

INVESTIGATION OF DRUG ABUSE AMONG PROBATIONERS

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ABSTRACT

This research involves the analysis of urine test results of probationers who were under the supervision of the Essex Vicinage Probation Division of the New Jersey Superior Court (the division). In this project, two major questions were answered: “Does the division collect sufficient demographic data regarding its probationers,” and if so, “Does the division utilize the demographic information efficiently to reduce the cost of drug testing?”

The findings showed that the division does collect sufficient data. The data collected to answer the primary research questions were analyzed to determine if they were being used effectively to reduce the high cost of drug testing, the division’s primary substance abuse problem. In addition, the data were assessed to improve testing, diagnosis, treatment, and referral procedures. The reduction of substance abuse, as well as instances of rehabilitative relapse, can be the ultimate benefit to the probationers, their families, and the community.

The methodology section details the statistical tests employed to determine the validity of the raw data. After collecting and quantifying the data, all the positive urine test results for each participating probationer were analyzed to answer four questions pertaining to gender, race, age, and drug preferences.

The Chi-square Test of Independence was used to test the gender, race, and age hypotheses. A z-test was employed to examine the data related to the identification of the preferred drug of the tested population.

The findings section of this paper offers a detailed analysis of the test results. The conclusion reveals specific recommendations based on that analysis. The recommendations will be forwarded through the vicinage chain of command for possible implementation. If the indicated recommendations are adopted, the cost of drug testing in the vicinage will be dramatically reduced as detailed by a cost-benefit analysis showing costs before and after the proposed program modifications. In addition to a reduction in testing costs, recommendations were made to change the way that the division treats and refers substance-abusing probationers.

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INTRODUCTION

The New Jersey Court System operates under the leadership of the Administrative Director, Philip S. Carchman. The structure of the New Jersey Court System is not complex; it is one of the simplest in the nation. There are only a few types of courts in the state: Municipal, Tax, State Superior (which includes trial courts), an Appellate Division, and the New Jersey Supreme Court. The Chief Justice of the Supreme Court of New Jersey is Deborah Poritz.

In 1995, the state began to relieve the 22 individual counties of the burdensome cost of operation.¹ As a result, the traditional county court system was transformed and reduced to 15 separate vicinages. Three vicinages were created to comprise 8 counties that were too small to support their own separate vicinage: Morris and Sussex counties, Hunterdon, Somerset and Warren counties and Cumberland, Gloucester, and Salem counties (vicinages 10, 13 and 15 respectively).

¹ In that county governments had no constitutional authority over the courts that operated within their boundaries, the counties had long complained that it was unfair for local home owners to bear the cost of operating the superior courts.

The Essex Vicinage Court System

The Essex Vicinage of the New Jersey Superior Court is led by the Honorable Patricia A. Costello, the Assignment Judge. Mr. Collins Ijoma is the Trial Court Administrator (TCA), who, along with two assistants, manages the largest and busiest trial court in New Jersey. It has approximately 60 judges and 1,100 staff. The vicinage serves 22 municipalities and approximately 765,348 citizens and is located in three buildings in the state's largest city, Newark.² The vicinage consists total of six separate divisions: Civil, Criminal, Municipal, General Equity, Family, and Probation (the subject of this research).

The Essex Vicinage Probation Division operates within the structure detailed above. With an operational budget of approximately \$535,000.00 (not including salaries and capital expenditures), the Chief Probation Officer, with the help of seven assistants, oversees approximately 309 employees in the largest probation division in the state. The division incorporates three separate areas of concentration, Child Support, Adult Supervision and Juvenile Supervision, which includes the Volunteer in Probation and juvenile-mentoring programs. The staff consists of the clerical support staff through to the investigator and line-level probation officer, senior and master probation officers, and the court services supervisor. The senior management staff is comprised

² Please see the Essex Vicinage Web site for additional information:
<http://www.judiciary.state.nj.us/essex/probation/adult.htm>.

of seven vicinage assistant chief probation officers (VACPO's) and the vicinage chief probation officer (VCPO).

Purpose and Goal of Probation

The ultimate goal of the Probation Division is to help reintegrate an offender into the community as a responsible, law-abiding individual. Probation is a sentencing alternative that provides selected offenders the opportunity to serve in the community under the supervision of a probation officer.

A sentence of probation requires an offender to pay fines or restitution and to seek counseling for substance abuse or other health and family-oriented problems. Probation officers also arrange for and monitor the community service often required of offenders. In New Jersey, probation officers collect from offenders more than \$20 million in imposed fines a year.

There are approximately 8,023 probationers under formal supervision of the Probation Division in Essex. Additionally, there are several thousand more individuals paying through the Probation division for their criminal activities. In mid-2000, there were nearly 20,000 individuals that fit the above description.

The Problem: The High Cost of Drug Testing

A substance abuse problem faced by the division is the growing use of controlled, dangerous substances. Consequently, the cost of drug testing is the primary problem that has inspired this research. It has begun to consume an increasingly larger portion of the division's substance-testing budget, which is currently at \$125,000 per year. As a result, the administration is compelled to develop procedures that will reduce the use of illicit drugs as well as the attendant costs associated with supervising drug-abusing probationers.

Two primary questions motivate this research: Is the division obtaining adequate demographic data pertaining to the substance-abusing probation population? If so, is the division utilizing the data effectively? These two questions are important because of the overwhelming importance of the data. The lack of this important data can prevent the division from developing new and efficient procedures necessary to reduce the cost of testing, as well as from adopting other important changes.

Missing demographic data represent potentially an important link between the reduction of the cost of urine testing and its increase. Conversely, the failure to utilize the data that has been gathered is just as fruitless. In the attempt to answer the primary questions, specific

subsidiary questions were developed that disclosed data pertaining to race, gender, and age of the substance-abusing probation population.

When incorporated into the division's overall substance abuse strategy, the effective utilization of the resulting demographic data can facilitate the creation of improved ways for reducing substance-abuse testing and helping probationers. In that the Division's goal is to facilitate rehabilitation, all probationers that have been ordered to submit to urine monitoring must have their urine tested for the prescribed period of time mandated by the court order. In addition to court-ordered drug tests, all probationers whom the probation officer believes to be involved in substance abuse, regardless to the offense, must also be tested.³

The division employs two substance abuse evaluators (SAE),⁴ whose primary function is to evaluate probationers that have been referred by the court or the supervising probation officers. The SAE also performs the various perfunctory duties necessary to attend to and ensure the compliance of the probationer. The SAE makes regular referrals of probationers to appropriate treatment centers or other medical practitioners for services as needed. However, the SAE does not counsel the substance-abusing probationer.

³ See Table A: Outcome-Based Standards and Mandate Requirements for Drug Testing.

⁴ Substance Abuse Evaluators (SAE) are also known as TASC Evaluators (TASC).

Drug Testing

In any given month the total number of urine tests can range from 400 to 600.⁵ The large number of daily urine tests justifies research into the problem. In that urine testing can be court ordered, it must be performed economical, as well as efficiently.

The supervising probation officer must follow up on all positive urine tests submitted by probationers. The probation officer must document the positive test results in the Family Automated Case Tracking System (FACTS) or the Comprehensive Automated Probation System. In that the role of the division is multifaceted, the substance-abusing probationer is held accountable for his or her actions.

The consequences of submitting a positive urine sample can result in graduated sanctions if the probationer does not comply with treatment protocols.⁶ Treatment protocol can range from increasing the number of urine tests to the referral of the test to an appropriate treatment center. The SAE has the option of referring the probationer to an outpatient or residential treatment facility for treatment if the problem is sufficiently severe.

Drug testing is extremely expensive. The division utilizes four testing modalities: the oral swab, test cup, eye recognition program, and the standard urine test. The standard urine test (the subject of this research) is the most reliable; however, it is also the most expensive. The

⁵ In that this research involves the study of the urine test program, other drug test modalities have not been included in the above figures.

