cells have too few cases for reliable percentages. Yet, within each group it is apparent that younger persons resident in the community for five or more years more often report familiarity with heroin users. The differences between ethnic groups are consistent with our earlier observations. Younger West Indians seem to be less likely to become familiar with those who use heroin, while blacks and Puerto Ricans, even younger whites, soon become familiar with those who are using heroin. Older individuals, on the other hand, show little change as a function of length of residence.

We find that the longer younger persons are resident in the community the intitial differences between migrants and natives tend to diminish. Even within ethnic groups this pattern persists, although we have to be tentative about this because the number of cases is sometimes quite small. In Table 8, we noted that 68%

of those under 30 who have lived in the community for five or more years are high on contiguity with drug users so that a very substantial majority do know heroin users who are friends, sometimes family members. And 'natives' in all groups report much higher rates (Table 6), even as differences between groups are retained. But for younger persons, even those who are originally from elsewhere, the contiguity with drug users increases substantially through time.

SUMMARY

Reported Heroin Use

Socio-Economic Characteristics: When we look within a community where heroin addiction is rampant, an examination of the relationships between socio-economic status and reported use of heroin by family members or relatives yields some surprising findings. Families that report heroin use by kin, or by respondent himself, are more often better educated, in white collar occupations and have higher incomes. When we look at social origins, although differences are modest, we also find somewhat more reported use from families where the father was a white collar worker and had at least some high school in his background.

These findings appear to contradict the prevailing view presented in most studies of heroin addicts. However, at least two investigations, one a survey of New York State residents, the other of addicts in treatment, also noted that addicts were not necessarily the most deprived members of their communities. (Ball, 1970 [10]; Chambers, 1971 [127]).

The addict population does come primarily from ghetto communities, and is disproportionately black, Puerto Rican and Mexican-American. Their social characteristics would appear to have been misinterpreted by contrasting them, in effect, with the general community. Instead, when we look within the community, we find a direct relationship between socio-economic status and the presence of someone who has used heroin. Higher status individuals are more likely to report heroin usage by kin. Nor are these findings attributable to age variations or other demographic characteristics of the respondents from whom we obtained information.

Our understanding of susceptibility to heroin addiction would appear, then, to require a shift in its emphasis away from postulating heroin use as a response to accumulated social deprivations. We have not examined the families of known heroin addicts but if the evidence

of this report is replicated, it will be necessary to advance explanations that account for the higher rates of reported heroin use in higher status families.

Family Structure: Most investigations note the frequency with which addicts come from incomplete families. When we identified complete and incomplete families we found that there was a slight (though insignificant) increase in reported family and relative use of heroin in intact families. Where households are contrasted by the sex of the head of the house we find those headed by females have a somewhat lower rate of reported heroin use (11%), compared to those headed by males (14%).* Within ethnic groups the trend amongst blacks is exacerbated: Female-headed households only 9% compared to 17% when headed by male. British West Indian blacks and whites have a similar discrepancy but the differences are much smaller. Only in Puerto Rican families headed by a female are reported rates higher, with 31% in contrast to 19% where a male is designated the head of the house. The difference for Puerto Ricans may reflect the strong patriarchal pattern of Latin Caribbean cultures and the more difficult accommodation to a disruption of traditional family

*Future reports will attempt to explain the relationships we have observed. There are only slight differences associated with the sex of the respondent on reported family use, with female respondents reporting 14% compared to 12% for male respondents on kin usage.

forms. The more substantial difference amongst blacks at least casts doubt on the assumption that simple structural patterns in the family play a contributory role in drug use. Insofar as the family plays a role it would seem that more subtle, and perhaps elusive, qualities of child-rearing and socialization, and the particular forms of familial structure within the different groups, will have to be examined.

Ethnic Groups: Four groups resident in the community were identified: British West Indians, other blacks, Puerto Ricans and whites. Although they reside in a community where drugs are easily available we find that different cultural groups report very different experiences. British West Indians and whites are least likely to report family members or relatives have used heroin (9% and 8% respectively). Blacks report kin have used heroin in 14% of the families and Puerto Ricans, mainly short-term residents in the community, 21%. In all groups the highest reported rates are by younger persons but the ranking remains generally consistent: Puerto Ricans are highest, followed by other blacks, with whites and British West Indians alternating for the lowest proportion of reported drug use in the family at different ages.

Within ethnic groups, except for white respondents, white collar families report higher kin usage than blue collar families. Reversal amongst whites is slight, with blue collar families a few percentage points higher than white collar households. Nor do other status indicators, such as education or income obviate the patterns observed within ethnic groups. Neither age nor social status differences amongst the four groups are able to eliminate ethnic differences in reported use of heroin by family members or relatives. The cultural patterns of some ethnic groups appear to insulate them more successfully from drug experimentation than others, even where they share residence in high drug abuse communities.

CONTIGUITY WITH DRUG USERS

Contiguity: Heroin use is almost always introduced to a person by friends, even family members. The concentration of heroin use in particular communities, and its spread, like most epidemics, is contingent on the presence of drug users. Thus, persons who are acquainted with drug users are exposed to a greater risk of experimentation. Many studies report that addicts were introduced to heroin by their friends, and those respondents in our sample who admitted they had been offered heroin almost always reported it was by a friend or member of the family. Therefore, an index of contiguity with drug users

was constructed from information on whether they had acquaintances, friends, family members, or if the respondents had ever used heroin, so that they could be classified on the extent of their familiarity with persons who use heroin.*

Socio-Economic Status, Ethnic Groups and Contiguity: The same relationships observed for reported family use of heroin were observed for the index of contiguity. Puerto Ricans had the highest rate of contiguity, followed by other blacks, then whites and British West Indians with the lowest contiguity scores. Again, status groups, however measured, the more prestigeful groups were highest on contiguity.

When ethnic groups were identified by socio-economic status the differences between them were retained, with Puerto Ricans highest at all levels of SES, then blacks. Again, whites and British West Indians alternated in rank at different SES levels. The highest SES groups within each ethnic group have the greatest likelihood of having a more extensive acquaintance with drug users, although SES had a minimal impact in differentiating British West Indians. Overall, the significance of ethnicity was stronger in differentiating contiguity than was socio-economic status.

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*The contiguity index contains the information used to identify reported kin usage, although it is directed toward identifying more extensive social networks where heroin use is reported.

Migration: Many forms of deviance are attributed to the disorganization of the cultures that migrants bring with them to the new social context. The lag in acculturation to the dominant culture of the new environment is assumed to result in a breakdown of traditional social controls before the migrants have assimilated the new ones. To test this thesis each group was sorted into natives and migrants. British West Indians and whites were classified into those who were born in the U.S.A. and abroad. Blacks were distinguished by place of birth: native New York and from other states, mainly border and southern. There were only a handful of Puerto Ricans who were born in continental United States.

We find, first, that migrants have substantially less likelihood than the natives of knowing addicts over the entire sample and within ethnic groups (excepting Puerto Ricans who have too few native born). The highest rates of reported drug use and contiguity with drug users has consistently been among Puerto Ricans. But we find that the single group who are most likely to be acquainted with drug users are native blacks, those born and reared in New York. Further, black and Puerto Rican migrants appear to become acquainted more quickly with persons who have used heroin, although their knowledge is still significantly lower than their native co-ethnics.

