A STUDY OF JUVENILE OFFENDERS

in St Thomas and St Croix, USVI

Submitted to:

The Law Enforcement Planning Commission
Government of the US Virgin Islands

Prepared by:

The Eastern Caribbean Center
University of the Virgin Islands

June 2003

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Acknowledgements

The 1990s was a particularly stressful decade for Virgin Islands parents, school administrators and teachers. Reports in the media of the increasing level and frequency of violence among youth across the Territory shocked adult residents into the realization that the culture of juveniles was very different from that within which they were raised. Perhaps the low points were reached when it became evident that dangerous weapons, including firearms, were being smuggled by high school students on to the campuses, and when this deviant behavior ultimately led to homicide.

Inevitably, many in the community looked to our elected leaders for answers to the questions concerning the estrangement of our youth. It was with this background that former Virgin Islands **Senator Allie "Allison" Petrus**—who campaigned on a platform of youth issues—invited the Director of the Eastern Caribbean Center (ECC) to his office to discuss the possibility of conducting a penetrating study of juvenile behaviors. It was not until funds to support this activity were identified by **Ms Helene Smollett** of the Law Enforcement Planning Commission (LEPC) that this study got underway.

The first formal meeting to launch this effort was held at the LEPC offices in Sub-Base, St Thomas under the patronage of former **Commissioner of Police Ramon Davila**. Also present at that meeting was former Commissioner of the Department of Human Services **Ms Catherine Mills**. She was very instrumental in suggesting that analysis should be undertaken to flesh out an explanation why some youth become recidivist and others do not.

When the decision was made to have data collected on youthful offenders from records within the police department, two officers stand out for their contribution in supervising this task. They are **Sgt Merlin Christian** of the St Thomas Juvenile Investigation Bureau, and **Sgt Thomas Hannah** of the St Croix Youth Investigation Bureau. ECC also acknowledges the endeavors of the many other officers on both islands who assisted with this aspect of the project.

There were many juveniles for whom records existed in both the Police Department and the Department of Human Services, and it was considered critical to link the two. ECC had the unhesitating support of Human Services **Commissioner Sedonie Halbert**, and it was no less fortunate in having the enthusiastic encouragement and willingness to help of **Ms Janet Turnbull-Krigger** in the St Thomas office. **Ms Carol Battuelo** in the St Croix office was equally supportive as she supervised the collection of data.

This report has benefited enormously from the input of several staff members of the Eastern Caribbean Center during the time it required to

complete it. One of our former staff, **Ms Carmen Rogers-Green**, provided significant input in the early stages of the project, including survey instrument development, data collection, tabulation and the initial writing of the report. **Mr Ramesh Srivastava**'s statistical expertise proved invaluable in proofing and certifying many of the statistical tables that appear in the report. And even though **Ms Marsha Penn**'s tenure with the Center was not very long, her willing contribution in helping to bring the report to near completion is sincerely appreciated.

I particularly wish to recognize the current members of staff who have endured my exhortations to get this report into the hands of those who desire to understand what the data on juvenile offenses are saying about our community. Long-term staff member **Ms Annette Gumbs** deserves applause for the valuable assistance she provided through all phases of project planning, data collection and processing, as well as in the development of the report. Our relatively new staff member **Mr James Richardson** is also complimented for introducing new energy into the project, especially through his skills in producing our first single integrated electronic report. I value no less the enthusiasm and assiduousness of our latest staff member, **Dr Marcy Mason**, who not only reviewed the entire draft report, but who contributed through her skills several improvements in formatting, presentation and interpretation.

Finally, ECC could not have completed its work without the support of several institutional offices, including: the office of **Vice Provost Dr Henry Smith**, that of Financial Management, Human Resources and Accounting.

I thank all of those mentioned above, as well as those I may have inadvertently overlooked, and hope that through this work we will all help to improve the quality of life for the youth in the Virgin Islands community.

Frank L. Mills
Director

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

HIGHLIGHTS

ST THOMAS

Juvenile Investigation Bureau

- The largest number of recorded first-time juvenile offenses committed between 1980 and 1997 was in 1991 with a total of 298.

- About 24 percent of the total number of first time offenses was classified as incidences (which include run-away and missing minors).

- Out of every 10 juvenile offenders, 8 did not use a weapon in committing their first offense.

- About 36.3 percent of all juvenile offenders committed two or more offenses.

- Approximately 7 out of 10 juvenile offenders were born in the US Virgin Islands.

- Juvenile offenders born in Puerto Rico comprised the highest percentage—41.3—of repeat offenders among all ethnic groups.

- Juvenile offenders born in the US Virgin Islands had the lowest percentage of any group classified as not using a weapon during the commission of an offense.

- Most repeat offenses—21.2 percent—occurred between 12 to 24 months after the first offense.

- At the time of their first offense, one out of every five—or 20 percent of— juvenile offenders was 15 years old; most males—18.9 percent—committed their first offense at this age, while most females—22.5 percent—recorded their first offense at age 14.

- Approximately 50 percent of juvenile offenders born in the US Virgin Islands were between the ages of 10 and 14.

- About 48 percent of first-time offenders between the ages of 10 and 14 had mothers who were born in the US Virgin Islands, and 43.3 percent had fathers who were born in the US Virgin Islands.

- Ninety-six percent of juvenile offenders were black.

- ✍ Approximately 50 percent of juvenile offenders lived in a household with their mother, but without their natural father.

- ✍ Eighty-eight percent of juvenile offenders were enrolled in school at the time of their offense.

- ✍ About 91 percent of the offenders were attending junior high or high school at the time of their offense, while 9 percent were in elementary school.

- ✍ Among all offending juveniles, 40 percent were children of mothers born in the Eastern Caribbean.

- ✍ Seventy-three percent of mothers of juvenile offenders were employed at the time of their arrest.

Predicting Recidivism with Juvenile Investigation Bureau Data

- ✍ For every increase in age by one year (between 7 and 17 years) the odds of being a repeat offender more than triples, but the chances of recidivism increase at a decreasing rate.

- ✍ Males are almost twice as likely as females to be repeat offenders.

- ✍ Offenders born in the US Virgin Islands or in the Eastern Caribbean are almost twice as likely to be recidivists as children born in the United States, whereas juveniles born in Latin countries are about one-and-a-half times as likely to be recidivists as United States born children.

- ✍ Juveniles with one offense who live with a mother and a step-father or with foster parents are nearly twice as likely to be repeat offenders as first-time offenders who live with their natural parents (singly or together), a father and step-mother (singly or together) or with relatives.

- ✍ First-time male juvenile offenders, between 8 and 15 years old, born in the US Virgin Islands and living with a mother and step-father or with foster parents, have a relatively high risk of being repeat offenders.

- ✍ Females most at risk of recidivism are those who are 12-years old, born in either the US Virgin Islands, in a Latin country or the Eastern Caribbean, and who live with their mother and step-father or with foster parents.

Department of Human Services

- Approximately 85 percent of all juvenile offenders were male.
- About 86 percent of offenders were citizens of the United States.
- Nearly 19 percent of juvenile offenders were 15 years old.
- Three out of four offenders were born in the US Virgin Islands.
- The majority of juvenile offenders—96.4 percent—were black.
- While a mother was present in the household of juvenile offenders 87.1 percent of the time, a father was present in the household only 30.6 percent of the time.
- The majority of the mothers of offenders—61.2 percent—fell within the 40-to-49-year age group, while the fathers were most represented in the 50 and over age group.
- Approximately half of the mothers of juvenile offenders were born in the Eastern Caribbean and about 60 percent of the fathers were born in the Eastern Caribbean.
- Forty-seven percent of the mothers of offenders were married and 51 percent of the fathers were married, although not necessarily to each other.
- About 74 percent of the mothers and fathers of juvenile offenders were employed.
- Nearly one out of every two juvenile offenders were living with their mother.
- Thirty-seven percent of the natural parents of offenders were never married to each other.
- About 23 percent of juvenile offenders lived in a household with either one or two siblings.
- Eighty-four percent of offenders were enrolled in school; however there was no certainty as to actual attendance and participation.
- The majority of juvenile offenders—86.7 percent—were employed.
- About sixty-two percent of juvenile offenders lived in a household with three or more children.

- ✍ Ninety-six percent of juvenile offenders did not have any children of their own.
- ✍ Approximately 58 percent of juvenile offenders had been suspended from school.
- ✍ Twenty-six percent of offenders had not used drugs or alcohol.
- ✍ About 43 percent of juvenile offenders had trouble controlling their anger and 41 percent experienced frequent arguments and fights.
- ✍ Fifty-eight percent of juvenile offenders were sexually active.

Predicting Recidivism with Department of Human Services Data

- ✍ STT / DHS data confirm the STT / JIB findings on recidivism:
  - ✍ That each year after age seven the likelihood of a repeat offense more than triples;
  - ✍ That males are over twice as likely as females to be charged with more than one offense;
  - ✍ That juveniles born in the US Virgin Islands or the Eastern Caribbean are about three time as likely to be recidivist as those born in the United States; and
  - ✍ That a first-time offender who lives with a mother and step-father or foster parents is more likely to be charged with at least one other offense than one who lives with natural parents (singly or together), a father and a step-mother (singly or together), or with relatives.
- ✍ Additionally, a first-time offender who admits to feelings of failure or worthlessness is twice more likely to be a recidivist than one who does not.
- ✍ Males between 8 and 16 years who were born in the US Virgin Islands and who have low self-esteem and live with a mother and step-father or foster parents are predicted to have a high chance of being a repeat offender.
- ✍ A 12-year old female born in the US Virgin Islands or the Eastern Caribbean who expresses feelings of failure or worthlessness and lives with a mother and step-father or foster parents has a high risk being a recidivist.

ST CROIX

Youth Investigative Bureau

- ✍ The largest number of recorded first-time juvenile offenses committed between 1980 and 1997 was in 1995 with a total of 753, and the second highest was 435 offenses in 1991.

- ✍ About 41 percent of first-time offenses were Part I and II felonies.

- ✍ The overwhelming majority of offenders—84.6 percent—committed only one offense; only 15.4 percent were repeat offenders.

- ✍ Two-thirds of the female offenders committed their first offense between the ages of 14 and 16.

- ✍ Two-thirds of the male offenders committed their first offense between the ages 15 and 17.

- ✍ Eighty percent of juvenile offenders were born in the US Virgin Islands.

- ✍ About 77 percent of the mothers of juvenile offenders were born in the U.S. Virgin Islands and approximately 69 percent of the fathers of juvenile offenders were born in the U.S. Virgin Islands.

- ✍ Approximately three out of every four or 75 percent of female offenders were black and about 77 percent of the male offenders were black.

- ✍ Only 3.7 percent of juvenile offenders were not enrolled in school.

- ✍ Nearly 76 percent of female offenders resided in homes where the mother only was the householder.

- ✍ Approximately four out of every five male offenders lived in homes where the mother only was the householder.

- ✍ About 71 percent of first-time offenders were attending high school.

Predicting Recidivism with Youth Investigation Bureau Data

- YIB data in St Croix suggest that:
  - Males are nearly twice as likely to be repeat offenders than females;
  - Offenders enrolled in school at the time of their first charge are between three and four times more likely to be recidivist than those who are not enrolled;
  - Juveniles who commit their first offense while in Grade 12 have more than twice the likelihood of being charged again than those who are not in Grade 12.
  - An offender who has a relative that has been previously charged with a criminal offense is almost seven times more likely to be a recidivist compared to one who does not have such a relative.

Department of Human Services

- About 86 percent of juvenile offenders were male.
- Approximately 94 percent of juvenile offenders were classified as a citizen of the United States.
- Juvenile offenders were most represented in the 16 year age category.
- The majority of the offenders—84.6 percent—were born in US Virgin Islands.
- About 98 percent of the juvenile offenders were black.
- Only 27.8 percent of the offenders had a father as a householder, but 86.1 percent lived in homes with a mother as a householder.
- More than half of the mothers—51.1 percent—of juvenile offenders fell in the 30-to-39-year age group, while the majority of fathers were in the 40-to-49-year age group.
- The majority of juvenile offenders had mothers—41.1 percent—and fathers—57.3 percent—who were married, although not necessarily to each other.
- More than half of the juvenile offenders—51.8 percent—lived with their mother only at the time of their first offense.

- ✍ Forty percent of the natural parents of juvenile offenders were never married to each other.

- ✍ The majority of offenders live in a household with less than three siblings.

- ✍ About 78 percent of the offenders were enrolled in school at the time of their first offense.

- ✍ The highest percentage of juvenile offenders—26.8 percent—was in Grade 7 at the time of their first offense.

- ✍ Only 15.7 percent of the juvenile offenders were employed.

- ✍ Nearly half of the offenders lived in a household with three or more children.

- ✍ Approximately three percent of offenders had children.

- ✍ About 2 out of every 10 offenders were responsible for childcare.

- ✍ About 36 percent of the juvenile offenders expressed feelings of failure or personal worthlessness.

- ✍ Nearly 50 percent of offenders admitted that they had used drugs or alcohol.

- ✍ The majority of offenders—66.5 percent— reported they had been suspended from school at some point, while only 4.9 percent had been expelled.

- ✍ About 29 percent of the juveniles offenders indicated that they had been hurt or physically abused.

- ✍ More than half—57.9 percent—of the juvenile offenders reported themselves to be sexually active.

- ✍ About 9 percent of the offenders had been forced to have sex.

- ✍ Approximately six percent of the offenders admitted that they did not know their biological father.

Predicting Recidivism with Department of Human Services Data

St Croix / DHS data suggest that:

- ✍ Males are over twice as likely as females to be recidivists.
- ✍ A juvenile who lives with his or her married parents has less chances of being a repeat offender than those who do not.
- ✍ First-time offenders who harbor feelings of being a failure or being worthless have almost twice the risk of being charged again compared to those who do not harbor such negative feelings.
- ✍ Juveniles who use drugs or alcohol have odds of recidivism that are nearly three times higher than those who do not use these substances.
- ✍ Males between 8 and 16 years old who do not live in a home with married parents, take drugs or use alcohol and have low self-esteem are predicted to have a high risk of recidivism.

I. INTRODUCTION

1.1 Background to the Study

1.1.1 Historical and Social Change

Before the US Virgin Islands achieved its current status as a United States territory, it had gone through a series of political and administrative changes that impacted the social composition of the islands. The Spanish, Dutch, English and French each played a role in early colonization before Denmark, the longest occupying colonial power, took possession from around 1665 until 1917 when the United States purchased the territory for strategic purposes.

Political and economic changes since the 1950s have moved the islands from being solely of strategic military importance and a primary agricultural society, to a more diversified economy. Tourism has become the main economic activity on St Thomas/St John, while oil and refining and spirits manufactures are prime economic activities on St Croix.

This more diversified economy encouraged inmigration from United States citizens wishing to experience the novelty of island life or from entrepreneurs seeking economic opportunities. Persons of nonresident status, willing to take advantage of employment opportunities, were brought in as bonded workers. Most emigrated from the Caribbean, especially the neighboring English-speaking Eastern Caribbean islands. It was difficult for families of these bonded workers to join them at any stage. These workers had no residential rights beyond the temporary status that a job assured. Later, the Immigration and Nationality Act of 1965 made provisions for the reunification of families. This Act opened the floodgates for thousands of immigrants to take up residence in the Virgin Islands.

Residents of African descent, who had been brought to the territory as slaves for plantation labor, comprised the largest sector of the population and remained from inception mainly at the base of the socio-economic pyramid.

Entrepreneurs of Asian descent have been drawn to the commerce associated with tourism. These immigration trends, together with a steady and often heavy flow of immigrants from the rest of the Caribbean, have produced a population that is highly diverse, both ethnically and culturally.

1.1.2 Some Effects of Immigration

The movement of large numbers of people with differing ethnic and socio-economic backgrounds into an already established community has always been marked with accompanying changes, resistance and social stresses as each group contributes its own uniqueness.

The majority of US mainland migrants into the territory have been white, and of middle-income levels or above. These migrants tend to reside in particular suburbs that are more affluent. This injection affected the social balance and tension in the society, though no recent psychological studies have been carried out to determine the impact of these effects.

Migrants from the rest of the Caribbean, especially the Eastern Caribbean, have been usually economically diverse, and settle in a variety of areas. Some migrants join family and may move into equivalent or better jobs and social positions as those from which they have left The majority of this group, however, seeks increased employment opportunities and hope for an improvement in the standard of living that access to the United States is expected to pro-

vide.

Table 1.1 shows population changes in the US Virgin Islands between 1980 and 1997 based on country of origin. The percent change column was calculated from 1980 and 1997 columns, since more representative data were available for these years. Over the 17-year period, the overall population increased by 16.9 percent. The number of persons born in the US Virgin Islands increased by 34.7 percent over the same period. The increase from the *Other Caribbean* region accounted for 42.7 percent.

In recent years there has been low, or in some cases diminishing, immigration from some islands such as Puerto Rico, St Lucia and Trinidad and Tobago. This is due possibly to the significant improvement in the economies of these islands. The British Virgin Islands, for example, has experienced a reversal of the migration trend in recent years with a movement of the children of former immigrants returning there in search of a better life. However, there continues to be increased immigration from Caribbean countries such as the Dominican Republic (591.4 percent) and Dominica (67.1 percent). The number of persons who became naturalized citizens increased by 62.7 percent during this period.

A number of social and economic characteristics are associated with immigrant populations, especially those migrating in large numbers under difficult conditions. The following is an attempt to outline some of these characteristics that may be applied to immigration patterns in the US Virgin Islands.

1. The most important factor in making a decision on where to locate usually depends on affordability of housing. New immigrants tend to settle near urban centers in low-quality and often substandard housing, with easy access to affordable public transportation. They may be attracted to areas where persons from their homeland already reside. Availability of public housing, often with less than desirable conditions, may also be an option.

2. Different morals and values from those experienced in the immigrant's homeland usually prevail in the new environment and must be learned, often rapidly, in order to facilitate social adjustment in the adopted community. In the absence of a systematic or monitored introduction to the new ways of life, children are often confused and overwhelmed. They may be exposed to experiences and behavior formerly considered undesirable. In addition, more readily available money, illegal drugs and weapons, as well as unsupervised opportunities for experimentation, leave children exposed and vulnerable. At the same time, children born of newly-arrived immigrants may be seen as passports to helping older migrants establish themselves as belonging. This is especially seen in the case of immigrants who speak a foreign first language and possess weak communication skills in English. Unfortunately, such children may not always be embraced quickly as individuals with full rights into the receiving community.

3. Employment opportunities for new immigrants who are usually unskilled tend to be in jobs that local residents regard as inadequate in wages or lacking in social status. Employment may also be in rapidly growing sectors of the economy with an insufficiently available domestic labor force. Wages are usually —minimum wage or below in the case of undocumented immigrants. It may be necessary to take several of these low-paying jobs in order to boost wages. This situation exerts more pressure on families, who find they must leave their children on their own for long periods of time while working one or two jobs. This minimizes the time for socialization. Mi-

Table1.1 **Place of Birth by Year: 1980, 1990, 1995, 1997**

Place of Birth and Citizenship	1980		1990		1995		1997		Percent Change 1980-97
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	
Total Persons	96,569	100.0	101,809	100.0	109,677	100.0	112,863	100.0	16.9
Born in US VI	43,234	44.8	49,839	49.0	55,389	0.5	58,256	51.6	34.7
St Croix	…	…	24,991	24.5	26,375	24.0	26,948	23.9	7.8
St John	…	…	698	0.7	675	0.6	820	0.7	17.5
St Thomas	…	…	24,150	23.7	28,329	25.8	29,707	26.3	23.0
Born in Puerto Rico	4,993	5.2	3,974	3.9	4,468	4.1	4,800	4.3	-3.9
Born in US	11,964	12.4	14,246	14.0	12,689	11.6	11,814	10.5	-1.3
Born Abroad of US Parents	282	0.3	1,032	0.0	389	0.4	418	0.7	48.2
Naturalized Citizens—US	7,819	8.1	14,361	14.1	18,894	17.2	12,723	0.1	62.7
Not a Citizen of the US	22,912	23.7	17,464	17.2	17,848	16.3	15,194	0.1	-33.7
Other Caribbean	25,327	26.2	25,609	25.2	34,330	31.3	36,131	32.0	42.7
Anguilla	1,210	1.3	899	0.9	1,073	1.0	1,412	1.3	16.7
Antigua/Barbuda	4,939	5.1	4,398	4.3	5,192	4.7	6,382	5.7	29.2
British VI	3,315	3.4	2,665	2.6	4,007	3.7	2,990	2.6	-9.8
Dominica	2,653	2.7	3,219	3.2	4,344	4.0	4,433	3.9	67.1
Dominican Republic	580	0.6	1,157	1.1	2,553	2.3	4,010	3.6	591.4
Montserrat	705	0.7	623	0.6	621	0.6	811	0.7	15.0
St Kitts-Nevis	6,523	6.8	5,828	5.7	7,932	7.2	8,113	7.2	24.4
St Lucia	2,713	2.8	2,533	2.5	2,603	2.4	2,604	2.3	-4.0
Trinidad & Tobago	2,689	2.8	1,837	1.8	2,699	2.5	1,667	1.5	-38.0
Elsewhere/Not Reported	5,365	5.6	7,871	7.7	2,801	2.6	1,861	1.6	-65.3

Source: Bureau of the Census, *Detailed Population Characteristics: Virgin Islands of the United States* (PC80 - 1-D55).

Bureau of the Census, *Detailed Cross-tabulations for the US Virgin Islands* (CPH – L – 156).

Eastern Caribbean Center, University of the Virgin Islands, *1995 Population and Housing Survey.*

Eastern Caribbean Center, University of the Virgin Islands, *1997 Consumer Expenditure Survey: Population and Housing.*

nors are also left up to their own devices regarding such behavior as the choice of television programs to watch or the group of friends to *lime* with. Family support systems that might have been available in the home country become disrupted or nonexistent and services such as childcare may be unaffordable. In the new setting, guardians

or parents with feelings of guilt may also allow lax, permissive behavior not usually accepted in their homeland in order to compensate the neglected child.

4. Immigrant families are often split up with the breadwinner emigrating first, and then gradually arranging for the rest of the family members to join as socio-economic conditions improve or as immigration policy allows. This puts a strain on family ties and relationships and may lead to continued tensions. Separations often occur even after the family is physically reunited.

5. Systems and institutions adjust slowly to change caused by the influx of immigrants. Thus, they may lag behind in providing social services to these families until needs are manifested in a series of crises such as incidents of violence. This is seen in the case of juvenile delinquent behavior. A heavy burden is placed on institutions providing services such as education, healthcare, law enforcement and social welfare. The inadequate planning, reluctance to accommodate the increase in numbers until it is unavoidable, guarantees an escalation in the rate of social problems experienced in the community.

6. Even after institutions implement policies and procedures to accommodate immigrants, there is usually a period of adjustment on both sides before social acceptance and assimilation into the new community are achieved. The life of this period can vary and may last for decades.

1.1.3 Risk Factors Affecting Juveniles

Researchers have identified a number of important insights into juvenile delinquent behavior. Youth involved in such behavior are usually from economically stressed families and communities, have histories of physical and sexual abuse, lack educational and vocational skills and are prone to become involved in alcohol and other forms of drug abuse. They may be failing or dropping out of school, and involved in unprotected sex.

Youth agencies have, for decades, used assessment instruments in evaluating high-risk youth. The following are seven background and personal characteristics used by social workers and counselors to predict high-risk behavior. *The higher the level or occurrence of these crucial characteristics, the higher the child's risk-level for delinquent behavior:*

1. *Age variable:*
   The child enters the correctional system at a very young age.

2. *Psychological variable:*
   Rebelliousness and identification with nonconformity, together with a low level of self-esteem.

3. *School performance variable:*
   Low achievement levels, undesirable social behavior, and truancy.

4. *Home Adjustment variable:*
   Poor interaction between the child and parents and between the child and siblings, curfew violation, failure to respond to discipline and supervision, and running away.

5. *Drug and alcohol use variable:*
   The child starts to abuse drugs at an early age, there is abuse of *serious* drugs, parents have a history of alcohol and drug abuse.

6. *Neighborhood variable:*
   The child lives in a neighborhood characterized by disorganization, poverty, and multiple social problems.

7. *Social Adjustment variable:*
   The child's friends are involved in problem

Table 1.2 **Possible Indicators of Juvenile Delinquent Behavior**

Indicator	Status of USVI	Status of Nation
Low birth-weight babies	8%	7%
Infant deaths per 1,000 live births	11	7
Families with children <18 years old headed by a single parent	44%	27%
Death of children 1 to 14 years old per 100,000	42	26
Children in poverty	41%	20%
High school dropout rate of children 16 to 19 years old	22%	10%
Death rate of children by accident, homicide or suicide 15 to 17 years old per 100,000	82	62
Teen birth rate females 15 to 17 years old per 1,000	39	34
High school dropouts not working 16 to 19 years old	5%	10%
Violent crime rate: arrests of youth 10 to 17 years old per 100,000	310	471
Median income of families with children 0 to 18 years old	$30,530	$39,700
Child abuse and neglect 0 to 18 years old per 1,000	8	NA

Source: Community Foundation of the Virgin Islands. (2000). *US Virgin Islands Kids Count Data Book 2000.* St Thomas, VI: Author.

behavior such as delinquency, drug abuse, truancy and disruption in school. There are displays of sexual acting-out and associa tion with gangs.

1.1.4 At-Risk Indicators in the US Virgin Islands

Table 1.2 provides a comparison between children under the age of 18 in the US Virgin Islands to those children in the United States on various possible indicators of juvenile delinquent behavior. Examination of the different indicators suggests that for the most part children in the US Virgin Islands are exposed to a higher level of risk than children in the United States. While Table 1.2 refers to all children under the age of 18, the findings presented below are limited to juvenile offenders 7 to 17 years of age.

1.1.5 Youth Crime Trends

US Youth Crime Trends: Between 1990 and 1994 the violent crime index for juveniles under 18 years old increased by 26 percent, representing four times that for individuals age 18 and over (Bartollas, 1997). Over the same period, juveniles' arrests for murder increased by 14.6 percent compared to 4.6 percent for adults.

A 1992 study found the arrest rate for African-American youth was five times higher than the rate for white youths (Bartollas, 1997, p.33). The use of guns by juveniles in homicides increased from 64 percent to 78 percent between 1987 and 1991. Juveniles' arrest for weapons law violations during this period also increased by 62 percent.

Status of Crime in US Virgin Islands: According to the 1990 Census of Population and Housing, the St Thomas/St John community had approximately 10,432 persons ages seven to 17, the age group that constitutes the juvenile category as designated by the police department.

Crimes involving excessive violence, especially when committed in public places such as schools or in the full view of adults, usually cause alarm and public outcry within the community.

During the 1990s the US Virgin Islands seemed to be following a nationwide trend in an escalation of violence by juveniles carried out on fellow juveniles, caretakers, teachers and others. These assaults took place in neighborhoods by gangs or on school premises. Violence so seemingly deliberate, brutal at times and even fatal, left communities searching for an understanding of the cause of violence and a method of prevention.

For almost every year from 1989 to 1997, statistics from the Department of Public Safety show a consistent number of offenses committed by juveniles in the St Thomas/St John district. These cover the range from trespassing and auto theft to rape and homicide.

The community has been forced to ask itself a number of obvious, as well as not so obvious, questions. How many juveniles are involved in criminal behavior? Are there characteristics or profiles that may help to identify these juveniles? Are the conditions to which these juveniles are exposed in the home, school or community contributing to delinquent behavior? Where these conditions exist, are they in the form of commission—the presence of some negatively influencing factors in the young persons' lives or omission, the absence of positive factors?

Handling Juvenile Delinquency: The definition of delinquency includes the portrayal of delinquent events, the reform and punishment of delinquents, and policy decisions about delinquency that occur in a particular setting. This social setting in turn is shaped by five contexts: historical, legal, socio-cultural, economic and political. All are interwoven to affect the whole.

Historically, a community's past methods of handling juvenile delinquents influence its current perception and methods. This past approach could well extend to an influence of historic factors that may have affected juvenile justice, rise and decline of beliefs and practices that govern cycles of delinquent behavior.

Legal context is set by the role and jurisdiction assigned juvenile courts, as well as constitutional obligations to which courts will hold the community responsible for dealing with youth in trouble.

Socio-cultural context will be determined by the effectiveness of societal institutions in interaction with the delinquent. This reflects the extent that the family, school and religious organizations, different lifestyles, peer groups, and the process of urbanization all play in contributing to juvenile problem behavior.

Economic status and the ability to succeed at economic goals affect youth and influence their behavior. This is especially the case in a society where success and winning are held at such a premium.

Politically, although local conditions may exert influence, national and institutional policy positions also affect youth attitudes toward crime and shape levels of severity or leniency for punishment (Bartollas, 1997).

1.1.6 US Virgin Islands Youth Rehabilitation Center[1]

A thorough audit of the Youth Rehabilitation Center (YRC) was carried out by the Office of Insular Affairs (OIA). A study was also completed by the Federal Department of Justice, Office of Juvenile Justice Delinquency Prevention. The studies identified concerns such as inadequate staffing, limited treatment and limited education opportunities for youth housed at the YRC in St Croix.

The original facility was designed to cater to 27 male adolescents. Between 1991 and 1994, however, the average number increased from 20, to 134. There were no policies and procedures to regulate the facility. One social worker comprised the treatment staff and there were no health services in place. In addition, no specialized training was provided for those working with adolescent offenders.

The Territory also experienced an increase, not only in the number of juvenile delinquents, but also in the levels of crime. This follows national and international trends.

The focus of the Department of Human Services (DHS) in regard to the YRC since 1994 has been to put policies and procedures into effect for the facility. DHS has worked to improve community-based sentencing options, residential programs and effective interventions for juveniles within the community. These include early intervention programs such as Head Start, child care and after-school programs, youth promotion programs for teenagers and parenting that positively impacts children.