⁶ A continuum of sanctions imposed for infractions leading incrementally from probation to incarceration.

standard urine test involves sending the collected sample to the New Jersey Department of Health Laboratory. The required test panel must be designated on the label of the specimen. The cost of the test is directly related to the number of drugs that are to be detected; the more drugs that are to be tested for, the higher the cost. The most expensive test panel is \$9.83, panel #90011 (ABBCMMOPP).⁷

The drug-testing program is essential to the administration of probation services. A primary function of probation supervision is to enforce court orders and oversee the compliance of probationers, the division cannot shirk from this responsibility. In view of the importance of urine testing to the courts and the probationers, as well as the rising costs of the program, a measurable goal of the division is to increase its efficiency while reducing the operating costs.

A measurable objective of the urine-monitoring program is consistent cost-effectiveness. Cost-effectiveness in this case can be manifested in reduced instances of both substance abuse relapse and criminal recidivism. It will take time to realize the relapse and recidivism benefits resulting from the improvements brought about by research findings. However, any proposed program improvements should be practical and philosophically sound to the degree that when implemented they will be expected to accomplish their intended goals.

⁷ Please see Table B for a detailed list of the available test panels, as well the drugs that each panel is associated with.

Subsequent sections of this paper will involve assessments of the different aspects of the problem. The review of relevant literature section summarizes research that relates to the current problem of increased drug abuse and its major consequence of increased testing costs. In the literature review section, published and unpublished works will be critiqued.

The current research variables of race, gender, and age will be explained and defined through the established research of others in the field. The identified variables represent important keys to the success or failure of any sociological program. Thoroughly assessing the data and utilizing it effectively represents the second half of the theoretical protocol. In conducting this research, the primary and secondary questions were answered. The views of a variety of different researchers were assessed to provide a sound foundation for the research methodology.

The research methodology consists of the current research design. It will also provide relevant details about the data collection as well as the unique manner in which this research was initiated. The findings section will detail the results of the research, and the conclusion section will summarize the research findings as well as the implications that those findings have for the division's substance-abuse-monitoring program.

REVIEW OF RELEVANT LITERATURE

Drug Testing

Drug testing is the primary form of surveillance used to determine whether the probationer has abused drugs. Urine testing is the oldest and most accurate form of drug testing; however, it does have its drawbacks. Urine testing is awkward, invasive, and at times expensive, it is untimely, involving substantial delay between the time of surveillance (the actual urine evaluation) and subsequent treatment, arrest, or revocation if the urine proves “dirty.” Although there are other more convenient methods available to test for drugs, urine test results are more widely accepted.

Recently, on-the-spot tests have been developed, usually involving a drug-sensitive strip of paper. Some are used with urine samples; others are performed on saliva samples. In addition, because some drugs leave no traces of their presence in the urine and saliva within hours of their use, some programs have adopted the even more expensive alternative of hair testing. Traces of some illegal drugs can be detected in human hair for a year or more after the drug’s ingestion. (Clear 134)

Literature in the field of drug testing is not extensive, the predominant literature is geared toward issues relating to employers or concerned parents. Drug-testing literature involving the courts generally extols the need for more extensive drug testing and ignores detailing the means for paying for it. This represents another reason that the current

research can prove beneficial to the division and possibly to the body of literature relating to the efficient drug testing of probationers.

Todd Clear, the author of “The Offender in the Community,” suggests that there is little evidence that greater levels of surveillance in supervision programs actually result in fewer re-arrests. He states there is some evidence that greater surveillance results in higher levels of re-arrests, not lower, probably due to a greater possibility of detection through the increased surveillance. (Clear 134)

Notwithstanding the truth of the latter theory, any approach to substance abuse that suggests in any way that it should be ignored or overlooked is counterproductive and contrary to the goals of rehabilitation and this research. The extent, to which probationers are using drugs, as reflected by the drug test, is being researched to help the abusers, their families, and society, not necessary to arrest the offenders.

The leadership Partnership for New Jersey prepared a report, “Drug Courts in New Jersey: Past, Present and Future” (March 2000). The report outlined many of the important reasons for vicinages to proceed with research such as this. One of the early supporters for the establishment of drug courts in New Jersey, the partnership identified many problems facing the courts and substance abusers. The most pressing problem facing the fifteen vicinages, particularly Essex, is the cost of drug testing. The problem is exacerbated by excessive caseloads. (Partnership For New Jersey, p.6)

In Essex, an adult caseload size can be as high as 200 cases per officer, more than six times the “ideal” caseload ratio of 30 to one. (Abate 10) Although, the state’s probation divisions do not directly supervise state prisoners, the substance abuse habits of the prison and probation populations are homogeneous. (Abate 1) When one considers that in New Jersey, approximately 60 to 80 percent of the inmates suffer from drug and alcohol dependency, the true extent of the problem can be realized. (Partnership for New Jersey 6)

Of course, drug testing is not limited to the courts; employers have tested employees and perspective employees for several years. While drug testing in the workplace increased dramatically in the 1980s, in 1992 it leveled off. Much drug testing in American industry is due to government mandates requiring testing, not due to the business judgment of employers. (American Management Association 2) One reason drug testing is not used by some employers is the cost. One electronics manufacturer estimated that the cost of finding each positive result was \$20,000. After testing 10,000 employees, he only found 49 positive results. A congressional committee estimated that the cost of each positive in government testing was \$77,000 because the positive rate was only 0.5 percent. (Cornell/Smithers Report 4)

When judges order probationers to submit to substance abuse evaluation or treatment, the Probation Divisions are compelled to ensure that the probationer complies with the court order. Unfortunately, there is

enormous variation in the degree to which probation officers assist probationers in fulfilling such requirements.

There is also no clear protocol that all probation officers must follow with regard to how far they must go to assist a probationer in obtaining treatment. In addition, testing is made even more necessary because many probationers who are drug dependent do not acknowledge that they are so and, therefore, resist treatment. (Cornell/Smithers Report 4)

The New Jersey criminal court structure renders very little contact between the judge and defendant during normal criminal court proceedings. The defendant witnesses the judge presiding over the court at arraignment, trial, and sentencing. If probation is imposed, the probation officer exercises ongoing authority over the probationer and is the surrogate of the judge in the enforcement of the court order. (Cornell/Smithers Report 6)

Since this research was conducted and valuable information has been analyzed, it behooves the division to implement appropriate policy changes resulting from the research to become more efficient in testing, treating, and referring substance-abusing probationers.

Relevant literature reveals that other jurisdictions have had similar problems in coming to grips with the cost of substance abuse testing. In response to “the lack of a cohesive implementation of policy among the existing probation and correctional alternative organizations” in 1998,

New York State Senator Catherine M. Abate urged New York probation and correction authorities to share intellectual resources. By doing this, it would facilitate comparing and evaluating county-run programs, which was nearly “impossible” to accomplish at that time. (Abate 32)

Senator Abate urged the formulation of a comprehensive Criminal Justice Policy to counteract common circumstances in which people that work toward the same goal turn against one another during budget negotiations. Although New Jersey can benefit from the sharing of information, the state does have an effective approach in which to disseminate information, specifically, each level of the court meets regularly to discuss issues facing their particular area of the court. For example, the conferences of judges, court administrators, and chief probation officers, meet individually and upon occasion collectively, through various management retreats, to solve pressing problems facing the court.

The Importance of Demographic Research

In addition to the above, Standard 36 of the outcome-based standards of supervision call for Probation Divisions to form partnerships to solve pressing problems that face the court. Significant to this research is the Essex Vicinage Drug Court and the Greater Newark Safer Cities Initiative (GNSCI). The drug court comprises all of the stakeholders responsible for the fate of the convicted substance abuser: the public

defender, prosecutor, probation officer, social worker, and the judge. Accordingly, the judge plays a continuous and important part in the rehabilitation of the defendant, a role not usually afforded to offenders that are not a part of the drug court.

The GNSCI comprises of similar stakeholders; however, its focus is on the violent offenders that inhabit the high-crime areas of the city. Community corrections experts frequently call the high-crime areas of the city hot spots. Research shows that the higher victimization rates of African-Americans and Latinos are due, almost completely, to the fact that they live in disadvantaged places where violence persists. (Clear 334) Research also shows that poor communities, particularly those hit hard by crime, tend to lack resources to regulate neighborhood problems and pursue social control. (Clear 334) The latter represents a primary reason that the demographics of the Greater Newark area characterize an important aspect of this research. It is also the reason that a thorough understanding of its demographics can play a role in reducing the high cost of drug testing in the vicinage of Essex.