The migrant from the West Indies is least likely to report knowing persons who are addicted.

Younger migrants become acquainted more quickly with drug users than those who are above 30 years of age. And as length of residence in the community increases there is a substantial increase in younger persons in all ethnic groups getting to know persons who use heroin. For persons under thirty and residents less than five years in the community 40% scored high on contiguity. This increases to 68% for those who have been in the community for more than five years. There is no change for older persons as a result of longer residence. Young migrants become acquainted with drug users more quickly and as their length of residence in the community is extended their index increases from 30% to 50%. We also find that younger migrants who are short-term residents still rank in contiguity with their senior ethnic group members; however, with increasing length of residence younger persons in all ethnic groups appear to become markedly more familiar with heroin users, although some of the percentages have to be interpreted with caution within particular ethnic groups.

The degree to which some groups are more successful in insulating themselves from heroin use is partly contingent on also not becoming extensively acquainted with

persons who do use drugs. All people who are in close contact with drug users will not necessarily experiment with drugs but the necessary, if not the exclusive, condition is familiarity with persons who do use them.

We cannot infer that all those with extensive contact with drug users are equally likely to become users. There may indeed be very significant differences between each of our ethnic groups in the propensity to accommodate to any social pressures that may be present to try heroin when it is proferred to them. But the substantial differences between ethnic groups that were observed are seen to diminish for those who are natives, in contrast to migrants. As the tenure of younger members of ethnic groups with lower rates of reported heroin use in their families is extended they are soon very likely to be ensconced in social networks where there are heroin users.

BIBLIOGRAPHY

Ball, John C. and Chambers, Carl D., (editors), The Epidemiology of Opiate Addiction in the United States, Charles C. Thomas, 1970.

Bates, Wm. M., "Occupational Characteristics of Negro Addicts," The International Journal of the Addictions, Vol. 3 (2), 1968.

Chambers, Carl D., An Assessment of Drug Use in the General Population, Special Report No. 1, New York State Narcotics Addiction Control Commission, May 1971.

Chambers, Carl D.; Moffet, Arthur D. and Judith P., "Demographic Factors Associated with Negro Opiate Addiction," International Journal of the Addictions, Vol. 3 (2), 1968.

Chein, Isador; Gerard, Donald L.; Lee, Robert S. and Rosenfeld, Eva, The Road to H, Basic Books, Inc., New York, 1964.

Clausen, John, "Social and Psychological Factors in Narcotic Addiction," Law and Contemporary Problems, 34-51.

Davenport, Wm., "The Family System in Jamaica," Social and Economic Studies, Vol. 10, 1961.

Ellinwood, E.H.; Smith, W.G. and Vaillant, G.E., "Narcotic Addiction in Males and Females: A Comparison," International Journal of the Addictions, Vol. 1 (2), 1966.

Hill, Robert B., "The Strengths of Black Families," National Urban League, July 1971 (mimeograph).

Lowenthal, David, "Race and Color in the West Indies," Daedelus, Vol. 96 (2), 1967.

Lowenthal, David, West Indian Societies, Oxford University Press, New York, 1972.

Marshall, Paula, Brown Girl, Brownstone, New York, 1960.

Narcotics Register, "Rates of Heroin Use by Boroughs and Health Areas in New York City," April 1964 (mimeograph).

Nurco, David N.; Balter, Mitchell B. et. al., Drug Abuse Study, Maryland, 1969.

Preble, Edward, "Social and Cultural Factors Related to Narcotic Use Among Puerto Ricans in New York City," International Journal of the Addictions, Vol. 1 (1), 1966, 30-41.

Reid, Ira de A., The Negro Immigrant; His Background, Characteristics and Social Adjustment, 1899-1937, AMS Publishers, 1939.

Robinson, W.S., "Ecological Correlations and the Behavior of Individuals," American Sociological Review, Vol. XV (June 1950), 351-357.

Rubin, Vera (editor), Caribbean Studies: A Symposium, University College of the West Indies, 1957.

Scher, Jordan, "Patterns and Profiles of Addiction and Drug Abuse," International Journal of the Addictions, Vol. 2 (2), 1967.

Spicer, Edward H., "Acculturation," Encyclopedia of the Social Sciences, 1970.

Williams, Joyce E. and Bates, Wm. M, "Some Characteristics of Female Narcotic Addicts," International Journal of the Addictions, Vol. 5 (2), 1970.

Winick, Charles, "Maturing Out of Narcotic Addiction," U.N. Bulletin on Narcotics, Vol. XIV, No. 1, 1962.

CONTIGUITY AS AN INFLUENCE ON PERCEPTION OF DRUG USE

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DEMOGRAPHIC CHARACTERISTICS AND PERCEPTION OF HEROIN USE

The estimates of drug use considered in this discussion are based on responses to two questions: "What is your impression about how many people over 21 in the area have used heroin at least once?" and "What is your impression about how many people under 21 in the area have used heroin at least once?" Respondents were offered the categories, "almost all," "more than half," "less than half," "only a few," and "none." For the purposes of analysis we are considering responses "almost all" and "more than half" as high estimates of heroin use and "less than half" and "only a few" as low estimates.

Race-Ethnicity

Black and Puerto Rican respondents perceive more heroin use in their community than do British West Indian and white respondents. Approximately one-fifth of the Puerto Rican (21%) and black respondents (18%) have high estimates of the extent of heroin use among adults in the area. Twelve percent of the British West Indian and 8% of the white respondents express this opinion[1] (Table 1).

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[1]The proportion of British West Indian (32%) and white respondents (29%) who answered "don't know" to this

TABLE 1

PERCENTAGE HIGH ESTIMATES THAT PEOPLE OVER 21 TRIED HEROIN BY RACE-ETHNICITY

	Race-Ethnicity			
	British West Indian	Black	Puerto Rican	White
Percentage High Estimates Of Use	12	18	21	8
	(145)*	(275)	(101)	(89)

*Numbers in parentheses are total number of responses on which percentages are based.

TABLE 2

PERCENTAGE HIGH ESTIMATES THAT PEOPLE UNDER 21 TRIED HEROIN BY RACE-ETHNICITY

	Race-Ethnicity			
	British West Indian	Black	Puerto Rican	White
Percentage High Estimates Of Use	14	23	41	16
	(145)	(275)	(101)	(89)

With respect to use by people under 21 in the area, 41% of the Puerto Rican respondents and 23% of the black respondents gave a high estimate of heroin use, compared to 16% of the whites and 14% of the British West Indians (Table 2).

Community residents in all race-ethnic groups are more likely to perceive a greater amount of heroin use among people under 21 than they do among people over 21. This perception is consistent with the finding that the majority of "regular heroin users" in New York State are young people.[2]

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question was about twice as large as the proportion of black and Puerto Rican residents (each 16%) who gave this response. (Data not presented in tabular form.) There is a similar pattern of "don't know" responses by race-ethnicity to the question about heroin use by people under 21. We also find that younger people are less likely to answer "don't know" than are older people, and men are less likely to do so than women. There is no discernible pattern of "don't know" responses when the relationship between estimates and socio-economic status is analyzed. The interpretation of "don't know" responses, and their variation by age, sex, and race-ethnicity, are interesting questions but are beyond the scope of this analysis.

