

## JUVENILE DRUG TRAFFICKERS: CHARACTERIZATION AND SUBSTANCE USE PATTERNS

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### ABSTRACT

Drug trafficking has become one of the dominant issues facing the criminal justice system. Juveniles involved in drug trafficking have been reported to be far more likely to be seriously immersed in substance abuse and delinquent behavior than nonsellers. The primary aim of the present study was to examine the substance use patterns of juveniles incarcerated for drug trafficking offenses in the Commonwealth of Virginia (N = 240). A second goal of the study was to characterize juvenile drug traffickers based upon additional information pertaining to their delinquent, social, psychological, educational and medical histories. For this purpose, a demographic comparison group was generated (N = 433). The results indicated that the most frequently sold substance was cocaine (93%), either powdered or crack, while alcohol and marijuana were the drugs most often used by the juvenile drug traffickers. The juvenile drug traffickers were associated with lower levels of aggressivity, violence and delinquency when compared to other incarcerated juveniles from their community. In addition, the juvenile drug traffickers were characterized by higher ratings in several areas which included social and psychological functioning. Areas that did not correlate well with drug trafficking were physical health, intellectual functioning and academic achievement. The results of this study indicated that juvenile drug traffickers tend not to use the drugs that they sell, and generally present as higher functioning and better adjusted in almost every area evaluated, when compared to their incarcerated delinquent peers.

### INTRODUCTION

Over the past 8-10 years, drug trafficking has become one of the foremost issues facing the criminal justice system. Drug selling poses a serious threat to society, both in terms of the distribution of illegal drugs, as well as the ancillary criminal activity and violence associated with the illegal drug market (Goldstein 1985). Juveniles involved in drug trafficking have been reported to be far more likely to be seriously immersed in substance abuse and delinquent behavior than nonsellers (Chaiken, Johnson 1988; Dembo, Williams, Wothke, Schmeidler, Getreu, Berry, Wish, Christensen 1990; Inciardi, Pottieger 1991; Johnson, Natarajan, Dunlap, Elmoghazy 1994; Li, Feigelman 1994; Stanton, Galbraith 1994; van Kammen, Loeber 1994), while the relationship between violence and the "crack business" has received particular notoriety (Goldstein 1985; Goldstein, Brownstein, Ryan, Bellucci 1989; Hamid 1991). In their characterization of drug-involved adolescent offenders, Chaiken and Johnson (1988) portray adolescents who frequently sell drugs as moderate to heavy, or even daily substance users; using multiple drugs, including cocaine. They further demonstrated that these juveniles are involved in a variety of associated criminal activities including assaults and property crimes. An additional report indicated that juvenile detainees involved in the trafficking of cocaine were more

likely to report having assaulted someone with the intent of serious injury or murder than those juveniles who were not involved in cocaine distribution (Dembo et al 1990).

The national trends outlined above are reflected in Virginia's juvenile offender population. During fiscal years 1993 and 1994, 268 juveniles were committed to the Virginia Department of Juvenile Justice juvenile correctional centers for drug trafficking offenses; representing 9 percent of the total commitments during this time period. Information permitting the characterization of juveniles involved in the sale and distribution of illegal drugs would significantly facilitate the development of meaningful and effective treatment programs. Therefore, the primary aim of the present study was to examine the substance use patterns of juveniles incarcerated for drug trafficking offenses in the Commonwealth of Virginia, particularly as they relate to the substances sold. A second goal of the study was to characterize these juvenile offenders based upon information gathered pertaining to their delinquent, social, psychological, educational and medical histories. For this purpose, an incarcerated, demographic comparison group was generated. Finally, a composite variable rating the level of violence present in their offense histories was generated. This permitted an analysis of the relationship between drug trafficking and violence.