Two important traits affect personality disorders such as drug abuse: one's individual personality and one's ascribed socioeconomic status. The latter has been assigned by society. Race, gender, and age are variables that have been assigned to an individual by nature. Those variables often represent an important aspect of a substance abuser's problem, as well as the individual's subsequent rehabilitation. The

interrelationship of these entities is clear and is important when assessing drug abuse rehabilitation. (Kisker 247)

Much research in the field of substance abuse rehabilitation tends to concede that race, gender, and age represent important qualifying factors. Key components of leading psychoanalytical theories universally hold the importance of race, gender, and age classification on drug abuse rehabilitation. The theories of Carl Rogers, Albert Ellis, and William Glasser agree in principle that individual treatment modalities must include assessment of possible contributory factors brought on or affected by race, gender, and age.⁸

In a Summary Report on recidivism and the Virginia's Drug Court programs between November 1995 and December 2002, the control group was matched by age, race, and gender. In that program, 217 Virginians were admitted to the felony drug court program. (BJA Drug Court Clearinghouse Project 1)

Background of Drug Abuse

Drug abuse has always been a major problem in American life. Coca-Cola, the soft drink that became known as "America's soda," had its beginnings with an additive known as cocaine. (Bugliosi 38; Bellis 238) This research found that cocaine was the second most used drug among

⁸ Carl Rogers: Rogerian Psychotherapy. Albert Ellis: Rational Emotive Therapy and Reality and Choice Theory.

the divisions tested probationers. Moreover, it is common to come across probationers who freely abuse a number of different drugs. Table D shows that 16.49 percent or 49 individual tests, scored positive for multiple substances; a mixture of marijuana/cocaine is not uncommon. (American Psychiatric Association 238)

Long before the passing of the Marijuana Tax Act in 1937, marijuana was smuggled into Texas by Mexican farmers in 1910; however, some reports list its debut much earlier. (American Psychiatric Association 238) An important aspect of the appearance of multiple positives is the growing problem of marijuana blunts mixed with a variety of other drugs. An ambiguous effect of the drug findings of this research is possible because marijuana is absorbed in the fatty tissues and can be detected in the body much longer than other drugs.

In the early years of our country, many commonly known products had rather dubious beginnings with varying degrees of concentrations of mind-altering substances that today are classified as Controlled Dangerous Substances, or CDS. (Bugliosi 178) Marijuana, which the research found as the preferred drug among the probationers, was one of those drugs cited to possess medicinal benefits.

The rhetoric about marijuana and its medicinal effects would have less-knowledgeable individuals believe that the negative effects of the drug were limited. However, that is far from the truth. There are a number of serious physical problems that marijuana induces in users.

Since marijuana is a psychoactive substance, it can cause serious mental or emotional trauma to the habitual abuser. This trauma can appear as a flashback similar to the effects of lysergic acid diethylamide (LSD).

Habitual use of the drug has been reported to cause mild forms of depression, anxiety, or irritability. The third symptom (irritability) has been noted or diagnosed in approximately one-third of individuals who use the drug. (American Psychiatric Association 238) In addition, marijuana has been universally viewed as a “gateway” drug, because it is often the first drug that a young person ingests before, theoretically, progressing to the next level of illegal substances. (American Psychiatric Association 239)

Marijuana smoking contains an even larger amount of known carcinogens than tobacco. The smoke is highly irritating to the nasopharynx and bronchial lining, thus increasing the risk for chronic cough and other symptoms of nasopharyngeal pathology. Additionally, the marijuana smoke may cause emphysema and pulmonary dysplasia. (American Psychiatric Association 239) Although these symptoms are serious in nature, the use of “street” marijuana is perhaps a more dangerous problem. Reportedly, marijuana is mixed with several illicit drugs, and as with all illicit street drugs, one never knows what chemicals have been used to prepare the drugs. For example, gasoline is a common ingredient used in the preparation of cocaine.

As consumers began to use pseudo-pharmaceutical products, such as marijuana, the unavoidable consequences of the abuse soon followed. The list of uncontrolled mind- and body-damaging substances is long. As a result, legislators began to take notice, and an astonishing number of laws were imposed that intended to stop the growing menace of drug abuse in America (Hartsen 82) The authorities had more success enacting preventative laws than they did in curbing illicit drug usage. Many anti-drug laws, as well as the public awareness campaigns employed to stop illicit drug use, were at best comical and at worse were counterproductive or ill informed. (Bugliosi 178-179)

The early twentieth-century campaign against the use of marijuana represented a classic counterproductive measure for several reasons; even for the times, it failed to correctly identify the psychosocial problems associated illicit marijuana use. In addition, the various movies, public-service announcements, books, and lectures tended to exaggerate the drug's effects and consequences. In fact, the Marijuana Tax Act (1937), which outlawed the sale and eventually the use of the drug, was imposed as a means for the financially strapped Federal Bureau of Narcotics (FBN) to obtain more funding. No legislator in the government at the time really knew or cared much about marijuana. (Hartsen 87)

Later on in the twentieth century, those errant efforts became the grist for comedians' jokes. Attempts to characterize marijuana use as

Satanic or otherwise demonic never were believed by the public and, therefore, tended to be counterproductive to their original purpose.

During many of the “pot” parties of the early to late sixties, the movies that were originally intended to discourage the use of marijuana were shown as the main entertainment. Movies such as Reefer Madness, sponsored by the Federal Bureau of Narcotics, became caricatures of themselves by portraying the marijuana user as a hedonistic, crazed, pleasure-seeking drug fiend who would stop at nothing to obtain the “killer weed,” marijuana. (Hartsen 88)

Adjacent to the problem is the ever-changing scientific environment, which serves the purpose of categorizing drugs and discovering their legitimate uses and benefits. A legal, over-the-counter drug today may have required a prescription five, ten or twenty years ago. A few years ago legislation was defeated in the United States Congress that would mandate a prescription requirement for the purchase of nutritional supplements, such as vitamins and various herbs. Due to the tremendous influence of special-interest groups representing the growing nontraditional health community, as well as the general public, attempts to regulate dietary supplements in the United States were halted.⁹

The interaction of one drug with another can cause an unintended negative reaction that is unknown to the user. Prescription drugs, as well as nonprescription drugs taken together with unspecified drugs or

⁹ The Dietary Supplements Health and Education Act - DSHEA, passed in 1993 and signed into law in 1994 by President Clinton.

supplements, could cause additional, unexpected health problems. Marijuana itself has had a long history of evolving legal approaches. Historically, marijuana was used in China for its fiber nearly five thousand years ago. (Hart 1) As it spread westward across the Indian subcontinent, it was used in Hindu temple rituals four thousand years ago and was valued as a medicine capable of restoring vital energy. (Hart 1)

Medical Research on Marijuana

Carol Hart, in “Marijuana: From Evil Weed to Wonder Drugs?” in the 1999 Modern Drug Discovery, adds her voice to the growing list of believers in the research of health-related benefits of THC. Eli Lilly and Company also made a research commitment in 1973 that led to the development of the cannabinoid analog nabilone and its approval for the treatment of chemotherapy-associated nausea and vomiting. Although many companies are still attempting to make a medicinal THC derivative, to this date none have gained great success as a legal medicine. (Hart 1) In view of this situation, one fact remains clear. Regardless of the potential benefits of any THC derivative or extract, street marijuana is far from a safe and beneficial substance.

This research paper was intended to answer several questions that are important to the problem of drug abuse for the probation division. However, it is still just a small step. It takes a series of small steps to

effect lasting change. A modicum of insight into the demographics of the drug-abusing probationer will allow probation authorities to reduce the cost of drug testing through effective research and policy adjustment.