[2]A study of the extent of drug use in New York State, based on interviews with a sample of 7,500 residents during August and September of 1970, found that 66% of the "regular heroin users" were between 14 and 24 years old.

Carl D. Chambers, An Assessment of Drug Use in the General Population, Special Report No. 1, Drug Use in New York State (State of New York Narcotic Addiction Control Commission, July, 1971), p. 126.

TABLE 3

PERCENTAGE HIGH ESTIMATES THAT PEOPLE OVER 21 TRIED HEROIN BY SEX AND RACE-ETHNICITY

	Race-Ethnicity							
	British West Indian		Black		Puerto Rican		White	
	Sex		Sex		Sex		Sex	
	Male	Female	Male	Female	Male	Female	Male	Female
Percentage High Estimates Of Use	11	13	18	18	17	25	2	14
	(75)	(70)	(114)	(161)	(53)	(48)	(47)	(42)

TABLE 4

PERCENTAGE HIGH ESTIMATES THAT PEOPLE UNDER 21 TRIED HEROIN BY SEX AND RACE-ETHNICITY

	Race-Ethnicity							
	British West Indian		Black		Puerto Rican		White	
	Sex		Sex		Sex		Sex	
	Male	Female	Male	Female	Male	Female	Male	Female
Percentage High Estimates Of Use	13	16	25	22	40	42	9	24
	(75)	(70)	(114)	(161)	(53)	(48)	(47)	(42)

With respect to use by people under 21 in the area, 41% of the Puerto Rican respondents and 23% of the black respondents gave a high estimate of heroin use, compared to 16% of the whites and 14% of the British West Indians (Table 2).

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TABLE 3

PERCENTAGE HIGH ESTIMATES THAT PEOPLE OVER 21 TRIED HEROIN BY SEX AND RACE-ETHNICITY

	Race-Ethnicity							
	British West Indian		Black		Puerto Rican		White	
	Sex		Sex		Sex		Sex	
	Male	Female	Male	Female	Male	Female	Male	Female
Percentage High Estimates Of Use	11	13	18	18	17	25	2	14
	(75)	(70)	(114)	(161)	(53)	(48)	(47)	(42)

TABLE 4

PERCENTAGE HIGH ESTIMATES THAT PEOPLE UNDER 21 TRIED HEROIN BY SEX AND RACE-ETHNICITY

	Race-Ethnicity							
	British West Indian		Black		Puerto Rican		White	
	Sex		Sex		Sex		Sex	
	Male	Female	Male	Female	Male	Female	Male	Female
Percentage High Estimates Of Use	13	16	25	22	40	42	9	24
	(75)	(70)	(114)	(161)	(53)	(48)	(47)	(42)

The extent of the difference in the estimates of drug use of younger and older people, however, varies by race-ethnicity. The percentage difference between the estimates of high use for those under and those over 21 is only 2% for the British West Indians and 5% for the blacks, while it is 20% for the Puerto Ricans and 8% for the whites (Tables 1 and 2). Puerto Ricans and whites perceive twice as much heroin use among people under 21 as they do among people over 21.

Sex

There are no consistent differences in estimates of heroin use by sex among British West Indians, blacks, or Puerto Ricans. Among blacks and British West Indians, men and women have similar estimates of heroin use, among people both over and under 21 (Tables 3 and 4). Puerto Rican women have slightly higher estimate of heroin use among people over 21 than do Puerto Rican men, but there are no differences by sex among Puerto Ricans in their estimate of the amount of heroin use among people under 21. White women, however, perceive more heroin use than do white men, among those both over and under 21. A possible explanation for the very low estimates of heroin use of white men is discussed below.

TABLE 5

PERCENTAGE HIGH ESTIMATES THAT PEOPLE OVER 21 TRIED HEROIN BY AGE AND RACE-ETHNICITY

	Race-Ethnicity											
	British West Indian			Black			Puerto Rican			White		
	Age			Age			Age			Age		
	18-29	30-49	50+	18-29	30-49	50+	18-29	30-49	50+	18-29	30-49	50+
Percentage High Estimates Of Use	18	12	9	25	17	11	22	20	17	7	12	4
	(28)	(69)	(46)	(81)	(126)	(62)	(27)	(61)	[12]	(27)	(34)	(26)

TABLE 6

PERCENTAGE HIGH ESTIMATES THAT PEOPLE UNDER 21 TRIED HEROIN BY AGE AND RACE-ETHNICITY

	Race-Ethnicity											
	British West Indian			Black			Puerto Rican			White		
	Age			Age			Age			Age		
	18-29	30-49	50+	18-29	30-49	50+	18-29	30-49	50+	18-29	30-49	50+
Percentage High Estimates Of Use	21	17	7	27	21	23	37	43	33	22	15	8
	(28)	(69)	(46)	(81)	(126)	(62)	(27)	(61)	[12]	(27)	(34)	(26)

Age

The youngest respondents (age 18-29) have a higher estimate of heroin use among people over 21 than do the oldest respondents (age 50 and over) in all race-ethnic groups except whites[3] (Table 5).

When respondents estimate heroin use among people under 21, estimates decrease as age increases across all age groups in every race-ethnic group, except among Puerto Ricans (Table 6).

Socio-Economic Status (SES)

There is no consistent relationship between socio-economic status and estimates of heroin use. When we look at residents' perception of heroin use among people over 21, we see that there are no differences in estimate by socio-economic status among blacks and whites (Table 7). Estimates of heroin use do, however, vary by socio-economic status among Puerto Ricans and British West Indians. Low and medium SES British West Indians perceive more heroin use than do high SES British West Indians. Among Puerto Ricans, low status respondents have higher

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[3]We can consider only Puerto Ricans age 18-29 and 30-49 since the number of Puerto Ricans age 50 and over is only twelve.

TABLE 7

PERCENTAGE HIGH ESTIMATES THAT PEOPLE OVER 21 TRIED HEROIN BY SES AND RACE-ETHNICITY

	Race-Ethnicity											
	British West Indian			Black			Puerto Rican			White		
	SES			SES			SES			SES		
	Low	Med	High	Low	Med	High	Low	Med	High	Low	Med	High
Percentage High Estimates Of Use	15	16	5	16	20	19	27	15	9	5	7	10
	(52)	(37)	(56)	(109)	(92)	(74)	(51)	(39)	[11]	(20)	(28)	(41)

TABLE 8

PERCENTAGE HIGH ESTIMATES THAT PEOPLE UNDER 21 TRIED HEROIN BY SES AND RACE-ETHNICITY

	Race-Ethnicity											
	British West Indian			Black			Puerto Rican			White		
	SES			SES			SES			SES		
	Low	Med	High	Low	Med	High	Low	Med	High	Low	Med	High
Percentage High Estimates Of Use	13	14	16	21	25	24	43	41	27	5	11	24
	(52)	(37)	(56)	(109)	(92)	(74)	(51)	(39)	[11]	(20)	(28)	(41)

estimates of use than do medium status respondents.[4]

A different pattern emerges when residents' perception about the extent of heroin use among people in the area under 21 is examined (Table 8). There are no differences in estimates by socio-economic status among British West Indians, blacks, or Puerto Ricans. There is a large positive relationship between perception of heroin use and socio-economic status among whites.