## METHODS

### Subjects

Juveniles adjudicated for drug trafficking offenses in the Commonwealth of Virginia during fiscal years 1993 and 1994 (1 July 1992 - 30 June 1994) comprised the juvenile drug traffickers group. The drug trafficking offenses included "possession [of controlled substances] with intent to sell or distribute;" and offenses pertaining to the sale, distribution, or manufacture of controlled substances. (The specific offense codes used to construct the drug trafficker group are available upon request.) The so-called "simple possession [of controlled substances]" offenses were not included, as those offenses are presumed to be related to possession for personal use, from a legal standpoint. A demographic comparison group matched for gender, race, age and geographic location was generated.

### Instruments and procedures

A retrospective chart review was conducted. Briefly, the official records for juvenile offenders committed to the Commonwealth of Virginia juvenile correctional centers during two fiscal years (1 July 1992 - 30 June 1994) were reviewed ( $n=2916$ ). The records included information regarding current, prior and pending criminal offenses; a psychological assessment; social and medical histories; a complete physical examination; and measures of intellectual functioning and academic achievement. The psychological evaluation was performed by a masters- or doctoral-level psychologist and included a standardized test of intellectual functioning (Wechsler 1991, 1974), a mental status interview and projective testing, as determined by the clinical judgment of the evaluator and the individual needs of the juvenile. The social history was obtained by a case manager. The medical history and physical were completed by a trained nurse and physician, respectively. Educational information was obtained by an educational specialist. All evaluators received extensive and continued training with regard to issues of juvenile delinquency.

Following completion of the intake evaluation, all of the evaluators involved in the assessment process were convened. At this time, the assessment team developed consensus ratings concerning the juvenile across a broad spectrum of functional areas including affective, cognitive, behavioral, familial and social functioning. These appraisals were

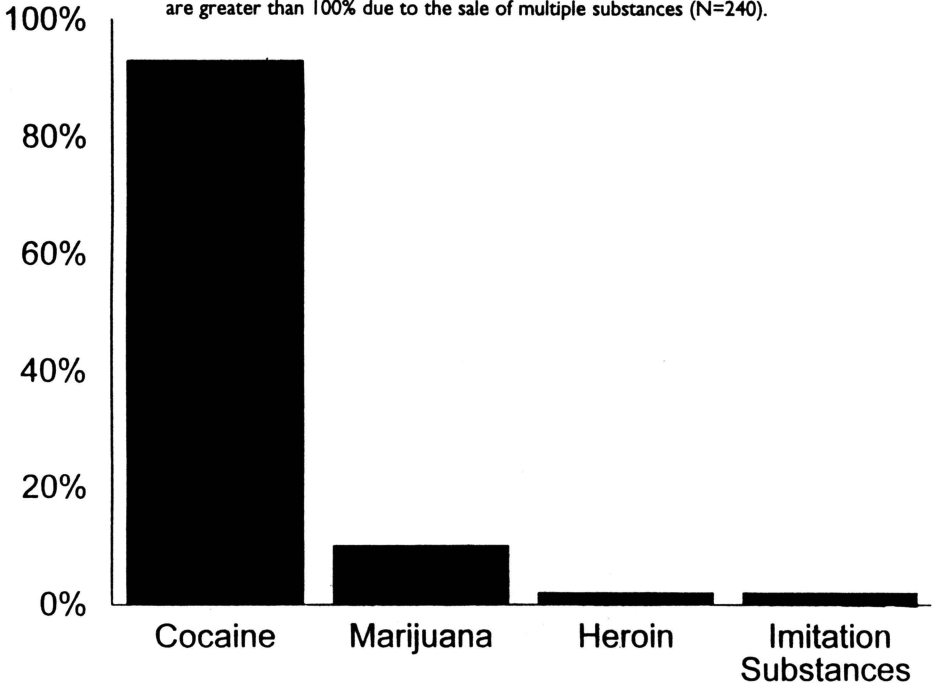
frequently based on a composite rating which included multiple converging data sources such as the results of the objective data, test results and clinical impressions compiled during the assessment process. It is important to note, however, that at every level of assessment the evaluators were familiar with the juvenile's offense history. On one hand, the data were interpreted cautiously, especially with information that was based upon a relatively subjective decision process. On the other hand, many of these "subjective" decisions were made at the staffing meeting by the entire assessment team. Therefore, it was hoped that this diverse input and consensus ratings may have diminished any potential individual bias.