All youth at YRC are ordered to the facility by the court. Although the Virgin Islands Code permits Persons in Need of Supervision (PINS) to be mixed with adjudicated youth, this is contrary to federal regulation. The practice puts the availability of federal funds for the facility in jeopardy. Adjudicated youth should not be housed within sight or sound of an adult offender. That includes adolescents transferred to be tried as adults or sentenced as adults. In FY 1999 the facility housed 17 such adjudicated youth with no provisions made within the facility for the required separation. In March 2000 out of 55 youths, 14 to 25 percent were adolescents transferred as adults, (seven for murder and four for rape).

All youth at the YRC facility are adolescents ages 13 to 18. However, a judge may—under special circumstances—retain a youth at YRC until that person turned 19 years of age. This is mostly for serious offenses. There were four youth aged 18 by May, 2000. Although the facility was designed to accommodate 27 adjudicated delinquents at a time, the level of occupancy averaged 40 to 50. This overcrowding was due to the presence of youth transferred as adults who continued to be housed in the facility.

The facility was never designed to house females and never did until 1992 when two females were placed there. Subsequently, from 1994 to 1999 there were 20 or more females remanded to the facility yearly with as many as 34 placed there in 1997. As of the report date, 56 youth were housed in the facility. Eleven of them—20 percent—were females. In FY 1999, the YRC served three population types: pretrial juveniles who were in contempt of court orders, adjudicated juveniles and youth transferred as adults (Table 1.3).

[1]*The following is a paraphrased outline of a presentation by Mrs. Sidonie Halbert, Commissioner, Department of Human Services (DHS), Division of Children, Youth and Families, to the Virgin Islands Legislature on May 17, 2000.*

Table 1.3 **Three Population Types Served by the Youth Rehabilitation Center: FY 1999**

	Number	Percent
Total	**155**	**100**
Pre-Trial Juveniles in contempt Court Order	57	37
STT/STJ	21	37
STX	36	63
Adjudicated Juveniles	81	52
STT/STJ	38	47
STX	43	53
Youth transferred (as adults)	17	11
STT/STJ	8	47
STX	9	53

Note: Youth transferred as adults (both pretrial and sentenced)

Source: Department of Human Services (2000).

In FY 1999, the youth population remanded at the YRC had the characteristics shown in Table 1.4. In addition to those 155 juveniles remanded at the YRC, there were 411 who, though not remanded at YRC, were being serviced by the system (Table 1.5).

Data from the 1995 survey indicated that there were 12,528 teenagers between ages 13 to 18 in the Territory. The 566 in the DHS system (155 remanded at YRC, 411 not incarcerated) accounted for 4.5 percent of that youth population.

YRC Expansion: Plans are in progress for the improvement of the facility that would include the following:

a. Expansion of the YRC by a construction project of three phases that will result in a 51 bed dormitory facility.
b. Development of a Pre-release Center comprising an eight-bed pre-release home.
c. A total of four trailers for use as office and classroom space.
d. Security fence to replace the fence damaged by Hurricane *Marilyn* in 1995.
e. Staffing included 54 Full-Time (FT) DHS staff at YRC with an additional 3 FT and two Part Time (PT) teachers from the Department of Education.

Services and Activities: Educational activities were provided by one FT teacher from DHS who works all year round and five teachers from the Department of Education (three FT; two PT). Activities included: educational assessment, GED preparation, tutoring, special education and vocational education in the areas of air-condition/refrigeration and upholstery.

Recreation: YRC had a full-time recreational specialist who coordinated outdoor activities such as basketball and softball and various indoor activities such as board games and pool.

Treatment Services: Two full-time licensed social workers coordinated with the Intervention

Table 1.4 **Characteristics of Youths Remanded at YRC FY 1999**

Characteristics	**Total**	**Percent**
Youths Remanded at YRC	155	100
First time admission	87	56
Single parent household	58	37
Tested positively for drug use upon admission	57	37
School dropouts at admission	34	30
Diagnosed learning disability	20	13
Living at home at time of arrest	81	52
Arrested for Violent Crime	46	27

Unit for intake and discharge and provided all court work and counseling. An average 80 youth counseling sessions were provided each month, along with six court reports and 16 court hearings. Residential counselors also worked with juvenile residents, listening to their concerns and helping to develop alternative ways to deal with anger, depression and conflicts. There is an agreement between DHS and the Virgin Islands Behavioral Services (VIBS) to provide health services and supplemental mental health services to youth at YRC.

Following are some of the areas for which services were contracted in FY 1999:
Mental Health: psychiatric evaluations, consultations, psychotherapy sessions, emergency, psychological evaluations.

General Health: physicals, medical histories, emergency visits, hospital referrals, nursing care, medication provision, laboratory services/tests, pharmaceutical supplies, screening.

Special Concerns: There are a large number of youth who are testing positive for drugs, usually marijuana, upon intake. Plans have been discussed to use monies available from the Law Enforcement Planning Commission (LEPC) to renovate a facility to house drug treatment programs. There was a recognized need for full evaluations for all youth entering the facility that may have special needs.

1.1.7 Department of Human Services

History: Aid to the poor and needy of the US Virgin Islands was first provided from trust funds established under the Danish colonial administration and administered by local "Charitable aid Councils" on each island. In 1922, under the United States Navy administration, a Department of Public Welfare was established by order of the Naval Governor, and upon direction of an admiral's aide. With the transition to a civilian administration, all welfare functions were administered in the Governor's office, with the first civilian Superintendent of Public Welfare appointed in 1931, and the first native appointed to that position in 1933. This person also coordinated services provided to the Virgin Islands under the Federal Emergency Relief Act of 1933.

In 1943 the Virgin Islands Welfare Act established the Department of Social Welfare for providing public social welfare services on a territorial basis. It was a legal base for the extension of federal social security programs to the US Virgin Islands. Federal child health and welfare services were extended to the territory in 1947; public assistance in 1950; old age and survivors insurance benefits in 1951; Medicaid benefits in 1966; the Food Stamp program in 1974; and the Child Support Enforcement program in 1975. A local medical assistance program, which was operated by the Department of Social Welfare since 1961, was absorbed by Title XIX—Medicaid—and transferred to the Department of Health in 1966. Vocational rehabilitation services were transferred from the Department of Education to Social Welfare in 1969, and the Child Support Enforcement program was transferred from Social Welfare in the Department of Law in 1983.

The Government Reorganization and Consolidation Act of 1987, VI Act 5265, established

Table 1.5 **Juveniles Remanded Outside YRC FY 1999**

Juveniles Remanded Outside YRC	Total	Percent
Total	411	100
Adjudicated Juveniles	337	82
STT/STJ	215	64
STX	122	36
PINS	74	18
STT/STJ	60	81
STX	14	23

the Department of Human Services (DHS) to provide all services for youth, children, handicapped, elderly and adults and families in the low-income bracket. Programs were consolidated from the former Department of Social Welfare, Office of Community Services, Virgin Islands Community Action Agency, Youth Services Administration, Commission on Youth, Commission on Aging, Commission on the Handicapped and the Developmental Disabilities Council, all of which were abolished by the Act. In addition, three programs for the elderly were transferred from other departments.

Mission: The mission of the Department of Human Services is to provide a sensitive, efficient, responsive human services delivery system to meet the needs of low-income persons, the elderly, children and families, and the disabled in the Territory. Through six program divisions, the department provides corrective, supportive and preventive programs, as well as advocacy to identify human needs. DHS develops innovative ways to break the cycle of dependency, and help its clients become self-sufficient, contributing members of the Virgin Islands' communities.

Vision: The DHS envisions its emergence as a department that empowers individuals and families toward self-sufficiency through a seamless delivery system of services.

1.1.8 Juvenile Units

Background: The Juvenile Unit of the St Thomas/St John Police Department was established in February, 1969. The Juvenile Unit of the St Croix Police Department was established on December 1, 1969. A senior detective with extensive experience in juvenile crime was assigned as juvenile officer to head the unit.

The unit offers many varied services to the community and its citizens. In accordance with the Code of Laws of the Territory of the US Virgin Islands, a juvenile is a person under 18 years of age.

Mission: It shall be the mission of the Juvenile Unit to:

a) Be on the lookout for potential delinquents and for conditions that cause delinquent behavior.
b) Work with other agencies to correct environmental conditions that may foster delinquency.
c) Use preventive patrol where it has potential for helping to control delinquency.
d) Investigate delinquency problems that lead to juvenile offenses. This includes apprehension and prosecution of adults involved in these cases.
e) Investigate and prosecute all complaints of child abuse from the home when conditions warrant.
f) Detect, and take into custody, juvenile offenders for both criminal and status offenses.
g) Follow up on juvenile offenders, using referral and other dispositions as appropriate.

Duties: It is the duty and responsibility of the Juvenile Unit to:

a) Interview all juvenile offenders and victims in accordance with the law.
b) Investigate all criminal and status offenses involving juveniles.
c) Determine which juvenile offenders will be placed on diversion programs and which juveniles will be referred to Family Court.
d) Prepare court complaints and provide assistance to the Attorney General at hearings and cases involving juveniles before Family Court.
e) Investigate and prepare for prosecution, when applicable, all cases of child abuse or neglect. The unit may also render assistance in child abuse or neglect cases on the island when requested by other agencies and approved by the Head of the Juvenile Unit.
f) Prepare Uniform Crime Reports (UCR) and

ensure proper data concerning missing or runaway juveniles.

g) Conduct in-service training on juvenile laws and procedures for members of the department.

h) Assist the Bureau of Criminal Investigation in criminal cases when the juvenile caseload permits.

i) Conduct juvenile workshops; give lectures and talks to adults and students on all phases of juvenile law, crimes and abuses of the child. These programs will include visual aids and a realistic approach to the growing juvenile problems in our community and nation.

j) Plan, organize, sponsor, or co-sponsor summer youth information, recreational and safety programs, i.e. Police Movie Club, Operation Shipmate and bicycle rodeos. Such police information programs will teach the youth safety and responsibility in the home, family and community.

k) Seek out and identify needy children and families who deserve food and toys furnished by military or civilian groups for distribution during the holiday season. This is an on-going yearly program.

l) Work closely with school officials and teachers to deter and suppress juvenile delinquency, crimes, and disorders on school campuses.

Duties and Responsibilities of the Commander: In addition to the general authority duties and responsibilities of command and supervisory personnel enumerated in Section 3.3.4 of this chapter, it is the responsibility of the Commander of the Juvenile Bureau to:

a) Develop a program of delinquency prevention intended to eliminate factors that induce criminal tendencies and conditions that promote criminal activities among juveniles. The commander shall promote such a program by enlisting the aid of the public, interested agencies and other divisions and bureaus of the Department. The commander shall coordinate the functions of his bureau with that of the Territorial Court, Youth Services Administration, Department of Welfare and other organizations concerned with the social welfare of juveniles.

b) Properly investigate and process all cases of delinquency coming to the bureau's attention. In addition, the commander should have members of his bureau patrol all places where delinquency is likely to occur, to detect any violations of law which involve juveniles and which may contribute to vice or delinquency. Also, the commander should ensure that bureau members assist members of other divisions, bureaus, sections and units, as well as community agencies and organizations involved in the prevention of juvenile delinquency and youth crime.

c) Accept all juveniles taken into custody by any member of the Department; establish an adequate system of recording complaints, contacts, arrests, investigations and depositions involving juveniles; and maintain a complete and accurate file of all cases referred to the Juvenile Investigation Bureau for action, indicating its status.

d) Collect data, discover and chart trends, stimulate juvenile protective measures, and work to improve general community conditions. The commander should work to eliminate those factors contributing to delinquency. Also, the commander may interpret functions of the Department as a whole, and the Juvenile Bureau in particular, in the suppression of delinquency, when ever the commander or any member of the bureau has occasion to speak before any civil, educational or religious groups.

e) Have a thorough knowledge of the laws regulating the handling of juveniles, and instruct and ensure the obedience of all such laws by members of the bureau.

f) Report to the Deputy Chief of Police all important activities of the bureau, and keep the deputy advised of the youth crime situation in the district, the effectiveness of the bu-

reau, morale, disciplinary problems or needs of the bureau.

Types of Juvenile Offenses

There are two types of offenses peculiar to juveniles:

a) Criminal Offenses: The criminal offense is a crime against persons and/or property and is the same offense as the adult criminal offenses. Upon request, the juvenile, after receiving a waiver hearing before a Family Court Judge, may be referred to the General Sessions Court.
b) Status offense: the status offense is a non-criminal offense such as a runaway or truancy.

1.2 Purpose of the LEPC Study

In the Memorandum of Understanding (MOU) between the Virgin Islands Law Enforcement Planning Commission (LEPC) and the University of the Virgin Islands (UVI) the following were outlined as the purpose of the study:

a) Develop a statistical profile of delinquent youth, with the primary aim of adopting a proactive approach to the prevention and reduction of the escalating level of crime among youth;
b) Collect data on delinquent youth between 1987 and 1997 from the files in the Virgin Islands Department of Human Services (DHS) and in the Juvenile Investigation Bureau of the Virgin Islands Police Department (JIB);
c) Develop associated attributes of delinquents;
d) Determine what are the significant characteristics which explain juvenile delinquency;
e) Measure the degree of association between abused juveniles and delinquency;
f) Establish characteristics that distinguish a first-time offender from a repeat offender;
g) Measure the attributes of first-time and repeat offenders
h) Determine the time frame between the first and second arrest for repeat offenders;
i) Measure the effectiveness of intervention services; and
j) Develop a prognostic evaluation model that will assist caseworkers in determining the likelihood of evolving from a first-time to a repeat offender.

LEPC was charged with developing profile information on young offenders in the Territory.

Through a coordinated and cooperative effort between the three working parties involved—UVI, Department of Human Services and Juvenile Investigation Bureau—expertise and personnel from UVI were commissioned to conduct the study and gather the needed profile information.

Services Performed by UVI: UVI was commissioned to perform the following services in fulfillment of the purpose of the MOU.

a) The design of two instruments to collect specific data from the files of JIB and a sample selected case files from DHS, primary data items;
b) The preparation of a computer screen that will be used in keying the data from the instruments;
c) Editing recorded data in the instruments before data entry takes place;
d) Generation of descriptive statistics of delinquents and associated characteristics from the data;
e) Identification of appropriate statistical analytic techniques for the range of analyses to which the data will be subjected;
f) Generation of appropriate tables for presentation;
g) Application of statistical models and interpretation of output; and
h) Preparation and printing of a final report for presentation.

1.3 Scope of the Study

Among other things, the proposed study will seek to determine the impact of four fundamental socioeconomic issues on juvenile delinquency:

a) the composition of the household in which children live—such as the number of parents, grandparents and other relatives, and the number of siblings;
b) the educational attainment of the parents;
c) the labor force behavior of the parents, especially changes in employment of mothers; and
d) poverty status of the household.

Initially, an estimate of 4,500 case files at JIB and 5,000 at DHS spanning the 11-year period of 1987 to 1997 were believed to exist. At first it was anticipated that a scientific sample would be necessary. On closer examination, however, it was discovered that the estimates of available case files were highly exaggerated. The decision was then taken to utilize all the cases available at JIB and match them with the corresponding cases from DHS.

Two survey-type instruments were developed to record data from each selected arrest or delinquent case. These instruments sought to gather data based on the following categories:

From the Juvenile Investigation Bureau:

- Sex
- Age
- Date of birth
- Place of birth
- Race
- Birthplace of parent/guardian or caretaker
- School enrollment
- Education (highest level)
- Employment status of guardian
- Date of crime/incident
- Type of crime/incident
- Type of weapon used
- Status (outcome/disposition).

From Department of Human Services:

General Information:

- Sex
- Age
- Date of birth
- Place of birth
- Race
- Date of crime/incident
- Type of crime/incident
- Type of weapon used
- Status (outcome/disposition)
- Immigration status
- Mother in the household
- Father in the household
- Number of siblings in the household
- Education (highest level)
- Occupation
- Marital status
- Number of children
- Responsible for caring for children
- Type of live-in program, if any
- Head of household
- Marital relationship of natural parents
- Education of primary caretaker(s)
- Income (gross per month).

Psychological Adjustment:

- Self esteem
- Frequent arguments and fights with others
- Age at first contact with police
- Use of drugs/alcohol
- Use of drugs/alcohol before or during school
- Sexual activity
- Number of different sex partners in past year
- Physically abused

Case files of juveniles in both JIB and DHS are confidential and may be seen only by sworn staff members. Volunteer in-house staff members were compensated to do the data recording after their regular work hours. The data instrument for each case was edited to ensure that items of information were assigned numeric

codes. These codes were entered into an Integrated Microcomputer Programs Systems (IMPS) application for tabulation.

1.4 Survey Goals

With a growing number of youth becoming involved in delinquent behavior in the US Virgin Islands, it became imperative that some understanding of factors contributing to this problem be investigated.

Although extensive studies have been conducted on the US mainland that point to cause and effect of juvenile delinquent behavior, to date no study with an in-depth scientific approach has tackled this problem in the US Virgin Islands. This study serves as a first in gathering available data on juveniles that have passed through the correctional/counseling systems. The data has been processed in a form that will facilitate analysis. By examining the data for correlations between variables, some conclusions can be suggested regarding the factors that contribute to juvenile delinquent behavior.

It is anticipated that a number of indicators will be established and a framework developed on which to build an ongoing analysis of the problems of juvenile delinquents. It is hoped that suggestions may be offered to assist the institutions working with youth in general and juvenile delinquents in particular, to minimize the problem of delinquent behavior.

It is expected that data and information produced from this study will be used by legislators with the resolve to identify resources to underwrite necessary preventive programs. The data can also be used by executive officers to develop policy geared to the reduction and prevention of delinquent behavior. It is also anticipated that information would be released to make the public more aware of the factors playing a role in delinquent behavior of the territory's youth. It is expected that this first effort would also assist the JIB and DHS in both districts to fine tune their instruments of data collection. In so doing they can develop more efficient and comprehensive instruments for the purpose of the data collection. It is hoped that this study will form the basis for present analysis of the data gathered on juvenile delinquents, as well as provide a benchmark for subsequent comparison and study.

II. PERSPECTIVES AND METHODOLOGY

2.1 Delinquency and Antisocial Behavior

2.1.1 Causes and Recommendations

In the section that follows, consideration is given to the extent to which various forms of delinquent behavior can be predicted from earlier conduct problems, the relationships among these behaviors, and implications of this knowledge for intervention focused on delinquency reduction.

2.1.2 Development, Persistence and Pathways of Early Problem Behaviors[2]

It is relatively simple to fall prey to the notion that juvenile crime is the manifestation of a single latent construct such as low self-control. If this is so, what then are the causes of, and the constraints on, the operation of low self-control? Ineffective child rearing—that is, failure to set clear expectations for behavior, failure to monitor children, and excessively severe and inconsistent disciplinary practices—clearly contributes to delinquent behavior. One theory suggests that differences in opportunities for personal gain may also be a cause of crime. Three aspects of the developmental continuity of delinquency will be discussed: different manifestations of the problems from childhood to adulthood, the persistence of problem behavior, and the impact of behavioral catalysts on the continuity or discontinuity of behavioral problems.

The basic premise in *the development sequence* in problem behavior is that youngsters of different ages have different capabilities and behavioral repertoires for the expression of problematic behavior. A rough approximation of a development ordering of problematic behaviors from early childhood to late adolescence, according to the earliest age at which particular behaviors manifest themselves, might conform to the following: a difficult temperament, hyperactivity, overt conduct problems and aggressiveness, withdrawal, poor peer relationships, academic problems, covert or concealing of conduct problems, association with deviant peers, delinquency leading to arrest and recidivism.

A difficult temperament is one of the earliest manifestations of a problem behavior. The syndrome of hyperactivity—with its associated attention deficit problems—is usually not discernible before age two or three. As soon as the child begins to walk, this opens up many new avenues of mischief. When children learn to speak, verbal aggression may be added to their behavioral repertoire. Social withdrawal may also become apparent during preschool years. The availability of peers in kindergarten may generate new problems or reinforce the aggressive problems that may already have become apparent. During elementary school, concealing problem behaviors such as truancy, theft and association with deviant peers may emerge. In junior high or high school, youngsters may begin to associate with deviant peers or begin to commit minor crimes. For the majority of children this will be a passing phenomenon, but for others it will constitute a transition to the frequent commission of more serious delinquent activity. Contacts with police tend to accelerate during early adolescence, and so does recidivist offending.

Studies of the continuity of child behavior indicate that certain behaviors function as catalysts in that other behaviors are prone to *persist*

[2]Loeber, 1996.

when the catalyst is present; conversely, when the catalyst is absent, the problematic behavior tends to become less likely over time. Two examples are hyperactivity and substance use.

There is considerable evidence that hyperactivity—and associated impulsivity and attention problems—and disruptive behaviors often occur simultaneously. Related questions that may be posed are: To what extent is hyperactivity a catalyst for development of disruptive behavior? Is hyperactivity directly associated with later serious outcomes, or is the relationship conditional on the emergence of early and less serious forms of disruptive behavior? Longitudinal studies elsewhere of 6- to 16-year-old hyperactive boys until age 16 have shown that those who continued to be hyperactive were far more likely to show antisocial or substance use disorder than those whose attention deficit disorder abated. It has also been reported that hyperactivity and conduct problems at age 8 to 10 each predicted chronic offending.

It is clear that most of the evidence indicates the catalytic role of hyperactivity in the development of serious disruptive behavior in childhood and adolescence. It should be understood that hyperactivity is often accompanied by impulsivity and attention problems, and that probably the impulsive element in hyperactivity is of most relevance for the associated onset of disruptive behaviors during childhood and adolescence. The following developmental sequence is plausible. Hyperactivity may stimulate an early onset of disobedience, conduct problems, and delinquency. The risk of serious conduct problems and delinquency may become more acute when physical aggression accompanies disobedience at an early age. Whether a decrease in hyperactivity is associated with a decrease in problem behavior is less certain.

Studies have shown that the more serious the substance use, the higher the likelihood that individuals will engage in serious forms of delinquency. One longitudinal analysis of boys from age 13 to 16 reported that the onset of drug use—marijuana or hard drugs—and dealing in adolescent males, was associated with an increase in person-related offenses and carrying a concealed weapon. If drug involvement and delinquency are intertwined, does this also mean that a decrease in drug use is followed by a decrease in delinquent activities? There is evidence for this: when individuals began using hard drugs less frequently, their criminal involvement also decreased.

In brief, hyperactivity and drug involvement may act as catalysts in the development of disruptive behaviors, but the evidence is not altogether complete. Additional studies need to demonstrate that catalysts operate independently from third factors such as impulsivity, aggression, or peer influences.

It is common practice in criminology to classify youngsters on the basis of their first offense, but it can be argued that classification on the basis of a single behavior is rather limited. There is obviously more than one pathway to crime. The concept of a pathway allows individuals with varying degrees of deviance to be placed on one or more developmental trajectories. Three pathways have been identified: first, the *overt pathway*, which represents an escalation from minor aggression—such as annoying others, bullying—to physical fighting, and eventually to violence as robbery, rape, etc.); second, the *covert pathway*, consisting first of minor covert acts—like shoplifting and frequent lying—then property damage and then more serious forms of theft, such as breaking and entering; and third, the *authority conflict pathway*, which had as its first step stubborn behavior, followed by serious disobedience and defiance, and finally by authority avoidance before the age of 12 in the form of staying out late at night or truancy. Typically, the onset of authority conflict preceded the onset of overt or

covert behavior.

In brief, the evidence points to multiple pathways rather than a single pathway in the development of disruptive problem behaviors. The knowledge of pathways is important because it can help identify, at an early age, juveniles who appear to be at highest risk for later maladjustment and can distinguish them from youth with minor and/or more transient problem behavior. Pathways can also aid in the specification of the type of problem behaviors that certain risk groups of youth are likely to experience next. Once pathways have been formulated, risk and causal variables can explain why some youth do not initiate problem behavior at all, why others get into less serious problem behavior temporarily and do not progress, and a proportion of youth escalate in problem behavior and become seriously affected.

The following section deals with some basic theoretical ideas that have been advanced to explain the causes of juvenile crime. Offending is a type of behavior, similar in many respects to other types of antisocial behavior. Hence, the theories, methods and knowledge of other types of antisocial behavior can be applied to the study of crime.

2.1.3 Explanation of the Causes of Antisocial Behavior

Human behavior is, to a considerable degree, consistent and predictable. It has been argued that, in general, the antisocial child tends to become the antisocial teenager and the antisocial adult, just as the antisocial adult then tends to produce another antisocial child. This section begins by examining some of the most important risk factors that have been identified with offending and antisocial behavior.[3] These include family influences such as poor parental management and techniques, childhood antisocial behavior, offending by parents and siblings, low intelligence and educational attainment, separation from parents, prenatal and prenatal factors such as low birth weight, individual difference factors such as high impulsivity, socioeconomic deprivation, peer influences such as having delinquent friends, school factors, community characteristics such as social disorganization, and situational factors (Farrington, 1996).

2.1.4 Prenatal and Perinatal Factors

In the Caribbean, early childbearing, or teenage pregnancy, predicts many undesirable outcomes for the children, including low school attainment, antisocial school behavior, substance use, and early sexual intercourse. The children of teenage mothers are also more likely to become offenders. Studies in the US and England have found that teenage mothers were associated with low-income families, welfare support, absent biological fathers, used poor child-rearing methods, and that their children were characterized by low school attainment and delinquency. Additional research has shown that smoking during pregnancy was associated with low birth weight, small height, and poor performance in school. Excessive alcohol consumption during pregnancy predicted hyperactivity, low intelligence, and speech disorders in children.

2.1.5 Hyperactivity

Hyperactivity is an important construct that predicts later delinquency. It is associated with restlessness, impulsivity, and a short attention span that has been termed the *hyperactivity-impulsivity-attention deficit* or HIA syndrome. Related concepts include a poor ability to defer gratification and a short future time perspective. It was pointed out above that hyperactivity and conduct problems between 8 and 10

[3]Risk factors are prior factors that increase the risk of occurrence of events such as the onset, frequency, persistence or duration of offending.

years reliably predicted chronic offending, with the proviso that hyperactivity by itself is not necessarily associated with disruptive behavior.

2.1.6 Intelligence and Attainment

Empirical work has shown that intelligence at age 4 significantly predicted the number of arrests up to age 27. Results of a nonverbal intelligence test in Cambridge showed that twice as many boys scoring 90 or less at ages 8 to 10 were convicted as juveniles than of the remainder. Low nonverbal intelligence was highly correlated with low verbal intelligence and with low school attainment, and all of these measures predicted juvenile convictions to much the same extent. In addition to their poor school performance, delinquents tended to be frequent truants, to leave school at the earliest possible age and to take no school examinations.

Low nonverbal intelligence was especially characteristic of the juvenile recidivists and those first convicted at the earliest ages. It has also been argued that high intelligence is a protective factor against offending for children from high-risk backgrounds. Delinquents often do better on nonverbal performance tests than on verbal tests. The association between school failure and offending has been demonstrated consistently in longitudinal surveys. They showed how the probability of offending increased according to the presence of truancy, school failure, and low socioeconomic status.

A more plausible explanatory factor underlying the link between intelligence and offending is the ability to manipulate abstract concepts. Youngsters who are poor at this tend to do badly on intelligence tests, and they also tend to commit offenses, ***mainly because of their poor ability to foresee the consequences of their offending and to appreciate the feelings of victims (i.e., their low empathy***). One researcher argues that working-class, poorer parents tend to live for the present and to have little thought for the future, and tend to talk in terms of the concrete rather than the abstract. A lack of concern for the future is also linked to the concept of impulsivity.

2.1.7 Parental Supervision, Discipline, and Attitude

An exhaustive review of family factors as predictors of juvenile conduct problems and delinquency found that poor parental supervision or monitoring, erratic or harsh parental discipline, parental disharmony, parental rejection of the child, and low parental involvement in the child's activities (as well as antisocial parents and large family size) were all important predictors of offending. A study conducted in Boston reported that poor parental supervision was the best predictor of both violent and property crimes. Parental aggressiveness—which included harsh discipline, shading into child abuse at the extreme—and parental conflict were significant precursors of violent crimes, while the mother's attitude—passive or rejecting—was a significant precursor of property crimes. Other studies also found that poor supervision and discipline were consistently related to later offending, and that hostile and rejecting mothers when children were age 5 predicted their children's frequent use of drugs at age 18.

It was also found that poor parental supervision was the most important correlate of delinquency for girls, and that it was the second most important for boys—after delinquent friends. The Boston study also reported that harsh or erratic parental discipline, cruel, passive, or neglecting parental attitude, poor supervision, and parental conflict predicted later juvenile convictions. Generally, the presence of any of these adverse family background features doubled the risk of later juvenile conviction. Poor supervision, erratic or inconsistent discipline, and conflict between parents are all conducive to offending by children. It is im-

portant for parents to explain to children why they are being punished, so that they can identify precisely the behavior that is disapproved. One research study indicated a significant intergenerational transmission of aggressive and violent behavior from parents to children. Children who were physically abused up to age 11 were significantly likely to become violent offenders in the next 15 years.

2.1.8 Broken Homes

The theory that broken homes cause delinquency was inspired by psychoanalytic ideas in 1951. The research found that delinquents were significantly more likely than comparison children to have suffered a complete and prolonged separation from their mothers during the first five years of life. It was argued that mother love in infancy and childhood was just as important for mental health as were vitamins and proteins for physical health. It was thought that it was essential that a child should experience a warm, loving, and continuous relationship with a mother figure. If a child suffered a prolonged period of maternal deprivation during the first five years of life, this would have irreversible negative effects, including delinquency.

It is important to distinguish separation from a biological or operative parent after a loving relationship has been built up, attributable to different causes such as death or parental disharmony, from the complete lack of contact with a biological parent. It was found that the prevalence of offending was high for boys reared in broken homes without affectionate mothers and for those reared in united homes characterized by parental conflict, irrespective of whether they had affectionate mothers. The prevalence of offending was low for those reared in united homes without conflict and—importantly—equally low for boys from broken homes with affectionate mothers. These findings suggest that it is not so much the broken home that is criminogenic as the parental conflict that causes it. They also indicate that a loving mother might in some sense be able to compensate for the loss of a father.