(Browser and Bilal 4.2)

There is currently much concern over the plethora of designer drugs, hybrids and potentially volatile drug interactions. The extent and costs of the problem are of paramount importance; though probationer drug abuse is not new to the division, it remains a problem that exhausts its resources. According to most prominent law enforcement authorities, drug abuse not only negatively impinges the lives of the abuser and the individual's family, but also creates a ripple effect on the community through subsequent crime and loss of productivity.

The geographical location of New Jersey, with its large port cities of Newark and Elizabeth, as well as its close proximity to the cosmopolitan port city of New York, leaves it more vulnerable than most cities to the influx of an array of illicit drugs. It is because of this danger that the types of drugs that are being abused by probationers should be identified. Since the research allowed for the assessment of this data, the determination of the most abused drug was made. This assessment is important because just as each drug affects the body differently, each drug also requires unique treatment modalities and detection panels. The more drugs that are prevalent in a community, the more resources are needed to detect, treat, and complete effective referrals.

Notwithstanding the potential benefits of any THC derivative or extract, street marijuana is far from a safe and beneficial substance. According to information supplied by Pastor Reginald Osborne of Covenant House, Newark, New Jersey (2005), “piff,” the street name given to a form of marijuana “blunt” that has as much as 20 to 30 percent THC, is used widely in Essex County. Pastor Osborne states that contrary to public belief, piff is highly addictive.

Although, by nature, the abused drugs are neither constant nor intransigent, instead they are subject to change at any given time. Marijuana is being abused in Essex County communities every day in growing numbers. An understanding of the types of drugs that are being abused will still benefit the authorities. Tracking the drug abuse population will permit the division to provide help by tailoring specific counseling modalities to specific addictions. The identification of the drugs that are abused and the knowledge that at present there are no demographic differences within the target population are extremely important facts to know when developing an anti-drug protocol.¹⁰

In addition to the above-indicated improvements, the results of the study will also provide helpful preventive and enforcement benefits. Effective utilization of the partnerships that have been created between the division and the various municipal police departments within the county can make possible the identification and arrests of dealers and suppliers of marijuana.

¹⁰ See the conclusions.

Drug Abuse and Race

There are many views with regard to this controversial aspect of the problem of drug abuse. Critics of the war on drugs have argued that in addition to the minimal reduction in drug use and increased system cost, another major problem with the war on drugs is that it has been waged primarily against black men. According to Mauer and Tracy (1995), research supporting this view states that although African-Americans make up 13 percent of the population and only 15 percent of illegal drug users, 35 percent of all people arrested for drug offenses, 55 percent of those convicted, and 74 percent of those sentenced to prison for drugs are black. Similarly, noted criminologist Jerome Miller (1996) has characterized the war on drugs as a “search and destroy” mission directed at young African American men. “Diversity in Relapse Prevention Needs: Gender and Race Comparisons among Substance Abuse Treatment Patients,” Walton, Blow, and Booth (2001) address the issue of race and substance abuse treatment. They cite the need for research focusing on the unique relapse prevention needs of women and African-Americans. This represents another primary reason that the study of the potential implications of race and gender among substance-abusing probationers in Essex County is imperative. As in the Walton, Blow, and Booth study, there is now a possibility that the research findings in this area could

provide an initial basis for the development of alternative relapse prevention approaches that could be more appropriate for our probation population. (Walton, Blow and Booth, p. 225)

Walton, Blow, and Booth (2001) found that African-Americans and Caucasians had very different interpersonal assets. African-Americans showed greater coping skills and self-efficacy than did Caucasians. They also found that Caucasians required fewer resources for recovery than did African-Americans.

In the United States, drug addiction has impacted African-Americans more than any other race. Additionally, African-Americans are cited to have lower recovery rates. (Bowser and Bilal 2-4) Many potential reasons are espoused for this phenomenon. However, Benjamin P. Bowser and Rafiq Bilal (2002) of California State University at Hayward suggest that traditional drug treatment facilities may be ignoring specific cultural and spiritual aspects of the African-American client that may prove crucial to recovery. Bowser and Bilal suggest that the history of racism in the United States has traumatized the African-American drug abuser. They propose that drug treatment modalities understand that there are “six coping strategies” that African-American substance abusers need to overcome historic and personal trauma:

1. Conforming to Caucasian norms of respectability and rejecting associations with anything and anyone African-American.

2. Innovating, through artistic creativity.
3. Ritualizing, through use of religion, spiritualism, “partying,” or drugs.
4. Retreating and avoiding encounters with white power and authority, including white drug treatment programs.
5. Separating from and rejecting people and instructions based in any other race.
6. Rebellious, which if directed inward, also may lead to drug use.

The authors believe that understanding the above six principles and incorporating them in treatment modalities will prove successful in improving treatment recovery among African-American drug abuse clients.

Bowser and Bilal (2002) state that race must be contextualized as culture, social practice, and behavior, rather than as genes and biology. By doing so, authorities can adequately address the issues of ethnicity in drug treatment and make determinations about culturally appropriate treatments. The authors contend that African-Americans and Native Americans are most often recognized as being part of a racial group used as opposed to an ethnic or cultural group. The questionnaire used in this research specifically allows for self-reporting with regard to race. Moreover, the questions are clearly designed to allow for the above distinctions in several cases, including the case of Hispanics.

The reasons why the rate of substance abuse is so high among African Americans in the United States have been explored. Additionally, some suggest that there are specific psychosocial reasons that some therapeutic modalities fail. Some experts suggest that to treat African-Americans successfully, the effects of racism should be considered. (Browser and Bilal 2-4)

Hispanics, the fastest growing minority groups in the country, have different treatment problems; those issues can be just as difficult to solve when trying to overcome drug abuse. Depending upon individual circumstances, Hispanics can face a multiplicity of troubles, including racism, language, citizenship, or illegal-alien issues.

Caucasian males, though representing only 11.19 percent of the total probation population (see Appendix C), can experience a totally different set of problems that can inhibit recovery. The problems faced by Caucasian males can be as difficult to overcome as problems faced by minorities. Interacting in the substance abuse subculture presents a multiplicity of problems that must be understood before permanent rehabilitation can be achieved.

After reviewing Appendix C, one might wonder why this second hypothesis was postulated: “Caucasian male probationers exhibit a greater ratio of positive test results than do African American or Hispanic male probationers.” Caucasian males represent less than one-fifth of the number of African-American male probationers. However, it was

presented as a hypothesis because before the analysis of the research findings, it was a statistical possibility. The specific results, which state that there are no differences within the races, would have been the same if role of the Caucasian man had been switched to Hispanic or African American. The exercise was performed to provide the division with important statistical data. ¹¹

Drug Abuse and Gender

According to the American College of Obstetricians and Gynecologists, 10 percent of all pregnant women have a problem with substance abuse. Pregnant women who use any type of controlled substance increase the risk of adverse mental and physical effects on their newborn. (Gilbert and Harmon 20) A recent survey revealed that the costs involved in treating the drug-addicted mothers and infants are astronomical. The Florida Department of Health and Rehabilitation Services (1991) estimated that total long-term service costs might be as high as \$750,000 for medical care, special education, and other related social services over the first 18 years of an exposed infant's life. (Phibbs 118)

¹¹ Please see Table C for the positive results per race.

Age and Drug Abuse

Statistics pertaining to age-related drug abuse and criminal activity reveal different findings depending upon the type of crime that has been committed. Recidivism for offenses such as driving under the influence (DUI) is age related. (Cheesman, Dancy, and Jones 5) Some crimes are skewed in favor of the older offender, some toward the younger, and some share the same risks. (Wilson 131) Some researchers believe that drug offenders may match specific predetermined offender groups or types; this fact may render the offender amenable to successful rehabilitation. (Wilson 131)

The National Household Survey on Drug Abuse (NHSDA) indicates that for the years 2000 and 2001, there were 28,760 individuals of 25 years of age or younger and 24,300 individuals of 26 years of age or older who were perceived to be at a great risk of smoking marijuana once a month.¹² The current research findings found similar results in Essex Vicinage.¹³

Essex County does not currently have a juvenile drug court in operation. In the State of New Jersey, at least three vicinages operate juvenile drug courts. The state is currently considering establishing drug courts in each vicinage. The data obtained in this research, along with a specific recommendation, will be forwarded to the Administrative Office

¹² See <http://www.samhsa.gov/index.aspx>.