Data pertaining to the specific drugs sold were collected from the specific committing offense(s) information detailed in the court documents. Specific substance use data were compiled from several sources including self-report information collected during the social, psychological and medical histories; and the physical examination. In addition, documented urinalysis results obtained from the courts and detention centers also were employed in an effort to determine specific substance use. However, the urinalysis results were not available for every subject and the data pertaining to specific substance use included reports of single use and/or "experimentation" during the juvenile's lifetime. Consequently, these data are not meant to imply abuse or addiction, rather they were employed as a qualitative measure of the substances used by these offenders.

Finally, a composite "violence" variable (high, moderate, low) was created based upon the juvenile's offense history. Briefly, to be included in the "high-violent" offender group, a juvenile must have been adjudicated for at least one "high-violent" offense (e.g., murder, arson of an occupied dwelling), or multiple felonious assaults. These decision rules (available upon request) were deliberately conservative, and are based on the Office of Juvenile Justice and Delinquency Prevention (OJJDP) working definition of violent juvenile offenders (OJJDP 1993). Preliminary analysis with our sample indicated that the "high-violent" rating correlates highly with several other indices of violence contained within the juvenile's history (unpublished results), as well as the existing literature on violent delinquents (Huizinga, Loeber, Thronberry 1994; Mathias, DeMuro,

**Figure 1**

Frequency distribution of drugs sold. Imitation substances were sold as "cocaine" or "marijuana." Total drug sales are greater than 100% due to the sale of multiple substances (N=240).



Allison 1984).

### Statistics

The statistical approach was conservative as this study consisted of a retrospective chart review with substantial subjective and self-report data. The hypotheses being tested in the present study, therefore, pertained to the relationships and relative level of association between the variables and a designation of "juvenile drug trafficker." Correlational analyses were deemed most appropriate for the present study as there were no explicit experimental manipulations. In addition, the subjects were not randomly assigned to the various groups, thereby violating the assumption of independence of observations (Howell 1992). The incarcerated delinquent comparison group was compared directly to the drug traffickers on the different measures by serving as the "non-drug trafficker group" in each correlation.

### RESULTS

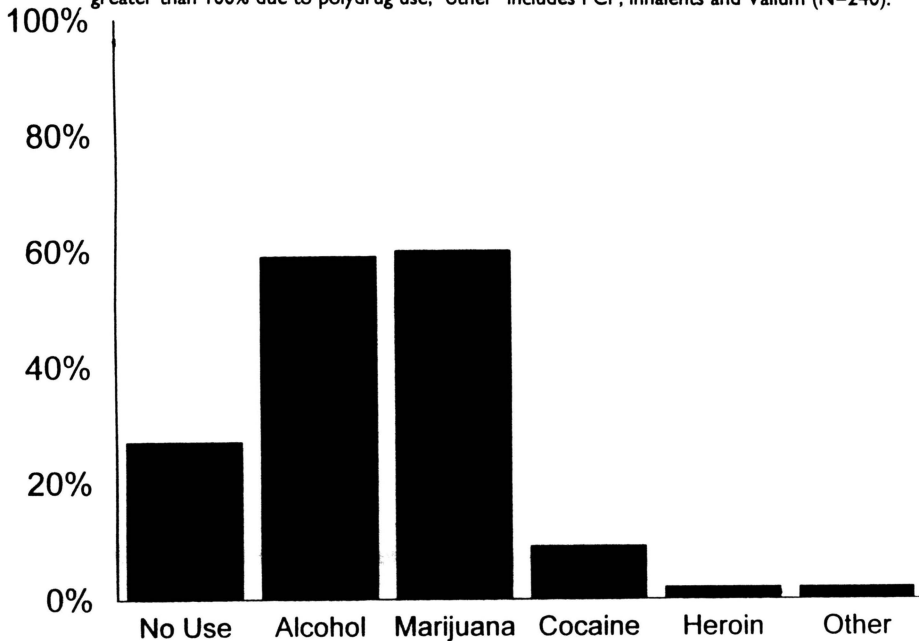
A total of 268 juveniles were adjudicated for drug trafficking offenses during fiscal years 1993-1994. This represented 9 percent of the total commitments to the Commonwealth of