2.1.9 Large Family Size

Many studies in developed countries show that large families predict delinquency. There are many possible reasons a large number of siblings might increase the risk of delinquency. Generally, as the number of children in a family increases, not only does the amount of parental attention that can be given to each child decrease, but the household will tend to become more overcrowded, possibly leading to increases in frustration, irritation and conflict. However, one is guided by our knowledge that in the US Virgin Islands there have been many large (extended) families with loving parents in which delinquency never reared its head.

A few additional comments concerning inhibitions against offending are offered. First, one researcher emphasized differences in parental child rearing behavior as the major source of differences in criminal tendencies. Middle-class parents are more likely to explain to children why they were being punished and to be concerned with long-term character building and the inculcation of general moral principles. In contrast, working-class parents supervised their children less closely and were more inconsistent in their use of discipline. Middle-class parents in general tend to use love-oriented discipline, relying on withdrawal of love as the main sanction, whereas working-class parents used much more physical punishment. The researcher contended that working-class children committed more crimes because working-class parents used less effective methods of socialization.

Second, two modern criminologists suggested that people differed in their underlying criminal tendency, and that whether a person chose to

commit a crime in any situation depended on whether the expected benefits of offending outweighed the expected costs. The benefits of offending, including material gain, peer approval, and sexual gratification, tended to be contemporaneous with the crime. In contrast, many of the costs of offending, such as the risk of being caught and punished and the possible loss of reputation or employment, were uncertain and long-delayed. Other costs, such as pangs of conscience (or guilt), disapproval by onlookers, and retaliation by the victim, were more immediate. The key is the extent to which people's behavior is influenced by immediate as opposed to delayed consequences.

2.2 Methodology

2.2.1 Steps in Developing the Framework of the Study

A series of discussion meetings were convened with representatives from the Eastern Caribbean Center of UVI, the Juvenile Investigation Bureau (JIB) and the Department of Human Services (DHS). Through these meetings, a clearer understanding was gained of the methods, procedures and guidelines each department/division utilized in processing juveniles entering the system.

It was learned that youngsters 7 to 17 years were considered juveniles and processed as such. In rare cases, children as young as five years appeared on file; however, these proved to be Persons in Need of Service (PINS), victims of neglect or crime, or children lost or abandoned; these were eventually excluded from the study sample.

Forms used by employees in each division to record information concerning juveniles admitted into the system for delinquent behavior formed the basis in compiling the data-gathering instrument. These forms included the *Contact Card* used by JIB as well as several forms from the DHS that provided information on general, personal, psychological, educational, and legal aspects of the juvenile history.

The normal process allowed an officer with the JIB to arrest a juvenile age seven to 17 who was involved in offensive behavior and to place on file a *Contact Card* containing a detailed description of the offender and the crime perpetrated. The juvenile is then referred to DHS with a copy of the information gathered by JIB. DHS conducts a thorough assessment of the juvenile and makes a decision about the needs of each juvenile, as well as the affected community.

Two survey instruments were compiled by the Eastern Caribbean Center in collaboration with JIB and DHS. Since all juveniles must first pass through JIB, that became the starting point of data-gathering. To ensure confidentiality and avoid disclosure to unauthorized persons, names of juvenile delinquents were adhered to the data-gathering instrument by a removable label to facilitate identification by JIB and DHS data gatherers. Each case was then identified by a serial number consisting of four ordinate digits and a first offense date for identification.

When JIB employees completed the recording of data for all cases they were passed on to DHS where the process was continued with information from files of juvenile delinquents. Name-identifying labels were removed from the data-gathering instrument before delivery to the Eastern Caribbean Center for processing.

It was discovered that the total number of cases existing on file at JIB did not match total cases at DHS. This was due at least in part to the existence of some cases where juveniles with first offenses that were considered minor in nature were placed on file at JIB, counseled and released into the care of family members but not passed on to DHS for further processing.

Data gathering commenced at JIB in the St Thomas-St John district and data were recorded for all cases on file for the years 1987 to 1997 inclusive. When all cases were recorded from both JIB and DHS, the data-gathering instruments were edited manually, and numeric codes were inserted in preparation for data entry. An Integrated Micro-computer Processing Systems (IMPS) software program was used to produce data dictionaries and data application screens.

2.2.2 The Data Collection Instrument

Two data-collection instruments were developed: the *Contact Card and Arrest Record* and the *Department of Human Services Form* to meet the special requirements of data available at JIB and DHS, respectively. Each instrument sought to capture information on each juvenile related to the first offense.

The *Contact Card and Arrest Record* consisted of 10 items that required basic identification, background, family information as well as arrest data and offenses. Arrest data and offenses included total number of offenses recorded throughout the juvenile's contact with JIB, as well as arrest date and offense, type of crime and weapon used for up to six incidents: namely, the first three and the last three offenses.

Forms for both districts carried the same items with the exception of an additional item on past involvement of family members in criminal activities for the St Croix *Contact Card and Arrest Record*

The DHS data collection instrument consisted of 29 items that sought information on the juvenile's ethnicity, educational progress, political status, social background, economic status, and psychological adjustment. Information was also gathered on the status and outcome of the six offenses detailed in the JIB *Contact Card and Arrest Record.*

In processing juvenile delinquents in the district of St Croix, JIB and DHS did not carry out the same type of collaboration as seen in the district of St Thomas/St John. The St Croix district did not track juveniles across the two divisions, as did St Thomas/St John. The district of St Croix also added an item to test the extent to which a juvenile offender was acquainted with their biological father.

2.2.3 Selection of the Population

In the St Thomas/St John district, the population consisted of all juveniles that were on JIB files dated 1987 to 1997. Some of the earlier offenses of these cases extended to years prior to 1987

These data records were then matched at DHS, and filled out for each case by JIB personnel using available data. Both data forms—without personal identifying information—were then handed over to the Eastern Caribbean Center.

Overall, there was no strict consistency in the process of data-gathering between St Thomas/St John and St Croix districts. In St Croix, there was no match between JIB and DHS in the data-gathering process, since there were no systems in place to track each case from one division to the other.

2.2.4 Data Collection Procedures

In both divisions, employees who pledged confidentiality and were familiar with the forms used to store data on juveniles' case files, were employed temporarily as data gatherers as well as supervisors. Preliminary briefings and training sessions were conducted with employees to ascertain the need for accuracy and integrity in the data gathering process. Guidelines for filling out the data collection instruments were prepared to ensure uniformity and clarity of the

process. These included a description of simple steps in the data-gathering process. In some cases, suggestions were given as to where certain pieces of data could be located in the division's forms.

The designated supervisor in each division was responsible for overall quality of the job, to be confirmed by thorough checks, before delivery of the finished product to the Eastern Caribbean Center.

In the St Thomas/St John district, data-gathering instruments completed by JIB were turned over to the supervisor at DHS for continuation of the data-gathering process. This ensured that the names of juvenile offenders remained confidential. On St Croix after completion, the data-gathering instruments were forwarded to the Eastern Caribbean Center independently.

2.2.5 Data Availability and Deficiencies

The sources from which data were gathered were the manual case files kept by juvenile-arresting officers at JIB and social workers at DHS. The forms used by these persons to record information were designed to serve the needs of these agencies, while processing juveniles through various stages of the system. Data used in this study were therefore limited to what was available and the data gathering instruments could only take advantage of data already present on the forms.

In addition, whereas the basic information on identification of juveniles was routinely filled in, there seemed to have been diligence in capturing data on areas such as social background, educational levels, ethnicity and psychological adjustment. A significant number of cases had items with missing data.

2.2.6 Data Analysis Procedures

Data entered into the IMPS **I**ntegrated **M**icro-computer **P**rocessing **S**ystem storage files were examined for mistakes or incongruence by tabulating frequency tables and making adjustments where necessary. New frequencies and cross tabulations were produced and key items or indicators were looked at to identify presence of relationships. For example, household type was compared with number and type of juvenile delinquent; place of birth of juvenile delinquent and number of offenders.

2.2.7 Organization of the Report

In general, background information in this report is presented for the Territory with specific references to districts. There is comparative section on the Territory which also indicates differences between districts. However, the section on *Survey Findings* is presented by district, since the data collected for St Thomas/St John were not the same variables as those for St Croix. Whereas St Thomas/St John could track cases at JIB with their counterparts at DHS, this was not possible on St Croix.

In this report each data set for St Thomas/St John and St Croix is each presented and analyzed separately by district.

2.2.8 Limitations of the Study

Ideally, a study that seeks to develop profiles or characteristics that could be used as red light or risk identifiers in the prevention of juvenile delinquency would be more comprehensive if the attributes of delinquents, as well as those of non-delinquents, were examined and a comparison made of the results. Since this study focuses only on the delinquents, it is difficult to make categorical statements as to possible cause and effect without an adequate available control group.

The population of the study is restricted to the files that were available in JIB and DHS divisions at the time of data-gathering. In the St Thomas/St John district a number of files were identified for which data were recorded at JIB, but did not have corresponding matches at DHS. Cross tabulation and analysis of data for certain items in both sets of data were limited to items with cases presented in both sets of data.

At times there were inadequate or insufficient data available on division forms used as source information to fill out data collection instruments for the study. For some items, a significant number of cases had missing data, having been left vacant by persons originally or persons handling that particular case.

In the district of St Croix, on the other hand, since JIB and DHS data were each gathered without a cross reference for cases, data could only be processed in separate JIB and DHS batches. No direct connection could be made between these groups of data. It was therefore not possible to process the St Croix data to track relationships between variables as in-depth as that carried out for the St Thomas/St John district.

On the higher level, since the method of data-gathering differed in each district, it was not possible to combine the data sets for the two districts and look at relationships as they occurred for the territory as a whole.

These differences in data gathering occurred due to different forms and methods of data collection and storage within the two districts, as well as a difference in the relationship and support systems practiced within districts by JIB and DHS.

III. Presentation Analysis

St Thomas Data: Description and Analysis

3.1 Juvenile Investigation Bureau Data Variables

Data collection commenced at Juvenile Investigation Bureau (JIB) in the St Thomas/St John district.[3] Data were recorded for all cases on file for the years 1987 to 1997. The data collection instrument developed was the Contact Card and Arrest Report (CCAR). Data were recorded for each arrest and the following characteristics were covered in the CCAR:

Sex
Age
Date of birth
Place of birth
Race/ethnic origin
Person with whom living
Birthplace of mother and father
Enrollment status
Education (highest level)
Employment status of guardian
Date of crime/incident
Type of crime/incident
Type of weapon used

3.1.1 St Thomas Data Description: Juvenile Investigation Bureau

Year of First Offense—There were 2,348 cases of first offenses in the JIB data set (Table 3.1.1). On the average there were about 198.7 first offenses annually between 1987 and 1997. There was a gradual increase annually from 1987 to 1991 with the exception of 1990. The period 1992 to 1997 was mixed: there were declines in 1992 and 1993, an upsurge in 1994, declines again in 1995 and 1996, and an increase in 1997. The smallest number of offenses was 104 in 1996, and the highest was 298 in 1991. This suggests a wide range in the annual number of offenses. It is not certain whether this disparity was due to a difference in record keeping or whether it was real.

Type of First Offense—In Table 3.1.2, Part I Felony accounted for 21.8 percent of first offenses. Part I Felony includes robbery, felonious assault, burglary, grand larceny, homicide, rape and auto theft.
Part II Felony accounted for 11.5 percent of all offenses. These include possession of con-

Table 3.1.1 **Year of First Offense**

Year of Offense	Number	Percent
Total	2348	100.0
Before 1980	4	0.2
1980	1	0.0
1981	8	0.3
1982	13	0.6
1983	9	0.4
1984	15	0.6
1985	9	0.4
1986	22	0.9
1987	180	7.7
1988	219	9.3
1989	259	11.0
1990	220	9.4
1991	298	12.7
1992	243	10.3
1993	178	7.6
1994	204	8.7
1995	135	5.7
1996	104	4.4
1997	146	6.2
After 1997	81	3.4

[3]All future references to the St Thomas/St John district are shortened to St Thomas.

Table 3.1.2 **Type of First Offense**

Year of Offense	Number	Percent
Total	2335	100.0
Part I Felony	509	21.8
Part II Felony	268	11.5
Misdemeanor	309	13.2
Incidence	548	23.5
Other	701	30.0

Part I Felony: Robbery, Felonious assault, Burglary, Grand larceny, Homicide, Rape, Auto theft.
Part II Felony: Possession of controlled substance/ unlicensed firearm/ stolen use of vehicle, Fraud, Forgery.
Misdemeanor: Aggravated assault and battery, Petit larceny.
Incidences: Run-away minor, missing minor.

trolled substances, unlicensed firearms, stolen property, unauthorized use of vehicle, fraud, and forgery. Misdemeanor accounted for 13.2 percent, which includes aggravated assault and battery, and petit larceny. Incidences accounted for 23.5 percent, and this category includes run-away minors and missing minors. "Others" accounted for 30.0 percent.

Table 3.1.3 **Weapon Used in First Offense**

Weapon	Number	Percent
Total	2332	100.0
Gun	64	2.7
Knife	90	3.9
Hand	149	6.4
Bottle	23	1.0
Penis	11	0.5
None	1828	78.4
Other	167	7.2

Weapon Used in First Offense—The weapon categories were gun, knife, hand, bottle, penis, none and other. In 78.4 percent of the cases no weapon was used (Table 3.1.3). Hand was used in 6.4 percent of the cases, followed by knife (3.9 percent), gun (2.7 percent), bottle (1 percent), and penis (0.5 percent).

Total Number of Offenses—The majority—or about close to two-thirds (63.7 percent)—of the juveniles had only one offense. About one in six, or 17.1 percent, had two offenses, and 7.3 percent had 3 offenses. The percentages for more than three and more than six were 8.2 percent and 3.1 percent, respectively (Table 3.1.4).

Table 3.1.4 **Total Number of Offenses**

Offense	Number	Percent
Total	2340	100.0
1	1491	63.7
2	401	17.1
3	170	7.3
4	92	3.9
5	58	2.5
6	43	1.8
7	11	0.5
8	13	0.6
9	9	0.4
10	11	0.5
11	16	0.7
12	6	0.3
13	3	0.1
14	2	0.1
15	6	0.3
17	3	0.1
19	1	0.0
22	1	0.0
24	1	0.0
27	1	0.0
34	1	0.0

3.1.2 St Thomas: Juvenile Investigation Bureau Data Relationships

Total Number of Offenses by Place of Birth—Table 3.1.5 represents the total number of offenses cross-classified by place of birth. Total numbers of offenses were grouped in two categories: one offense, and two or more offenses. In the case of juveniles born in the United States or other countries, three-fourths more of them had only one offense; less than one quarter of them had two or more offenses. For juveniles having birthplaces in the Virgin Islands (VI), Puerto Rico (PR) and the Eastern Caribbean (EC), the percentages for two or more offenses were higher—37.6 percent, 41.3 percent and 36.0 percent, respectively.

Type of First Offense by Juvenile's Place of Birth—The data in Table 3.1.6 cross-classify 'type of first offense by place of birth'. In the Virgin Islands, Part I Felony accounted for 21.7 percent of the cases (Table 3.1.2). In those cases where the birthplace was Puerto Rico, or the Eastern Caribbean, it accounted for 24.4 and 24.2 percent, respectively. Both of these were above the overall percentage for the Virgin Islands.

Juveniles with a US birthplace had 15.2 percent of their offenses in the Part II Felony category, which was much higher than that—11.0 percent—for the Territory overall. Puerto Ricans had the lowest percentage of misdemeanor cases—4.4 percent—while native-born Virgin Islanders had the highest—14.3 percent. Virgin Islanders had the lowest percentage—21.1 percent—of Incidences.

Type of Weapon Used by Place of Birth—Table 3.1.7 reveals that the overwhelming majority of the offenses—77.3 percent—were not

Table 3.1.5 **Total Number of Offenses by Place of Birth**

	Place of Birth									
	Virgin Islands		Puerto Rico		United States		Eastern Caribbean		Other	
Offenses	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1667	100.0	46	100.0	165	100.0	422	100.0	34	100.0
1 Offense	1040	62.4	27	58.7	125	75.8	270	64.0	27	79.4
2 or more	627	37.6	19	41.3	40	24.2	152	36.0	7	20.6

Table 3.1.6 **Type of First Offense by Place of Birth**

	Place of Birth									
Type of	Virgin Islands		Puerto Rico		United States		Eastern Caribbean		Other	
Offense	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1668	100.0	45	100.0	165	100.0	422	100.0	34	100.0
Part I Felony	362	21.7	11	24.4	30	18.2	102	24.2	3	8.8
Part II Felony	184	11.0	4	8.9	25	15.2	51	12.1	4	11.8
Misdemeanor	238	14.3	2	4.4	16	9.7	50	11.8	3	8.8
Incidences	352	21.1	15	33.3	53	32.1	114	27.0	13	38.2
Other	532	31.9	13	28.9	41	24.8	105	24.9	11	32.4

Table 3.1.7 **Type of Weapon Used by Place of Birth**

	Place of Birth									
	Virgin Islands		Puerto Rico		United States		Eastern Caribbean		Other	
Weapon	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1676	100.0	46	100.0	165	100.0	422	100.0	34	100.0
Gun	49	2.9	0	0.0	2	1.2	12	2.8	1	2.9
Knife	69	4.1	1	2.2	3	1.8	16	3.8	1	2.9
Hand	117	7.0	4	8.7	9	5.5	18	4.3	1	2.9
Bottle	16	1.0	0	0.0	1	0.6	6	1.4	0	0.0
Penis	10	0.6	0	0.0	0	0.0	1	0.2	0	0.0
None	1295	77.3	38	82.6	138	83.6	328	77.7	27	79.4
Other	120	7.2	3	6.5	12	7.3	41	9.7	4	11.8

committed with weapons. In cases where a weapon was used by juveniles born in the US Virgin Islands, the most commonly used ones were by Hand (7.0 percent), Knife (4.1 percent), and Gun (2.9 percent).

Duration Between First and Second Offense—The mode—or the category with the largest number of occurrences—for the duration between the first and second offense was "One to less than two years." One out of every five repeat offense took place between 12 and 24 months after the first offense (Table 3.1.8).

Age at First Offense by Sex—Table 3.1.9 indicates juvenile offense levels were relatively very low between the ages of seven and nine—two percent or below. The number increased to 3.2 percent for 10-year-olds. Offense rates continued to increase with age, climbing to 12 percent for 13-year-olds, and remaining high until age 17. The peak of activity occurred at 15, the age at which 19.5 percent of juveniles committed their first offense. The data suggest a positive association between age and the number of juveniles committing their first offense.

When the data are broken down by gender, it is observed that a pattern of increased activity occurred for both sexes between the ages 13 to 17. The largest proportion of males committed their first offense between the ages 13 and 17, while this occurred for females between ages 13 to 16. By age 17 females had dropped to 9.9 percent of cases having first offenses, while the males were still relatively active, with 13.1 percent committing their first-time offense at this age. These data would seem to suggest that females abandoned their delinquent activity at an

Table 3.1.8 **Duration Between First and Second Offense**

Duration	Number	Percent
Total	824	100.0
< 1 Month	104	12.6
1 to < 2 Months	75	9.1
2 to < 3 Months	43	5.2
3 to < 6 Months	103	12.5
6 to < 12 Months	155	18.8
1 to < 2 Yrs	175	21.2
2 to < 3 Yrs	75	9.1
3 to < 4 Yrs	50	6.1
4 to < 5 Yrs	18	2.2
5 Yrs and Over	26	3.2

Table 3.1.9 **Age at First Offense by Sex**

	Total		Male		Female	
Age	Number	Percent	Number	Percent	Number	Percent
Total	2282	100.0	1633	100.0	649	100.0
Age 7	22	1.0	18	1.1	4	0.6
Age 8	37	1.6	32	2.0	5	0.8
Age 9	46	2.0	40	2.4	6	0.9
Age 10	73	3.2	66	4.0	7	1.1
Age 11	108	4.7	91	5.6	17	2.6
Age 12	177	7.8	127	7.8	50	7.7
Age 13	274	12.0	193	11.8	81	12.5
Age 14	430	18.8	284	17.4	146	22.5
Age 15	446	19.5	308	18.9	138	21.3
Age 16	391	17.1	260	15.9	131	20.2
Age 17	278	12.2	214	13.1	64	9.9

earlier age than did males. This observation coincides with other child development concepts that assign higher levels of physical and social development to females at an earlier age than to males.

Place of Birth of Juveniles by Sex—Table 3.1.10 indicates that the majority of juvenile offenders were born in the US Virgin Islands—73.3 percent. There were 12.4 percent of juvenile offenders born on an Eastern Caribbean Island and 7.2 percent of juvenile delinquents who were born in the US. Female offenders were slightly less likely to by born in the US Virgin Islands or and Eastern Caribbean Island and slightly more likely to be born in the US than male offenders.

Age at First Offense by Place of Birth—In Table 3.1.11 juveniles from all places of birth under the age of 10 appeared to have a low participation in delinquent behavior compared to the older age groups. Significant increases in the rate occurred between ages 10 to 14 for all

Table 3.1.10 **Place of Birth of Juvenile by Sex**

	Total		Male		Female	
Place of Birth	Number	Percent	Number	Percent	Number	Percent
Total	2288	100.0	1627	100.0	640	100.0
United States	165	7.2	106	6.5	57	8.9
US Virgin Islands	1676	73.3	1202	73.9	460	71.9
Eastern Caribbean	283	12.4	206	12.7	73	11.4
Other Caribbean	90	3.9	62	3.8	28	4.4
Puerto Rico	46	2.0	31	1.9	14	2.2
Other	28	1.2	20	1.2	8	1.3

Table 3.1.11 **Age at First Offense by Juvenile's Place of Birth**

	Place of Birth									
	Virgin Islands		Puerto Rico		United States		Eastern Caribbean		Other	
Age	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1642	100.0	45	100.0	160	100.0	422	100.0	34	100.0
Under 10 yrs	93	5.7	1	2.2	4	2.5	16	3.8	1	2.9
10 to 14 yrs	769	46.8	19	42.2	80	50.0	183	43.4	17	50.0
15 to 16 yrs	587	35.7	20	44.4	58	36.3	167	39.6	10	29.4
Over 16 yrs	193	11.8	5	11.1	18	11.3	56	13.3	6	17.6

groups. The peak age group for which first time delinquent activity occurred for all juveniles, regardless of place of birth, was between ages 10 and 14, with a falling off at the "Over 16" age category.

Age at First Offense by Mother's Place of Birth—In Table 3.1.12 the same pattern appears as for Table 3.1.11 above. First-time delinquent activity remained low for juveniles under age 10 for all place of birth groups, but increased significantly among the 10- to 14-year-old age group. There was a higher rate of first-time offenses in the 10 to 14 age group—50 percent—in the case of mothers born in Puerto Rico, compared with the other place of birth groups. This would seem to suggest that a greater proportion of juveniles who have a mother born in Puerto Rico become involved in delinquent activity at an early age.

Age at First Offense by Father's Place of Birth—The frequencies among the age categories in Table 3.1.13 for place-of-birth of mothers are not widely different from those in 3.1.12 for place-of-birth of fathers. However, while the percentages in the age 10 to 14 group are higher for mothers that were born in the Virgin Islands and Puerto Rico, the frequency in the same age category is higher for fathers born in the US than for fathers born elsewhere.

Juvenile's Race by Sex—Table 3.1.14 shows that of the total number of juveniles who committed a first offense, 96.0 percent were black, while 1.7 percent were white. Very small percentages were classified as Asian and Other—0.2 and 2.0 percent, respectively. These percentages were generally consistent for males and females.

Table 3.1.12 **Age at First Offense by Mother's Place of Birth**

	Mother's Place of Birth									
	Virgin Islands		Puerto Rico		United States		Eastern Caribbean		Other	
Age	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	688	100.0	52	100.0	105	100.0	1167	100.0	32	100.0
Under 10 yrs	39	5.7	2	3.8	12	11.4	87	7.5	1	3.1
10 to 14 yrs	332	48.3	26	50.0	44	41.9	490	42.0	10	31.3
15 to 16 yrs	251	36.5	17	32.7	35	33.3	433	37.1	15	46.9
Over 16 yrs	66	9.6	7	13.5	14	13.3	157	13.5	6	18.8

Table 3.1.13 **Age at First Offense by Father's Place of Birth**

	Father's Place of Birth									
	Virgin Islands		Puerto Rico		United States		Eastern Caribbean		Other	
Age	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	478	100.0	45	100.0	110	100.0	1141	100.0	30	100.0
Under 10 yrs	51	10.7	2	4.4	11	10.0	75	6.6	1	3.3
10 to 14 yrs	207	43.3	19	42.2	55	50.0	487	42.7	11	36.7
15 to 16 yrs	168	35.1	17	37.8	31	28.2	423	37.1	12	40.0
Over 16 yrs	52	10.9	7	15.6	13	11.8	156	13.7	6	20.0

In a 1995 survey of the general population of St Thomas and St John, among 5- to 19-year-olds, blacks accounted for 89.4 percent of the total, while whites accounted for 4.3 percent, and those of other race represented 6.3 percent. Although the age categories do not match exactly—the age group of the data set is 7 to 17—this gives a broad general comparison of the situation.

Juvenile's Guardian by Sex of Juvenile—The data in Table 3.1.15 show the majority of juvenile delinquents—54.8 percent—lived with their mother alone. The second highest percentage—21.1 percent—lived with both mother and father. The remainder of the guardian categories ranged between 0 and 10.4 percent. Proportionally, eight times as many lived with "mother and stepfather" as opposed to "father and stepmother"—3.3 percent to 0.4 percent, respectively.

When comparisons are made by gender, both male and female categories of juvenile offenders followed similar patterns within similar ranges. All of the remaining guardian categories experienced relatively low proportions of the total number of offenders. One can assume with some confidence that this is quite likely a reflection of the representation of these groups in the general Virgin Islands' population. Namely, the assumption is that the majority of children in this age group live with mothers alone, and the second largest group live with both natural parents.

School Enrollment at Time of Arrest—Table 3.1.16 indicates that only a small percentage of

Table 3.1.14 **Juvenile's Race by Sex**

	Total		Male		Female	
Race	Number	Percent	Number	Percent	Number	Percent
Total	2346	100.0	1666	100.0	657	100.0
Black	2252	96.0	1602	96.2	629	95.7
White	39	1.7	26	1.6	13	2.0
Asian	4	0.2	2	0.1	2	0.3
Other	47	2.0	33	2.0	13	2.0

Table 3.1.15 **Juvenile's Guardian by Juvenile's Sex**

	Total		Male		Female	
Guardian	Number	Percent	Number	Percent	Number	Percent
Total	2,346	100.0	1,666	100.0	657	100.0
Mother & Father	496	21.1	366	22.0	123	18.7
Mother	1,285	54.8	914	54.9	359	54.6
Father	137	5.8	105	6.3	31	4.7
Mother and Step Father	77	3.3	63	3.8	14	2.1
Father and Step Mother	9	0.4	5	0.3	4	0.6
Step Mother	3	0.1	2	0.1	1	0.2
Step Father	5	0.2	3	0.2	2	0.3
Foster Parents	23	1.0	8	0.5	15	2.3
Relatives	245	10.4	157	9.4	85	12.9
Other	46	2.0	32	1.9	14	2.1

Table 3.1.16 **School Enrollment**

Status	Number	Percent
Total	972	100.0
Enrolled	855	88.0
Not Enrolled	117	12.0

Table 3.1.17 **School Type**

School	Number	Percent
Total	799	100.0
Elementary	74	9.3
Jr. High	360	45.1
High	365	45.7

offenders—12 percent—were not enrolled in school at the time of arrest. This suggests that being enrolled in school is not a deterrent to youngsters committing offenses. A more comprehensive picture might be gained if data were available for analysis on levels of school and class attendance, and even achievement measures.

School Type at Time of Arrest—Table 3.1.17 shows data on the school level at which juvenile delinquents were enrolled at the time of their first offense. These data seem to correlate with previous sets of data that reflected age and first offense. The data show that a relatively low percentage of juveniles committed first offenses in elementary school—9.3 percent—increasing to 45.1 percent in Jr. high school, and 45.7 in high school.

Mother's Place of Birth by Juvenile's Sex—Table 3.1.18 indicates that the majority of juvenile offenders—39.8 percent—were children of mothers born in the Eastern Caribbean. The second highest proportion—35 percent—were children whose mothers were natives of the US Virgin Islands. The percentage of juvenile delinquents with mothers born in the other Caribbean islands or island group was 14.9 percent.

Mother's Employment by Sex of Juvenile—Table 3.1.19 shows that 72.9 percent of juvenile offenders had mothers who were em-

Table 3.1.18 **Mother's Place of Birth by Sex of Juvenile**

	Total		Male		Female	
Place of Birth	Number	Percent	Number	Percent	Number	Percent
Total	2,014	100.0	1,438	100.0	559	100.0
United states	108	5.4	76	5.3	32	5.7
US Virgin Islands	705	35.0	501	34.8	198	35.4
Eastern Caribbean	801	39.8	577	40.1	218	39.0
Other Anglo Caribbean	300	14.9	214	14.9	84	15.0
Puerto Rico	53	2.6	36	2.5	14	2.5
Other	47	2.3	34	2.4	13	2.3

Table 3.1.19 **Mother's Employment by Sex of Juvenile**

	Total		Male		Female	
Status	Number	Percent	Number	Percent	Number	Percent
Total	1,979	100.0	1,435	100.0	527	100.0
Employed	1,443	72.9	1,062	74.0	370	70.2
Unemployed	536	27.1	373	26.0	157	29.8

ployed. Male offenders were slightly more likely to have employment mothers—74.0 percent—than were females—70.2 percent. The finding that most of the mothers of juvenile offenders were employed may suggest that employed mothers were away from the home for extended hours, especially at times when children returned home from school. These data do not indicate if any of the employed mothers held more than one job or worked overtime. These factors would potentially add to a mother-child separation, and leave unsupervised children exposed and vulnerable to involvement in delinquent behavior.