CONTIGUITY AND PERCEPTION OF HEROIN USE

We have seen thus far that community residents' perceptions of the extent of heroin use in the area varies with both race-ethnicity and age, that sex of respondent has a relationship to this perception only for whites, and that there is no consistent relationship between estimates of heroin use and socio-economic status. It is our hypothesis that there is a direct correlation between respondents' higher estimates of heroin use and higher contiguity to drug use. We would, therefore, expect to find that Puerto Ricans and blacks have more direct experience with or knowledge of others' experience

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[4]There are only 11 high SES Puerto Ricans in our sample. These respondents are not being considered in this analysis.

TABLE 9

RACE-ETHNICITY AND CONTIGUITY

Race-Ethnicity	Percentage High Contiguity	
British West Indian:	13	(143)
Black:	30	(269)
Puerto Rican:	45	(100)
White:	26	(87)

with heroin than do whites and British West Indians, and that younger people have higher contiguity to drug use than do older people.

Contiguity, Race-Ethnicity, and Estimate

The same four-item index of contiguity described in the preceding study was used in this analysis of the relationships between contiguity, estimate, and demographic variables. When we examine the proportion of high contiguity respondents within each of the race-ethnic groups (Table 9), we see that these proportions range from a high of 45% among Puerto Ricans to a low of 13% among British West Indians. The estimates of heroin use by race-ethnicity (Tables 1 and 2), discussed earlier, showed that blacks and Puerto Ricans have the highest estimates of heroin use. These groups also have the largest proportion of high contiguity respondents. Although the proportion of high contiguity white respondents (26%) is close to the proportion of high contiguity respondents among blacks (30%), white respondents had perceived less heroin use (especially among people in that area under 21) than had black respondents.

When contiguity is introduced into the relationship between estimates and race-ethnicity, it is clear that

TABLE 10

PERCENTAGE HIGH ESTIMATES THAT PEOPLE OVER 21 TRIED HEROIN BY RACE-ETHNICITY AND CONTIGUITY

	Race-Ethnicity							
	British West Indian		Black		Puerto Rican		White	
	Contiguity		Contiguity		Contiguity		Contiguity	
	Low	High	Low	High	Low	High	Low	High
Percentage High Estimates Of Use	9	32	13	29	18	24	6	13
	(126)	(19)	(193)	(82)	(56)	(45)	(66)	(23)

TABLE 11

PERCENTAGE HIGH ESTIMATES THAT PEOPLE UNDER 21 TRIED HEROIN BY RACE-ETHNICITY AND CONTIGUITY

	Race-Ethnicity							
	British West Indian		Black		Puerto Rican		White	
	Contiguity		Contiguity		Contiguity		Contiguity	
	Low	High	Low	High	Low	High	Low	High
Percentage High Estimates Of Use	11	37	16	40	33	49	9	30
	(124)	(19)	(187)	(82)	(55)	(45)	(64)	(23)

contiguity is the major influence on estimates. However, race-ethnicity still has an effect. Within each race-ethnic group, people of high contiguity are more likely than people of low contiguity to give high estimates of heroin use among people in the area over 21 (Table 10).

When contiguity is held constant, black, British West Indian, and Puerto Rican respondents have similar estimates of heroin use. Among low contiguity respondents in these race-ethnic groups, from 9 to 18% have high estimates of heroin use by those over 21. For high contiguity respondents the proportion of respondents with this estimate ranges from 24 to 32%. However, for whites the estimates of both low and high contiguity respondents are considerably lower than the estimates of other respondents. Among low contiguity whites 6% -- and among high contiguity whites 13% -- of the respondents have high estimates of heroin use among people in the area over 21.

The relationship of contiguity to estimate is even stronger when the perception of heroin use among younger people in the area is considered (Table 11). Differences in the proportion of high and low contiguity respondents who have high estimates of use are 16% for Puerto Ricans, 24% for blacks, and 26% for British West Indians. When we hold contiguity constant we see that blacks and British

West Indians have similar estimates of heroin use. The proportion of Puerto Ricans, of both high and low contiguity, who perceive high amounts of heroin use among people under 21 is considerably higher than that proportion among respondents in the other ethnic groups. Whites, again, have the lowest estimates of heroin use.

Isolation of Whites

The lower estimates of white respondents cannot be explained by the existence of a lower proportion of high contiguity respondents in the white population than in the other race-ethnic groups. It is our hypothesis that these lower estimates are due to the isolation of whites in this community. White residents in a predominantly black area would be less integrated into the larger community than would other residents and would feel less a part of that larger community. Therefore whites (even high contiguity whites) would be less likely than other respondents to generalize their knowledge of heroin use among relatives, friends, or acquaintances to the general population of the area. The higher estimates of heroin use by white women as compared to white men may be explained by the fact that women spend more time in the community, have wider social contacts there, and are thus more willing

to generalize their direct knowledge of heroin use to the population of the area.

Estimates of Puerto Ricans

We saw previously that almost half of the Puerto Rican respondents were classified as high contiguity respondents, a considerably higher proportion than in any other race-ethnic group (Table 9). This would suggest that there might be more heroin use among Puerto Ricans than among the other race-ethnic groups in our sample. If this is true, it might explain why low contiguity Puerto Rican respondents have higher estimates than do other low contiguity respondents of the extent of heroin use among people over 21 (Table 10) and considerably higher estimates of use among people under 21 than do other low contiguity respondents (Table 11). It would also explain why high contiguity Puerto Ricans are more apt to have high estimates of use among people under 21 than high contiguity respondents in other race-ethnic groups. It is not clear, however, why high contiguity Puerto Rican respondents have lower estimates of use among people over 21 than do high contiguity British West Indian and black respondents.

TABLE 12

AGE AND CONTIGUITY WITHIN RACE-ETHNIC GROUPS

Age	Percentage High Contiguity	
British West Indian:		
18-29	21	(28)
30-49	14	(69)
50+	7	(46)
Black:		
18-29	52	(81)
30-49	25	(126)
50+	13	(62)
Puerto Rican:		
18-29	67	(27)
30-49	38	(61)
50+	33	[12]
White:		
18-29	44	(27)
30-49	29	(34)
50+	4	(26)

Contiguity and Age

Younger people have higher estimates of the extent of heroin use in the area than do older people. We hypothesized that the differences in estimate by age are a result of the fact that younger people have more direct experience with heroin and greater knowledge of the use of heroin by others than do older people. An examination of the relationship between contiguity and age will enable us to confirm or deny this hypothesis.

As age increases, contiguity decreases markedly within all race-ethnic groups (Table 12). The differences in contiguity by age are quite large (roughly 40%) among blacks, whites, and Puerto Ricans. The differences in contiguity by age among British West Indians were smaller (a 14% difference between the youngest and oldest respondents), but the relationship between contiguity and age is in the same direction.