Virginia's juvenile correctional centers for that period. The drug trafficker group was 96 percent African American and 98 percent male. Preliminary analysis of the entire data set for all offenders during fiscal years 1993 and 1994 (n=2916), with respect to the variables of interest (e.g., substance use, violence, aggressivity), indicated that females, non-African Americans and sex offenders were sufficiently different as to prohibit their inclusion in the drug traffickers group. Additional comparisons with these subjects were not possible because the sample sizes of these subgroups were also prohibitively small and frequently overlapped. Therefore, to increase the homogeneity of the sample, females, non-African Americans and sex offenders were excluded from the final analyses. Therefore, of the 268 juvenile offenders incarcerated for drug trafficking offenses during fiscal years 1993 and 1994, the records of 240 of these were included in the final analysis (90%).

There were 433 incarcerated juvenile offenders in the demographic comparison group. The comparison group was somewhat larger than the sample of juvenile drug traffickers as it included a larger range of offending,

**Figure 2**

Frequency distribution of lifetime drug use. These data include self-report information and urinalysis results. They also include reports of single use and are not intended to imply abuse or dependence. The total percentage is greater than 100% due to polydrug use; "other" includes PCP, inhalents and Valium (N=240).



while drug selling offenses represent only 9 percent of the total commitments ( $n = 268$  and 2916 for drug trafficking and total commitments, respectively).

### Demographics

All of the subjects in the present study were African American males. The results indicated that the average age of the juvenile drug traffickers was 16 years (range = 12-18 years), and that 74 percent were in the 16-17 year-old cohort.

### Substance Use

The drugs sold by the juvenile drug traffickers are illustrated in Figure 1. As can be observed, the overwhelming majority were committed for drug trafficking offenses involving the distribution of cocaine, both "crack" and powdered. It should be noted that 7 percent of the juvenile drug traffickers were convicted for the sale of more than one substance, hence the total percentage exceeds 100 percent.

Figure 2 depicts the reported substance use in the juvenile drug trafficker group. As can be seen, alcohol and marijuana were the most

frequently-cited drugs, although there was evidence (self-report data and/or positive drug screen results) that several of the juveniles were using additional substances. It was interesting to note that commentary in the files pertaining to positive cocaine drug screen results frequently indicated that the juvenile denied use of the drug, falsely claiming that the test merely reflected the fact that the he had been handling cocaine recently.

### Delinquency Assessment

Thirty-seven of the drug traffickers had been previously committed for drug trafficking offenses. Analysis of the "violence" composite variable suggested that the juvenile drug traffickers tended to have less violent offense histories than the demographic comparison group ( $r = .2364$ ,  $p < .01$ ). Only 7 percent of the drug traffickers were rated as "high-violent" while 21 percent of the demographic comparison group had "high-violent" offense histories. Additional information pertaining to violence, aggressivity and delinquency are presented in Table 1. The age of first adjudication was negatively correlated with the juvenile drug traffickers, suggesting that they were older at

**Table 1: Nonparametric Correlations Between the Juvenile Drug Traffickers and the Demographic Comparison Group for Violence, Aggressivity, and Delinquency Measures\***