3.1.3 Predicting Recidivism with the St Thomas Juvenile Investigation Bureau Data

3.1.3.1 Approach

One of the primary purposes of the study identified above was to adopt a proactive approach to the study of juvenile delinquent behavior. A persistent issue that is of significance to the Department of Human Services (DHS) relates to the task of trying to determine if a first-time offender will commit additional violations that will repeatedly result in his or her arrest. The data from the Contact and Arrest Reports show that during the study period, about 36 percent of all arrested juveniles had been arrested more than once. Of the total, about 12 percent of the juveniles had been arrested 4 or more times. It is the relatively high percent of repeat offenses that argues for closer study of this phenomenon.

It is evident why DHS has a primary interest in knowing what are the factors that might explain why some first-time offenders—male or female—never commit another offense to precipitate an arrest, while other youth persist in patterns of delinquent behavior that cause them

to be arrested several times. A keen understanding of this phenomenon becomes even more critical because DHS social caseworkers realize that juvenile repeat offenders often mature into adult criminals.

The question to be resolved might be stated another way: what is the combination of characteristics that might help to predict if a first-time offender might become a recidivist or repeat offender, that is, one showing a tendency to relapse into a previous mode of delinquent behavior?

Statistical methods provide one technique known as logit modeling that can help to provide answers to the question just posed. In the sections below, this statistical method will be applied to some of the demographic characteristics of juveniles that were recorded in the survey data, age, place of birth, race, place of birth of parents, school enrollment status and grade at time of arrest. These data were collected from both the Juvenile Investigation Bureau (JIB) and DHS offices in St Thomas/St John and in St Croix.

[Note: Readers who are not interested in the statistical methodology or procedure of logistical analysis may skip sections 3.1.3.2 to 3.1.3.4].

3.1.3.2 Methodology

Although logit modeling or logistic regression is a powerful statistical analytic technique, it may be presented in relatively simple terms for the non-statistical reader. An elementary description of the logit model is that it is one that objectively examines in a numerical way the relationship between a dependent variable and one or a set of independent characteristics. In this case, the method determines the chances of a first-time offender becoming a recidivist, and it also helps to measure the strength of the impact of the demographic characteristics on the chance of being a repeat offender. Further, it also enables the analyst to determine the order of the importance of the characteristics that are significant in their influence upon reverting to offensive behavior.

A concept that is commonly used in this kind of analysis is that of *odds*. This term is commonly used by gamblers and is easily understood by most persons. The odds indicate the relative number of chances of falling into one of two categories on some characteristic of interest. For example, if in a population of couples living together—married and unmarried—the chance of divorce or break-up is 0.4 and the chance of remaining married or living together is 0.6, then the odds of getting divorced or splitting up would be 0.4/0.6 = 0.67. This indicates that couples are two-thirds as likely to break-up as they are to stay together.

3.1.3.3 Definition of Variables

Dependent Variable: The primary outcome variable or characteristic of interest for each individual in the data set is a dichotomous variable (consisting of two groups). A juvenile was classified as a one-time offender if he or she were recorded as having been arrested one and only one time. The juvenile was classified as a recidivist if he or she were arrested two or more times within the period of study. The one-time offender is the referent group.

Independent or Explanatory Variable: These variables or characteristics are included in the study because they have been determined by prior preliminary analysis to exert relatively strong influence on the outcome variable. These include age, sex and ethnicity of the juvenile, and the primary person with whom the youth lives. Other variables that were considered, but not included in the final predictive model were place of birth of the mother and father, whether the mother and father were presently occupied, school enrollment status of

the youth at the time of first arrest, and grade level at the time of first arrest. Additionally, the type of offense and the type of weapon used were also included in a preliminary test of variables that might exert statistically significant impact on the outcome variable. Even though logic suggested that certain demographic variables should be included in such a model, only those that met statistical significance were retained in the final estimating equation.

i) *Age*: The variable age is simply the age of the juvenile at the time of first arrest. Using the actual age instead of a set of age categories affords an analysis of the changing chances or odds of recidivism as he juvenile moves across the age spectrum that is measured—7 to 17 years.

ii) Ag*e Squared*: This is a theoretical variable that captures the essence of the relationship between age and recidivism in that as juveniles mature, the chances of additional offenses level off. That is, the chances of recidivism decrease with age at a decreasing rate. (Age squared is therefore age multiplied by age.)

iii) *Gender*: This variable is dichotomous and refers to the sex of the juvenile. Female is the referent category.

iv) *Ethnicity*: Juveniles were classified into four categories based on the juvenile's place of birth at the time of first arrest. The groups were: born in the Virgin Islands, born in Puerto Rico or other Hispanic country, born in the Eastern Caribbean, and born in the Mainland United States. This latter is the referent group or the group with which the others were compared.

v) *Guardian*: The primary person with whom the juvenile was living at time of first arrest was grouped into one of two classifications. One was "mother and step father" or "Foster parents". All other juveniles fell into the category "Other parent". This latter was the referent group.

3.1.3.4 The Model

Let it be assumed that R_i is recidivism or repeat offending, A_i is the age of each juvenile, AS_i is age squared, S_i is sex or gender, E_i is ethnicity and G_i is primary guardian. It may further be assumed that p_i is the chance—or conditional probability—that recidivism is high, and $1 - p_i$ that the chance that it is low, given A_i, AS_i, S_i, E_i, and G_i. The logistic regression model for the log odds of a recidivist is:

$$\text{Log}(p/(1-p)) = \log R_i = a + ß_1(A_i) + ß_2(AS_i) + ß_3(S_i) + ß_4(E_i) + ß_5(G_i)$$

where log $(p/(1-p))$ is simply the log odds of becoming a recidivist, given the explanatory variables, and the betas represent the change in the log odds due to unit increments in the values of the predictors (Menard, 1995). In simpler terms, the model can be written as:

$$\text{Prob(event)} = 1 / (1 + e^{-Z})$$

where Z is the familiar linear combination

$$Z = B_0 + B_1X_1 + B_2X_2 + \ldots + B_pX_p.$$

3.1.3.5 Estimates of the St Thomas Juvenile Investigation Bureau Data

Numerical results from estimation of the logistic regression model are shown in Table 3.1.3.1. While the total number of cases initially included in the analysis was 2,346 offenders, only 2,275 were used to estimate the results shown in the table. Seventy-one of the cases had at least one item of information missing, and had to be excluded.

At the bottom of the main part of the table is a row that indicates the Likelihood ratio chi-

Table 3.1.3.1 **Parameter Estimates in Logistic Regression Predicting Recidivism: St Thomas, Juvenile Investigation Bureau Data**

Variable	Parameter Estimate (1)	Standard Error (2)	Pr> Chi Square (3)	Adjusted Odds Ratio (4)
Intercept	-6.5287	1.2110	<0.0001	…
Age	1.1726	0.1871	<0.0001	3.230
Age Squared	-0.0521	0.0072	<0.0001	0.949
Sex (1=Male)	0.3220	0.0525	<0.0001	1.904
Ethnicity				
USVI Born[a]	0.2044	0.0941	0.0298	1.879
Puerto Rico or Dominican Republic Born[a]	0.0083	0.2045	0.9675	1.545
Eastern Caribbean Born[a]	0.2138	0.1157	0.0647	1.897
Guardian (1=Mother and Stepfather or Foster Parents)[b]	0.3201	0.1068	0.0027	1.897

Likelihood Ratio Chi Square = 196.1936 df = 7 Pr > Chi Square < 0.0001

[a] Compared to US Born.
[b] Compared to living with mother and father, mother only, father only, father and step mother, step mother only, step father only, foster parents, or relatives.
Notes: N=2275. Odds ratios greater than 1.0 indicate greater odds of recidivism.

square = 196.1936. This is a test of the hypothesis that all of the explanatory variables have coefficients of 0. Since the associated *p*-value is less than 0.01, it is concluded that the hypothesis is substantiated and that at least one of the coefficients for the independent variables in column (1) is not 0.

It was defined above that the odds of an event occurring are the ratio of the chance that it will occur to the chance that it will not occur. When a parameter estimate—as shown in Table 3.1.3.1—is positive, the odds ratio will be greater than one, which means that the odds of the occurrence of the event are increased. If the parameter estimate is negative, the odds ratio will be less than 1, and the odds of the event are decreased.

The variable Age has a positive sign on the parameter estimate—shown in the second column of Table 3.1.3.1. This positive coefficient for Age indicates that the likelihood of recidivism increases with Age. The negative sign associated with the variable Age Squared means that the chances of repeated offenses increase with age at a decreasing rate. Thus, having been arrested once, the odds of relapsing into offensive behavior with a one-year increase in age are about three times as likely as not being arrested again. This information is derived from the adjusted odds ratio of 3.23 for Age shown in the last column. This means that for a one-year increase in age, the odds of becoming a recidivist are more than three times that of not becoming a repeat of offender. The table shows that the negative estimate for Age Squared—0.0521—produces an odds ratio that is slightly

less than 1.0. Because the relationship between age and recidivism is nonlinear, this variable helps to dampen the effect of age as the juveniles become older.

The estimate for Sex is positive with an odds ratio of 1.904. This indicates that the chance of being a recidivist, with other variables held constant, is about twice as high among males as it is for the base case, or for females.

Four ethnic groups were included in the model, and are explained in the lower half of Table 3.1.3.1. Three ethnic types are compared to the base case of US born. The odds ratio for born in the US Virgin Islands and born in the Eastern Caribbean are 1.879 and 1.897, respectively. The odds ratio for juveniles born in Puerto Rico or the Dominican Republic is smaller than those of the other two, with a value of 1.545. It is noted, however, that the column headed 'Pr > Chi Square' shows that this variable greatly exceeds the 0.05 level of significance, and is therefore not considered statistically substantive. This is probably due to the relatively small number of observations that fell into this category when compared to the others.

A first-time juvenile offender born in either the US Virgin Islands or in the Eastern Caribbean, with an odds ratio of 1.879 and 1.897, respectively, is almost twice as likely to become a recidivist as a stateside-born first-time offender. A Hispanic juvenile first-time offender that is one born in either Puerto Rico or the Dominican Republic, is only slightly less likely than either Virgin Islands-born juveniles or Eastern Caribbean youth to become a repeat offender.

The guardian or the primary person with whom the offender was living at the time of first arrest was classified into two groups. The first group included a juvenile who was living with his or her mother and a stepfather, or with foster parents. The second group consisted of all other guardians, primarily mother and father together or mother alone, father alone, father and stepmother, stepmother, stepfather, relatives or other kinds of living arrangements.

The odds ratio for the variable Guardian of 1.897 indicates that the odds of being a recidivist, with other variables held constant, are about 90 percent more for first-time offenders living with a mother and a stepfather or with foster parents, than it is for a first-time offender in some other kind of living arrangement.

3.1.3.6 The Prediction of Recidivism

The logit model can be used effectively to predict or forecast the probability or the chances that a juvenile first-time offender will become a repeat offender. If a juvenile has predicted chances of offense status that are less than 0.5, it is said that his or her chances of recidivating are 0. If the prediction is greater than 0.5, the chances of becoming a recidivist are 1.0, i.e., it is highly likely that the juvenile will be a recidivist. Similarly, if predicted odds are greater than 1.0, then the probability or chances of the outcome will be, or correspond to a probability, greater than 0.5. And if the predicted odds are less than 1.0, then the probability will be less than 0.5. Therefore, in cases where the prediction of the odds is less than 1.0, or the probability is less than 0.5, it can be said that the juvenile will likely not have another arrest.

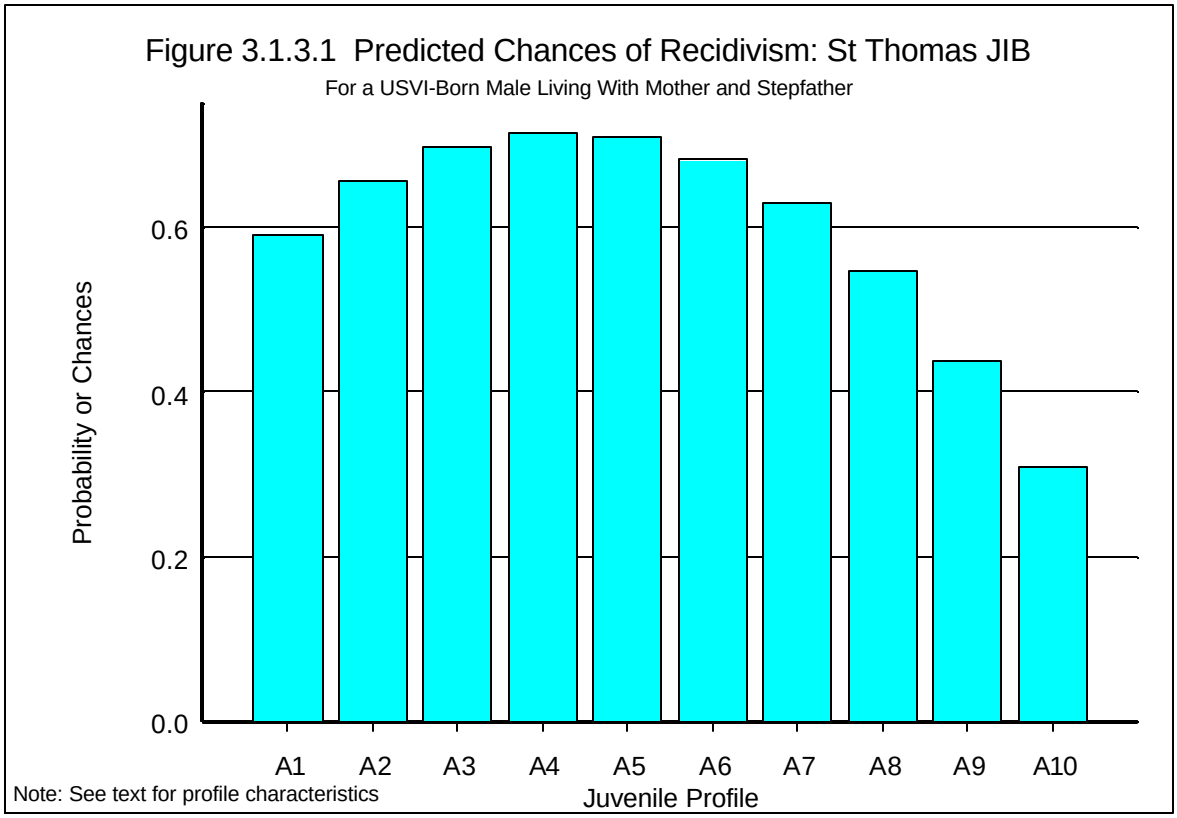
The data in Table 3.1.3.2 present various combinations of offender characteristics and the associated chances of recidivism. The table shows the parameter estimates of the variables taken from Table 3.1.3.1, as well as various juvenile profiles. The predicted chances of the first profile shown, A1, are those of an offender who is eight years old, is male, was born in the US Virgin Islands, and who lives with a mother and stepfather, or with foster parents. Column (10) of the table shows that the predicted odds

Table 3.1.3.2 **Predicted Probabilities in Logistic Regression: St Thomas, Juvenile Investigation Bureau Data**

Coefficients:	*a* (1)	*AgeFO* (2)	*AgeSq* (3)	*Sex* (4)	*Ethnicity1* (5)	*Ethnicity2* (6)	*Ethnicity3* (7)	*Guardian* (8)	***Odds*** (9)	***Proba-bility*** (10)
Parameter Estimates:	-6.5287	1.1726	-0.0521	0.3220	0.2044	0.0083	0.2138	0.3201		
Juvenile Profiles:										
A1		8	64	1	1	0	0	1	1.439	0.590
A2		9	81	1	1	0	0	1	1.918	0.657
A3		10	100	1	1	0	0	1	2.302	0.697
A4		11	121	1	1	0	0	1	2.490	0.713
A5		12	144	1	1	0	0	1	2.427	0.708
A6		13	169	1	1	0	0	1	2.131	0.681
A7		14	196	1	1	0	0	1	1.686	0.628
A8		15	225	1	1	0	0	1	1.202	0.546
A9		16	256	1	1	0	0	1	0.772	0.436
A10		17	289	1	1	0	0	1	0.447	0.309
A11		15	225	1	1	0	0	0	0.873	0.466
A12		12	144	0	1	0	0	1	1.759	0.638
A13		12	144	1	0	1	0	1	1.995	0.666
A14		12	144	0	0	0	1	1	1.775	0.640
A15		12	144	0	1	0	0	1	1.759	0.638
A16		12	144	0	0	0	1	1	1.775	0.640
A17		15	225	1	1	0	0	1	1.202	0.546
A18		15	225	0	0	1	0	1	0.716	0.417
A19		15	225	1	0	1	0	1	0.988	0.497
A20		15	225	1	1	0	0	0	0.873	0.466
A21		15	225	0	0	0	1	0	0.639	0.390
A22		10	100	0	1	0	0	0	1.211	0.548

Variables:

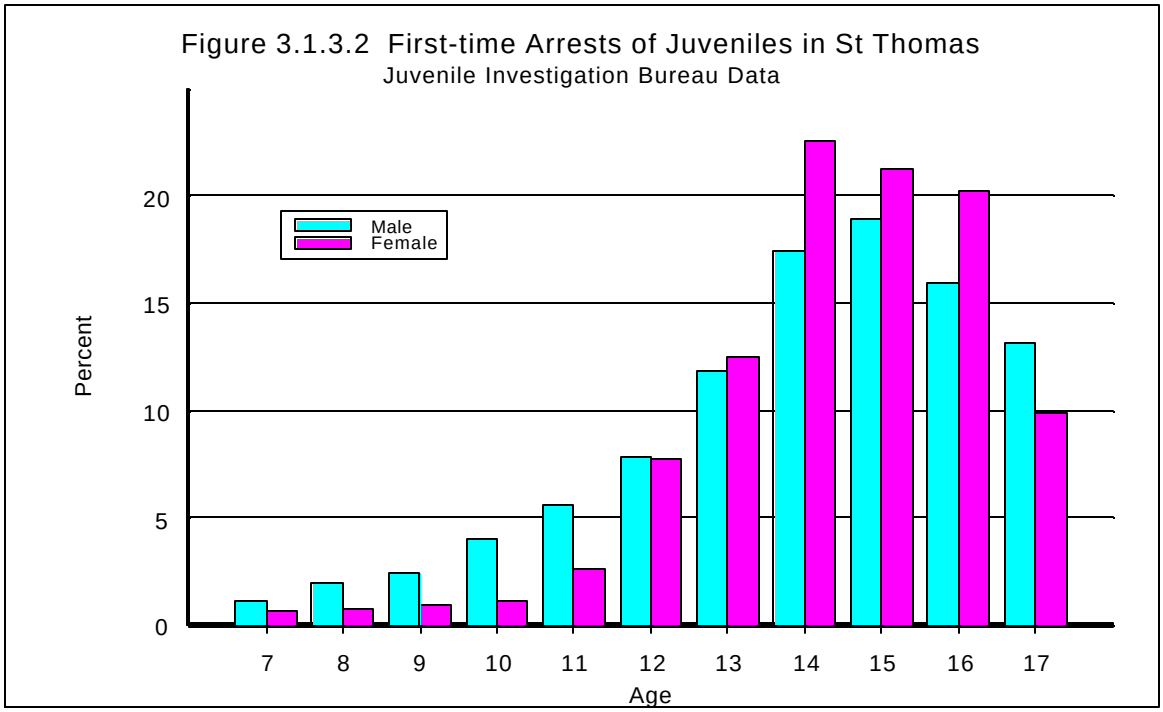
AgeFO = Age of juvenile at first offense.
AgeSq = The square of the age of juvenile at first offense.
Sex = Sex of the juvenile (1 = male, 0 = female).
Ethnicity1 = Virgin Island Born.
Ethnicity2 = Puerto Rican Born.
Ethnicity3 = Eastern Caribbean Born.
Ethnicity4 = US Mainland Born.
Guardian = Person with whom living (1 = mother and stepfather or foster parents, 0 = other guardian).



corresponding to this combination of characteristics are greater than 1.0—1.439—and therefore have a prediction of recidivism of 0.590. Because this value is greater than 0.5, this may be interpreted that an 8-year-old male offender, born in the Virgin Islands and living with his mother and stepfather or with foster parents is highly likely to become a repeat offender.

Profiles A1 to A10 show outcomes for juveniles with identical characteristics except for age. Thus it is noted that as age increases for the foregoing combination of attributes, the chances of recidivating increase at a decreasing rate until age 11 (for profiles A1 to A4). This is illustrated graphically in Figure 3.1.3.1. It shows that the chances of repeat offenses increase at a decreasing rate until the chances peak with A4 at age 11, and then decrease at an increasing rate to age 17 thereafter. While the attributes of A8 indicate that this 15-year-old juvenile will be a recidivist, the chances are slightly less than that of a 14-year-old. However, by the time the juvenile male with the associated characteristics reaches age 16, his predicted odds drop below 1.0 and his probability is less than 0.5, thus indicating he will not be a repeat offender.

Juvenile profile A11—of a 15-year-old US Virgin Islands born male living with either both parents, or a mother alone, or a father, or a father and stepmother, a stepmother alone, a stepfather, or with relatives—has predicted odds of less than 1.0 and a probability of 0.466. This juvenile is therefore predicted to be a non-repeat offender, and is not likely to be arrested again up to age 17. The profile of juvenile A12 is that of a 12-year-old female offender born in the US Virgin Islands who lives with her mother and stepfather or with foster parents. Her chances are predicted to be about 64 percent, and this indicates that she is highly likely to commit at least one other offense and be ar-



rested before age 18. Other profiles in the table show similar combination of characteristics, and the odds and probabilities can be interpreted similarly (Figure 3.1.3.2).

3.2 Department of Human Services Data Variables

The following data items were collected from case files at the St Thomas Department of Human Services (DHS):

Sex
Age
Date of birth
Place of birth
Race
Date of crime/incident
Type of crime/incident
Type of weapon used
Status (outcome/disposition)
Immigration status
Mother in the household
Father in the household
Number of siblings in the household
Education (highest level)
Occupation
Marital status
Number of children
Responsible for caring for children
Type of live-in program, if any
Head of household
Marital relationship of natural parents
Education of primary caretaker(s)
Income (gross per month)
Psychological Adjustment
Self esteem
Frequent arguments and fights with others
Age at first contact with police
Use of drugs/alcohol
Use of drugs/alcohol before or during school
Sexually active
Number of different sex partners in past year
Physical abuse

There were 707 records in the St Thomas district DHS data set. As reported earlier these consisted of all juveniles who were on DHS files during the period 1987 to 1997. Many of the tables below will reflect differing totals because of missing data.

3.2.1 St Thomas Data Description: Department of Human Services

Juvenile's Sex—According to Table 3.2.1 a large proportion of the total juvenile offenders—84.5 percent were males compared to 15.5 percent who were females. The age category here refers to 7- to 17-year olds: as a comparison, the 5-to-19-year-olds in the total St Thomas/St John population had a 50.4 to 49.6 percent male-female ratio (as estimated in the 1995 Population and Housing Survey). This over representation of males involved in delinquent behavior is a common and well-known phenomenon, though the reasons for this occurrence are still not as clear.

Immigration Status—In Table 3.2.2 US citizens made up the overwhelming majority of juvenile offenders—86.2 percent—whereas juveniles of resident alien status accounted for just 13.8 percent. The closest corresponding age group in the US Virgin Islands general population for which data are available is 5 to 19; US citizens and resident aliens or permanent residents in this group made up 88.4 and 10.8 percent, respectively (1995 Population and Housing Survey).

Table 3.2.1 **Juvenile's Sex**

	Juvenile	
Sex	Number	Percent
Total	691	100.0
Male	584	84.5
Female	107	15.5

Table 3.2.2 **Immigration Status**

	Juvenile	
Immigration Status	Number	Percent
Total	623	100.0
US citizen	537	86.2
Resident Alien	86	13.8

Juvenile's Age—Delinquent activity remained at a low rate between ages 7 to 9 (Table 3.2.3). At age 13 there was a relative picking up of activity and this increased dramatically between ages 14 to 17 with a peak at ages 14 and 15. Although delinquent activity at age 17 remained in the high-level category, the beginning of a falling off can be observed.

Juvenile's Place of Birth—The data in Table 3.2.4 show that 74 percent of juveniles committing first-time offenses were born in the US Virgin Islands, 4.3 percent on the US mainland, 17.2 percent in Eastern Caribbean islands, and 2.6 percent in Puerto Rico.

Juvenile's Race—Table 3.2.5 shows that 96.4 percent of juveniles involved in delinquent be-

Table 3.2.3 **Age of Juvenile**

	Juvenile	
Age in Years	Number	Percent
Total	693	100.0
7-9	35	5.1
10-12	102	14.7
13	80	11.5
14	123	17.7
15	129	18.6
16	118	17.0
17	106	15.3

Table 3.2.4 **Juvenile's Place of Birth**

Place of Birth	Juvenile	
	Number	Percent
Total	690	100.0
United States	30	4.3
Virgin Islands	514	74.5
Puerto Rico	18	2.6
Eastern Caribbean	119	17.2
Others	9	1.3

havior were black and 1.1 percent were white. Data on the age group 5 to 19 in the general population (1995 Population and Housing Survey) indicated that 89.4 percent of St Thomas/St John's population was black, 4.3 percent white, and 6.3 percent fell in the 'Other' category. These figures suggest that a disproportionately larger number of blacks became involved in delinquent behavior while whites and other groups were underrepresented based on their size in the general population.

Table 3.2.5 **Juvenile's Race**

Race	Juvenile	
	Number	Percent
Total	700	100.0
Black	675	96.4
White	8	1.1
Asian	2	0.3
Others	15	2.1

Household Status of Parents—Of the cases in Table 3.2.6 reporting data on the presence of parents in the household from which juvenile delinquents reside, 87.1 percent of mothers lived in the household compared to 30.6 percent of fathers. This supports a general concept in discourse on the causes of juvenile delinquency. It suggests that in households where either parent is absent, the tendency is to foster a less supportive and stable environment that permits a higher level of risk to juveniles becoming delinquent. Unfortunately, data are not available on the presence of mothers and fathers in the household for the general population.

Age of Parents—In Table 3.2.7 fathers and mothers of juvenile delinquents appear to have generally fallen in different age categories. The majority of mothers—61.2 percent—fell in the 40 to 49 age group. The greater proportions of fathers (over half) were in the "50 years and above" age group. Fathers tended to be somewhat older than mothers.

Birthplace of Parents—The data in Table 3.2.8 show that only 35.7 percent of the mothers and 28.5 percent of the fathers were born in the US Virgin Islands. The percentage for the US mainland-born was 5.2 and 6.1 percent for mothers and fathers, respectively. The majority of the parents were born in the Eastern Caribbean. The leading islands were St Kitts and Nevis with 18.6 and 17.6 percent, respectively if the data on place of birth of parents in the case files are compared on general population, a notable feature emerges. In the general popula-

Table 3.2.6 **Household Status of Parents**

Household Presence	Mother		Father	
	Number	Percent	Number	Percent
Total	635	100.0	604	100.0
In the household	553	87.1	185	30.6
Not in the household	82	12.9	419	69.4

Table 3.2.7 **Age of Parents**

Age in years	Mother		Father	
	Number	Percent	Number	Percent
Total	237	100.0	105	100.0
14-19	2	0.8	0	0.0
20-29	5	2.1	0	0.0
30-39	85	35.9	12	11.4
40-49	145	61.2	40	38.1
50 & above	0	0.0	53	50.5

Table 3.2.8 **Place of Birth of Parents**

Place of Birth	Mother		Father	
	Number	Percent	Number	Percent
Total	614	100.0	555	100.0
United States	32	5.2	34	6.1
Virgin Islands	219	35.7	158	28.5
Puerto Rico	17	2.8	11	2.0
Eastern Caribbean	320	52.1	325	58.6
Others	26	4.2	27	4.9

tion (1995 Population and Housing Survey) mothers and fathers born in St Kitts and Nevis were only 12.5 and 11.7 percent, respectively. In the case of Antigua and Barbuda, in the general population, percentages were 7.7 and 9.2 for mothers and fathers, respectively; whereas among juveniles in the data set, they were 10.6 and 11.8, respectively.

Marital Status of Parents—Table 3.2.9 shows data on marital status for parents of those juvenile delinquents. Available data show that in the highest category, 46.8 percent of mothers and 50.7 percent of fathers were married at the time of the juvenile's first offense, ("Now Married"), though not necessarily to each other. The next two categories for mothers were "Never Married," 28.2 and "Divorced" 12.3 percent. (Here again, divorce not necessarily between the two parents of the juvenile). For fathers, the next two categories were the same: "Never Married" was 24.3 percent and "Divorced", 12.7 percent. A higher "Separated" rate, 9.4 percent, existed for fathers of juveniles than it did for mothers of juveniles, 8.5 percent.

Employment Status of Parents—Of the cases in Table 3.2.10 reporting data on the employment status of parents, 74.0 percent of mothers were employed compared to 73.5 percent of fathers.

Juvenile's Guardian—Of the reported cases of juvenile offenders that had information on the person or persons with whom they lived, 48.5 percent lived with their mother, 4.9 percent with their father, 23.4 percent with mother and father, 8.4 percent with relatives and 10.5 percent with a mother and a stepfather (Table 3.2.11). These data suggest that more juvenile delinquents who lived with their mother alone ended up becoming delinquent more than juveniles in the other categories. With almost half of the juvenile cases living in households with a mother alone, the association between these two variables in the data is evident.

Table 3.2.9 **Marital Status of Parents**

Marital Status	Mother		Father	
	Number	Percent	Number	Percent
Total	365	100.0	276	100.0
Now married	171	46.8	140	50.7
Widowed	15	4.1	8	2.9
Divorced	45	12.3	35	12.7
Separated	31	8.5	26	9.4
Never married	103	28.2	67	24.3

Table 3.2.10 **Employment Status of Parents**

Employment Status	Mother		Father	
	Number	Percent	Number	Percent
Total	592	100.0	431	100.0
Employed	438	74.0	317	73.5
Unemployed	154	26.0	114	26.5

Table 3.2.11 **Juvenile's Guardian**

Guardian	Number	Percent
Total	629	100.0
Mother and Father	147	23.4
Mother	305	48.5
Father	31	4.9
Mother and Stepfather	66	10.5
Father and Stepmother	6	1.0
Foster parents	4	0.6
Relatives	53	8.4
Other	17	2.7

Marital Relationship of Natural Parents— Data on current marital status of natural parents highlight categories for the natural parents of juvenile delinquents. At time of the first offense “Never Married" and “Divorced” categories represented 36.6 and 12.4 percent, respectively, making up about half of the juvenile delinquents. The proportion for the category “Married and Living Together” was 28.7 percent. The categories “One Parent Deceased” and “Separated” accounted for 12.1 and 10.2 percent respectively (Table 3.2.12).