¹³ Please see the research findings and conclusions section.

of the Courts to facilitate a statistical basis for this most important decision.¹⁴

In that all probationers are instructed to obey the laws of their city, state, and country, when it involves drug abuse, the status of female substance-abusing probationers must occupy top priority. As revealed in Appendix A of this research, women probationers total 1,475 (18 percent) of the entire probationer population. Eighteen percent of the Essex Vicinage probationers are women primarily of childbearing age; seventy-one women were subjects of the study. The above statistics represent a clear and convincing reason that this study involves obtaining data that may serve to reduce their potential substance abuse relapse. Walton, Blow, and Booth's findings stated that in addition to the obvious physical differences, men reported poorer coping skills, more negative social influences, and more exposure to illegal substances than women. (Walton, Bow, and Booth 226)

METHODOLOGY

Data Collection

This project was designed to process and analyze unstudied statistical data which was collected for a different primary research project, to answer two primary questions: "Does the division collect sufficient demographic data regarding its probationers," and if so, "Does

¹⁴ Please see the findings and conclusions section of this research for specific details.

the division utilize the demographic information efficiently to reduce the cost of drug testing?”

The State of New Jersey, in consultation with the Probation Division, designed the initial research to determine the drug detection efficiency of three different testing modalities.¹⁵ The original research design involved the collection of 100 positive urine tests as determined by the testing laboratory. The remaining three testing modalities were tested simultaneously. The analysis was to have been made when the 100 positive urine tests along with the corresponding additional requisite tests were received. Only the full sets were to be analyzed.

Since prior research required the collection of matched specimen sets, much of the collected data could not be used. More important, the data could not be used to answer the demographic questions posed by this research. This research design involves the analysis of all positive urine test data, notwithstanding any of the collection barriers of the former research, which led to the accumulation of the surplus data.¹⁶ It was in this context that it was realized that the full urine test data would be beneficial to the division’s drug program in a different and equally important manner.

¹⁵ For legal reasons, the trade names of the specific test modalities were not provided.

¹⁶ The previous research design required a sequence of three consecutive visits for urine-collection purposes.

In addition to the reduction of drug-testing costs, another purpose of this research is to identify the typical drug abuser among those individuals supervised by the division. The probationer is an individual who has been formally sentenced to a term of probation. A probationer is also a person supervised by the probation division (that is, a “First Offender”)—a substance abuse defendant is one whose sentencing has been postponed pending a one-year term of successful probation supervision. A First Offender has not been given a formal term of probation; instead, the offender is supervised by the division. Upon the successful completion of the one-year term of supervision, the court formally dismisses the case.

Another informal probation case type is the Pre-Trial Intervention case (PTI). After successfully completing a term of “supervision,” a PTI case will also be vacated by the court, leaving the subject without a criminal record. Acquiescing to the purposes of this study and acknowledging the technical differences, the term “probationer” will be used synonymously to include all three case types.

Data Collection Details

Probation officers or substance abuse evaluators, at the division offices located in East Orange, New Jersey, collected all urine samples. The originally scheduled time period of data collection was six months; however, specific administrative occurrences resulted in delays that

extended the data collection for an additional two months. Thus, the study period began April 29, 2004 and data collection was completed on December 30, 2004. Although the time period was extended, the methodology was not affected. The circumstances of the research project eliminated the need for a pre-test of the instruments.

Sample and Population Size

There were a total of 764 individual cases in the sample size. However, a small number of subjects failed to answer all of the demographic questions necessary to complete the questionnaire. The total number of probationers who are being supervised by the Probation Division is 8,023.

The Target Population

The research protocol required that all new probationers who had drug-related offenses in addition to those probationers, who were ordered to comply with urine testing, were included in the study. All of the collected data was coded by using the probationers' individual Comprehensive Automated Probation System Numbers (CAPS), which are assigned to probationers at the time when they undergo their initial interviews with Probation. Only probation personnel can obtain the identity of the specific probationer assigned to each CAPS number. This

protocol was adopted because it provided the largest representative spectrum of probationers and would not skew the test results.

Scope, Delimitations, and Assumptions

This investigation did not analyze the validity of the urine test nor the urine test policies and procedures, which governed the division during the collection of test data. The urine test policies and procedures represent a statewide protocol and are utilized by all vicinages for the collecting and processing of urine samples.

The scope of this research also did not include the analysis of the methodology or accuracy of the testing laboratory. It is important to note that the New Jersey Department of Health Laboratory was the testing facility, and all test results from the laboratory are accepted as evidence in the state's courts. The fact that New Jersey's urine-collecting and urine-testing policies and procedures are valid and accurate represents a primary assumption of this research.

Time Period between Arrest and Sentencing

The time period between arrest and sentencing can range from approximately one or two months to one year. However, the average time is approximately six months. Municipal court cases represent the shortest period from arrest to sentencing. Unlike Superior Court Cases, Municipal Court cases are less serious and, therefore, usually adjudicated within a

month or two after the date of the offense. If the defendant is found guilty after trial or pleads guilty, then the individual can be immediately sentenced to a term of probation.

Procedure

The study began on April 29, 2004 and was completed on December 30, 2004. The original test design called for the collection of urine samples from each participating probationer. The samples were processed under complete anonymity; only the division's staff members knew which tests were being used in the study. The laboratory did not know the identity of the test subjects.

Regardless of the number of times that a probationer reported and submitted to urine monitoring, if the probationer tested negative each time, the probationer's name would be entered once and the negative results would be reflected once. If a probationer reported three times and tested positive for different drugs each time, the probationer's name would be entered only once; however, all three drugs would be identified. If the probationer reported three times and tested positive once, then the indicated test results would show one positive. If a probationer reported once and tested negative, then the test results would reflect that negative status.

Statistical Procedures

The data was collected in response to four demographic questions, concerning the race, gender, age, and drug preference of the tested population.¹⁷

1. “Do male probationers exhibit a higher ratio of positive urine test results than do female probationers?” The Chi-square test of Independence was used in this particular case because positive urine specimens were tested between two categories, male and female.

The test was chosen to quantify the members within the two gender categories who fell into the two descriptive categories of positive or negative. Specifically, the data were tested to determine whether the differences in the ratio of positive test results occurred by chance.

2. “Do Caucasian males have a greater ratio of positive test results than do African-American and Hispanic males?” The Chi-square Test of Independence was also used here because positive and negative urine samples were tested among three racial categories: Caucasian, African-American, and Hispanic. Again, the test was chosen to count how many members within the three racial categories fall into each of the two descriptive categories. The data was tested to determine whether the differences in the ratio of

¹⁷ The probationer completed the blank space for race, gender and age.

positive tests results were valid or if the differences occurred by chance.

3. “Do probationers 25 years of age or older have a greater ratio of positive test results than do probationers less than or equal to 25 years?” The Chi-square Test of Independence was used here because positive and negative urine tests were being examined between two age categories. The test was chosen to count how many members within the two age groups fell into the two descriptive categories. Once again, the data was tested to determine whether the differences in the ratio of positive results were significant or occurred by chance.

4. “Is THC the preferred drug of the tested probationers?” A z-test was used to determine if the data represented rankings or if the results occurred by chance. The z-test was used to check whether two samples (THC and cocaine) are likely to have come from the same or from different populations.

FINDINGS

Before discussing the research findings, it is important to comment on some facts relating to the data collection. A number of test participants failed to answer various questions. All valid test questions were used and identified, along with the number of participants that did not answer the specific question. The variables that were tested were:

- Race
- Age
- Gender¹⁸
- Drugs¹⁹

The probationers who did not answer specific questions or for whom data was not entered were deleted from the corresponding analysis.

Entries in which the urine test result was provided but no demographic data were given also were deleted. There were 652 research participants remaining left to research.