The strong relationship between contiguity and estimate within all race-ethnic groups has already been discussed. Since the differences in contiguity by age are so large, we wondered whether the relationship of age to estimate is a spurious one, and whether the differences in estimate could be accounted for by contiguity rather than age. In order to pursue this issue it is necessary to examine the relationship between estimate, contiguity,

TABLE 13

PERCENTAGE HIGH ESTIMATES THAT PEOPLE OVER 21 TRIED HEROIN BY CONTIGUITY AND AGE (BLACKS)

	Age			
	18-29		30-49	
	Contiguity		Contiguity	
	Low	High	Low	High
Percentage High Estimates of Use	10	38	15	25
	(39)	(42)	(94)	(32)

TABLE 14

PERCENTAGE HIGH ESTIMATES THAT PEOPLE UNDER 21 TRIED HEROIN BY CONTIGUITY AND AGE (BLACKS)

	Age			
	18-29		30-49	
	Contiguity		Contiguity	
	Low	High	Low	High
Percentage High Estimates of Use	8	45	17	31
	(39)	(42)	(94)	(32)

and age simultaneously. However, the number of cases resulting from this multivariate analysis is large enough for meaningful analysis only among blacks less than 50 years old. Thus we will explore those relationships among blacks 18-29 and 30-49, with the caveat that our findings can only be suggestive of these relationships in other race-ethnic groups.

Estimate, Contiguity, and Age

In examining the relationships between estimate, age, and contiguity (Tables 13 and 14), we see that contiguity is the major influence on estimate, but that age also has some effect. High contiguity black respondents have higher estimates of heroin use than do low contiguity respondents when age is held constant. This is true for estimates of heroin use among people both over and under 21.

When we hold contiguity constant we see that the effect of age on estimate is different for low and high contiguity respondents. Among high contiguity respondents, younger people have higher estimates of use than do older people. This is true for estimates of heroin use for people both over and under 21 (Tables 13 and 14). This finding, that younger people have higher estimates of heroin use than older people, is what we would expect,

since, as we mentioned previously, available data indicates that the most extensive use of heroin today is among younger people.

Age has a somewhat smaller, and reverse, effect on the estimates of low contiguity respondents. Older low contiguity respondents have higher estimates of heroin use than do younger low contiguity respondents. Seventeen percent of the low contiguity black respondents age 30-49 feel that more than half of those under 21 in the area had used heroin, while 8% of the low contiguity black respondents age 18-29 have this view (Table 14). The effect of age on low contiguity respondents is somewhat smaller when we consider the perception of the extent of heroin use among people in the area over 21, but it is in the same direction (Table 13).

The explanation for the higher estimates of older respondents among respondents of low contiguity may be that younger low contiguity respondents are very protected by their families and have been isolated from experience with or knowledge of heroin use. Older people of low contiguity might have wider community contacts and be more likely to be exposed to discussions of heroin use in the area, and so have somewhat higher estimates of use.

This effect of age on high and low contiguity black

respondents explains why the differences in contiguity by age among blacks are much larger than the differences in estimate by age among black respondents. There is a higher proportion (75%) of low contiguity respondents among blacks age 30-49 than there is among blacks age 18-29 (48%) (calculated from Table 12). The higher estimates of low contiguity older black respondents counterbalance the higher estimates of high contiguity younger black respondents and thus the size of the differences in estimates by age are smaller than the differences in contiguity by age. A similar phenomenon may explain the variation between estimates and age, and age and contiguity, among Puerto Ricans and whites.

Contiguity and Perception: Further Evidence

We cannot explore the question of the relative influences of contiguity and socio-economic status[5] on

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[5]In examining the relationship between contiguity and socio-economic status (data not presented in tabular form) we find that a larger proportion of high status respondents in all ethnic groups reported greater contiguity to drug use than did low or medium status respondents. The relationship of ethnicity to contiguity was, however, stronger than the relationship of SES to contiguity.

The explanation for the fact that there is no consistent relationship between socio-economic status and estimates of heroin use, even though there is a relationship between socio-economic status and contiguity, may be that socio-economic status is not a determining factor of social interaction in this community.
These status groups are not the traditional lower, middle, and upper class, since this community is

TABLE 15

PERCENTAGE HIGH ESTIMATES THAT PEOPLE OVER 21 TRIED HEROIN BY CONTIGUITY AND SES (BLACKS)

	SES					
	Low		Medium		High	
	Contiguity		Contiguity		Contiguity	
	Low	High	Low	High	Low	High
Percentage High Estimates Of Use	11	32	16	26	11	31
	(87)	(22)	(61)	(31)	(45)	(29)

TABLE 16

PERCENTAGE HIGH ESTIMATES THAT PEOPLE UNDER 21 TRIED HEROIN BY CONTIGUITY AND SES (BLACKS)

	SES					
	Low		Medium		High	
	Contiguity		Contiguity		Contiguity	
	Low	High	Low	High	Low	High
Percentage High Estimates Of Use	15	45	20	35	13	41
	(87)	(22)	(61)	(31)	(45)	(29)

the estimates of Puerto Ricans, British West Indians, or whites, nor the relative influence of contiguity and sex on the estimates of whites, because the introduction of contiguity into these relationships would result in numbers too small for meaningful analysis. We can, however, examine the relationships between contiguity and estimates among blacks of different socio-economic groups and among black men and women.

We have already seen that for blacks, socio-economic status and sex have no relationship to estimates of heroin use. When we introduce contiguity into the relationship between estimate and socio-economic status among black respondents (Tables 15 and 16) we see that contiguity clearly influences estimate within all socio-

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economically and occupationally homogeneous compared to the larger society. The social interactions which influence perception of heroin use probably occur more frequently on the basis of ethnicity and age in this community than on the basis of status groups which we have constructed for the purposes of analysis.

There is a positive relationship between socio-economic status and perception of heroin use among whites when the estimate of use among people under 21 is considered. It is possible that among whites, a group which differs in several ways from the other ethnic groups, socio-economic status may be more influential as a determinant of residents' social contacts. This, however, does not explain why the relationship between socio-economic status and estimate is not found when whites estimate the extent of heroin use among people over 21.

TABLE 17

PERCENTAGE HIGH ESTIMATES THAT PEOPLE OVER 21 TRIED HEROIN BY CONTIGUITY AND SEX (BLACKS)

	Sex			
	Male		Female	
	Contiguity		Contiguity	
	Low	High	Low	High
Percentage High Estimates of Use	12	26	13	34
	(67)	(47)	(126)	(35)

TABLE 18

PERCENTAGE HIGH ESTIMATES THAT PEOPLE UNDER 21 TRIED HEROIN BY CONTIGUITY AND SEX (BLACKS)

	Sex			
	Male		Female	
	Contiguity		Contiguity	
	Low	High	Low	High
Percentage High Estimates of Use	13	43	17	37
	(67)	(47)	(126)	(35)

economic groups in the responses to both estimate questions: high contiguity respondents within all SES groups have considerably higher estimates of use than did low contiguity respondents (Tables 15 and 16). Both Tables 15 and 16 show that while contiguity is unquestionably related to estimates of heroin use in all SES groups, the effect of contiguity on medium SES respondents is somewhat smaller than on high and low status respondents.

The influence of contiguity on estimate is again confirmed when we introduce it into the relationship between estimate and sex among black respondents. High contiguity men and women have considerably higher estimates of heroin use among people in the area, both over and under 21, than do low contiguity men and women (Tables 17 and 18). High contiguity women are more likely than high contiguity men to estimate high use among area residents over 21, while the reverse is true regarding the estimate of use among those under 21.