Table 3.2.12 **Marital Relationship of Natural Parents**

Current status	Number	Percent
Total	421	100.0
Married and living together	121	28.7
Separated	43	10.2
Divorced	52	12.4
Never married	154	36.6
One parent deceased	51	12.1
Both parents deceased	0	0.0

Siblings in the Household—Data in Table 3.2.13 indicate that juvenile offenders were most represented in households with one or two siblings present. These two categories combined represented 45.2 percent of all juvenile offenders. In households with three siblings, 21.6 percent of offenders were represented. In contrast, only 10.1 percent of juvenile offenders resided in households with four siblings and only 4.2 percent and 4.8 percent of juveniles lived in households with five or six or more siblings, respectively.

School Enrollment—Table 3.2.14 indicates that 84.4 percent of juvenile delinquents were enrolled in school. Unfortunately, data indicating actual attendance at school and class participation were not part of the data set. Although the majority of juveniles involved in delinquent behavior were enrolled in school, that does not mean they attended school, participated in and benefited from class activities.

Table 3.2.13 **Siblings in the Household**

Number of siblings	Number	Percent
Total	523	100.0
No siblings	74	14.1
One siblings	118	22.6
Two siblings	118	22.6
Three siblings	113	21.6
Four siblings	53	10.1
Five siblings	22	4.2
Six or more siblings	25	4.8

Note: Median number of siblings in the household is 2.

Table 3.2.14 **School Enrollment**

Enrollment Status	Number	Percent
Total	546	100.0
Enrolled	461	84.4
Not Enrolled	85	15.6

Table 3.2.15 **Current or Highest Grade Completed**

Grade	Number	Percent
Total	689	99.6
Grade 1	1	0.1
Grade 2	212	30.6
Grade 3	0	0.0
Grade 4	10	1.4
Grade 5	7	1.0
Grade 6	20	2.9
Grade 7	105	15.2
Grade 8	111	16.0
Grade 9	107	15.5
Grade 10	59	8.5
Grade 11	34	4.9
Grade 12	23	3.3

It is important to note that 15.6 percent were not enrolled in school, although the law stipulates that children below the age of 16 must be enrolled. Attendance at school and class is neither enforced nor easily enforceable.

Current or Highest Grade Completed— Table 3.2.15 indicates that juveniles involved in delinquent activities were represented across Grades 1 through 12. Children in Grades one through six were involved at low levels of juvenile delinquent behavior except Grade two which was surprisingly high—30.6 percent. The peak was between juveniles in Grades seven through nine, with a range between 15.2 and 15.5 percent of the juvenile delinquents taking part. The proportion of juveniles involved in delinquent behavior began to decrease at Grade 10 and continued through to the higher grades. It should be remembered that these data represented the educational status at time of first offense and cannot predict the educational progress after that offense.

3.2.2 St Thomas: Department of Human Services Data Relationships

Juvenile's Employment Status—Table 3.2.16 indicates that the majority of juveniles involved in delinquent behavior were unemployed—86.7 percent. Here again it could help to have figures showing the proportion of this age group of juveniles who are employed and unemployed in the general population in order to get a clearer picture.

Current Job—Table 3.2.17 suggests that at the time of the first offense, the juvenile delinquents were employed in a variety of job types and no particular activity seems to have had a monopoly on their time. It is assumed that these are part-time jobs but there is no way of knowing weekly or monthly duration. Another point to remember is that only one out of 10 reported current jobs due to the fact that majority of them (86.7 percent) reported unemployed.

Table 3.2.16 **Juvenile's Employment Status**

Currently Working	Number	Percent
Total	429	100.0
Employed	57	13.3
Unemployed	372	86.7

Table 3.2.17 **Current Job**

Job	Number	Percent
Total	68	100.0
Restaurant or Hotel	11	16.2
Construction	6	8.8
Store clerk	5	7.4
Mechanic shop	5	7.4
Gas station attendant	3	4.4
Other	38	55.9

Table 3.2.18 **Number of Children in the Household**

Children	Number	Percent
Total	485	100.0
0	5	1.0
1	90	18.6
2	88	18.1
3	111	22.9
4	95	19.6
5	36	7.4
6-10	53	10.9
11-14	4	0.8
15 or more	3	0.6

Table 3.2.19 **Juvenile's Children**

Parental Status	Number	Percent
Total	405	100.0
Children	18	4.4
No Children	387	95.6

Table 3.2.20 **Juvenile Responsible for Childcare**

Childcare	Number	Percent
Total	396	100.0
Yes	14	3.5
No	382	96.5

Children in the Household—Table 3.2.18 seems to suggest that households with one, two, three or four children were more likely to have delinquent juveniles—between 18.6 and 22.9 percent—than households with five or more children. It is possible that the presence of more children provide examples of alternate behavior and persons with whom youngsters may associate and communicate with. It also may limit negative outside influences on their behavior and activities.

Juvenile's Children—Table 3.2.19 shows that a small proportion of juvenile delinquents—4.4 percent—had children of their own. Juveniles who were responsible for childcare—Table 3.2.20 show a slightly lower proportion—3.5 percent—than those with children. This responsibility did not necessarily refer to children owned by the juvenile delinquent, and could have been a younger sibling or relative.

Presence of Risk Indicators—Each of the variables in Table 3.2.21 holds some significance for the juvenile's psychological well-being. The presence of one or more of these factors could contribute to the undermining of

Table 3.2.21 **Juvenile's Psychological Assessment**

		Yes		No	
	Total	Number	Percent	Number	Percent
Felt like a failure or worthless	171	44	25.7	127	74.3
Had trouble controlling anger	196	84	42.9	112	57.1
Had frequent arguments and fights	186	76	40.9	110	59.1
Ever been suspended from school	213	123	57.7	90	42.3
Ever been expelled from school	174	40	23.0	134	77.0
Used drugs or alcohol	167	43	25.7	124	74.3
Getting hurt (physically abused)	124	16	12.9	108	87.1

the juvenile's self esteem and self worth. The influence of any one or more of these variables at any level usually suggests negative impacts on behavior. There were relatively high percentages in areas such as had trouble controlling anger (42.9 percent), had frequent arguments and fights(40.9 percent), ever been suspended from school (57.7 percent), used drugs or alcohol (25.7 percent), felt like a failure or worthless (25.7 percent), getting hurt (physically abused)—(12.9 percent), ever been expelled from school (23 percent).

Juvenile's Sexual Activity—Table 3.2.22 indicates that 56.7 percent of the first time offenders were sexually active. This variable is often identified as an indicator associated with delinquent behavior.

Forced Sex—Table 3.2.23 indicates that 6.5 percent of the juveniles with first offenses were forced to have sex. Looked at along with the previous table on Juvenile's Sexual Activity, the data suggest that a large proportion of juveniles opt to participate in sexual activity freely.

Juvenile's Sex Partners—In Table 3.2.24 the number of juveniles (32) for whom data are available here is relatively low. About 60 percent reported one or two sex partners but 9.4 percent reported six or more sex partners. The low number of cases for this variable was probably due to the reluctance of juveniles to be forthcoming with data that would obviously be considered very sensitive.

Table 3.2.22 **Juvenile's Sexual Activity**

Sexual Activity	Number	Percent
Total	164	100.0
Sexually Active	93	56.7
Not Sexually Active	71	43.3

Table 3.2.23 **Juvenile Forced to Have Sex**

	Number	Percent
Total	123	100.0
Forced	8	6.5
Not Forced	115	93.5

Table 3.2.24 **Juvenile's Sex Partners**

Sex Partners	Number	Percent
Total	32	100.0
1	14	43.8
2	5	15.6
3	5	15.6
4	2	6.3
5	3	9.4
6-10	1	3.1
11 or more	2	6.3

Pre-outcome Status—Of the six offenses listed in Table 3.2.25 the number of juveniles involved increasingly decreased in number. The proportion of cases going to trial rather than plea agreement was lower for Offenses 1 and 2. The pattern was reversed for Offense 3 onwards, the proportion of cases going to trial, rather than plea agreement became close to 60 percent.

Outcome of Offense—Table 3.2.26 gives a breakdown of the outcome of cases that went through the JIB and DHS systems for the six offenses being tracked. This was the final processing of juvenile delinquents and represented the final sentencing stage. For the first and second the most common form of treatment is community service ranging between 21.3 to 31.0 percent of the cases.

For cases ranging three to six offenses, however, the treatment in the majority of instances changed to sentencing for a period at the Youth Rehabilitation Center (YRC)—between 31.3 to 39.5 percent of cases. It should be noted that

Table 3.2.25 **Pre-Outcome Status**

Pre-Outcome Status	Offense 1		Offense 2		Offense 3	
	Number	Percent	Number	Percent	Number	Percent
Total	366	100.0	130	100	70	100
Trial	170	46.4	62	47.7	41	58.6
Plea Agreement	196	53.6	68	52.3	29	41.4

Table 3.2.25 **Pre-Outcome Status: Continued**

Pre-Outcome Status	Offense 4		Offense 5		Offense 6	
	Number	Percent	Number	Percent	Number	Percent
Total	36	100	26	100	25	100
Trial	21	58.3	15	57.7	16	64.0
Plea Agreement	15	41.7	11	42.3	9	36.0

for this population of juvenile delinquents for whom the literature indicates there is high marijuana usage, drug rehabilitation is listed as a treatment only in Offenses 1, 2, 3 and 4 and that at an extremely low rate.

3.2.3 Predicting Recidivism with the St Thomas Department of Human Services Data

This discussion focuses on forecasting the chances of recidivism, or the chances that a juvenile will be arrested again after committing a first offense. While most of the features of this section are similar to those of 3.1.3.1—particularly the approach, the methodology and the model—there are two primary differences. First, the data set is confined to only those juveniles whose cases are on file at DHS for the period 1987 to 1997. The number of observations in this data set—701—is less than half of that of JIB. Second, in addition to the variables employed in the model in section 3.1.3, there is an additional variable that was recorded in DHS case files, and that is the response to the question, *Has … felt like a failure or worthless?*

3.2.3.1 Estimates of the St Thomas Department of Human Services Data

The number of cases on which the DHS St Thomas analysis is based one is 686 out of a total of 701. Table 3.2.3.1 shows the results of the estimation of the logistic regression model. The likelihood ratio chi-square reported has a probability value less than 0.01, indicating that at least one of the coefficients for the explanatory variables is not 0. A glance at the values of the parameter estimates of the explanatory variables in column (1) are not largely different from those in Table 3.1.3.1, because in many respects they are measuring characteristics of some of the same juvenile offenders.

The standard errors that are associated with the parameter estimates are shown in column (2). Column (3) shows that the variables Age, Age squared and Sex are statistically significant. For example, the chances that they are not significant when one treats them as such are less than 1 in 10,000. The level of significance of US Virgin Island born category hovers around 0.05, with Puerto Rico or Dominican Republic Born category showing no statistical significance. The relatively small size of the number

Table 3.2.26 **Outcome Status**

	Offense 1		Offense 2		Offense 3	
Outcome Status	Number	Percent	Number	Percent	Number	Percent
Total	632	100.0	211	100.0	112	100.0
Crisis Stabilization Center	10	1.6	2	0.9	0	0.0
Youth Rehabilitation Center	62	9.8	38	18.0	35	31.3
Boys/Girls Group Home	0	0.0	1	0.5	0	0.0
Transfer to Correctional Facility	1	0.2	2	0.9	5	4.5
Drug Rehabilitation Center	10	1.6	7	3.3	1	0.9
Psychological evaluation	18	2.8	5	2.4	2	1.8
Dismised	154	24.4	30	14.2	10	8.9
Left jurisdiction	8	1.3	1	0.5	0	0.0
Case not prosecuted	37	5.9	7	3.3	3	2.7
Case pending	6	0.9	6	2.8	0	0.0
Community service	196	31.0	45	21.3	27	24.1
Counseling	25	4.0	12	5.7	5	4.5
restit = $2,000	8	1.3	1	0.5	1	0.9
Attend school regularly	1	0.2	0	0.0	0	0.0
Academic prog	0	0.0	0	0.0	1	0.9
read/subm bk rep	0	0.0	1	0.5	0	0.0
curf/prnt/princ	10	1.6	6	2.8	3	2.7
rpmnd/prin/j off	11	1.7	3	1.4	2	1.8
other	75	11.9	44	20.9	17	15.2

Table 3.2.26 **Outcome Status: Continued**

	Offense 4		Offense 5		Offense 6	
Outcome Status	Number	Percent	Number	Percent	Number	Percent
Total	61	100.0	43	100.0	38	100.0
Crisis Stabilization Center	1	1.6	1	2.3	0	0.0
Youth Rehabilitation Center	22	36.1	17	39.5	15	39.5
Boys/Girls Group Home	0	0.0	0	0.0	0	0.0
Transfer to Correctional Facility	2	3.3	0	0.0	3	7.9
Drug Rehabilitation Center	1	1.6	0	0.0	0	0.0
Psychological evaluation	2	3.3	1	2.3	2	5.3
Dismised	9	14.8	5	11.6	3	7.9
Left jurisdiction	0	0.0	0	0.0	2	5.3
Case not prosecuted	2	3.3	1	2.3	0	0.0
Case pending	1	1.6	0	0.0	0	0.0
Community service	10	16.4	12	27.9	6	15.8
Counseling	0	0.0	1	2.3	2	5.3
restit = $2,000	0	0.0	0	0.0	0	0.0
Attend school regularly	0	0.0	0	0.0	0	0.0
Academic prog	0	0.0	0	0.0	0	0.0
read/subm bk rep	0	0.0	0	0.0	0	0.0
curf/prnt/princ	1	1.6	2	4.7	1	2.6
rpmnd/prin/j off	1	1.6	0	0.0	0	0.0
other	9	14.8	3	7.0	4	10.5

Table 3.2.3.1 **Parameter Estimates in Logistic Regression Predicting Recidivism: St Thomas, Department of Human Services Data**

Variable	Parameter Estimate (1)	Standard Error (2)	Pr> Chi Square (3)	Adjusted Odds Ratio (4)
Intercept	-5.1437	2.2758	<0.0001	…
Age	1.2042	0.3443	<0.0001	3.334
Age Squared	-0.5880	0.0130	<0.0001	0.943
Sex (1=Male)	0.4449	0.1154	<0.0001	2.435
Ethnicity				
USVI Born[a]	0.5192	0.1903	0.0493	2.794
Puerto Rico or Dominican Republic Born[a]	-0.6105	0.3819	0.9896	0.903
Eastern Caribbean Born[a]	0.5995	0.2274	0.0554	3.027
Guardian (1=Mother and Stepfather or Foster Parents)[b]	0.0389	0.1421	0.0058	1.081
Self-Esteem	0.3502	0.1890	<0.0001	2.015

Likelihood Ratio Chi Square = 141.2858 df = 8 Pr > Chi Square < 0.0001

[a] Compared to US Born.
[b] Compared to living with mother and father, mother only, father only, father and step mother, step mother only, step father only, foster parents, or relatives.
Notes: N=686. Odds ratios greater than 1.0 indicate greater odds of recidivism.

of cases for this variable probably explains its low level of significance. Guardian is statistically significant, and so is self-esteem, with both levels of significance well below 0.01.

As was mentioned above in section 3.1.3, a positive parameter estimate produces an odds ratio greater than 1.0, and a negative odd ratio results in an odds ratio below 1.0. The adjusted odds ratio for Age of 3.334 in column (4) leads one to the same conclusion as that in Table 3.1.3.1, that is, with a one-year increase in age, the chances of committing at least one other offense and being arrested, are more than three times as likely as not committing another offense, all other things being equal.

The odds ratio for Sex of 2.435 indicates that males are about 2.5 times more likely than females to commit at least one other offense for which they will be arrested. It is notable that this ratio is somewhat higher than that for males in the JIB data set. The odds ratios for the Eastern Caribbean Ethnicity variable—3.027—suggest that offenders from the Eastern Caribbean are slightly more likely to be repeat offenders than VI-born offenders—2.794. Both of these groups are about three times more likely to be repeat offenders than US-born offenders.

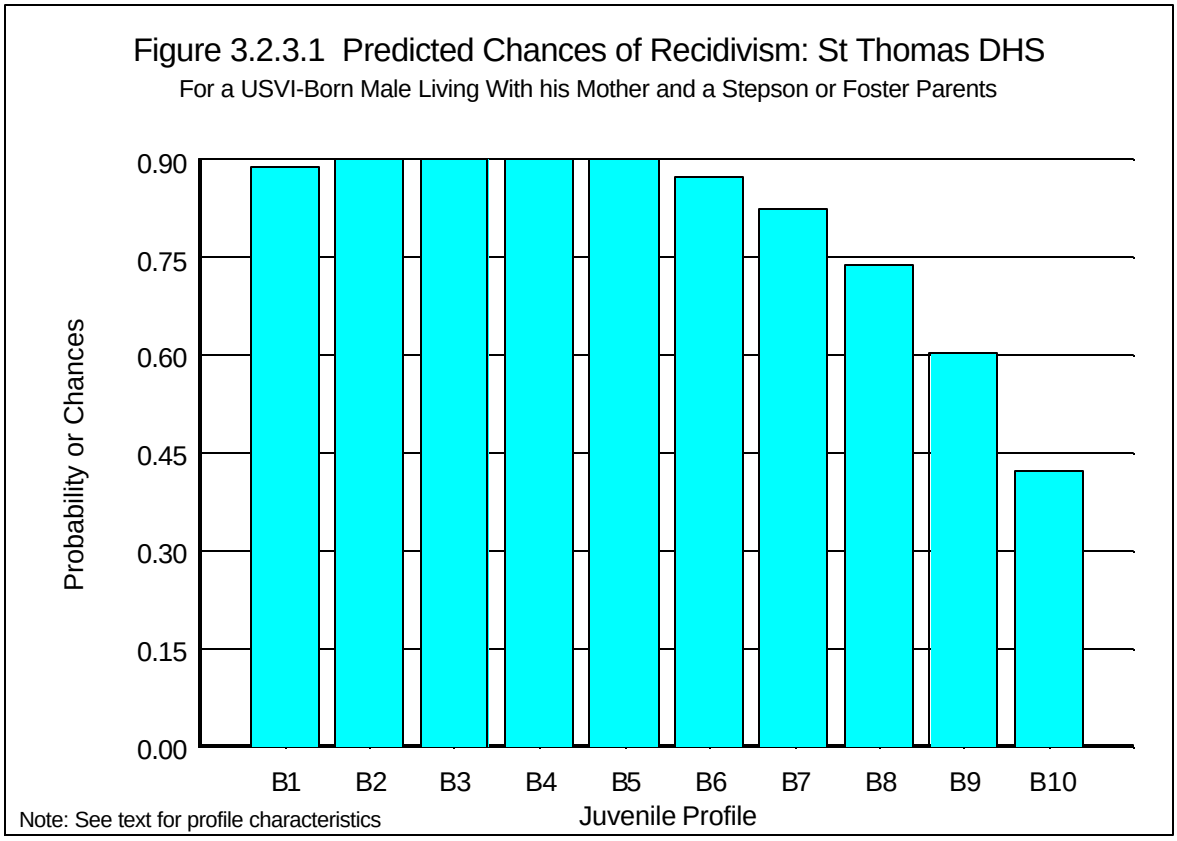
The variable for Guardian does not appear to exert as much influence in the DHS data set as evidenced by the odds ratio of 1.081 compared

Table 3.2.3.2 **Predicted Probabilities in Logistic Regression: St Thomas, Department of Human Services Data**

Coefficients:	*a* (1)	*AgeFO* (2)	*AgeSq* (3)	*Sex* (4)	*Ethnicity1* (5)	*Ethnicity2* (6)	*Ethnicity3* (7)	*Guardian* (8)	*Self-Esteem* (9)	***Odds*** (10)	***Proba-bility*** (11)
Parameter Estimates:	-5.1437	1.2042	-0.0588	0.4449	0.5192	-0.6105	0.5995	0.0389	0.3502		
Juvenile Profiles:											
B1		8	64	1	1	0	0	1	1	8.004	0.889
B2		9	81	1	1	0	0	1	1	9.821	0.908
B3		10	100	1	1	0	0	1	1	10.713	0.915
B4		11	121	1	1	0	0	1	1	10.391	0.912
B5		12	144	1	1	0	0	1	1	8.959	0.900
B6		13	169	1	1	0	0	1	1	6.868	0.873
B7		14	196	1	1	0	0	1	1	4.681	0.824
B8		15	225	1	1	0	0	1	1	2.836	0.739
B9		16	256	1	1	0	0	1	1	1.528	0.604
B10		17	289	1	1	0	0	1	1	0.732	0.423
B11		15	225	1	1	0	0	0	0	1.922	0.658
B12		12	144	0	1	0	0	1	1	5.742	0.852
B13		12	144	1	0	1	0	1	1	2.895	0.743
B14		12	144	0	0	0	1	1	1	6.222	0.862
B15		13	169	0	1	0	0	1	1	4.402	0.815
B16		14	196	0	0	0	1	1	1	3.251	0.765
B17		15	225	0	1	0	0	1	1	1.818	0.645
B18		15	225	0	0	1	0	1	1	0.587	0.370
B19		15	225	1	0	1	0	1	1	0.916	0.478
B20		15	225	1	1	0	0	0	0	1.922	0.658
B21		15	225	0	0	0	1	0	0	1.335	0.572
B22		10	100	0	1	0	0	0	0	4.653	0.823

Variables:

AgeFO = Age of juvenile at first offense.
AgeSq = The square of the age of the juvenile at first offense.
Sex = Sex of the juvenile (1 = male, 0 = female).
Ethnicity1 = Virgin Islander.
Ethnicity2 = Hispanic.
Ethnicity3 = Eastern Caribbean-born.
Ethnicity4 = US Mainland-born.
Guardian = Person with whom living (1 = mother and stepfather or foster parents, 0 = other guardian).
Self-esteem = Self-esteem of the juvenile, coded 1 if person does not feel like a failure, otherwise 0.



to 1.897 in the JIB data. The odds ratio for Self-esteem of 2.015, a variable not included in the JIB data, indicates clearly that first-time offenders who report that they experience low esteem or feel worthless are twice as likely to be a recidivist as an offender who expresses self-assurance and feels self-confident.

3.2.3.2 The Prediction of Recidivism

As in Table 3.1.3.2, Table 3.2.3.2 show several combinations of characteristics of juveniles that might help to determine whether a juvenile will be a recidivist or not. The set of variables is the same as that in the former table with the addition of the Self-Esteem variable. In a similar way, the set of juvenile profiles is repeated so as to allow comparison with the JIB data.

Table 3.2.3.2 illustrates that because the parameter estimates of the coefficients in the DHS data are in general close to those of the JIB data, the odds and the associated probabilities are not very different. Hence, in the first 10 profiles of juveniles between age eight and age 17, male US Virgin Islands-born first-time offenders living with a mother and stepfather or foster parents and having low self-esteem are predicted to be repeat offenders. This combination of demographic and social characteristics predicts recidivists for all ages consistently up to age 16. It is not until the youthful offender with these attributes reaches age 17 that the chances of recidivism are below 0.5, hence predicted to remain a one-time offender. (See section 3.1.3.6 for an explanation of interpretation of the prediction probabilities).

St Croix Data: Description and Analysis

3.3 Youth Investigation Bureau Data Variables

The initial assumption of the researchers was that the same data collection instrument—the Contact Card and Arrest Report—that was utilized with the Investigation Bureau in St Thomas could also be used with the St Croix Youth Investigation Bureau data. This was not entirely the case as the St Croix office deemed it valuable to consider an additional variable for which data were immediately available. The data variables were as follows:

Sex
Age
Date of birth
Place of birth
Race/ethnic origin
Person with whom living
Birthplace of mother and father
School enrollment status
Education (highest level)
Employment status of guardian
Date of crime/incident
Type of crime/incident
Type of weapon used
Relative charged with criminal offense
Degree of criminal involvement of relative

The number of cases that occurred before 1987 were expected to be small since they represented only those juveniles that committed offenses before the period of study but were still active after 1987. Data between 1987 and 1997, on the other hand, should have reflected all cases that committed first offenses during those years.

It appears very likely that the number of cases used in data gathering particularly at YIB on St Croix, did not constitute the entire population of cases for the years stipulated and as anticipated in the parameters of the study. This is evident especially when observing Year of First Offense data. This would mean that all the YIB data would be affected by this absence of a full quota of cases even when it is not immediately obvious in the results. It is not possible to estimate or devise the extent to which the data presented here do not represent the complete data set. The actual data gathering process, though guided by ECC, was carried out by YIB employees in order to comply with confidentiality agreements.

There are concerns as to whether this data set represents enough of the total population and what possible effect the inclusion of additional, but absent cases, would have had on the outcome of variables. Thought should be given also to how these factors restrict or facilitate the drawing of conclusions using this data.

Following is an attempt to describe the data that are presented in frequency tables, followed by a section of cross tabulation and analysis based on the items outlined in the data gathering forms. Data are set out first for YIB, followed by those for DHS. An attempt is made to provide background information and brief descriptions toward a clearer appreciation of the data.

3.3.1 St Croix Data Description: Youth Investigation Bureau

Year of First Offense—The period from which cases were chosen for this study was 1987 to 1997. All cases that were active during that time should have been included during the data gathering process. In some cases first and subsequent offenses had been committed before 1987 and these years and offenses were included in the data set as well.

The data in Table 3.3.1 suggest a very uneven pattern in entry of juveniles as first time offenders into the YIB system. These data suggest that in 1989 and the period before had few recorded juvenile first offenses—a total of

Table 3.3.1 **Year of First Offense**

Year of Offense	Juvenile	Percent
Total	1821	100.0
Before 1980	1	0.1
1980 to 1988	1	0.1
1989	1	0.1
1990	102	5.6
1991	435	23.9
1992	361	19.8
1993	18	1.0
1994	13	0.7
1995	753	41.4
1996	136	7.5

three during the period before 1980 and in 1989—that required intervention by the YIB system. This pattern appears extremely unusual and might likely be a reflection of administrative recordkeeping up to the time of data gathering, and not necessarily an accurate account of the cases that were recorded by the YIB system during those years.

The cluster of years beginning in 1990 and extending to 1996 show juveniles as relatively active in committing first offenses. During that period, however, the data suggest a steep dip of two years where the percent of offenders fell to one and below—(1993, 1994). This is followed by a period of increased activity that peaked at 41.1 percent in 1995, followed by a drop to 7.5 percent in 1996. Once again, it is both an interesting and unusual phenomenon that first-time delinquent behavior would drop drastically to as low as zero in 1997 after such an intense period of activity, and suggests that this might be a reflection of a deficiency in administrative recordkeeping. No serious significance should therefore be placed on the distribution of first offenses over time using this data set.

Type of First Offense—Table 3.3.2 lists first-time offenses under very broad categories. Part 1 Felony accounted for the largest single offense type—28.7 percent—and included crimes such as robbery, felonious assault, burglary, and grand larceny. Part II Felony—11.8 percent—covered crimes such as possession of a controlled substance, possession of unlicensed firearm, possession of stolen property, and unauthorized use of vehicle. A large proportion—41.0 percent—of offense types fell under the category other, compiled from a number of undefined offenses.

Weapon Used in First Offense—According to Table 3.3.3, the highest proportion of cases fell in the other category, implying a number of undefined objects that may be deemed weapons were used by juveniles while carrying out de-

Table 3.3.2 **Type of First Offense**

Type of Offense	Juvenile	Percent
Total	1824	100.0
Part I Felony	523	28.7
Part II Felony	215	11.8
Misdemeanor	187	10.3
Incidence	152	8.3
Other	747	41.0

Table 3.3.3 **Weapon Used in First Offense**

Weapon	Juvenile	Percent
Total	634	100.0
Gun	101	15.9
Knife	50	7.9
Hand	187	29.5
Bottle	8	1.3
Penis	41	6.5
None	8	1.3
Other	239	37.7

linquent activities. Hand is the next highest category—29.5 percent—suggesting some amount of unplanned, spontaneous involvement. This is followed by gun and knife—15.9 and 7.9 percent, respectively. Each suggests some level of deliberate and planned armed activity. Penis—6.5 percent—implies the committing of sexual offenses.

Total Number of Offenses—Table 3.3.4 indicates that the vast majority of juveniles—84.6 percent—entered the system by committing a first offense and exited the system, never again committing an offense that led to arrest as a juvenile. Repeat offenders that committed two offenses before exiting the system made up 10 percent of the cases. The percent of juveniles committing three or more offenses was relatively small—5.4 percent.

Table 3.3.4 **Total Number of Offenses**

No. Of Offenses	Juvenile	Percent
Total	1824	100.0
1	1544	84.6
2	183	10.0
3	49	2.7
4	18	1.0
5	4	0.2
6	17	0.9
7	3	0.2
8	2	0.1
9	0	0.0
10	3	0.2
11	0	0.0
12	1	0.1

3.3.2 St Croix: Youth Investigation Bureau Data Relationships

Age at First Offense by Sex—Table 3.3.5 indicates juvenile delinquency levels were very low—below 1 percent—between ages 7 to 9 and increased to 2 percent for 10-year-olds. Delinquency rates continued to increase with age, climbing to 10.3 percent for 13-year-olds and remaining high until age 17. The peak of activity occurred at age 15, with 22.3 percent of juveniles committing their first offense at this age.