1. A goal of the study was to find the effect of gender on test results in those cases for which gender (male or female) was provided. Out of the remaining 652 cases, there were 86 for which

¹⁸ Please see Table C, D, and E for information relating to the variables and results findings.

¹⁹ Please see Table D for research drug findings

the gender of the probationer was not provided. The results are based on the remaining 566 cases.²⁰ The data was summarized to obtain the urine test results for both male and female probationers subsequent to the omission of the missing cases.

From table (D), the proportion of male positive urine test results is 39.87 percent, and the proportion of female positive urine tests is 40.21 percent. To answer the question of whether the male probationers exhibit a higher ratio of positive urine test results than female probationers, the null hypothesis was set as: “The ratio of positive urine test results is the same for both male and female probationers.”

Using the Chi-Square Test of Independence to determine whether there is any dependency between the classifying variables of male and female, the test failed to reject the null hypothesis with a p-value of 0.96. In hypothesis testing, the p-value can range from .0 to .10; when the p-value is high, the null hypothesis is accepted. When the p-value is low, the null hypothesis is rejected. Since the result of this test was $p=0.96$ it has been determined that the ratio of positive urine test results is the same for both male and female probationers.

2. First, the data was summarized into combined Table C, which shows the urine test results for African-American, Caucasian, and

²⁰ Please see the combined table C

Hispanic males. The percentage of positive results is 31.91 percent among Caucasian males, 41.31 percent among African-Americans males, and 37.28 percent among Hispanic males. To answer the question, the null hypothesis was set as: “The ratio of positive urine test results is the same for black males, white males and Hispanic males.”

The Chi-Square Test of Independence was applied to determine whether the proportion of positive results is the same for Caucasian, African-American, and Hispanic males. The equality of the proportions was tested for positive urine results among the three groups. The test failed to reject the null hypothesis ($p= 0.42$). Since the p-value is significantly large, it can be concluded that Caucasian, African-American, and Hispanic males have the same ratio of positive urine test results.

3. The data was summarized after removing the missing cases. The percentage of positive results among the age group of less than or equal to 25 is 43.28 percent, and it is 36.46 percent for the older age group (see table E). For testing if probationers over 25 years have a greater ratio of positive test results than probationers of less than or equal to 25 years, the null hypothesis was set as: “The ratio of positive urine test results is the same for both the age groups.”

Using the Chi-Square Test of independence, the null hypothesis ($p=0.12$) was not rejected, concluding that the ratio of

positive urine test results is the same for both the age groups.

Again, the p-value was sufficiently large to allow for the acceptance of the null hypothesis.

TABLE E AGE RESULTS:

	Age≤25	Age>25
Positive	129	97

4. The goal in this test is to establish the preferred drug that is being abused by probationers in Essex. Determining whether the obviously disparate differences were significant or merely a chance occurrence will accomplish this task. Since the relationship between three or more variables was being tested, the decision to use the z-test was made.

Table D shows the list of positive results. The list stopped at alcohol, which showed just seven positive test results. The final group of positive drugs was not identified because of the extremely small numbers. This group included probationers that tested positive for more than one drug. The last column shows the percentage of positive samples that tested positive for the listed drugs. There were 297 positive test results studied for this test. It was clear that a majority of the positive results were for THC. The second most used drug was cocaine. The drugs with a small number of people using them were pooled together in the “other drugs” category.

Two tests were performed on the data to determine whether THC is the preferred drug among probationers. The first test answered whether the population proportion of THC users was more than 55 percent. Fifty-five percent was chosen because it represented a clear majority that would establish THC the preferred drug among the tested population. The results of a z-test ($p=0.99$) showed that the proportion of THC users is more than 55 percent and that THC is the preferred drug of the tested probationers.

Cocaine was the second most abused drug by Essex Probationers. Thirty percent was chosen as a marker to confirm cocaine as the second most preferred drug among the tested probationers. Since Table D clearly identifies cocaine as the second most abused drug, confirmation was needed to prove that the rank was valid and did not occur by chance. The z-test, which resulted in $p=0.96$), confirmed that the cocaine user proportion is less than 30 percent. The conclusion is that THC is the preferred drug among the probationers.

TABLE D
RESULTS SUBSTANCES ABUSED (DRUGS)

Drug Type	# of Probationers	Percentage
THC	179	60.26%
Cocaine	38	12.79%
Opiates	11	3.70%
Alcohol	7	2.35%
Multiple drugs ²¹	49	16.49%
Other drugs	13	4.37%

²¹ Multiple drugs, those cases in which the subjects tested positive for more that one drug.

CONCLUSIONS

Conclusion #1: The Division Does Collect Sufficient Demographic Data Regarding Its Probationers.

Based on the findings of this research there was sufficient demographic data collected by the division to answer the four questions of gender, race, age and the identity of the tested probationers' preferred drug. As a result, the answer to the first question was that the division does collect sufficient demographic data concerning its probationers.

Conclusion #2: The Division Does Not Utilize the Demographic Information Efficiently to Reduce the Cost of Drug Testing.

Utilizing the research findings, a cost-benefit analysis was constructed. The analysis detailed the current drug-testing costs and compared them to the projected costs after the implementation of the improved testing procedures. The analysis revealed a significant savings. The answer to the second question is: The division does not utilize the demographic information efficiently to reduce the cost of drug testing.

In addition to the reduction of the costs of drug testing, improvements in the way in which the division treats and refers substance-abusing probationers can be improved. The improvements can positively affect the instances of substance abuse and relapse, as well the budgetary drain that unnecessary testing has created.

RECOMMENDATIONS

Recommendation for Drug Testing

In that the measurable goal of this research is the reduction of the cost of drug testing, this research has been successful. The division's administrators can benefit from the findings of this research in several ways. Primarily, the data can save the division money due to refined substance-abuse-testing procedures. As the drug problem continues to increase, substance abuse testing is becoming increasingly expensive. The ACOT Panel is the most popular panel; it detects alcohol, cocaine, opiates, and THC in the urine. However, according to the survey results, the division can save money by ordering the more expensive test panels less frequently

In the cost-benefit analysis, tests in the higher cost panel 90011 were reduced by 35 percent and tests in panel 90013 (ACOT) were reduced by 40 percent (see Appendix G). The lower-cost panels were increased. The THC panel was increased by 120 percent and the alcohol panel was increased by 35 percent. This exercise created a monthly savings of \$633.53. This figure is proof that the division's testing protocol can be altered to utilize the specific testing modality that is efficient in detecting THC.²² The THC urine panel will be highly

²² Currently, the Probation Division utilizes four test modalities: the traditional urine test, test cup, test swab, and the eye-scan recognition software.

recommended. The recommendation will be proposed in consideration of the cost factor.²³

The urine test charges that are detailed in the exercise reflect one month's urine monitoring expenditure for the division. The savings outlined in the cost-benefit analysis represent only a partial gain, particularly when one considers that rehabilitation will lessen the need for increased urine testing.

The research found no differences in the ratio of positive results among the tested population in the gender, racial, and age classifications. More effective and economical treatment modalities can be established. Adding to the above stated research benefits is the homogeneity of the tested population's preference for THC. The population's drug usage is homogeneous in character, with 60.26 percent of the tested population scoring positive for THC, with cocaine and opiate positives showing a distant second (12.79 percent) and third (3.70 percent) respectively.

What is important about obtaining this information is that the division now has definitive knowledge regarding this questionable area. Before this research, males were treated more intensely than females. The probation division now knows that the same intensity must be applied to treatments regardless of gender.

²³ Please see Appendix G, cost-benefit analysis.

Recommendation for Continued Partnership Involvement

With the realization that THC is the preferred drug of the probation population, the recommendation is that the division continues to participate in partnerships with stakeholders in the field. Continued involvement in the GNSCI and the adult drug court will afford the division the opportunity to press for closer observation, monitoring, and arrest, if necessary, of those in the community that sell or otherwise traffic in marijuana.

Recommendation for Additional Research

There are several ways that the vicinage courts can benefit from this study. One benefit is in the area of continued research. Further research is recommended in the area of race and the war on drugs. The work of Miller, Mauer, and Huling revealed the large variance of ideas with regard to this area; additional research can add to the body of literature. Further research can add further fuel to the fires of discontent, dilute the effects of the prior research, or prove noncommittal. Whatever the results, the universal reduction of drug abuse is and should be the primary goal of all research in the field.