Measure	Drug Traffickers: Demographic Comparison Group
Total Number of Offenses	-.2351
Age at First Adjudication	.1087
History of Possessing or Brandishing a Weapon	-.1317
History of Assault on Peers	-.1662
History of Assault on Authority Figures	-.1205
History of Unprovoked Assault on Others	-.1412
History of Assault Resulting in Injury	-.0982
History of Assault Using a Weapon or Object	-.1068
Poor Anger Control	-.1629
History of Verbal Aggression (in school)	-.1998
History of Physical Aggression (in school)	-.1565

N= 242 for the juvenile drug trafficker; N=433 for the demographic comparison group, respectively. Spearman's rho ( $p < .01$ , unless otherwise indicated).

\*Not all measures are included.

**Table 2: Nonparametric Correlations Between the Juvenile Drug Traffickers, and the Demographic and High-Violent Comparison Groups for Psychological Functioning Measures\***

Measure	Drug Traffickers: Demographic Comparison Group
<b>Affective Functioning</b>	
Easily angered	-.1210
Poor impulse control	-.1501
Significantly depressed or anxious	-.1274
Effective affective control	.1519
Overall emotional/cognitive functioning	.2010
<b>Documented and Self-Reported Self-Destructive Behavior</b>	
History of self-destructive behavior	-.1736
Documented history of suicidal ideation	-.1629
Youth's report of suicidal gestures	-.1124
Documented history of suicidal gestures	-.1050

N=242 for the juvenile drug traffickers; N=433 for the demographic comparison groups. Spearman's rho ( $p < .01$ , unless otherwise indicated).

\*Not all measures are included.

the time of their first adjudication. The total number of offenses also tended to be lower for the drug traffickers than for the comparison group. The drug traffickers presented with an average of 5.5 (SEM = 0.2) offenses, while the demographic comparison group presented with an average of 7.5 (SEM = 0.2) offenses. Analysis of the other measures of violence, or aggressive behavior (Table 1) suggested that the juvenile drug traffickers tended to be less violent and aggressive than the juvenile offenders in the comparison group.

**Psychological Assessment**

Table 2 contains the correlations of note which pertain to the juvenile's rated level of psychological functioning. Examination of

these measures indicated that the drug trafficker group tended to be less impulsive, had better self control and was less prone to aggressivity than the comparison group. It was also interesting to note that inclusion in the drug traffickers groups was also reliably correlated with a lower level of suicidal thoughts and behaviors; again suggestive of better psychological health.

In sum, the juvenile drug traffickers were correlated with a higher level of overall emotional and cognitive functioning; a composite assessment which also included indices reflecting generalized aggressivity and/or anger management. Specifically, 12 percent of the drug traffickers were rated as functioning at an adequate or minimally dysfunctional

**Table 3: Nonparametric Correlations Between the Juvenile Drug Traffickers and the Demographic Comparison Group for Social Functioning Measures\***

Measure	Drug Traffickers: Demographic Comparison Group
<b>General</b>	
Exploits others	-.1384
No empathy	NS
Social/interpersonal functioning	.1156
School adjustment	.1755
<b>Social Functioning With Peers</b>	
Provokes others	-.1188
Excitable	-.1540
Aggressive	-.1821
Conflict with classmates	-.1916
Mistrustful/guarded	-.1305
Socially appropriate	NS
<b>Social Functioning With Adults</b>	
Provokes Others	NS
Excitable	-.1427
Aggressive	-.1265
Conflict with school authorities	-.1094
Mistrustful/guarded	NS
Socially appropriate	NS
<b>Family Relationships</b>	
Current family	NS
Family of origin	.1258

N=242 for the juvenile drug traffickers; N=433 for the demographic comparison group. Spearman's rho ( $p < .01$ , unless otherwise indicated). NS, nonsignificant correlation.

\*Not all measures are included.

emotional and cognitive level, while only 5 percent of the demographic group was judged as adequate or minimally dysfunctional. It should be noted, however, that a large percentage of the juvenile drug traffickers (22%) were rated as severely dysfunctional in this domain. Again, though, 40 percent of the comparison group was rated as severely dysfunctional by the staffing team.