Table 3.3.5 **Age at First Offense by Sex**

Age at First Offense	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	1797	100.0	1285	100.0	511	100.0
Age 7	10	0.6	6	0.5	4	0.8
Age 8	12	0.7	9	0.7	3	0.6
Age 9	15	0.8	10	0.8	5	1.0
Age 10	36	2.0	33	2.6	3	0.6
Age 11	52	2.9	35	2.7	17	3.3
Age 12	83	4.6	52	4.0	30	5.9
Age 13	185	10.3	123	9.6	62	12.1
Age 14	324	18.0	205	16.0	119	23.3
Age 15	400	22.3	282	21.9	118	23.1
Age 16	368	20.5	263	20.5	105	20.5
Age 17	312	17.4	267	20.8	45	8.8

When the data are broken down by gender, it is observed that a pattern of increased activity occurred for both sexes between ages 13 to 17. The largest percent of males committed their first offense between ages 15 and 17, while the corresponding period for females was between ages 14 to 16. By age 17, females had dropped to 8.8 percent of cases having a first offense, while the males were still relatively active, with 20.8 percent committing a first-time offense. These data suggest that females became involved in delinquent activity at a younger age than males. Females also abandoned their delinquent activity at an earlier age than did males. This observation coincides with other child development concepts that assign higher levels of physical and social development to females at an earlier age than to males. However, given the uncertainty surrounding the completeness of the data set being used here, it would be inadvisable to apply such conclusions on any broad scale. Additional data could change the outcome of these variables.

Juvenile's Place of Birth—The data in Table 3.3.6 permit a comparison between the percentage of juvenile offenders by ethnic origin and the actual percentage in the population at large. The data show that the percentage of juvenile offenders—7-to-17-year olds—born in the US Virgin Islands was 79.9 percent. This figure compares with 75.8 percent that made up the 5-to-19-year olds that were counted in the 1990 Census of Population. These data suggest, proportionately, that slightly more Virgin Islanders were among the offenders than their numbers in the population would suggest. The percentage of offenders born in Puerto Rico, Antigua and Barbuda and St Lucia were also slightly higher than their percentage in the total population would suggest.

Juvenile's Place of Birth by Sex—Table 3.3.7 shows males and females having similar percentages of juvenile delinquents based on the total delinquents for each category. Here again, for both males and females, persons born in the US Virgin Islands constituted by far the largest proportion of delinquents—79.7 and 80.4 percent respectively.

Table 3.3.6 **Juvenile's Place of Birth**

Place of Birth	Number	Percent
Total	1825	100.0
US Virgin Islands	1458	79.9
Puerto Rico	48	2.6
United States	129	7.1
Antigua or Barbuda	36	2.0
Dominica	22	1.2
St Kitts or Nevis	32	1.8
St Lucia	42	2.3
Other Eastern Caribbean	39	2.1
Other	19	1.0

The next highest category was made up of those born in the US—6.6 percent males and 8.3 percent females. The remainder of the juvenile delinquents born in other Caribbean islands or group of islands ranged between 1.1 and 2.6 percent, males and 1.0 and 3.3 percent, females.

Age at First Offense by Juvenile's Place of Birth—In Table 3.3.8 suggests that juveniles from all ethnic groups under the age of 10 had a relatively low rate of committing their first offense, compared to the other age categories. Significant increases in the rate occurred between ages 10 to 13 for all ethnic groups but with a noticeable difference in percentage for those born in Puerto Rico where it rose to 29.5 percent, which was a much higher rate than for similarly aged juveniles who were represented in the other ethnic categories. The peak age group for which first-time delinquent activity across all ethnic groups was between 14 to 16 year-olds with a falling off at the over 16 age category. Juveniles of Puerto Rican or Domini-

Table 3.3.7 **Juvenile's Place of Birth by Sex**

Place of Birth	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	1825	100.0	1303	100.0	521	100.0
US Virgin Islands	1458	79.9	1038	79.7	419	80.4
Puerto Rico	48	2.6	31	2.4	17	3.3
United States	129	7.1	86	6.6	43	8.3
Antigua or Barbuda	36	2.0	28	2.1	8	1.5
Dominica	22	1.2	17	1.3	5	1.0
St Kitts or Nevis	32	1.8	26	2.0	6	1.2
St Lucia	42	2.3	34	2.6	8	1.5
Eastern Caribbean	39	2.1	29	2.2	10	1.9
Other	19	1.0	14	1.1	5	1.0

can Republic descent were especially likely to not have committed their first offense when over 16 years old—8.2 percent—when compared to those juveniles in the other place of birth categories—16.4 to 50.0 percent.

Age at First Offense by Mother's Place of Birth—In Table 3.3.9, a similar pattern appears as in Table 3.3.8 above. First-time delinquent activity remained low for juveniles under 10 years across all ethic groups, but increased significantly among the 10 to 13 age groups. There was a peaking of delinquent activity for juveniles with in the 14 to 16 age category for all ethnic groups.

The trend that seems to follow juvenile delinquents born in Puerto Rico was apparent here in the case of juveniles with mothers of Puerto Rican or Dominican Republic descent. For instance, juveniles with mothers who were born in Puerto Rico or Dominican Republic had a higher rate of a first offense in the 10 to 13 age group—30.2 percent—than juveniles with mothers born elsewhere—16.7 to 16.9 percent. This would seem to suggest that a greater proportion of juveniles with a mother from a Puerto Rican or Dominican Republic background become involved in delinquent activity between ages 10 to 13. The relative fall off in first time offenses by juveniles over age 16 was

Table 3.3.8 **Age at First Offense by Juvenile's Place of Birth**

Age at First Offense	Place of Birth									
	Virgin Islands		Puerto Rico or Dominican Republic		United States		Eastern Caribbean		Other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1431	100.0	61	100.0	128	100.0	169	100.0	6	100.0
Under 10 yrs	30	2.1	2	3.3	4	3.1	1	0.6	0	0.0
10 to 13 yrs	286	20.0	18	29.5	24	18.8	26	15.4	1	16.7
14 to 16 yrs	863	60.3	36	59.0	79	61.7	111	65.7	2	33.3
Over 16 yrs	252	17.6	5	8.2	21	16.4	31	18.3	3	50.0

Table 3.3.9 **Age at First Offense by Mother's Place of Birth**

Age at First Offense	Mother's Place of Birth									
	Virgin Islands		Puerto Rico or Dominican Republic		United States		Eastern Caribbean		Other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1355	100.0	86	100.0	90	100.0	219	100.0	6	100.0
Under 10 yrs	26	1.9	2	2.3	2	2.2	4	1.8	0	0.0
10 to 13 yrs	268	19.8	26	30.2	15	16.7	37	16.9	1	16.7
14 to 16 yrs	823	60.7	49	57.0	61	67.8	136	62.1	2	33.3
Over 16 yrs	238	17.6	9	10.5	12	13.3	42	19.2	3	50.0

especially apparent for those juveniles with mothers of Puerto Rican or Dominican Republic descent—10.5 percent. In contrast, juveniles beyond the age of 16 with mothers who were not born in Puerto Rico or the Dominican Republic had rates of a first-time offense that ranged from 13.3 percent to 50 percent.

Age at First Offense by Father's Place of Birth—It is of interest to note that the pattern apparent in the total population of juvenile delinquents and those with fathers born in Puerto Rico or Dominican Republic in Table 3.3.10 is similar to that found in two previous tables depicting Age at First Offense by Place of Birth Group, and Age at First Offense by Mother's Place of Birth. The involvement in delinquent activity became apparent in the 10 to 13 age group for all juveniles across all place of birth categories. The rate of first time offenses also peaked at the 14 to 16 age category for all juveniles, regardless of their father's place of birth.

Juvenile's Race by Sex—Table 3.3.11 shows that of the total number of juvenile delinquents who committed first offenses, 76.8 percent were black, 1.7 percent white, a small percent was Asian, and an undefined Other was 21.4 percent. These proportions were generally consistent for males and females. Slightly more males than females—77.4 percent versus 75.1 percent—were among black offenders.

Table 3.3.10 **Age at First Offense by Father's Pace of Birth**

Age at First Offense	Father's Place of Birth									
	Virgin Islands		Puerto Rico or Dominican Republic		United States		Eastern Caribbean		Other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	728	100.0	88	100.0	57	100.0	187	100.0	4	100.0
Under 10 yrs	15	2.1	3	3.4	1	1.8	3	1.6	0	0.0
10 to 13 yrs	142	19.5	24	27.3	12	21.1	28	15.0	1	25.0
14 to 16 yrs	445	61.1	55	62.5	37	64.9	118	63.1	0	0.0
Over 16 yrs	126	17.3	6	6.8	7	12.3	38	20.3	3	75.0

Table 3.3.11 **Juvenile's Race by Sex**

	Total		Male		Female	
Race	Number	Percent	Number	Percent	Number	Percent
Total	1819	100.0	1299	100.0	519	100.0
Black	1397	76.8	1006	77.4	390	75.1
White	31	1.7	22	1.7	9	1.7
Asian	1	0.1	1	0.1	0	0.0
Other	390	21.4	270	20.8	120	23.1

Juvenile's Guardian by Sex of Juvenile—The data in Table 3.3.12 suggests that the majority of juvenile offenders—78.7 percent—lived with their mother; the second highest percent—18.3 percent—lived with their mother and father. The remainder of the guardian categories ranged between 0 to 1.3 percent.

When looked at by gender, both male and female categories of juvenile delinquents followed similar patterns within similar ranges. Female offenders were slightly more like to live with both their mother and father than were male offenders—21.3 percent and 17.0 percent, respectively. All the remaining of guardian categories experienced relatively low proportions of the total number of juvenile delinquents. One can assume with some confidence that this is quite likely a reflection of the representation of these groups in the general Virgin Islands' population, namely, the majority of children in this age group live with Mothers alone and the second largest group with Mother and Father. However, a categorical statement cannot be made on this matter since there is no corresponding data available for comparison in the general population data on St Croix.

Table 3.3.12 **Juvenile's Guardian by Sex**

	Total		Male		Female	
Guardian	Number	Percent	Number	Percent	Number	Percent
Total	1726	100.0	1236	100.0	489	100.0
Mother and Father	315	18.3	210	17.0	104	21.3
Mother	1359	78.7	989	80.0	370	75.7
Father	12	0.7	10	0.8	2	0.4
Mother and Step Father	3	0.2	1	0.1	2	0.4
Father and Step Mother	1	0.1	0	0.0	1	0.2
Step Mother	0	0.0	0	0.0	0	0.0
Step Father	0	0.0	0	0.0	0	0.0
Foster Parents	1	0.1	0	0.0	1	0.2
Relatives	23	1.3	19	1.5	4	0.8
Other	12	0.7	7	0.6	5	1.0

Table 3.3.13 **School Enrollment**

Status	Number	Percent
Total	1789	100.0
Enrolled	1722	96.3
Not Enrolled	67	3.7

School Enrollment at Time of Arrest—Table 3.3.13 indicates that only a small proportion of juvenile delinquents—3.7 percent—were not enrolled in school at the time of arrest. This suggests that being enrolled in school is not a deterrent to youngsters committing offenses. A more comprehensive picture might be gained if data were available for analysis on levels of school and class attendance, and even achievement measures.

School Type at Time of Arrest—Table 3.3.14 shows data on school type at which juvenile delinquents were enrolled at the time of first offense. These data seem to correlate with previous sets of data that reflected age and first offense and show that a relatively low percentage of juvenile delinquents committed their first offense in elementary school—5.5 percent—increasing to 23.3 percent in Jr. high school and rising to 71.1 percent by high school.

Mother's Place of Birth by Juvenile's Sex—Table 3.3.15 reflects a similar pattern encountered in juvenile's place of birth. The majority of juvenile delinquents, 77.3 percent, came from mothers born in the US Virgin Islands. The second highest proportion was from the United States—5.1 percent. Puerto Rico and St Lucia each had around four percent. The proportion of juvenile delinquents with mothers born in other Caribbean islands or island group fell to approximately between one and three percent.

Table 3.3.14 **School Type**

School	Number	Percent
Total	1684	100.0
Elementary	93	5.5
Jr. High	393	23.3
High	1198	71.1

Table 3.3.15 **Mother's Place of Birth by Sex of Juvenile**

	Total		Male		Female	
Place of Birth	Number	Percent	Number	Percent	Number	Percent
Total	1785	100.0	1277	100.0	507	100.0
Virgin Islands	1380	77.3	986	77.2	394	77.7
Puerto Rico	72	4.0	48	3.8	24	4.7
United States	91	5.1	56	4.4	34	6.7
Antigua or Barbuda	38	2.1	28	2.2	10	2.0
Dominica	27	1.5	21	1.6	6	1.2
St Kitts or Nevis	36	2.0	28	2.2	8	1.6
St Lucia	74	4.1	58	4.5	16	3.2
Eastern Caribbean	46	2.6	36	2.8	10	2.0
Other	21	1.2	16	1.3	5	1.0

Table 3.3.16 **Mother's Employment by Sex of Juvenile**

Employment Status	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	1398	100.0	1000	100.0	397	100.0
Employed	1321	94.5	939	93.9	381	96.0
Unemployed	77	5.5	61	6.1	16	4.0

Mother's Employment by Sex of Juvenile— Table 3.3.16 shows that only a relatively small proportion, 5.5 percent, of the total juvenile delinquents were of mothers who were unemployed. The percentage of female offenders with mothers who were employed was slightly higher than it was for male offenders. This may suggest that employed mothers were away from the home for extended hours especially at times when children returned home from school. Data do not indicate if any of those mothers held more than one job or worked overtime, factors that would obviously have added to the mother-child separation and left unsupervised children exposed and vulnerable to involvement in delinquent behavior.

Father's Place of Birth by Juvenile's Sex— Table 3.3.17 indicates that 68.8 percent of juvenile offenders had fathers who were born in the Virgin Islands; those born of Puerto Rican fathers made up 7.2 percent and offenders with St Lucian fathers made up 6.7 percent. Female offenders were slightly more likely to have fathers who were born in the US Virgin Islands and Puerto Rico than male offenders.

Father's Employment by Juvenile's Sex— The *employment* statistics of fathers of juvenile offenders at time of first offense follows closely that of mother's employment statistics (Table 3.3.18). A small percentage of fathers—5.4 percent—were unemployed. Unemploy-

Table 3.3.17 **Father's Place of Birth by Sex of Juvenile**

Place of Birth	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	1079	100.0	757	100.0	321	100.0
Virgin Islands	742	68.8	508	67.1	233	72.6
Puerto Rico	78	7.2	50	6.6	28	8.7
United States	57	5.3	43	5.7	14	4.4
Antigua or Barbuda	28	2.6	21	2.8	7	2.2
Dominica	17	1.6	12	1.6	5	1.6
St Kitts or Nevis	37	3.4	29	3.8	8	2.5
St Lucia	72	6.7	59	7.8	13	4.0
Eastern Caribbean	34	3.2	25	3.3	9	2.8
Other	14	1.3	10	1.3	4	1.2

Table 3.3.18 **Father's Employment by Sex of Juvenile**

Employment Status	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	719	100.0	517	100.0	201	100.0
Employed	680	94.6	488	94.4	191	95.0
Unemployed	39	5.4	29	5.6	10	5.0

ment was slightly higher for the fathers of male juvenile offenders—5.6 percent compared to the fathers of female offenders—5.0 percent.

Relationship Between Relatives With Previous Criminal Offenses and Recidivism— Officers of the YIB in St Croix expressed the view that, based on their experience, there was an observable link between the number of repeat offenders and homes with relatives that had previously been charged with criminal offenses. The data in Table 3.3.19 were compiled to investigate this assumed relationship.

From the data in the table, it can be observed that of the total 1,782 youth charged with offenses, 505 or 28.3 percent of them came from homes in which relatives had been previously charged with criminal offenses. The table highlights that of the 505 homes with previously charged relatives, 35.4 percent of them were recidivists compared to the 7.7 percent recidivists that came from homes in which there were no relatives charged with offenses. The data in the table were further subjected to more rigorous statistical analysis to test the proposition of a significant relationship between households with relatives that had previously been charged and recidivism among youth. The test does strongly support the view that there is a very strong relationship between the rate of recidivism and households with relatives that have been charged with criminal activities. The *p*-value at the bottom of the table indicates that this conclusion is likely to be incorrect in less than 1 in 10,000 times.

Juvenile's Age by Current or Highest Grade—Table 3.3.20 suggests that juveniles offenders tended to be in grade levels consistent with their age. There were a few exceptions. For instance, there were several 14 and 15 year olds who had not reached Grade 8 yet and some 16 and 17 year olds who were at a grade level less than 10. The existence of some juveniles being at a grade level much

Table 3.3.19 **Recidivism and Relatives Charged With Offenses**

Relatives Charged	Recidivism					
	Yes		No		Total	
	Number	Percent	Number	Percent	Number	Percent
Total	277	15.5	1,505	84.5	1,782	100.0
Yes	179	35.4	326	64.6	505	100.0
No	98	7.7	1,179	92.3	1,277	100.0

$\chi^2 = 212.6$ $df = 1$, $p < 0.0001$

Odds ratio = 6.61

$5.02 < \tau < 8.7$

Table 3.3.20 **Juvenile's Age by Current or Highest Grade**

Age in years	Total		Grade 1-6		Grade 7		Grade 8	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1670	100.0	133	100.0	112	100.0	237	100
7-9	36	2.2	33	24.8	0	0.0	1	0.4
10-12	165	9.9	95	71.4	58	51.8	7	3.0
13	178	10.7	2	1.5	50	44.6	115	48.5
14	311	18.6	2	1.5	2	1.8	101	42.6
15	379	22.7	0	0.0	2	1.8	12	5.1
16	347	20.8	0	0.0	0	0.0	0	0.0
17	254	15.2	1	0.8	0	0.0	1	0.4

Table 3.3.20 **Juvenile's Age by Current or Highest Grade: Continued**

Age in years	Grade 9		Grade 10		Grade 11		Grade 12	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	358	100.0	450	100.0	311	100.0	69	100.0
7-9	0	0.0	0	0.0	2	0.6	0	0.0
10-12	4	1.1	0	0.0	1	0.3	0	0.0
13	8	2.2	3	0.7	0	0.0	0	0.0
14	196	54.7	7	1.6	0	0.0	3	4.3
15	134	37.4	228	50.7	3	1.0	0	0.0
16	14	3.9	203	45.1	129	41.5	1	1.4
17	2	0.6	9	2.0	176	56.6	65	94.2

lower than would be expected given their age may indicate the propensity for such juveniles to be underachievers. However, since social promotion was practiced throughout the public school system of the US Virgin Islands at the period referenced by the study, it is difficult to assess whether underachievement as indicated by grade level was a factor influencing behavior.

3.3.3 Predicting Recidivism with the Youth Investigation Bureau Data

The methods and procedures utilized in this section and similar to those that were applied to the St Thomas JIB and DHS data above. (See Sections 3.1.3.1, 3.1.3.2, and 3.1.3.4 for a thorough discussion of the approach, methodology and recidivism model.)

There is a notable difference between the data of the Youth Investigation Bureau (YIB) in St Croix and the JIB data in St Thomas. Some of the variables that were significant in the St Thomas model showed no statistically significant association with recidivism, while a new set of variables were clearly very good predictors of repeat arrests. For example, it was shown above empirically that age is a very strong predictor of recidivism in St Thomas in both the JIB and DHS data sets, but in the St Croix data set, it is a very poor predictor. Similarly, ethnicity and the role of the parents or guardians fail to exert any statistically strong

relationship with repeat offense behavior.

The immediate suggestion is that both sets of juvenile come from significantly different populations or social milieus, and that attempts to prescribe similar explanations for self-same behaviors could be enormously misleading. The variables included in the St Croix models reflect such differences.

3.3.3.1 Definition of Variables

Dependent Variable: As in the previous cases for St Thomas, the outcome or dependent variable of interest is recidivism. Each juvenile was classified in one of two discrete categories. If the youth were charged with more than one offense, (s)he was classified as a repeat offender or recidivist. The other classification comprised youth who were charged with a single offense. This latter group was made the referent group.

Independent or Explanatory Variables: Ideally, it would have been most valuable to compare the impact of the same variables on St Croix as were used for St Thomas, but the differences in data precluded this. For example, preliminary analysis showed considerable inconsistency with the age distribution of the YIB data, hence they were excluded from the analysis. This is a significant loss since theory does point to age as critical in this prediction model. Additionally, one new variable that relates to the involvement of relatives of the juvenile in criminal activity appears to be an essential predictor.

i) Gender: As in the previous models, this variable is dichotomous and refers to the sex of the juvenile. Female is the referent category.

ii) School Enrollment: This variable indicates whether the juvenile was enrolled in school at the time of the first offense. The referent group was "not enrolled in school at the time of first offense".

iii) *Grade:* This variable is dichotomous and refers to whether the offender was in Grade 12 or in a grade level less than 12 when first charged with an offense. The referent group was Grade 12.

iv) Relative Charged: This dichotomous variable classified each youth as to whether (s)he had a relative who had been charged with a crime previously. The referent group was those who did not have relatives that had been previously charged with a criminal offense.

3.3.3.2 Estimates of the St Croix Youth Investigation Bureau Data

The total number of cases that were recorded in the study period was 1,827. In some instances, data items were missing and some cases had to be dropped from a particular analysis. In the application of the logistic regression model, 1,796 valid cases were used.

Four variables in the YIB data set show strong association with repeat offenses. The sex of the arrested youth remains a reliable predictor. Enrollment in school at the time of the first arrest is also a good indicator of the type of subsequent behavior that might be expected from first-time arrested youth.

A particularly strong predictor is related to whether the first-time arrested youth had relatives that had been charged with criminal offenses at any time previously. Data analysis in 3.2.2 (Table 3.3.19) illustrated that there is a statistically significant relationship between deviant behaviors in youth when a relative has been known to have been charged with criminal offenses in the past. The odds ratio as a measure of the strength of the relationship confirms that a first-time offender with relatives charged with criminal offenses is seven times more likely to be a repeat offender than one who

Table 3.3.3.1 **Parameter Estimates in Logistic Regression Predicting Recidivism: St Croix, Youth Investigation Bureau Data**

Variable	Parameter Estimate (1)	Standard Error (2)	Pr> Chi Square (3)	Adjusted Odds Ratio (4)
Intercept	-1.5531	0.3361	<0.0001	…
Sex (1=Male)	0.3389	0.0937	0.0003	1.970
School Enrollment (1=Enrolled)	0.6398	0.2513	0.0109	3.595
Grade (1=Less than Grade 12)	0.4324	0.2265	0.0562	2.375
Relative Charged (1=Yes)	0.9664	0.0757	0.0001	6.908

Likelihood Ratio Chi Square = 204.1609 df = 4 Pr > Chi Square < 0.0001

Notes: N=1796. Odds ratios greater than 1.0 indicate greater odds of recidivism.

does not have relatives charged with such offenses.

The data in Table 3.3.3.1 are interpreted similarly to those in 3.1.3.1 and 3.2.3.1 above. The odds ratio of 1.970 for Sex denotes that the predicted odds of recidivism for a first-time male offender are about twice the odds for a female offender or 97 percent higher than the odds for a female first-time offender.

The adjusted odds ratio of a first-time offender who is enrolled in school is 3.595. This means that the odds of an offender who was not enrolled in school at the time of his or her first arrest becoming a repeat offender are at least three and one-half times the odds of someone who is enrolled. Equivalently, it can be said that the odds of repeat arrests of a juvenile who was enrolled at school are only about 28 percent of the odds of someone who was not enrolled in school.

The grade level of a juvenile is also an indicator of what to anticipate in a youth's behavior. The odds ratio for Grade in Table 3.3.3.1 is 2.375. This represents the predicted odds of recidivism of a youth who was in a grade below 12 at the time of first arrest. The odds of recidivism for youngsters who are below Grade 12 are more than twice—2.375—as high as those who committed their first offense in Grade 12. In other words, the odds of recidivism for juveniles in Grade 12 are only 42 percent of the odds of a youth who had not reached Grade 12.

It is to be recalled that in section 3.3.3 it was shown that there was a very strong association between repeat offense behavior and the presence in the lives of these youth of relatives who have been charged with criminal offenses (Table 3.3.19). This relationship is maintained at about the same level even in the presence of other explanatory variables. The table shows that the adjusted odds ratio for the Relatives Charged variable is 6.908. This value asserts that the predicted odds for repeat arrests from a first-time male offender with relatives who have been charged with criminal behavior in the past are about seven times the odds of a first-time offender without relatives having such a criminal history.

Table 3.3.3.2 **Predicted Probabilities in Logistic Regression: St Croix, Youth Investigation Bureau Data**

Coefficients:	*a* (1)	*Sex* (2)	*Enrollment* (3)	*Grade* (4)	*Rel. Charged* (5)	***Odds*** (6)	***Probability*** (7)
Parameter Estimates:	-1.5531	0.3389	0.6398	0.4324	0.9664		
Juvenile Profiles:							
C1		1	1	1	1	2.281	0.695
C2		0	1	1	1	1.625	0.619
C3		1	1	0	1	1.480	0.597
C4		1	0	1	1	1.203	0.546
C5		0	1	0	1	1.055	0.513
C6		1	1	1	0	0.868	0.465
C7		0	0	1	1	0.857	0.462
C8		1	1	0	0	0.563	0.360
C9		0	0	0	1	0.556	0.357
C10		1	0	1	0	0.458	0.314
C11		0	1	0	0	0.401	0.286
C12		0	0	0	0	0.212	0.175

Variables:

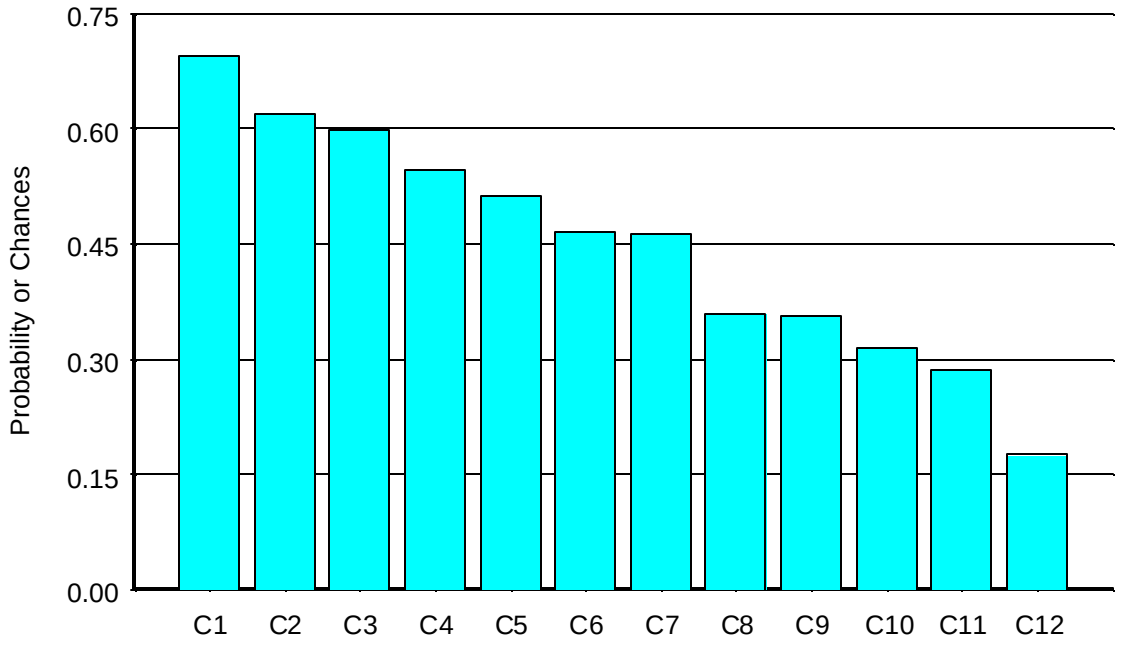
Sex = Sex of the juvenile (1 = male, 0 = female).
Enrollment = Coded 1 if not enrolled in school at first arrest, otherwise 0.
Grade = Coded 1 if school grade is less than 12th grade, otherwise 0.
Rel. Charged = Coded 1 if a relative was charged with a criminal offense, otherwise 0.

3.3.3.3 The Prediction of Recidivism

The probabilities in Table 3.3.3.2 indicate the chances of recidivism or non-delinquent behavior—using YIB St Croix data—for a given combination of the variables under study. (See also Figures 3.3.3.1 and 3.3.3.2). Again, for odds—in column (6)—greater than 1.0 or for probabilities—in column (7)—greater than 0.5, the combination of characteristics predicts that the juvenile will commit offenses for which he or she will be arrested. And for odds less than 1.0 or probabilities less than 0.5, the prediction is that a first-time offender will not be arrested as a juvenile again.