Statistics reported in the Uniform Crime Report (see Table F) appear to differ from our research findings. The findings held marijuana (THC) to be preferred drug among the tested population. However, the Uniform Crime Report statistics show much higher arrests in the sale of

opium and cocaine than in THC. The court can attempt to verify these research findings by conducting studies on the quantity of drug-related arrests. Theoretically, in that THC is the preferred drug among the tested probationers, one can extrapolate and state that there should be a representative number of marijuana-related arrests. The abuse of THC should result in more THC-related arrests.

This topic is a very interesting area of research because it necessarily carries the current research to a different level. Although attempts at decriminalizing marijuana were addressed in the review of relevant literature, the role of the law enforcement community regarding the issue was not addressed. Are police neglecting to arrest marijuana traffickers in order to arrest the more “high-level” cocaine or opium traffickers?

The answer to that question would be interesting to study. As stated, the Uniform Crime Report shows a much higher number of arrests for the sale and manufacture of opium and cocaine than for any category of THC offenses. Moreover, the arrests for marijuana possession increase dramatically when the offense is lowered to mere possession. It is at that juncture that the statistics of the Uniform Crime Report begins to simulate the findings of this study. In fact, it appears that the 2002 study was validated by the current research findings of the Essex Vicinage probationers.

In Essex County's statistics of arrests for drug offenses in the 2002 Uniform Crime Report, there were 267 marijuana-possession arrests.²⁴ This number is in comparison to zero synthetic-narcotics-possession arrests.²⁵ The data also confirm the division's policy of using the ACOT drug-analysis panel as opposed to the more expensive ABBCMMOPP panel. Although the ABBCMMOPP panel will detect the presence of some common synthetic or designer drugs, this research reveals that since the entire class of drugs totaled only 4.37 percent of the positives for our total tested population, its use in Essex County would not be cost-effective.²⁶

An arrest offense can tell a story. For example, the offense of possession of a controlled dangerous substance is primarily a charge imposed against individuals who use the drug, in contrast to the offense of selling and manufacturing a drug. "Possession" is a user's offense, whereas sale and manufacturing propels the charge to a business level. This difference is that a conviction for the latter offense will mandate a harsher penalty.

²⁴ Please see Table F.

²⁵ Ibid.

²⁶ Please see Table D, Results substances abused.

It is important to note that the Uniform Crime Report reveals that Essex County may have a more serious problem with CDS sale and manufacture problem than one of mere usage. While there were eighty-eight-marijuana sale and manufacturing arrests in 2002, there were (627) arrests for the sale and manufacturing of opium and cocaine. Again, these statistics contradict the rationale previously expounded upon.

Are law enforcement officials concentrating on making the “high-level” arrests? If so, the answer to the discrepancy in the number of arrests for the sale and manufacture of the two classes of drugs and the contrasting results of this research may be partially answered. The answer to this question is very important when analyzing the results of the current research because it is obvious that upon the sale and manufacture of CDS, will lead to the abuse of that drug. As has been noted in observing Table D of this study, the number of cocaine and opiate positives is a distant second to THC (see Table D). Further research is recommended to answer this question.

The survey results conclusively show that THC represents the primary abused drug by probationers of the division. Other contributory factors must be taken under consideration when gathering data to aid in formulating the division’s subsequent course of action. After looking to the law enforcement establishment for possible reasons for the differences, the spotlight can be turned to the question of the test results.

Can these test results be skewed by nature? A biological fact that cannot be overlooked is that the THC in marijuana stays in the system of the abuser longer than most other substances. The drug is strongly absorbed by fatty tissues in various organs. THC may be detected in casual users between seven to ten days after use; however, a heavy user can test positive for two to four weeks. (American Psychiatric Association 239)

The length of time that cocaine and opiates remains readily detectable in the body compared to THC varies. The length of time these drugs remain in the body depends upon a number of variables, such as metabolic rate, dose, and method by which the drug was taken. Other factors that determine how long a drug can be detected include the cutoff concentration used by the testing laboratory.²⁷ Is it possible that the statistics used to accomplish these research findings are accurate yet human biological processes render drugs such as cocaine undetectable in normal levels? Further research in this area may answer the question.

Recommendation for the Establishment of Juvenile Drug Courts in New Jersey

In the Essex Vicinage, the current research revealed that the ratio of positive urine test results is statistically the same for participating probationers under and over the age of 25. The State of New Jersey has established the operation of drug courts as a best practice, and since 1996,

²⁷ The laboratory sets the standard levels of THC for test panel 90013 (ACOT); (please see Table B).

there have been an increasing number of adult drug courts becoming operational. Since the inception of the adult program, 4,612 participants have enrolled in the program, with 51 percent being African-American, 35 percent Caucasian, 13 percent Hispanic, and 1 percent Other. A total of 428 individuals have completed the Adult New Jersey Drug Court Program.

This research reveals that the state should accelerate the establishment of juvenile drug courts. Currently, juvenile drug courts are in operation on a trial basis in only a few vicinages.

Recommendation for Counseling and Referrals

Another important recommendation would be to employ the substance abuse evaluators to perform some of the routine counseling duties. Rather than referring all of the probationers to outpatient treatment facilities, the division will be more effective in its rehabilitative efforts if it provides in-house counseling to a select number of occasional users. In providing such counseling, the division will accomplish customer satisfaction by providing services to probationers who need counseling before they become heavily involved in drug abuse.

Most of the treatment facilities utilized by the individual services that belong to the division's referral network subscribe to the twelve-step theory and prototype. The twelve-step theory is the most effective treatment modality. There is a prototypical program for any number of

and types of addictions. There are three basic tenets of the twelve-step program:

- Individuals with addictive disorders feel powerless over their addiction, and their lives are unmanageable.
- Although individuals with addictive disorders are not responsible for their disease, they are responsible for their recovery.
- Individuals can no longer blame people, places, and things for their addictions; they must face their problems and their feelings. (GSC 23)

It is in the area of counseling and referral, a primary reason that this research was conducted, that the division can secure respect in the community by providing beneficial services. The research findings began the first step toward the possible revamping of the way in which the division counsels and refers probationers to substance abuse treatment. In that the tested population showed no significant differences related to age, race, and gender in the ratio of positive urine test results, specific policy changes can be made.

Recommendation for Referral Procedures

Another area that can be examined is the way in which the substance abuse evaluators refer probationers to various programs for treatment. The results of this research suggest that the probationer population is similar across all racial, gender, and age lines, in the use of

marijuana, cocaine, and opiates. Therefore, it would not be enormously difficult to establish an in-house treatment modality to counsel and otherwise treat needy probationers. The latter concept is important because many indigent probationers lack the necessary health benefits or ability to pay that is increasingly a prerequisite to the receipt of services.

Despite the valued partnerships that the division has with many of the treatment facilities, many probationers are lost in the crucial time between referral and acceptance in the referred facility. In some cases, probationers are, unfortunately, never able to receive needed treatment before becoming involved in additional infractions of the law. Re-arrests all too often require submittal to probation and incarceration.

TABLES

TABLE A: Outcome-Based Standards and Mandate Requirements for Drug Testing²⁸

Standard 6	<p>The intake process is when the probation officer gathers the crucial information to develop the supervision strategy. A thorough investigation and assessment of all relevant information leads to a more complete and appropriate plan for supervision. Appropriate drug testing is an important aspect of the process.</p> <p>The initial intake process shall consist of the outcome-based guidelines that calls for the following:</p> <p>Initial urine drug test if the probationer is under supervision for a drug offense, has a drug-use history, or shows evidence of symptoms of use. A urine test is also taken if the court orders a test or if the professional judgment of the officer indicates a test is needed.</p> <p style="padding-left: 40px;">1 Referral to treatment if ordered or indicated.</p>
Standard 19	<p>When treatment is required, either based on a court order or the officer’s assessment, the probation officer shall make the referral to the appropriate treatment facility or provider within thirty days, and shall follow up to ensure that the probationer arrived and was interviewed and to determine the status of the referral.</p> <p style="padding-left: 40px;">1 Treatment most often needed is substance abuse treatment. This ranges from residential treatment to outpatient counseling.</p> <p style="padding-left: 40px;">2 Whatever treatment is required, it is essential that the probation officer make a prompt referral for services. The referral must be followed up to ensure that the probationer went to the facility and was interviewed. The officer needs to know the result of the interview, and often can provide additional information to the program. The officer may be able to facilitate acceptance of the probationer by intervening with staff to advocate on behalf of the probationer.</p>

²⁸ Outcome-based standards govern the supervision policy and procedures for New Jersey State Probation.