**Social History**

Social functioning for the juvenile drug traffickers was generally rated higher (Table 3). For example, the drug traffickers were rated as being less likely to exploit others, and possessing better interpersonal skills than the

comparison group. The family relationships and environment also tended to be slightly more positive for the drug traffickers (Table 3). The family relationships tended to be dysfunctional for both groups, however, with the current family being rated as somewhat better than the family of origin. The percentage of current families rated as severely dysfunctional for both groups were 22 and 28 percent for the drug traffickers and comparison group, respectively. The ratings of severe dysfunction for the family of origin were 43 and 56 percent for the drug traffickers and comparison group, respectively. Inclusion in the juvenile drug traffickers group was correlated with a higher level of functioning in the family of origin. The juvenile drug traffickers were less likely to have been physically victimized when compared to the demographic comparison group ( $r = -.1153$ ,  $p < .05$ ).

No measures of intellectual functioning or academic achievement were correlated with inclusion in the drug traffickers group, and nothing in the medical record correlated with inclusion in the drug traffickers group.

**DISCUSSION**

The goal of the present study was to describe and characterize incarcerated juvenile drug traffickers with regard to their substance use patterns, as well as several other measures pertaining to their social, psychological and intellectual functioning, academic achievement, level of delinquency and violence, and physical health. In general, where significant correlations existed, the juvenile drug traffickers were consistently rated as functioning at a higher level than the comparison group.

A large number of the drug traffickers in the present study (73%) indicated that they had used alcohol or other drugs at least once in their lifetime, however the data from the present study indicated that incarcerated juvenile drug traffickers tend not to use the substances that they are selling. Most of the juvenile drug traffickers reported using alcohol and marijuana, substance use characteristic of adolescents (Johnston, O'Malley, Bachman 1993). Though some juveniles admitted to the use of additional drugs, commentary in the file often indicated that use of drugs other than alcohol or marijuana reflected experimentation rather than regular or problematic use. This finding is consistent with the suggestion that successful drug traffickers tend to avoid substance abuse and dependence as it

interferes with ability to "conduct business" and diminishes their profit margin (Chaiken, Johnson 1988; Goldstein et al 1989).

Although it is possible that some of the juvenile offenders in the present study may have been selling drugs in an effort to supplement their personal use, economic incentives (Whitehead, Peterson, Kaljee 1994) or the status associated with drug dealing in some communities (Dembo et al 1990; Whitehead et al 1994) may have been the motivating influences for their involvement in drug selling. This may be especially true for inner-city African American males, similar to the present sample, who have limited access to economic and vocational resources (Whitehead et al 1994). The allure of the money, power and prestige associated with the drug-selling lifestyle may represent a significant impetus for this group to engage in drug-selling. This is not to preclude the possibility that these juveniles may not be at higher risk for future substance abuse and dependence. In fact it has been reported that as juvenile drug traffickers become more enmeshed in the drug selling lifestyle, their use concomitantly increases (Inciardi, Pottieger 1991). Although the data in the present study do not address the level of involvement in the drug and trafficking cultures, adolescents are generally involved in the lower levels of the drug distribution network; the so-called entry-level positions (Alt-schuler, Brounstein 1991).

Earlier reports in the literature indicate that adolescent drug selling is associated with violence (Chaiken, Johnson 1988; Inciardi, Pottieger 1991). We have found that the incarcerated juvenile drug traffickers in the present study, however, were correlated with a lower incidence of aggressivity, violence and delinquency when compared to other age-, race- and gender-matched incarcerated juvenile offenders from their community. These results are consistent with a recent study which indicates that violence is not significantly associated with drug selling (Lockwood, Inciardi 1993). It is important to note, however, that the juvenile drug traffickers with violent offense histories may have been selectively transferred for prosecution as adults rather than juveniles (Butts 1994; Poulos, Orchowsky 1994); the present data set would not address this potential confound. Moreover, because the committing offense does not necessarily reflect the total pattern of delinquency and offenders are not always arrested or