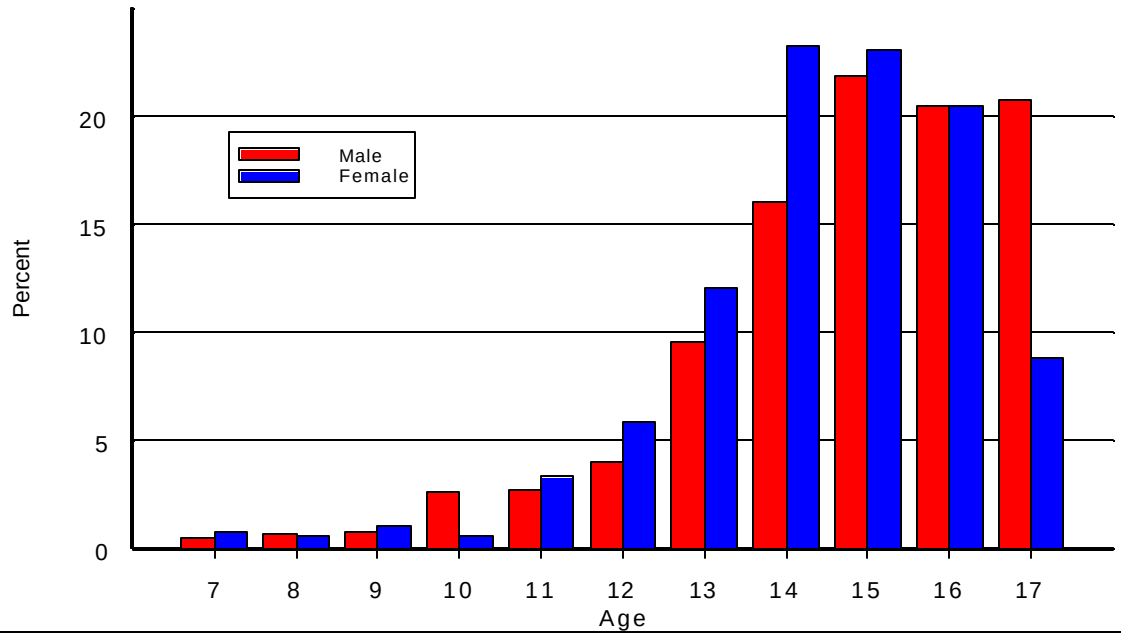
The profile for juvenile C1 in the table is interpreted as follows. A first-time male offender who is not enrolled in school at the time of his arrest, who has not reached Grade 12, and who has relatives that had been charged with criminal offenses has odds of 2.281 and probability of 0.695, thus indicating that this youth has a high probability of being a recidivist. Profile C2 is that of a female who is enrolled in school in Grade 12 with relatives charged for committing criminal offenses is predicted to be a one-time offender and not be a recidivist. The youth that is represented by profile C11 is that of a female with one offense, who is enrolled in Grade 12 at the time of arrest, and who does

Figure 3.3.3.1 Predicted Changes of Recidivism: St Croix YIB
For Various Combinations of Youth Characteristics



Note: See text for profile characteristics

Figure 3.3.3.2 Age at First Offense: St Croix
Youth Investigation Bureau Data



not have relatives charged with any criminal offense. A female offenders with these characteristics is predicted to have a relatively low chance of being a repeat offender. It is notable that for most variable combinations that include the 'Relatives Charged' variable, the prediction is that the juvenile will be a repeat offender. This is consistent with all of the foregoing analyses that include this particular variable.

3.4 Department of Human Services Data Variables

The following data items were collected from case files at the St Croix Department of Human Services (DHS):

- Sex
- Immigration Status
- Age
- Place of Birth
- Race
- Household Status of Parents
- Age of Parents
- Marital Status of Parents
- Guardian
- Marital Relationship of Natural Parents
- Number of Siblings in the Household
- School Enrollment
- Employment Status Juvenile
- Children of Juvenile
- Psychological Assessment of Juvenile
- Sexual Activity of Juvenile
- Pre-outcome Status of Juvenile
- Type of Offense
- Year of Offense
- Outcome of Offense
- Biological Father Known by Juvenile

There were 888 records in the St Croix district DHS data set. These records consist of all juveniles who were on DHS files during the period 1987 to 1997. As a result of missing data, many of the tables below will reflect differing totals.

3.4.1 St Croix Data Description: Department of Human Services

Juvenile's Sex—According to Table 3.4.1 a large proportion of the total juvenile offenders—85.9 percent—were males compared to 14.1 percent who were females. The age category here refers to seven-to 17-year-olds: as a comparison, the five-to 19-year-olds in the total St Croix population had a 49.9 to 50.1 male-female ratio (1995 Population and Housing Survey). This over representation of males involved in delinquent behavior is a common and well-known phenomenon, though the reasons for the occurrence are still not as clear.

Immigration Status—In Table 3.4.2 US citizens made up the overwhelming majority of juvenile offenders—94.1 percent—whereas juveniles of resident alien status accounted for just 5.9 percent. The closest corresponding age group in the St Croix general population for which data are available is five to 19; US citizens and resident aliens or permanent residents in this group made up 88.4 and 10.8 percent, respectively (1995 Population and Housing Survey).

Table 3.4.1 **Juvenile's Sex**

	Juvenile	
Sex	Number	Percent
Total	885	100.0
Male	760	85.9
Female	125	14.1

Table 3.4.2 **Immigration Status**

Immigration	Juvenile	
Status	Number	Percent
Total	717	100.0
US Citizen	675	94.1
Resident Alien	42	5.9

Table 3.4.3 **Age of Juvenile**

Age in years	Juvenile	
	Number	Percent
Total	860	100.0
7-9	3	0.3
10-12	31	3.6
13	57	6.6
14	151	17.6
15	202	23.5
16	219	25.5
17	197	22.9

Table 3.4.4 **Juvenile's Place of Birth**

Sex	Juvenile	
	Number	Percent
Total	732	100.0
United States	37	5.0
Virgin Islands	619	84.6
Puerto Rico	13	1.8
St Kitts or Nevis	7	0.9
Antigua or Barbuda	10	1.4
Dominica	8	1.1
Other Eastern Caribbean	24	3.3
Other	14	1.9

Juvenile's Age—The data in Table 3.4.3, Juveniles' Age suggest that delinquent activity remained at a low rate between ages seven to 12. At age 13 there was a relative increase of activity and this delinquent activity increased more dramatically between ages 14 to 17 with a peaking at ages 15 and 16. Although delinquent activity at age 17 remained relatively high, the beginning of a falling off is observed.

Juvenile's Place of Birth—The data in Table 3.4.4 indicate that 84.6 percent of juveniles committing first-time offense were born in the US Virgin Islands, 5.0 percent in the US and a combined 6.7 percent for other Caribbean areas, except Puerto Rico with 1.9 percent. In comparison, figures for five- to 19-year-olds in the general population of St Croix for which data is available show persons born in St Croix account for 74.6 percent of the population. Persons born in Puerto Rico were 1.9 percent and in the matching Caribbean areas combined 6.7 percent. The US mainland accounted for 9.9 percent (1995 Population and Housing Survey). It must be noted that these figures represent the entire US Virgin Islands population, and that these groups are not necessarily spread uniformly across the islands.

Juvenile's Race—Table 3.4.5 indicates that 98.1 percent of juveniles involved in delinquent behavior were black and 1.1 percent were white. Data on the age group five to 19 in the general population (1995 Population and Housing Survey) indicated that 72.4 percent of St Croix's population was black, 5.7 percent white, and 21.8 percent fell in the other category. These figures suggest that a disproportionately larger number of blacks became involved in delinquent behavior, while whites and other groups were underrepresented based on their size in the St Croix population.

Household Status of Parents—Of the cases in Table 3.4.6 reporting data on the presence of parents in the household from which juvenile delinquents reside, 86.1 percent of mothers lived in the household compared to 27.8 per-

Table 3.4.5 **Juvenile's Race**

Sex	Juvenile	
	Number	Percent
Total	639	100.0
Black	627	98.1
White	7	1.1
Asian	5	0.8

Table 3.4.6 **Household Status of Parents**

	Mother		Father	
Household Status	Number	Percent	Number	Percent
Total	806	100.0	723	100.0
In the Household	694	86.1	201	27.8
Not in the Household	112	13.9	522	72.2

Table 3.4.7 **Age of Parents**

	Mother		Father	
Age in Years	Number	Percent	Number	Percent
Total	454	100.0	213	100.0
14-19	1	0.2	0	0.0
20-29	2	0.4	0	0.0
30-39	232	51.1	55	25.8
40-49	183	40.3	102	47.9
50 & above	36	7.9	56	26.3

cent of fathers. This supports a general concept in discourse on the causes of juvenile delinquency that suggest households where either parent is absent may foster a less supportive and stable environment that permits higher risk to juveniles becoming delinquent. Unfortunately, data are not available on the presence of mothers and fathers in the household for the general population of St Croix.

Age of Parents—In Table 3.4.7, fathers and mothers of juvenile delinquents appear to be differently represented in the various age categories. The majority of mothers—51.1 percent—fell in the 30 to 39 age group, whereas fathers were most represented in the 40 to 49 age category. Thus, fathers tended to be somewhat older than mothers.

Marital Status of Parents—Table 3.4.8 shows data on the marital status for parents of those juvenile delinquents. Available data show that in the highest category, 41.4 percent of the mothers of juvenile offenders and 57.3 percent of the fathers of juvenile offenders were married at the time of the juvenile's first offense, (now married), though not necessarily to each other. The next two highest categories for mothers were "Never Married," 26.7, and "Divorced," 18.0 percent. (Here again, divorce is not necessarily between the two natural parents of the juvenile). For fathers, the next two highest categories were "Divorced," 21.9 and "Separated," 11.1 percent.

Table 3.4.8 **Marital Status of Parents**

	Mother		Father	
Marital Status	Number	Percent	Number	Percent
Total	589	100.0	361	100.0
Now Married	244	41.4	207	57.3
Widowed	37	6.3	3	0.8
Divorced	106	18.0	79	21.9
Separated	45	7.6	40	11.1
Never Married	157	26.7	32	8.9

Juvenile's Guardian—In Table 3.4.9 of the reported cases of juvenile delinquents that had information on the person or persons they were currently living with, 51.8 percent were living with their mother, 4.2 percent with their father, 16.3 percent with mother and father, 12.5 percent with their relatives, and 10.0 percent with their mother and stepfather. These data suggest that the majority of juvenile delinquents lived with their mother alone. It should be noted that the category of single female was the highest represented category for guardian in households of the general St Croix population. To get a more in-depth understanding of the significance of these data, it would have been desirable to have data on this same variable for the general St Croix community.

Marital Relationship of Natural Parents—Data on the current marital relationship of natural parents highlight categories for the natural parents of juvenile delinquents at time of first offense. "Never Married" and "Divorced" categories represented 40.0 and 21.5 percent respectively, representing a combined total of 61.5 percent. The proportion for the category "Married and Living Together" was 20.9 percent. The fact that categories like "Both Parents Deceased" accounted for a low rate of juvenile delinquents might be due to an equally small occurrence of such cases in the general St Croix community (Table 3.4.10).

Table 3.4.9 **Juvenile's Guardian**

Guardian	Number	Percent
Total	874	100.0
Mother and Father	142	16.3
Mother	453	51.8
Father	37	4.2
Mother and Stepfather	87	10.0
Father and Stepmother	17	2.0
Stepmother	2	0.2
Stepfather	1	0.1
Foster Parents	8	0.9
Relatives	110	12.5
Other	17	2.0

Table 3.4.10 **Marital Relationship of Natural Parents**

Status	Number	Percent
Total	628	100.0
Married and living together	131	20.9
Separated	49	7.8
Divorced	135	21.5
Never Married	251	40.0
One parent deceased	60	9.5
Both parents deceased	2	0.3

Siblings in the Household—Data in Table 3.4.11 indicate that the lower the number of siblings that were in the household, the greater the representation of juvenile delinquents. For example, in households with three or fewer siblings, the range of juvenile delinquents was 16.7 to 20.5 percent of the total. In those households with four to six or more siblings, 5.6 and 9.2 percent of the juveniles were represented. This may imply that the more siblings present within families the more opportunities

Table 3.4.11 **Siblings in the Household**

Siblings	Number	Percent
Total	606	100.0
No siblings	101	16.7
One sibling	123	20.3
Two siblings	124	20.5
Three siblings	117	19.3
Four siblings	56	9.2
Five siblings	34	5.6
Six or more siblings	51	8.4

Table 3.4.12 **School Enrollment**

Enrollment Status	Number	Percent
Total	704	100.0
Enrolled	546	77.6
Not Enrolled	158	22.4

there are for interaction with large numbers of children and the less likely juveniles are to engage in delinquent behavior.

School Enrollment—Table 3.4.12 indicates that the majority of juvenile delinquents were enrolled in school. Unfortunately, data indicating actual attendance at school and class participation were not part of the data set. Although 77.6 percent of juveniles involved in delinquent behavior were enrolled in school, that does not mean they attended school, participated in and benefited from class activities. It is important to note that 22.4 percent were not enrolled in school although the law stipulates that children below the age of 16 must be enrolled in school. Attendance at school and class is neither enforced nor easily enforceable.

Current or Highest Grade Completed—Table 3.4.13 indicates that juveniles involved in delinquent activities were represented across Grades 1 through 12. However, juvenile offenders were only limitedly reprepresented in Grades one through five. There was an increase in representation in Grades six to nine with a range between 14.9 and 26.8 percent of the juvenile offenders. The proportion of juveniles involved in delinquent behavior began to decrease around Grade 10 and continued to do so to the higher grades. It should be remembered that these data represented the educational status at time of first offense and cannot predict the educational progress after that offense.

Table 3.4.13 **Current or Highest Grade Completed**

Grade	Number	Percent
Total	586	100.0
Grade 1	2	0.3
Grade 2	1	0.2
Grade 3	4	0.7
Grade 4	2	0.3
Grade 5	9	1.5
Grade 6	87	14.9
Grade 7	157	26.8
Grade 8	106	18.1
Grade 9	102	17.4
Grade 10	53	9.0
Grade 11	42	7.2
Grade 12	21	3.6

3.4.2 St Croix: Department of Human Services Data Relationships

Juvenile's Age by Current or Highest Grade Completed—Table 3.4.14 presents the age of juvenile delinquents together with the highest grade achieved at that time. It could be assumed that on average the upper age limit for Grades one through six would be 13 years, though it is not unusual to find children above or below that age. Juvenile delinquents who are in Grades one to six and between ages 14 to 17 amounted to 62.4 percent of the total. In Grade seven, the 15- to 17-year-olds accounted for 56.4 percent, and 51 percent in Grade eight. Grade nine had 20.6 percent of delinquents who were 17 years old.

Children develop at different levels, however, but the sense of underachievement can be very severe and lead to activity that could draw attention to the low or underachiever. This trend of a juvenile at a certain age being in a lower grade than expected is of concern, especially since the policy of social promotion existed during this time in public schools.

Table 3.4.14 **Juvenile's Age by Current or Highest Grade**

Age in years	Total		Grade 1-6		Grade 7		Grade 8	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	860	100.0	104	100.0	156	100.0	105	100
7-9	3	0.3	2	1.9	0	0.0	0	0.0
10-12	31	3.6	21	20.2	5	3.2	1	1.0
13	57	6.6	16	15.4	20	12.8	12	11.4
14	151	17.6	26	25.0	43	27.6	32	30.5
15	202	23.5	18	17.3	41	26.3	29	27.6
16	219	25.5	17	16.3	28	17.9	23	21.9
17	197	22.9	4	3.8	19	12.2	8	7.6

Table 3.4.14 **Juvenile's Age by Current or Highest Grade: Continued**

Age in years	Grade 9		Grade 10		Grade 11		Grade 12	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	102	100.0	102	100.0	42	100.0	21	100.0
7-9	0	0	0	0.0	0	0.0	0	0.0
10-12	1	1.0	1	1.0	0	0.0	0	0.0
13	0	0.0	0	0.0	0	0.0	0	0.0
14	17	16.7	17	16.7	1	2.4	1	4.8
15	24	23.5	24	23.5	7	16.7	0	0.0
16	39	38.2	39	38.2	10	23.8	5	23.8
17	21	20.6	21	20.6	24	57.1	15	71.4

The reverse—a juvenile in a grade above that expected for the average age or overachievers—was largely absent. For example, there was a lack of juvenile offenders 13 years or younger in Grade nine or higher. Juveniles in Grades 11 and 12, as would be expected, tended to be 16 and 17 years old—80.9 and 95.2percent, respectively.

Juvenile's Employment Status—Table 3.4.15 shows that the majority of juveniles involved in delinquent behavior were unemployed—84.3 percent. This could suggest a confirmation of the old adage of mischief and idle hands. Here again, it could help to have figures showing the proportion of this age group of juveniles who are employed and unemployed in the general population in order to get a clearer picture.

Current Job—Table 3.4.16 suggests that at time of first offense the juvenile delinquents were employed in a variety of job types and no particular activity seems to have had a monopoly on their time. It is assumed that these are part-time jobs but it is not known if these are of weekly or monthly duration.

Table 3.4.15 **Juvenile's Employment Status**

Employment Status	Number	Percent
Total	630	100.0
Employed	99	15.7
Unemployed	531	84.3

Table 3.4.16 **Current Job**

Job	Number	Percent
Total	92	100.1
Restaurant/Hotel	4	4.4
Construction	6	6.5
Store Clerk	0	0.0
Mechanic Shop	4	4.4
Gas Station Attendant	4	4.4
Other	74	80.4

Children in the Household—Table 3.4.17 seems to suggest that households with one, two, three or no children were more likely to have delinquent juveniles—between 14.0 and 20.3 percent—than households with four or more children. It is possible that the presence of more children provide examples of alternate behavior, persons with whom youngsters may associate, communicate and so limit negative outside influences on their behavior and activities.

Juvenile's Children—Table 3.4.18 shows that a small proportion of juvenile delinquents—2.6 percent had children of their own.

Juvenile Responsible for Childcare—Table 3.4.19 suggests that 4.6 percent of juvenile offenders were responsible for childcare. This responsibility did not necessarily refer to the offspring of juvenile offenders, and could have been a younger sibling or relative.

Presence of Risk Indicators—Each of the indicators in Table 3.4.20 holds some significance for the juvenile's psychological well being. The presence of these factors contributes to the undermining of the juvenile's self esteem, self-worth and a healthy sense of being in control of events affecting one's life.

Table 3.4.17 **Children in the Household**

Siblings	Number	Percent
Total	600	100.0
No children	84	14.0
One child	118	19.7
Two children	112	18.7
Three children	122	20.3
Four children	59	9.8
Five children	50	8.3
6 to 10 children	54	9.0
11 to 14 children	0	0.0
15 & over	1	0.2

Table 3.4.18 **Juvenile's Children**

	Number	Percent
Total	607	100.0
Children	16	2.6
No Children	591	97.4

The influence of any one or more of these variables at any level usually suggests negative connotations for behavior. Juvenile offenders had relatively high percentages in the following areas: trouble controlling anger, 62.9; frequent arguments and fights, 58.8 suspension from

Table 3.4.19 **Juvenile Responsible for Childcare**

Childcare	Number	Percent
Total	592	100.0
Responsible	27	4.6
Not Responsible	565	95.4

Table 3.4.20 **Juvenile's Psychological Assessment**

	Total	Yes		No	
		Number	Percent	Number	Percent
Felt like a failure or worthless	448	163	36.4	285	63.6
Had trouble controlling anger	498	313	62.9	185	37.1
Had frequent arguments & fights	495	291	58.8	204	41.2
Ever been suspended from school	460	306	66.5	154	33.5
Ever been expelled from school	465	23	4.9	442	95.1
Used drugs or alcohol	415	199	48.0	216	52.0
Getting hurt (physically abused)	347	100	28.8	247	71.2

school, 66.5; use of drugs or alcohol, 48.5; feelings of failure or worthless, 36.4; getting hurt (physically abused), 28.8. The factor with the lowest representation of juvenile offenders was expulsion from school, 4.9 percent, which may imply that delinquent activities are not consistently curtailed in school or that the rules and regulations are not that severe.

Juvenile's Sexual Activity—Table 3.4.21 indicates that more than half—57.9 percent—of the first-time offenders were sexually active. This variable is often identified as an indicator of association with delinquent behavior.

Table 3.4.21 **Juvenile's Sexual Activity**

Sexual Activity	Number	Percent
Total	214	100.0
Sexually Active	124	57.9
Not Sexually Active	90	42.1

Table 3.4.22 **Forced Sex**

	Number	Percent
Total	223	100.0
Forced to have sex	21	9.4
Not forced to have sex	202	90.6

Forced Sex—Table 3.4.22 indicates that 9.4 percent of the juveniles with first offenses were forced to have sex. When these data are examined along with the previous table, Juvenile's Sexual Activity, the data suggest that a large proportion of juveniles opt to participate in sexual activity freely. It must be remembered, however, that a juvenile's perception of free choice may not meet all psychological standards and youngsters may be under subtle pressures and constraints that propel them into negative sexual activity.

Juvenile's Sex Partners—In Table 3.4.23 the number and percentage of juveniles for whom data are available here is relatively low, given that 124 offenders had indicated they were sexually active. These data may not be very reliable.

Pre-outcome Status—Of the six offenses listed in Table 3.4.24, the number of juveniles involved increasingly decreased in number, except for Offense 6 with an increase above the offenses immediately preceding. The proportion of cases going to trial rather than plea agreement was relatively low for all offenses. As the cases spread over the six offenses, there does not seem to be any definite pattern indicating an increase or decrease in the proportion

Table 3.4.23 **Juvenile's Sex Partners**

Sexual Partners	Number	Percent
Total	17	100.0
1	15	88.2
2	1	5.9
3	1	5.9
4	0	0.0
5	0	0.0
6 to 10	0	0.0
10 and over	0	0.0

of cases that went to trial as against the proportion that utilized a plea agreement.

Type of Offense—Table 3.4.25 lists the type of offenses committed by juvenile delinquents for a total of six offenses. Felonious Assaults, Other Part I Felony and Other Part II Felony account for the highest number of cases among offenses.

Overall, the type of offense or crime varied from one offense to another. Whereas offenses committed by juvenile delinquents in the early offenses seemed to be spread widely, offenders with four or more offenses seemed to have narrowed down their scope to activities such as robbery, felonious assault, burglary, possession of a firearm and Other Part II Felony. It is possible that these delinquents are not just experimenting but have settled into a pattern of more serious activities.

Year of Offense—Table 3.4.26 indicates the year that juvenile delinquents committed their first through sixth offenses. Although the time period of the study examined cases current between 1987 and 1997, a number of cases had first offenses occurring before the study's time frame and the cases remained active during the period covered by the study.

Cases were on record from as early as 1980. It should be noted that since juvenile delinquent behavior is recorded for 10 years between ages 7 to 17, the year 1997 did not necessarily indicate the end of the case history of all cases covered in the study. Only those delinquents with a first offense in 1987 or before could safely be regarded as having completed their history of delinquent behavior.

Outcome of Offense—Table 3.4.27 gives a breakdown of the outcome of cases that went through the YIB and DHS systems for the six offenses being tracked. This was the final proc-

Table 3.4.24 **Pre-Outcome Status**

	Offense 1		Offense 2		Offense 3	
Status	Number	Percent	Number	Percent	Number	Percent
Total	507	100.0	110	100	51	100
Trial	33	6.5	6	5.5	5	9.8
Plea Agreement	474	93.5	104	94.5	46	90.2

Table 3.4.24 **Pre-Outcome Status: Continued**

	Offense 4		Offense 5		Offense 6	
Status	Number	Percent	Number	Percent	Number	Percent
Total	6	100	6	100	21	100
Trial	1	16.7	0	0.0	3	14.3
Plea Agreement	5	83.3	6	100.0	18	85.7

Table 3.4.25 **Type of Offense**

	Offense 1		Offense 2		Offense 3	
Offense type	Number	Percent	Number	Percent	Number	Percent
Total	888	100.0	196	100.0	87	100.0
Robbery	71	8.0	16	8.2	10	11.5
Felonious Assaults	159	17.9	30	15.3	11	12.6
Burglary	101	11.4	17	8.7	7	8.0
Grand Larceny	79	8.9	19	9.7	7	8.0
Other Part I felony	126	14.2	32	16.3	13	14.9
Possession of controlled substance	44	5.0	12	6.1	9	10.3
Possession of unlicensed firearm	37	4.2	11	5.6	7	8.0
Possession of stolen property	19	2.1	3	1.5	2	2.3
Unauthorized use of a vehicle	2	0.2	2	1.0	0	0.0
Other Part II felony	45	5.1	24	12.2	9	10.3
Aggravated assault and battery	31	3.5	5	2.6	2	2.3
Petit Larceny	12	1.4	2	1.0	0	0.0
Run away minor	1	0.1	0	0.0	0	0.0
Missing minor	3	0.3	0	0.0	0	0.0
Other	158	17.8	23	11.7	10	11.5

Table 3.4.25 **Type of Offense: Continued**

	Offense 4		Offense 5		Offense 6	
Offense type	Number	Percent	Number	Percent	Number	Percent
Total	8	100.0	12	100.0	40	100.0
Robbery	1	12.5	1	8.3	9	22.5
Felonious Assaults	0	0.0	3	25.0	7	17.5
Burglary	1	12.5	0	0.0	2	5.0
Grand Larceny	1	12.5	0	0.0	2	5.0
Other Part I felony	0	0.0	1	8.3	4	10.0
Possession of controlled substance	0	0.0	1	8.3	5	12.5
Possession of unlicensed firearm	1	12.5	0	0.0	2	5.0
Possession of stolen property	0	0.0	0	0.0	0	0.0
Unauthorized use of a vehicle	0	0.0	0	0.0	0	0.0
Other Part II felony	3	37.5	1	8.3	6	15.0
Aggravated assault and battery	0	0.0	0	0.0	1	2.5
Petit Larceny	0	0.0	0	0.0	0	0.0
Run away minor	0	0.0	0	0.0	0	0.0
Missing minor	0	0.0	0	0.0	0	0.0
Other	1	12.5	5	41.7	2	5.0

Table 3.4.26 **Year of Offense**

	Offense 1		Offense 2		Offense 3	
Offense Year	Number	Percent	Number	Percent	Number	Percent
Total	882	100.0	193	100.0	85	100.0
1980	1	0.1	0	0.0	0	0.0
1981	0	0.0	0	0.0	0	0.0
1982	1	0.1	0	0.0	0	0.0
1983	1	0.1	0	0.0	0	0.0
1984	1	0.1	0	0.0	0	0.0
1985	1	0.1	0	0.0	0	0.0
1986	3	0.3	1	0.5	1	1.2
1987	79	9.0	7	3.6	1	1.2
1988	94	10.7	22	11.4	11	12.9
1989	59	6.7	23	11.9	6	7.1
1990	78	8.8	11	5.7	7	8.2
1991	66	7.5	28	14.5	8	9.4
1992	81	9.2	20	10.4	10	11.8
1993	51	5.8	9	4.7	5	5.9
1994	91	10.3	15	7.8	7	8.2
1995	104	11.8	24	12.4	11	12.9
1996	102	11.6	14	7.3	13	15.3
1997	67	7.6	12	6.2	2	2.4
1998	2	0.2	7	3.6	3	3.5

Table 3.4.26 **Year of Offense: Continued**

	Offense 4		Offense 5		Offense 6	
Offense Year	Number	Percent	Number	Percent	Number	Percent
Total	8	100.0	11	100	35	100.0
1980	0	0.0	0	0.0	0	0.0
1981	0	0.0	0	0.0	0	0.0
1982	0	0.0	0	0.0	0	0.0
1983	0	0.0	0	0.0	0	0.0
1984	0	0.0	0	0.0	0	0.0
1985	0	0.0	0	0.0	0	0.0
1986	0	0.0	0	0.0	0	0.0
1987	0	0.0	0	0.0	0	0.0
1988	1	12.5	1	9.1	3	8.6
1989	0	0.0	0	0.0	4	11.4
1990	1	12.5	1	9.1	5	14.3
1991	1	12.5	2	18.2	3	8.6
1992	1	12.5	1	9.1	3	8.6
1993	1	12.5	1	9.1	1	2.9
1994	1	12.5	0	0.0	4	11.4
1995	0	0.0	2	18.2	5	14.3
1996	0	0.0	2	18.2	3	8.6
1997	1	12.5	1	9.1	3	8.6
1998	1	12.5	0	0.0	1	2.9

Table 3.4.27 **Outcome of Offense**

	Offense 1		Offense 2		Offense 3	
Outcome	Number	Percent	Number	Percent	Number	Percent
Total	888	100.0	196	100.0	85	100.0
Crisis Stabilization Center	5	0.6	0	0.0	0	0.0
Youth Rehabilitiation Center	43	4.8	37	18.9	20	23.5
Boys/Girls Group Home	3	0.3	0	0.0	1	1.2
Transfer to Correctional Facility	4	0.5	2	1.0	1	1.2
Drug Rehabilitation Center	2	0.2	1	0.5	0	0.0
Psychological Evaluation	11	1.2	3	1.5	1	1.2
Dismissed	187	21.1	47	24.0	19	22.4
Left Jurisdiction	0	0.0	0	0.0	0	0.0
Case not prosecuted	70	7.9	7	3.6	0	0.0
Case pending	0	0.0	0	0.0	2	2.4
Community Service	3	0.3	1	0.5	0	0.0
Counseling	2	0.2	0	0.0	1	1.2
Restitution = $2000	10	1.1	0	0.0	0	0.0
Attend School Regularly	0	0.0	0	0.0	0	0.0
Academic Program	0	0.0	0	0.0	0	0.0
Read/Submit book report	0	0.0	0	0.0	0	0.0
Curfew/prnt/princ	2	0.2	0	0.0	0	0.0
reprimand/prin/j off	0	0.0	0	0.0	0	0.0
probation	328	36.9	69	35.2	27	31.8
Other	218	24.5	29	14.8	13	15.3

Table 3.4.27 **Outcome of Offense: Continued**

	Offense 4		Offense 5		Offense 6	
Outcome	Number	Percent	Number	Percent	Number	Percent
Total	9	100.0	12	100.0	38	100.0
Crisis Stabilization Center	0	0	0	0.0	0	0.0
Youth Rehabilitiation Center	2	22.2	5	41.7	13	34.2
Boys/Girls Group Home	0	0.0	0	0.0	0	0.0
Transfer to Correctional Facility	0	0.0	0	0.0	1	2.6
Drug Rehabilitation Center	0	0.0	1	8.3	0	0.0
Psychological Evaluation	0	0.0	0	0.0	0	0.0
Dismissed	1	11.1	2	16.7	12	31.6
Left Jurisdiction	0	0.0	0	0.0	0	0.0
Case not prosecuted	1	11.1	0	0.0	0	0.0
Case pending	0	0.0	1	8.3	2	5.3
Community Service	0	0.0	0	0.0	0	0.0
Counseling	0	0.0	0	0.0	0	0.0
Restitution = $2000	0	0.0	0	0.0	0	0.0
Attend School Regularly	0	0.0	0	0.0	0	0.0
Academic Program	0	0.0	0	0.0	0	0.0
Read/Submit book report	0	0.0	0	0.0	0	0.0
Curfew/prnt/princ	0	0.0	0	0.0	0	0.0
reprimand/prin/j off	0	0.0	0	0.0	0	0.0
probation	3	33.3	3	25.0	5	13.2
Other	2	22.2	0	0.0	5	13.2

essing of juvenile delinquents and represented the final sentencing stage. Between offenses one and four the most common form of treatment is *probation* ranging between 32.2 to 36.9 percent of cases. For cases with five and six offenses, however, the treatment in the majority of instances changed to sentencing for a period at the Youth Rehabilitation Center (YRC)—between 22.2 to 41.7 percent of cases.