Conclusions

The most important determinants of estimates of drug use in the community are contiguity to drug use and race-ethnicity. As expected, those who have had direct experience with, or knowledge of others' experience with heroin, perceive higher amounts of heroin use than do

those who have not had such direct experience.

Contiguity to drug use is related to race-ethnicity. The largest proportion of high contiguity respondents is among Puerto Ricans; blacks and whites have somewhat lower levels of contiguity, and British West Indians have the least amount of direct experience with or knowledge of others' experience with drugs.

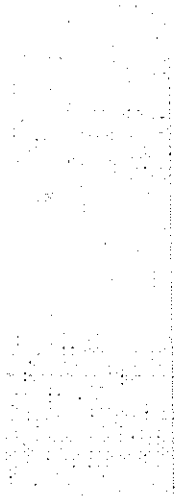
The simple relationship between estimates and race-ethnicity shows almost, but not exactly, the same pattern as the relationship between contiguity and race-ethnicity. Puerto Ricans are most likely and blacks next most likely, to estimate that heroin use in the community is high. Whites, who resemble blacks in contiguity, are more like British West Indians in their low estimates of heroin use among people in the area. We have suggested a possible reason for the disparity between the estimates and the level of contiguity found for whites.

When contiguity and race-ethnicity are considered simultaneously, both are shown to have an impact on estimates, although contiguity has a stronger influence than does race-ethnicity. Within all four race-ethnic groups, those who are more contiguous to drug use are most likely to have high estimates of use.

Young respondents, especially among blacks and

British West Indians, are more apt to estimate high use than are older respondents. When both age and contiguity are analyzed in relation to estimate, for blacks (the only race-ethnic group large enough to permit this comparison), contiguity is again shown to have a greater effect. Surprisingly, it was shown that among low contiguity blacks, older respondents are somewhat more likely to estimate high heroin use than are younger respondents.

Sex and socio-economic status were shown to have minimal impact on estimates. When sex and contiguity, and socio-economic status and contiguity, are considered together, contiguity remains of great importance, while differences between the sexes and between socio-economic groups remains small.



COMMUNITY ATTITUDES TOWARDS DRUGS: PERCEPTION OF SUSCEPTIBILITY TO HEROIN ADDICTION

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INTRODUCTION

One reason for the tremendous increase in national concern over the drug abuse problem, aside from the staggering amount of concomitant criminal activity, is that the problem is beginning to affect communities which heretofore assumed immunity. Recently NBC-TV produced a special one-hour show entitled "Not My Child," which dealt with the growing problem of drug abuse in white suburban communities and the awareness of residents of the extent of drug abuse among young people. Although the NBC team did not attempt to report any statistical findings, they conveyed the impression that although suburban residents acknowledged that drug use was increasing among their youth, most expressed that they would be shocked if they found that their child was using drugs. However, within the ghetto community, where addiction is prevalent and the sight of addicts nodding on stoops or street corners is common, the sense of susceptibility to heroin addiction, while not more acceptable, is more commonly felt than in white suburban communities.

Part of the susceptibility issue involves the question of whether or not residents feel that drug addiction is linked to or caused by environmental or socio-economic

conditions in their community. Much has been said about the socio-economic correlates of addiction in the urban ghetto (Preble, 1966, and Rangel, 1972). Poverty, dilapidated, unsanitary housing conditions, unemployment, and low job opportunities have been said to lead to the hopelessness and despair which make ghetto residents vulnerable to heroin addiction.

In the following paper we will explore the degree to which residents in a New York ghetto community feel that their families are susceptible to heroin addiction and the degree to which they perceive environmental and economic conditions as contributing to the addiction problem.

FAMILY SUSCEPTIBILITY

In the first paper presented in this report, Dr. Irving Lukoff reported important findings which shed new light on the epidemiology of heroin use in the urban ghetto. The greatest amount of heroin use by family or kin was reported by Puerto Ricans (21%), followed by blacks (14%), blacks of British West Indian extraction (9%), and whites (8%). Within these ethnic groups the highest reported rates are by younger persons. However, contrary to the prevailing view that addiction affects

the most deprived families, he found that, proportionately, heroin use is more often reported in families of relatively high socio-economic status than by the poorest and least educated families.

High contiguity to heroin use followed the same pattern as reported family use summarized above. That is, Puerto Ricans were the most likely to have had contact with others who have used heroin, with blacks second in amount of contact, and British West Indians and whites reporting the least amount of contact. Furthermore, within ethnic groups, younger people and those of higher socio-economic status reported greater personal contact with heroin users. Since it has been acknowledged that heroin addiction is similar to a communicable disease that spreads primarily through personal contact with heroin users, these findings have clear implications for the epidemiology of heroin addiction in this community.

In our analysis of the expression of susceptibility to heroin addiction, we have found that the feeling of susceptibility is highest among the same groups that reported the most personal contact with heroin users. We asked respondents to agree or disagree with the statement "a member of my family could become a heroin addict." Although over 60% of the respondents agreed with the

TABLE I

RACE/ETHNICITY BY PERCENT WHO AGREE
"A MEMBER OF MY FAMILY COULD BECOME A HEROIN ADDICT"

Race/Ethnicity	% Agree	
British West Indian	56	(145)
Other Black	73	(275)
Puerto Rican	63	(101)
White	42	(89)

TABLE 2

RACE/ETHNICITY BY AGE BY PERCENT WHO AGREE
"A MEMBER OF MY FAMILY COULD BECOME A HEROIN ADDICT"

	Age						
	18-25		30-49		50+		% Difference
	% Agree						
Race/Ethnicity							
British West Indian	54	(28)	62	(69)	46	(46)	+ 8
Other Black	73	(81)	78	(126)	66	(62)	+ 7
Puerto Ricans	70	(27)	61	(61)	[58]	(12)	+12
White	56	(27)	32	(34)	43	(26)	+14

statement, the percentages within ethnic groups differ considerably. Blacks were the most likely to agree with this statement (73%), Puerto Ricans second (63%). A little more than half of the British West Indians felt that their families could be touched by heroin addiction. However, more than half (58%) of the white respondents felt their families were immune and disagreed with the e statement. (See Table 1.)

Analysis of responses to the question by sex yielded mixed results. Generally, men expressed a somewhat greater amount of susceptibility than women with the exception of Puerto Rican women who agreed in significantly larger numbers than men.

Consistent with the correlates of reported contact with heroin use, we have found that younger people and those of high socio-economic standing also are the most likely to feel that a member of their family could become addicted. For all groups, older people are less likely to agree with the statement than younger people. Age makes the most significant difference among Puerto Ricans, where younger people clearly feel that members of their families are susceptible. Whites between the ages of 30-49 are the least likely group in the entire sample to agree (32%). (See Table 2.)