prosecuted for all of the crimes that they commit, nonadjudicated drug trafficking and/or violent offenses perpetrated by the juvenile offenders in the present study would not have been included in the analysis. This could potentially result in two additional samples embedded within the groups: the so-called "hidden" drug traffickers and violent offenders. Alternatively, it has been suggested that in many cases drug-related violence is actually perpetrated by a paid "enforcer" or "shooter" (Goldstein et al 1989). Again, the available data do not address this possibility. Finally, it is also important to note that the drug traffickers were not without violence; 7 percent were classified as "high-violent" offenders, and many more of the juvenile drug sellers had histories of some violent offending in their record.

We had postulated that drug trafficking involved skills in the area of finance, cost/benefit analyses, and possibly even rudimentary pharmacology as the drugs are frequently cut in an effort to increase the profit margin while retaining or even maximizing potency. Educational data were analyzed to assess how juvenile drug traffickers performed in an academic setting, however the results indicated no significant correlation between the measure of intellectual functioning (WISC-III) and involvement in drug selling. It is important to note, though, that the subjects in the present study were adjudicated juvenile offenders committed to the Commonwealth of Virginia's juvenile correctional centers. Consequently, the sample may be comprised of the "unsuccessful" juvenile drug traffickers insofar as they had been caught. In addition, reports in the literature suggest that standardized tests of intellectual functioning and academic performance may be culturally-biased (Hartlage, Lucas, Godwin 1976; Mackler, Holman 1976; Smith, Hays, Solway 1977), possibly rendering this instrument invalid for use with ethnic minority populations. This would be an especially critical point as our sample was exclusively African American. Furthermore, many of the juveniles in the present study came from economically disadvantaged localities; another variable which has been linked to poor performance on standardized tests (Mackler, Holman 1976). Finally, no correlative relationships emerged from the medical history or data pertaining to juveniles' physical health. There was, however, a high prevalence of sexually transmitted diseases, and fathering of children for both groups; positive evidence of

unprotected sexual activity. In addition, an extremely high prevalence of firearm injuries (13%) was noted in both groups (McLaughlin, Reiner, Smith, Waite, Reams, Joost, Gervin 1996). These findings may be reflective of a generalized pattern of high risk behavior or thrill seeking often attributed to delinquent populations (Farrow 1991).

In summary, the incarcerated juvenile drug traffickers were found to differ from the incarcerated delinquent comparison group in several areas. They tended to be rated as higher functioning by the assessment team, and basically presented as being better adjusted in almost every area evaluated. The broader implications of the present study suggest that drug trafficking may differ fundamentally from the other types of criminal offending which characterized the comparison group. In communities with staggering unemployment rates and youth poverty, drug trafficking may be perceived as a viable "vocational" choice; the money, power and prestige associated with the drug trafficking lifestyle presenting significant incentives to juveniles with limited economic opportunities. The results from the present study also have implications for interventions within the correctional setting as offenders seeking to earn money may bring additional motivation and abilities to rehabilitation. It also suggests that these offenders have career expectations that exceed the menial skills frequently offered in the correctional setting, and, unfortunately, may have significant incentive to return to drug selling upon release from incarceration.