TABLE B: Urine Test Panels

Panel #90011 (ABBCMMOPP) Cost: \$9.82	
Tests for the presence of:	A=Amphetamine; B=Barbiturate; B=Benzodiazepines; C=Cocaine; M=Methequalone; M=Methadone; O=Opiates; P=Phencyclidine; P=Propoxyphene
Panel #90012 (ABBCMO) Cost: \$8.52	
Tests for the presence of:	A=Amphetamine; B=Barbiturate; B=Benzodiazepines; C=Cocaine; M= Methadone; O=Opiates
Panel #90013 (ACOT) Cost: \$5.53	
Tests for the presence of:	A=Alcohol, C=Cocaine; O=Opiates; T=Tetrahydrocannabanois
Panel #90014 (CMO) Cost: \$4.30	
Tests for the presence of:	C=Cocaine; M=Methadone; O=Opiates
Panel #90015 (THC) Cost: \$1.53	
Tests for the presence of:	THC
Panel #90016 (ALCOHOL) Cost: \$1.53	
Tests for the presence of:	Alcohol

TABLE C: Research Data

Number of Positive Urine Tests for Essex				
Gender	RACE			
	Black	White	Hispanic	All
Male	145	15	24	184
Female	25	9	3	37
Totals	170	24	27	221

TABLE F: Uniform Crime Report 2002

ESSEX

OFFENSE	2002
Drug Abuse Violations-Total (18)	1,131
Drug Abuse-Sale/Manufacture (180)	720
Opium/Cocaine-Sale/Manufacture (18A)	627
Marijuana-Sale/Manufacture (18B)	88
Synthetic Drug-Sale/Manufacture (18C)	5
Other: Dangerous Non-Narcotics (18D)	0
Drug Possession-Subtotal (185)	411
Opium/Cocaine-Possession (18E)	136
Marijuana-Possession (18F)	267
Synthetic Narcotics-Possession (18G)	0
Other Drug-Possession (18H)	8

APPENDIX A

**Data as of January 2005
Essex County Probation Division General Statistics**

Distribution of Active Clients by Gender

GENDER	CLIENTS	PERCENT
Male	6,280	78.27
Female	1,475	18.38
Unknown	268	3.34
TOTALS	8,023	100

APPENDIX B

Distribution of Active Clients by Age:

	CLIENTS	PERCENT
UNDER 16	6	.07
16 TO 20	783	9.76
21 TO 30	3,389	42.24
31 TO 40	2,114	26.35
41 TO 50	1,243	15.49
51 TO 60	393	4.90
61 TO 70	70	.87
71-80	17	.21
UNKNOWN	8	.10
TOTALS	8,023	100

APPENDIX C:

Distribution of Active Clients by Race:

RACE	CLIENT	PERCENT
Caucasian	898	11.19
Black	5,732	71.44
Hispanic	921	11.48
Asian Oriental	22	.27
Native American	9	.11
Alaskan Native	0	0
Other	72	.90
Unknown	369	4.60
TOTALS	8,023	100

**APPENDIX D
ESSEX COUNTY PROBATION DIVISION
SUBSTANCE ABUSE STUDY**

DEMOGRAPHIC INFORMATION CARD (APPENDIX 11)

CAPS ID # _____ TODAY'S DATE _____

1. Age _____ YEARS

2. Sex/Gender Circle:
Male or Female

3. Race _____

4. Currently on probation
for drug related offense? Circle:
Yes or No

5. Any prior drug related Circle:
Yes or No

**APPENDIX E
ESSEX COUNTY PROBATION DIVISION
SUBSTANCE ABUSE STUDY**

RESPONSE CARD (APPENDIX 1)

TODAY'S DATE _____

- | | | |
|----|---|--|
| 1. | Are you taking any medicine/drugs? | Circle:
Yes or No |
| 2. | Have you taken anything for a cold,
flu or headache within the past
two days? | Circle
Yes or No |
| 3. | Do you currently have a prescription? | Circle
Yes or No |
| 4. | Have you ever used any illegal drugs? | Circle
Yes or No |
| 5. | If yes to question 4 how long ago
Did you take the illegal drug? | insert number
Hours _____
Days _____
Weeks _____
Months _____
Years _____ |

APPENDIX F

GLOSSARY OF TERMS

- Amphetamines:** The term “amphetamine” is used to refer to a large class of stimulants. The most commonly used amphetamines include Dexedrine and Ritalin.
- (Designer) Amphetamines: (MDMA or “Ecstasy”)** A synthetic, psychoactive drug with both stimulant (amphetamine-like) and hallucinogenic (LSD-like) properties. Street names include E, Hug Drug, Disco Biscuit, White doves, New Yorkers, Lover’s Speed, and XTC.
- Cocaine:** Cocaine is extracted from the leaves of the coca bush grown in South America.
- Heroin:** Heroin is an opioid. Heroin can be a white to dark brown powder or a tar-like substance that is injected, inhaled, or smoked.
- Inhalants:** Inhalants are a group of chemicals that produce vapors, which when inhaled interfere with normal functioning.
- Methamphetamines:** These stimulants are made in makeshift labs or imported into the United States.
- LSD:** Lysergic acid diethylamide (LSD) is perhaps the best-known hallucinogen.

Opiates:	This class of drugs includes opium, morphine, codeine, heroin, and heroin.
Oxycodone:	Oxycodone, like heroin, is an opioid. It has gained popularity in the past years.
Phencyclidine (PCP):	Common street names include angel dust, drip, sherm, and water. Frequently it is sprinkled on marijuana and smoked or used in combination with crack or other drugs.
Stimulants:	Stimulants are drugs that are very similar to our hormones adrenaline and epinephrine.
THC (Tetrahydrocannabinol):	A physiologically active chemical $C_{21}H_{30}O_2$ from hemp plant resin that is the chief intoxicant in marijuana.
TASC:	Treatment Alternatives to Street Crime Program.
Drug Court:	The first drug court was implemented in 1989 in Miami, Florida, when Judge Herbert M. Klien became frustrated with the impact of drug offenses on the county court system.

APPENDIX G

Cost-Benefit Analysis

Current

JANUARY 2005-CURRENT TEST & CHARGES				
	PANEL#	CHARGE	COUNT	TOTAL CHARGE
ABBCMMOPP	90011	\$9.82	117	\$1,148.94
ABBCMO	90012	\$8.52	5	\$42.90
ACOT	90013	\$5.53	194	\$1,072.82
CMO	90014	\$4.30	4	\$17.20
THC	90015	\$1.53	94	\$143.82
ALCOHOL	90016	\$1.53	51	\$78.03
			465	\$2,503.71

Proposed

JANUARY 2005-PROPOSED TEST & CHARGES				
	PANEL#	CHARGE	COUNT	TOTAL CHARGE
ABBCMMOPP	90011	\$9.82	76	\$746.32
ABBCMO	90012	\$8.52	5	\$42.90
ACOT	90013	\$5.53	116	\$641.48
CMO	90014	\$4.30	4	\$17.20
THC	90015	\$1.53	207	\$316.71
ALCOHOL	90016	\$1.53	69	\$105.57
			477	\$1,870.18

Based on research data in Table D. 90011 reduced by 35 percent, 90013 reduce by 40 percent, 90015 increased by 120 percent, 90016 increased by 35 percent. **Results in a savings of \$ 633.53 per month.**

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