TABLE 3

RACE/ETHNICITY BY SES BY PERCENT WHO AGREE
"A MEMBER OF MY FAMILY COULD BECOME A HEROIN ADDICT"

	SES						
	Low		Medium		High		% Difference
Race/Ethnicity	% Agree						
British West Indian	50	(52)	46	(37)	68	(56)	-18
Other Black	69	(109)	68	(92)	84	(74)	-15
Puerto Rican	59	(51)	59	(39)	[100]	(11)	-41
White	40	(20)	32	(28)	49	(41)	- 9

TABLE 4

RACE/ETHNICITY BY CONTIGUITY BY PERCENT WHO AGREE
"A MEMBER OF MY FAMILY COULD BECOME A HEROIN ADDICT"

	Contiguity					
	Low		High		% Difference	
Race/Ethnicity	% Agree					
British West Indian	51	(126)	[89]	(19)	-38	(8)
Other Black	68	(193)	83	(82)	-15	(12)
Puerto Rican	46	(56)	84	(45)	-38	(21)
White	33	(66)	65	(23)	-32	(8)

TABLE 5

AGE BY CONTIGUITY BY PERCENT WHO AGREE "A MEMBER OF MY FAMILY COULD BECOME A HEROIN ADDICT"

	Contiguity		
	Low	High	
Age	% Agree		% Difference
18-29	49 (85)	85 (78)	-36
30-49	60 (216)	79 (76)	-19
50+	52 (130)	82 (16)	-30

TABLE 6

SES BY CONTIGUITY BY PERCENT WHO AGREE "A MEMBER OF MY FAMILY COULD BECOME A HEROIN ADDICT"

	Contiguity		
	Low	High	
SES	% Agree		% Difference
Low	52 (181)	88 (51)	-36
Medium	51 (140)	72 (58)	-21
High	65 (121)	85 (61)	-20

Socio-economic status makes an even more significant difference in one's feeling of susceptibility than does age. Persons of high status in all ethnic groups agree in greater proportion than low and medium status groups. (See Table 3.)

It has already been pointed out in the summary of Lukoff's findings, that younger people and those of higher socio-economic stading are the most likely to report contact with heroin users and to have the greatest amount of contiguity with heroin users. In addition, these same groups are most likely to agree that a member of their family could become addicted. It is not surprising therefore that contiguity has a very large impact on the respondent's response to the question of susceptibility. (See Table 4.) In fact, when the relationships between age and SES and family susceptibility are controlled for by contiguity, it becomes clear that it is contiguity which influences the relationships. Thus, regardless of age or SES, those persons who have had the greatest amount of personal contact with heroin users are most likely to feel that members of their family could become addicted. (See Tables 5 and 6.)

Even when we take into account the fact that those of high contiguity include persons who have already reported heroin use by themselves or by relatives, the impact of contiguity is significant for all groups with

TABLE 7

RACE/ETHNICITY BY AGREE OR DISAGREE "A MEMBER OF MY FAMILY COULD BECOME AN ADDICT" BY PERCENT WHO GAVE HIGH ESTIMATES OF HEROIN USE IN THE AREA

	A Member of My Family Could Become an Addict		
	Agree	Disagree	
Race/ Ethnicity	% high estimate	% high estimate	% Difference
BWI	15 (81)	7 (55)	+8
Other Black	20 (200)	12 (69)	+8
Puerto Rican	23 (64)	13 (31)	+10
White	14 (37)	4 (46)	+10

TABLE 8

RACE/ETHNICITY BY AGREE OR DISAGREE "A MEMBER OF MY FAMILY COULD BECOME AN ADDICT" BY PERCENT WHO GAVE HIGH ESTIMATES OF HEROIN USE AMCNG YOUNG PEOPLE

	A Member of My Family Could Become an Addict		
	Agree	Disagree	
Race/ Ethnicity	% high estimate	% high estimate	% Difference
BWI	21 (81)	7 (55)	+14
Other Black	26 (200)	17 (69)	+9
Puerto Rican	45 (64)	32 (31)	+13
White	22 (37)	13 (46)	+9

the exception of "other blacks." The difference which contiguity makes is not very great for this group when those who have reported use in their families is discounted. In fact, a significantly large percentage of blacks agrees with the statement regardless of contiguity, age, or SES (Tables 2, 3, and 4).

For the other ethnic groups, however, it is apparent that the experience of direct contact with heroin users, either acquaintances or friends, breaks down the feeling of immunity. It may be that the people they know who are heroin users are not viewed as significantly different from themselves, and, therefore, do not provide a rationale for saying it couldn't happen in their family.

In the second study, "Contiguity As an Influence on Perception of Drug Use," it was reported that those who had the greatest amount of personal contact with heroin users also gave higher estimates of the pervasiveness of heroin use in their community than did those with less personal contact. Thus, combining the findings of these three studies it becomes apparent that there is a connection between contiguity with heroin users, perception of the amount of heroin use, and the expression of susceptibility. As shown in Tables 7 and 8, residents who estimate a high amount of heroin use in their neighborhoods are

more likely to feel that a member of their family could become addicted. Estimates of heroin use among younger people as compared to heroin use among the community at large tend to be higher. Interestingly, the feeling of susceptibility is also somewhat higher among those who give high estimates of heroin use among young people in in the community. Thus, greater awareness of addiction among young people has a greater influence on estimates of family susceptibility than does knowledge of heroin use among older people.

ATTITUDES TOWARD ENVIRONMENT AND LACK OF JOB OPPORTUNITIES AS FACTORS CONTRIBUTING TO ADDICTION

For the most part, residents of the area surveyed did not find a strong correlation between the socio-economic conditions of their community and heroin addiction.

As noted in our description of the sample, the Bedford-Stuyvesant/Fort Greene area of Brooklyn is an area of high addiction rates. Taking into account the high visibility of heroin addiction in this area, one might expect residents to feel that addiction is partly a consequence of their environment. However, when we asked respondents if they agreed or disagreed with the statement "Living in this neighborhood makes it easier to

become a heroin addict" a large majority (65%) disagreed. Puerto Ricans (34%) were the most likely to feel that their environment contributed to heroin addiction. Twenty-eight percent of the Blacks and British West Indians and 24% of the whites agreed.

Furthermore, although unemployment rates are high in the area,[1] only 37% of our sample agreed that better job opportunities would be a deterrent to heroin addiction. While British West Indians (31%) and whites (32%) were similar in their response to this question, well over half of the Puerto Ricans (56%) agreed with the statement. Thirty-seven percent of the Other Blacks agreed. The significantly high proportion of agreement of Puerto Ricans to the statement may be a reflection of the fact that they have the highest unemployment rate of the four groups.[2]

Not only did respondents generally feel that these factors did not contribute to addiction, but also there is no correlation between these attitudes and estimates of family susceptibility. It was expected that those who felt their neighborhood made it easier to become an addict

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[1] U.S. Bureau of the Census, Census of Population: 1970, "Employment Profiles of Selected Low-Income Areas," Brooklyn Borough, New York City," Final Report PHC(3), U.S. Government Printing Office, Washington, D.C., 1972.

[2] Ibid. The unemployment rate for white Spanish males is 15.8% as compared to 8.1% for black males.