## REFERENCES

- Altschuler DM, PJ Brounstein 1991 Patterns of drug use, drug trafficking, and other delinquency among inner-city adolescent males in Washington, DC *Criminology* 29 589-622
- Butts JA 1994 *Offenders in Juvenile Court, 1992*. U.S. Department of Justice, Juvenile Justice Bulletin
- Chaiken MR, BD Johnson 1988 *Characteristics of Different Types of Drug-Involved Offenders* National Institute of Justice
- Dembo R, L Williams, W Wothke, J Schmeidler, A Getreu, E Berry, ED Wish, C Christensen 1990 The relationship between cocaine use, drug sales, and other delinquency among a cohort of high-risk youths over time. 112-135 In M De La Rosa, EY Lambert, B Gropper eds *Drugs and Violence: Causes, Correlates, and Consequences* NIDA Research Monograph 103
- Farrow KF 1991 Health issues among juvenile delinquents. 21-33 In LS Thompson ed *The Forgotten Children in Health Care: Children in the Juvenile Justice System* Washington, DC: National Center for Education in Maternal and Child Health
- Goldstein PJ 1985 The drugs/violence nexus *J Drug Issues* 15 493-506
- Goldstein PJ, HH Brownstein, PJ Ryan, PA Bellucci 1989 Crack and homicide in New York City, 1988 *Contemp Drug Problems* 16 651-658
- Hamid A 1991 Crack: new directions in drug research. Part 2. Factors determining the current functioning of the crack economy - a program for ethnographic research *Internat J Addictions* 26 913-922
- Hartlage C, TL Lucas, A Godwin 1976 Culturally biased and culture-fair tests correlated with school performance in culturally disadvantaged children *J Clin Psychology* 32 658-660
- Howell DC 1992 *Statistical Methods for Psychology* third edition Bellmont, CA: Duxbury Press
- Huizinga D, R Loeber, TP Thornberry 1994 *Urban Delinquency and Substance Abuse: Initial Findings* Rockville, MD: Juvenile Justice Clearinghouse
- Inciardi JA, AE Pottieger 1991 Kids, crack, and crime *J Drug Issues* 21 257-270
- Johnson BD, M Natarajan, E Dunlap, E Elmoghazy 1994 Crack abusers and noncrack abusers *J Drug Issues* 24 117-141
- Johnston LD, PM O'Malley, JG Bachman 1993 *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1992, Vol. II* Rockville, MD: National Institute on Drug Abuse
- Li X, S Feigelman 1994 Recent & intended drug trafficking among male & female urban African-American early adolescents *Pediatrics* 93 1044-1049
- Lockwood D, JA Inciardi 1993 Criminal violence among seriously delinquent youths. NIDA Conference on Drug Abuse Research Practice: An Alliance for the 21st Century
- Mackler B, D Holman 1976 Assessing, packaging, & delivery *Young Children* 31 351-354
- Mathias RA, P DeMuro, RS Allison 1984 *Violent Juvenile Offenders: An Anthology* San Francisco, CA: National Council On Crime and Delinquency
- McLaughlin CR, SM Reiner, BW Smith, DE Waite, PN Reams, TF Joost, AS Gervin 1996 Firearm injuries among juvenile drug traffickers (Letter). *Amer J Public Health* 86 751-752
- Office of Juvenile Justice and Delinquency Prevention 1993 *Comprehensive Strategy for Serious, Violent, and Chronic Juvenile Offenders* Rockville, MD: Juvenile Justice Clearinghouse
- Poulos TM, S Orchowsky 1994 Serious juvenile offenders *Crime & Delinquency* 40 3-17
- Smith AL, JR Hays, KS Solway 1977 Comparison of the WISC-R & culture fair intelligence test in a juvenile delinquent population *J Psychology* 97 179-182
- Stanton B, J Galbraith 1994 Drug trafficking among African-American early adolescents *Pediatrics* 93 1039-1043
- van Kammen WB, R Loeber 1994 Are fluctuations in delinquent activities related to the onset and offset in juvenile illegal drug use and drug dealing? *J Drug Issues* 24 9-24
- Wechsler D 1991 *Wechsler Intelligence Scale for Children* 3rd Ed NY: Psychological Corporation
- Whitehead TL, J Peterson, L Kaljee 1994 The "Hustle" *Pediatrics* 93 1050-1054

## ACKNOWLEDGEMENT

This work was supported by the National Institute on Drug Abuse at the National Institutes of Health (DA10000).