TABLE 9

RACE/ETHNICITY BY PERCENT AGREE OR DISAGREE "LIVING IN THIS NEIGHBORHOOD MAKES IT EASIER TO BECOME A HEROIN ADDICT" BY PERCENT AGREE "A MEMBER OF MY FAMILY COULD BECOME A HEROIN ADDICT"

	Living in This Neighborhood Makes It Easier to Become a Heroin Addict		
	Agree	Disagree	
Race/ Ethnicity	% Agree Family Susceptibility		% Difference
BWI	65 (40)	56 (94)	+ 9
Other Black	64 (75)	77 (188)	-13
Puerto Rican	63 (35)	66 (61)	- 3
White	39 (23)	47 (55)	- 8

TABLE 10

RACE/ETHNICITY BY AGREE OR DISAGREE "PEOPLE WOULDN'T BECOME ADDICTED IF THEY HAD BETTER JOB OPPORTUNITIES" BY PERCENT WHO AGREE "A MEMBER OF MY FAMILY COULD BECOME AN ADDICT"

	People Wouldn't Become Addicted If They Had Better Job Opportunities		
	Agree	Disagree	
Race/ Ethnicity	% Agree Family Susceptibility		% Difference
BWI	57 (44)	57 (89)	0
Other Black	63 (100)	80 (167)	-17
Puerto Rican	56 (57)	72 (43)	-16
White	61 (28)	40 (47)	+21

would also feel that a member of their family could become a heroin addict. However, analysis of the relationship between the two shows that this is not the case. Only British West Indians who agreed that living in their neighborhood made it easier to become an addict also felt that their family was susceptible to addiction. But even in the case of the British West Indians, the difference was not very appreciable (32% as opposed to 25%). (See Table 9.)

Similarly, there is no consistent relationship between agreement that better job opportunities would decrease addiction and agreement that a member of one's family could become an addict. Other blacks and Puerto Ricans who feel their families are susceptible are more likely to disagree with the statement relating job opportunities to addiction. No difference is shown among British West Indians. However, whites, who feel that their families are susceptible, are significantly more likely to agree that lack of job opportunities contributes to addiction. (See Table 10.)

Personal contact with heroin users, which has such a strong influence on one's feeling of family susceptibility to addiction and on estimates of heroin use in the area, has little influence on perception of neighborhood as a factor which contributes to heroin addiction with the exception of British West Indians where high

TABLE 11

RACE/ETHNICITY BY CONTIGUITY BY PERCENT AGREE
"LIVING IN THIS NEIGHBORHOOD MAKES IT
EASIER TO BECOME A HEROIN ADDICT"

	Contiguity				
	Low		High		% Difference
Race/Ethnicity	% Agree				
British West Indian	23	(127)	58	(18)	-35
Other Black	26	(193	29	(82)	- 3
Puerto Rican	32	(55)	38	(44)	- 6
White	24	(56)	30	(23)	- 6

TABLE 12

RACE/ETHNICITY BY CONTIGUITY BY PERCENT AGREE
"PEOPLE WOULDN'T BECOME ADDICTED IF THEY
HAD BETTER JOB OPPORTUNITIES"

	Contiguity				
	Low		High		% Difference
Race/Ethnicity	% Agree				
British West Indian	33	(126)	11	(19)	+22
Other Black	39	(192)	32	(82)	+47
Puerto Rican	63	(56)	49	(45)	+14
White	27	(66)	43	(23)	-16

contiguity increases this attitude considerably. Fifty-eight percent of British West Indians who had a high degree of contiguity with heroin use agreed with the statement as compared to only 23% who had low contiguity. It should be noted, however, that only 18 British West Indians are in the high contiguity category; thus, the percentage difference may be somewhat inflated. (See Table 11.)

Moreover, analysis by contiguity with heroin shows that among British West Indians, blacks, and Puerto Ricans, personal experience with heroin users does not increase one's opinion that increasing job opportunities will prevent addiction. In fact, those with low contiguity are more likely to have that opinion. White respondents who had a high degree of personal contact with heroin users were more likely to view employment as a deterrent. (See Table 12.)

The greatest difference in attitude is caused by socio-economic status. Among Other Blacks and Puerto Ricans, those of low economic status are the most likely to see their neighborhood environment as making it easier to become a heroin addict. Among whites and British West Indians the connection between neighborhood environment and addiction is more often made by those in the high SES group. Although we do not know what these neigh-

TABLE 13

RACE/ETHNICITY BY SES BY PERCENT AGREE
"LIVING IN THIS NEIGHBORHOOD MAKES IT
EASIER TO BECOME A HEROIN ADDICT"

	SES						
	Low		Medium		High		% Difference
Race/Ethnicity	% Agree						
British West Indian	25	(52)	27	(37)	30	(56)	-5
Other Black	33	(109)	29	(92)	16	(74)	+17
Puerto Rican	39	(51)	31	(39)	[27]	(11)	+12
White	10	(20)	25	(38)	34	(41)	-34

TABLE 14

RACE/ETHNICITY BY SES BY PERCENT AGREE
"PEOPLE WOULDN'T BECOME ADDICTED IF THEY
HAD BETTER JOB OPPORTUNITIES"

	SES						
	Low		Medium		High		% Difference
Race/Ethnicity	% Agree						
British West Indian	38	(52)	35	(37)	20	(56)	+18
Other Black	42	(109)	45	(92)	19	(74)	+23
Puerto Rican	57	(51)	59	(39)	45	(11)	+12
White	25	(20)	36	(28)	32	(41)	- 7

borhoods are really like, we can probably assume that blacks and Puerto Ricans of low socio-economic status live in the poorest and most run-down neighborhoods where "junkies" are most visible because of the presence of transient and single room occupancy hotels. Groups of low socio-economic status among British West Indians, Other Blacks, and Puerto Ricans are also more likely to agree that better job opportunities would decrease addiction. The opposite is true of whites, where persons of high SES are more likely to agree although the difference is not very great. (See Tables 13 and 14.)

SUMMARY

The feeling that a member of one's family could become addicted to heroin is expressed most often by persons who have had a high degree of personal contact with heroin users. This is true among all ethnic groups. However, perception of susceptibility does not affect attitudes toward the environmental and socio-economic factors which may cause addiction. Respondents who had high contiguity and those who felt their families were susceptible did not perceive a causal relationship between their neighborhood environment, lack of job opportunities, and heroin addiction.

Among blacks and Puerto Ricans, who are generally less well-off than British West Indians or whites, persons of low socio-economic status are the most likely to feel that their environment and lack of job opportunities contribute to the spread of addiction. Thus, the realities of deteriorating neighborhoods and low employment rates have a greater impact on their attitudes toward these possible causes of addiction than their personal contact with addicts. British West Indians, who generally live in more pleasant neighborhoods, are not apt to view their surroundings as contributing to addiction. However, those of low SES are more likely to feel that job opportunities are an important factor.

Factors which influence the attitudes of whites in our sample indicate there are considerable attitudinal differences between whites and non-whites. Most whites do not believe a member of their family could become an addict while well over half of the other groups believe this is possible. Contiguity has a greater influence on the attitudes of whites towards the factors which contribute to addiction than it does among non-whites. Furthermore, in contrast to the other groups, high SES whites are more likely to perceive a connection between employment opportunities and addiction than those of low SES.

REFERENCES

Chambers, Carl D., Moffett, Arthur D. and Jones, Judith P., 1968. "Factors Associated with Negro Opiate Addiction," International Journal of the Addictions, Vol. 3, 1968 pp. 329-343.

Preble, Edward, 1966. "Social and Cultural Factors Related to Narcotic Use Among Puerto Ricans in New York City." The International Journal of the Addictions, Vol. 1, pp 30-41.

Rangel, Charles B., 1972. "Harlem - Yesterday's Joy Dead From Heroin", New York Law Journal. March 28, 1972.

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