It should be noted that for this population of juvenile delinquents for whom the literature indicates there is high marijuana usage, drug rehabilitation is listed as a treatment only in Offenses 1, 2 and 5 and that at an extremely low rate.

Biological Father Known—Table 3.4.28 was inserted into the St Croix data gathering form to measure the extent to which juvenile delinquents did not know the identity of their fathers. In discussions among DHS social workers, it was their perception that this factor would rate high. However, these data indicate that an overwhelming majority of juvenile delinquents did have knowledge of their fathers. Perhaps closer examination should be given to the level and types of bonds and relationships existing between father and juvenile delinquents, as a more important determining factor of delinquent behavior.

Table 3.4.28 **Biological Father Known**

Knowledge of Father	Number	Percent
Total	652	100.0
Known	609	93.4
Unknown	43	6.6

3.4.3 Predicting Recidivism with the St Croix Department of Human Services Data

In this analysis, five predictor variables that showed statistically significant association with the outcome variable, recidivism were included in the model. The estimation of the predictor variables was severely hampered by the widespread occurrences of missing data values. While there were 888 cases in the original data set of St Croix's Department of Human Services' data, only 361 valid observations could be used in deriving the estimates. This indicates that only 361 cases had non-missing values for each of the five variables that were included in the model. The five predictor variables were Age, Sex, Status of Natural Parents, Feeling of Failure, and Use of Drugs.

3.4.3.1 Estimates of the St Croix Department of Human Services Data

The likelihood ratio chi-square in Table 3.4.3.1 suggests that at least one of the variables in the model is significant. The table indicates that while four of the variables were statistically significant—Sex, Feelings of Failure and Use of Drugs—two of them failed to reach the traditional level of statistical significance of 0.05. However, because the variable Age has shown itself to be such a reliably strong predictor in all other models included in this study, it was retained even though its significance level of 0.0612 is just slightly beyond the usual 0.05 level. When the variables Age-Squared and Age were included in the model, both showed no statistical significance.[4] Even more surprising is the failure of the Status of Natural Parents variable to reach the significance level of 0.05. Even though a 2 x 2 table cross-classified this variable with recidivism and showed them

[4]A second possible explanation of the relatively poor predictive strength of the Age variable is that the data reflect some degree of contamination. The data analysts were unable to verify the data as they had no direct access to the juveniles' case files.

Table 3.4.3.1 **Parameter Estimates in Logistic Regression Predicting Recidivism: St Croix, Department of Human Services Data**

Variable	Parameter Estimate (1)	Standard Error (2)	Pr> Chi Square (3)	Adjusted Odds Ratio (4)
Intercept	1.3319	1.2519	0.2874	…
Age	-0.1545	0.0825	0.0612	0.857
Sex (1=Male)	0.4543	0.2086	0.0295	2.481
Parents (1=Married and Living Together)	-0.2322	0.1736	0.1811	0.628
Feelings of Failure (1=Yes)	0.2935	0.1267	0.0205	1.799
Drug Use (1=Yes)	0.5238	0.1223	<0.0001	2.851

Likelihood Ratio Chi Square = 48.8380 df = 5 Pr > Chi Square < 0.0001

Notes: N=361. Odds ratios greater than 1.0 indicate greater odds of recidivism.

to be significantly related, this variable was barely below the 0.2 level of significance—0.1811. Because of the strong association shown in the 2 x 2 case, this variable was also retained. It would appear that the high attrition of cases mentioned above is probably the primary reason for the relatively poor showing of these two variables in terms of statistical significance.

The adjusted odds ratio for age of 0.857 may be interpreted as follows. For each one-year increase in age, the odds of a repeat offense are decreased by a factor of 0.857 or eventuates in a 100 x (0.857 – 1) = -14.3 percent change, i.e., 14.3 percent reduction in the odds of the juvenile becoming a repeat offender. The odds ratio for Sex of 2.481 again indicates that the odds of males being repeat offenders are about 2.5 times higher than the odds for females. First-time offenders who live with their natural parents in a married state and living together have odds that are reduced by 37.2 percent of those juveniles who live with a parent or parents in some other kind of relationship. This may be explained in other words by saying that first-time offenders who do not live with their natural parents in a married union have odds of being recidivists by a factor that is—1/0.628 = 1.591—about 1.6 times higher than the odds for offenders who live with their natural parents in a married relationship.

Juvenile offenders who indicated they harbored feelings of being a failure or of being worthless had predicted odds of being repeat offenders of 1.799. In other words, the odds of recidivism for a first-time offender who experienced these feelings of failure and worthlessness are about 80 percent higher than the odds for other juvenile offenders who do not have such feelings.

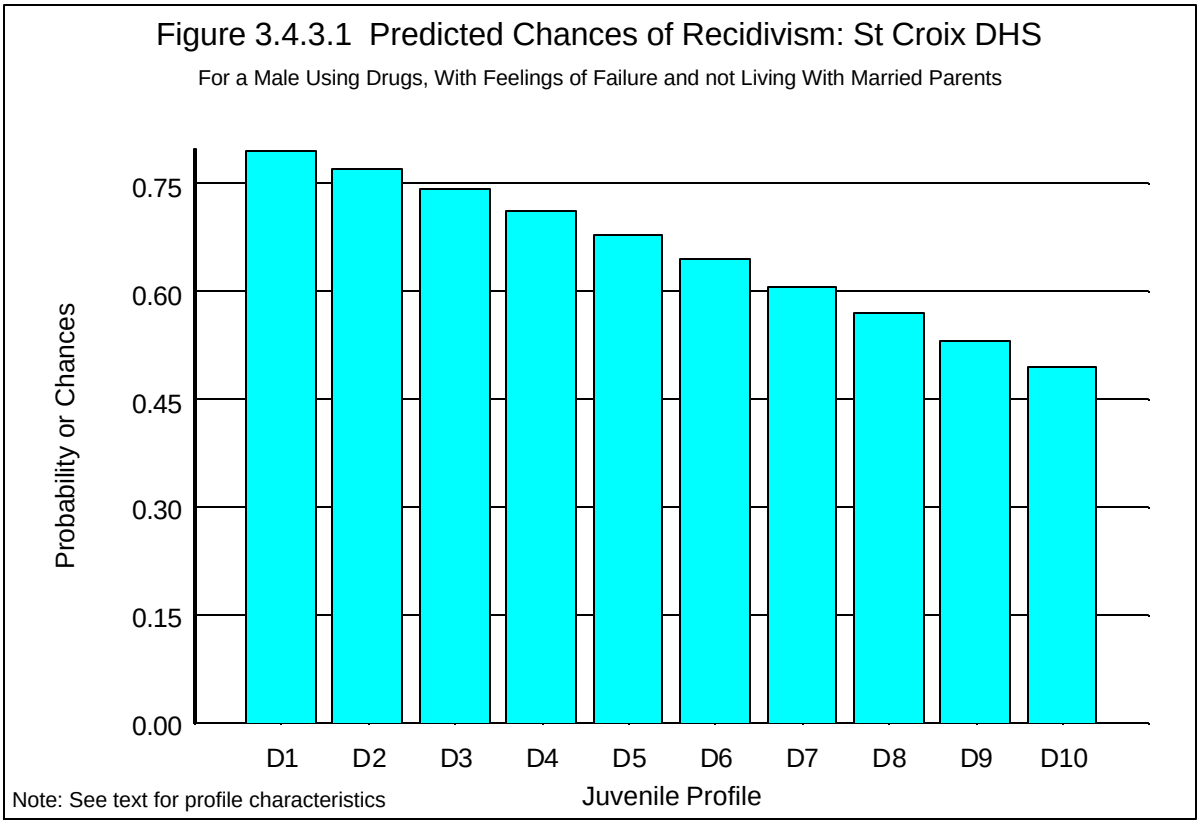
The final variable is one that derives from responses to the question concerning the use of drugs or alcohol before or during school. The adjusted odds ratio shown in table 3.4.3.1 of 2.851 is the highest among all the variables. Hence, the odds of recidivism for juveniles who indicated they used alcohol or drugs before or during school was nearly three times as

Table 3.4.3.2 **Predicted Probabilities in Logistic Regression: St Croix, Department of Human Services Data**

Coefficients:	*a* (1)	*Agefo* (2)	*Sex* (3)	*Parents* (4)	*Failure* (5)	*Drugs* (6)	***Odds*** (7)	***Proba-bility*** (8)
Parameter Estimates:	1.3319	-0.1545	0.4543	-0.2322	0.2935	0.5238		
Juvenile Profiles:								
D1		8	1	0	1	1	3.926	0.797
D2		9	1	0	1	1	3.364	0.771
D3		10	1	0	1	1	2.882	0.742
D4		11	1	0	1	1	2.469	0.712
D5		12	1	0	1	1	2.116	0.679
D6		13	1	0	1	1	1.813	0.645
D7		14	1	0	1	1	1.553	0.608
D8		15	1	0	1	1	1.331	0.571
D9		16	1	0	1	1	1.141	0.533
D10		17	1	0	1	1	0.977	0.494
D11		15	1	1	1	1	1.055	0.513
D12		10	0	1	0	1	1.082	0.520
D13		12	0	0	1	1	1.343	0.573
D14		12	0	1	1	1	1.065	0.516
D15		12	1	0	1	0	1.253	0.556
D16		12	1	0	0	0	0.934	0.483
D17		15	1	1	1	0	0.625	0.385
D18		15	1	0	0	1	0.993	0.498
D19		15	1	1	0	1	0.787	0.440
D20		15	1	0	1	0	0.788	0.441
D21		15	0	0	0	1	0.630	0.387
D22		10	1	0	1	0	1.707	0.631

Variables:

Agefo = Age of juvenile at first offense.
Sex = Sex of the juvenile (1 = male, 0 = female).
Parents = Natural parents of juvenile (1 = married and living together, otherwise 0).
Failure = Feeling like a failure or worthless (1 = failure, otherwise 0).
Drugs = Use of drugs or alcohol before or during school (1 = use, otherwise 0).



high as the odds for those juveniles who indicated they did not. Or it might be said that this latter group has odds of being recidivists of only about 35 percent of the odds of those using drugs or alcohol in school.

3.4.3.2 The Prediction of Recidivism

Table 3.4.3.2 shows the predicted chances of becoming a recidivist for a combination of stated levels of the variables in the model. The first 10 profiles are those of juveniles for each successive age from 8 to 17 with the other variables in the model—Sex, Status of Natural Parents, Feeling of Failure, and Use of Drugs—remaining constant throughout the age range (See Figure 3.4.3.1). It is noted that for these predictions shown in column (8), there is a gradual decrease from a high of 0.797 to a low of 0.494. The first profile may be interpreted to say that an 8-year-old first-time male offender who is living with parents that are not married and living together, who thinks of himself as a failure or worthless and who used drugs or alcohol before or during school is predicted to be an offender who will be arrested at least one more time before he reaches the age of 18. The data show that this combination of characteristics predicts recidivism for all ages up to 16 years. It is not until the juvenile reaches 17 years in age that his prediction falls below 0.50, therefore indicating that he will likely not commit another offense before he is 18 years old. Profile D11 suggests that a 15-year-old-male living with his natural parents who are married but who has low self esteem, and has used drugs or alcohol at school is still predicted to be a repeat offender before age 18. Profiles D1 to D22 in the table present other combinations of characteristics and their predictions of repeat or non-repeat of offenses that result in arrests.

3.5 Summary and Overview for the Territory

While looking at data results for both JIB/YIB and DHS it should be borne in mind that each item did not have the same rate of response. Response rate depended on whether or not a piece of data was gathered at the time a juvenile was processed into the system. As a result, with each new variable, the total tended to change.

3.5.1 Juvenile Units

Background Characteristics

The rate of involvement of juveniles engaged in offensive behavior differed based on age, gender, racial composition, time and type of offense. A relatively small percentage of total first-time offenders went on to become recidivists or repeat offenders (17.4 St Thomas, 10.0 St Croix) and an extremely small percent went on to commit multiple crimes, leading to confinement at the Youth Rehabilitation Center.

On both islands there was very little involvement in delinquent behavior up to the 7- to 10 age bracket but this involvement climbed with increasing age to peak around age 15. A comparison of gender suggested a much higher male than female participation in delinquent activity and over longer periods of time.

Blacks were over-represented in juvenile offensive activity, while whites and other races were underrepresented. However, the overrepresentation for blacks was more acute on the island of St Thomas. This is more likely, reflecting social and income differences in the populations than a racial factor.

The age at first offense, when looked at by ethnic groups showed, in general, that there were consistent and similar patterns for the juvenile delinquents of a particular ethnic group as well as for juvenile delinquents of mothers and fathers from these ethnic groups. For both islands there was a low rate of juvenile delinquency below age 10, showing a gradual increase with age, a peaking among the 11- to 14-year-olds, and a falling off at age 16 plus. The only ethnic group that seemed to have shown a difference in this trend was Puerto Rico, where a relatively higher rate of activity occurred around ages 10 to 13 than for the other ethnic groups. This tapered off at an age earlier than that for other ethnic groups as well.

Although the percentage of juvenile delinquents who were not enrolled in school was low on both islands, the percentage for St Thomas more than doubled that of St Croix. However, the law requires that children of school age, 16 years and under, be enrolled in school, and enrollment did not seem to play a significant part in juvenile behavior. Problems were likely to arise when children failed to attend school where they could participate meaningfully in class activities. It should be recalled that indications are that most delinquent behavior occur after school hours when more children tend to be unsupervised. Greater focus could be placed on gathering data that represent that period of juvenile life.

The general pattern of low delinquency rates in primary school, with an obvious increase with age and grade into middle and high school, held true for both St Croix and St Thomas. Within that pattern another interesting pattern showed St Thomas with approximately twice the rate of juvenile delinquents in primary school as did St Croix. Middle and high school juvenile delinquent rates on St Thomas were about the same, about two fifths of the total. For St Croix, middle school was a little over one-fifth, while high school had the majority of first-time juvenile delinquents—over 70 percent. The reason for these marked differences across the two islands is not clear.

Family and Community Characteristics

The majority of juvenile delinquents lived with mother alone, though the proportions differed significantly when looked at between islands. Over two-thirds on St Croix and a little more than half on St Thomas lived with mother alone. However, a higher proportion of juvenile delinquents on St Thomas, about one-fifth, lived with both father and mother than did on St Croix. Other guardian types were minimally represented, corresponding, it is believed, to their marginal presence in the communities. This pattern remained true across gender.

In St Thomas, juveniles seemed to have been overrepresented for persons born in the Eastern Caribbean and underrepresented for those born in the US and US Virgin Islands. The reverse occurred for St Croix where juvenile delinquents were over-represented for persons born in the US Virgin Islands and underrepresented for the Eastern Caribbean.

Place of birth seemed to have an influence on delinquent behavior from a number of perspectives. On both islands, the majority of juvenile delinquents came from mothers and fathers born in the US Virgin Islands. However, for those with parents born in the Eastern Caribbean and other Caribbean islands there was a disproportionate number of juvenile offenders relative to their size in the community.

On both islands, the majority of mothers and fathers were employed. However, the unemployment rate for mothers of juveniles on St Thomas was almost five times more than that for mothers of St Croix's juvenile delinquents. On both islands, the rate was slightly higher for the mothers of male juvenile offenders and slightly lower for female offenders. On St Croix, the unemployment rate for fathers of juvenile delinquents was similar to that for mothers.

Offenses Committed

The majority of juvenile offenders in the study on both islands showed no evidence of recidivism; that is, the juveniles who committed one offense were processed through the system but were never arrested for further offenses during the period of the study. The recidivism rate for St Croix was about six percent lower than that for St Thomas. It should be remembered, however, that the period that the study spanned allowed for juveniles not yet 17 years of age to commit offenses outside the terminating date of the study so that such offenses would have been outside the scope of this study.

St Thomas recorded over two-thirds of the male juvenile delinquents who had committed offenses having used no weapon; this rate for St Croix is less than two percent. Use of weapons, including hand, bottle, knife, gun and penis that suggested involvement in aggressive behavior accounted for approximately 15 percent in St Thomas; while on St Croix, this category represented over 60 percent of juvenile delinquents.

3.5.2 Department of Human Services

Background Characteristics

On both islands the proportion of male juvenile delinquents—approximately 85 to 86 percent—exceeded that for females—approximately 14 to 16 percent. This was dramatically disproportionate to the actual population proportions in the wider community where approximate male/female ratios tend to be closer to 50/50 one way or the other. This trend is common in most communities for delinquent behavior generally, and for juvenile delinquent behavior in particular.

In regard to age, the data showed that juvenile delinquents displayed the same pattern of be-

havior on both islands. There was low involvement between ages seven to 12 with a slight increase around age 13, and a dramatic increase between the ages of 14 and 17. The years of highest activity differed with St Croix, peaking at ages 15 and 16 and St Thomas at 14 to 15.

On both islands, the black race was over represented in juvenile delinquent behavior but at different rates. St Croix's rate of over-representation was 27 and St Thomas 7 percent. The white race, on the other hand, had the same rate of delinquent behavior on both islands and was underrepresented 4 to 5 times. This result is likely affected by broader social and economic influences.

There was a higher rate of juvenile offenders who were citizens involved in juvenile activity on the island of St Croix than on St Thomas. The Resident Alien category on St Thomas had a juvenile delinquent rate more than twice that for St Croix. In all cases, except resident aliens on St Croix, delinquent rates were higher than that population group's representation in the community.

For both islands, the vast majority of juvenile delinquents were enrolled in school. St Thomas had approximately 7 percent higher enrollment than did St Croix. It is obvious that enrollment in school is not a deterrent factor in juvenile's involvement in delinquent behavior. There were no data available on attendance, class participation or involvement in extra curricula activities.

On both St Thomas and St Croix there were very few juvenile offenders between Grades one through five, except a surprisingly high incidence in Grade two for St Thomas. Then there was a dramatic increase over Grades six through nine. Although there was still relatively high activity by Grade 10, the rate had begun to fall and continued to do so up to Grade 12.

Employment rates for juvenile delinquents were low for both islands with St Croix having a little over two percent higher than St Thomas. There was no specific reference regarding the location of employment activities and whether monetary compensation had to be a necessary part of the definition of employment. The absence of data for the juvenile population in the broader communities made it difficult to determine whether these rates are representative. On the surface however, it can be said that a large proportion of juvenile delinquents had a lot of unproductive time on their hands that could have contributed to involvement in criminal activities.

There were no particular activities that stood out on either island as a means of employment. Since the unemployment rate was so high, those employed represented a small proportion of the juvenile delinquent population.

The juvenile delinquent rate was more than 10 percent higher on St Croix than St Thomas for persons of US Virgin Islands birth. For those born in the Eastern Caribbean, the rate for St Thomas more than doubled that for St Croix. On both islands, the rates were close for those who were both US mainland- and Puerto Rico-born.

Family and Community Characteristics

The rate at which mothers were present in the household was similar for both islands, representing the vast majority. The presence of fathers, though slightly higher for St Thomas, revealed rates that were relatively low on both islands.

Mothers of juvenile delinquents in the 40 to 49 age group accounted for the largest proportion on St Thomas. On St Croix, the highest rate fell in the 30 to 39 age group. On both islands fathers appeared relatively older than mothers, falling between the 40 to 49 age group on

St Croix and the over 50 on St Thomas.

On both islands the "Now Married" category for mothers of juvenile offenders was over 40 percent compared to fathers where more than half were in the "Now Married" category. The next highest categories were "Never Married" and "Divorced" on St Thomas, making up 40.7 and 47.0 percent for mothers and fathers respectively. On St Croix these categories together made up 44.7 percent for mothers, whereas, the "Never Married" and "Separated" for fathers totaled 43 percent.

Approximately one-half of the natural parents of juvenile delinquents on St Thomas were "Divorced" or "Never Married," whereas on St Croix those categories together were over 10 percent higher. Those natural parents who were "Married" and "Living Together" made up approximately 29 percent in St Thomas and 21 percent in St Croix.

Almost half of the juvenile offenders in St Thomas and a little over half in St Croix were *currently living with mothers, compared to* a little over 4 percent living with fathers on both islands. Those *living with both mother and father* made up a little over one-fifth for St Thomas and somewhat less for St Croix.

According to data for both islands, the more siblings in a household, the lower the representation of juvenile delinquents. In households with four to six or more siblings present the rate of representation of juvenile offenders ranged between 4 to 10 percent. Households with between zero to three siblings accounted for approximately 14 to 27 percent of the juvenile delinquents.

As in the case of the "siblings-in-household" variable there seemed to have been a clear trend with children in household for both islands. The smaller the number of children in the household, the higher the representation of juvenile delinquents, and the higher the number of children in the household, the lower the representation of juvenile delinquents. It is likely that this factor does not operate alone but works in conjunction with other factors. The data appear to suggest that the more individuals available for communication and interaction at home, the less a juvenile is likely to go outside seeking dubious adventure.

A question concerning knowledge of fathers by juvenile delinquents was posited only on the island of St Croix. The results showed that the vast majority of juvenile delinquents knew who were their biological fathers. The problem sited by the DHS probably centers around the type of bond or relationship that exists between the juvenile delinquents and their fathers, despite that knowledge. Data were not available to measure this factor.

Presence of Risk Factors

On St Croix 2.6 percent of juvenile offenders, and 4.4 percent of offenders on St Thomas were reported as having children of their own. Although the rate on St Thomas was almost twice that of St Croix, both proportions were relatively low.

At the same time, less than 5.0 percent of reported juvenile delinquent cases on both islands were responsible for child care. This childcare responsibility was not necessarily for their own offspring. It could have been of siblings or relatives.

In all risk indicators, St Croix showed a higher rate of occurrence than did St Thomas except in the *"Expelled From School" group* where St Thomas had a rate almost 20 percent more than that for St Croix

On both St Croix and St Thomas the rate of juveniles involved in sexual activity was a little over half the reported cases.

St Croix had approximately twice the rate of juvenile delinquents reporting to be sexually active as did St Thomas.

Of the juvenile delinquents for whom data was available, St Croix had 88.2 percent with one sex partner and 5.9 percent with two and three partners. This compared with 60 percent with one sex partner and 10 percent with six or more sex partners on St Thomas.

Outcome of Offenses

Both islands seemed to have had a low trial and a high plea-bargain rate for all cases. There were several outcomes for each offense and outcomes varied with offense on both islands. On St Croix the most common outcome for Offenses 1 through 4 was *Probation* followed by *Dismissal.* This changed to sentencing to the Youth Rehabilitation Center as the first outcome for Offenses 5 and 6 and *Dismissal* or *Probation* remained the second highest outcomes.

On St Thomas Offenses 1 and 2 had *Community Service* as the most common outcome followed by *Dismissal* or sentencing to Youth Rehabilitation Center. Offenses 3 to 6 had Youth Rehabilitation Center as the number one outcome followed by *Community Service*.

IV. Implications of the Findings and Recommendations

Any substantive methods that are aimed at preventing or treating antisocial behavior should be based on empirically validated theories about causes. The major emphasis should be on the early prevention of offending. Serious antisocial behavior might be viewed as a chronic disease that requires continuous monitoring and intervention over the life course. The following recommendations are aimed at prevention, or reduction, of offensive behaviors in juveniles.

First, delinquency prevention may begin with pregnancy and infancy. Programs may be instituted to alleviate problems in pregnancy and infancy by encouraging visits to prenatal clinics designed to help mothers during pregnancy and during the first two years of life. Results elsewhere have shown that home visits during pregnancy led to teenage mothers having heavier babies, and women who had previously smoked decreased their smoking and had fewer pre-term deliveries. The postnatal visits to clinics caused a decreased in recorded physical abuse and neglect during the first two years in life. This latter result is important because of the common observation that being physically abused or neglected as a child predicts later violent offending.

Second, hyperactivity and impulsivity might be altered using techniques termed cognitive-behavioral interpersonal skills training. Delinquents can be taught the cognitive skills in which they are deficient, and this could lead to a decrease in their offending. This kind of program should aim to modify the impulsive, egocentric thinking of delinquents, to teach them to stop and think before acting, to consider the consequences of their behavior, to conceptualize alternative ways of solving interpersonal problems, and to consider the impact of their behavior on other people, especially their victims. This includes social skills training and social perspective training in recognizing and understanding other people's feelings.

Third, if low intelligence and school failure are causes of offending, then any program that leads to an increase in school success should lead to a decrease in offending.

Fourth, if poor parental supervision and erratic child-rearing behavior are causes of delinquency, it seems likely that parent training might succeed in reducing offending. Parents of antisocial children tend to be deficient in their methods of child rearing, often using more punishment but failing to make it contingent on the child's behavior.

Fifth, if socioeconomic deprivation causes offending, then providing increased economic resources for the more deprived families should lead to a decrease in offending by their children.

Sixth, if having delinquent friends causes offending, then any program that reduces their influence or increases the influence of prosocial friends could have a reductive effect on offending.

Seventh, if one accepts that today's children are tomorrow's parents, voters, workers and community leaders, then there ought to be a sustained commitment to a set of coherent family policies that are relevant to today's families and that are dedicated to the premise that families should be supported in meeting the needs of

their children. To this end, it is proposed that a set of children's indicators—like percent of children in living arrangements, percent of children in poverty, infant health risk indicators, age of teen births, child abuse and neglect, and juvenile crime rates—require statistical data collection on a regular basis.

Finally, it can be said that any measure that reduces crime in USVI will probably also reduce alcohol abuse, drunk driving, drug abuse, sexual promiscuity, family violence, truancy, school failure, unemployment, marital disharmony, and divorce. It is clear that problem children tend to grow up into problem adults, and that problem adults tend to produce more problem children. Are these then not enough solid reasons to make a sustained commitment to return these islands to their former status of being nearly crime-free?

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APPENDIX

Table A1 **Parent's Place of Birth, St Thomas**

Place of Birth	Mother		Father		1995 MPOB Percent	1995 FPOB Percent
	Number	Percent	Number	Percent		
Total	2,044	100.0	1,804	100.0	100.0	100.0
US Virgin Islands	688	33.7	478	26.5	25.8	27.0
Puerto Rico	52	2.5	45	2.5	2.6	2.0
United States	105	5.1	110	6.1	10.8	10.5
Antigua or Barbuda	202	9.9	198	11.0	7.0	8.6
Dominica	168	8.2	164	9.1	7.5	7.4
St Kitts or Nevis	357	17.5	341	18.9	14.6	13.7
Other Caribbean	443	21.7	439	24.3	27.6	26.4
Other	29	1.4	29	1.6	4	4.3

Table A2 **Type of Offense, St Thomas**

Type	Offense 1		Offense 2		Offense 3	
	Number	Percent	Number	Percent	Number	Percent
Total	2,335	100.0	836	100.0	433	100.0
Part I Felony	509	21.8	236	28.2	132	30.5
Part II Felony	268	11.5	112	13.4	57	13.2
Misdemeanor	309	13.2	110	13.2	41	9.5
Incidences	548	23.5	179	21.4	98	22.6
Other	701	30.0	199	23.8	105	24.2

Table A2 **Type of Offense, St Thomas:** Continued

Type	Offense 4		Offense 5		Offense 6	
	Number	Percent	Number	Percent	Number	Percent
Total	117	100.0	173	100.0	266	100.0
Part I Felony	28	23.9	47	27.2	96	36.1
Part II Felony	13	11.1	28	16.2	32	12.0
Misdemeanor	17	14.5	21	12.1	33	12.4
Incidences	30	25.6	38	22.0	40	15.0
Other	29	24.8	39	22.5	65	24.4

Table A3 **Type of Weapon, St Thomas**

Type	Offense 1		Offense 2		Offense 3	
	Number	Percent	Number	Percent	Number	Percent
Total	2,332	100.0	832	100.0	434	100.0
Gun	64	2.7	45	5.4	27	6.2
Knife	90	3.9	45	5.4	20	4.6
Hand	149	6.4	48	5.8	21	4.8
Bottle	23	1.0	15	1.8	5	1.2
Penis	11	0.5	4	0.5	2	0.5
None	1,828	78.4	597	71.8	325	74.9
Other	167	7.2	78	9.4	34	7.8

Table A3 **Type of Weapon, St Thomas:** Continued

Type	Offense 4		Offense 5		Offense 6	
	Number	Percent	Number	Percent	Number	Percent
Total	116	100.0	174	100.0	269	100.0
Gun	3	2.6	14	8.0	23	8.6
Knife	0	0.0	6	3.4	12	4.5
Hand	7	6.0	8	4.6	16	5.9
Bottle	2	1.7	2	1.1	5	1.9
Penis	0	0.0	0	0.0	0	0.0
None	99	85.3	131	75.3	191	71.0
Other	5	4.3	13	7.5	22	8.2

Table A4 **Year of Offense, St Thomas**

Offense Year	Offense 1		Offense 2		Offense 3	
	Number	Percent	Number	Percent	Number	Percent
Total	2342	100.0	838	100.0	437	100.0
1980	1	-	1	0.1	1	0.2
1981	8	0.3	3	0.4	1	0.2
1982	13	0.6	0	0.0	1	0.2
1983	9	0.4	6	0.7	3	0.7
1984	15	0.6	7	0.8	3	0.7
1985	9	0.4	8	1.0	3	0.7
1986	22	0.9	12	1.4	8	1.8
1987	180	7.7	54	6.4	28	6.4
1988	219	9.4	80	9.5	32	7.3
1989	259	11.1	87	10.4	51	11.7
1990	220	9.4	68	8.1	43	9.8
1991	296	12.6	103	12.3	63	14.4
1992	243	10.4	98	11.7	49	11.2
1993	178	7.6	81	9.7	37	8.5
1994	204	8.7	73	8.7	44	10.1
1995	135	5.8	44	5.3	19	4.3
1996	104	4.4	42	5.0	16	3.7
1997	146	6.2	45	5.4	23	5.3
1998	81	3.5	26	3.1	12	2.7

Table A4 **Year of Offense, St Thomas:** Continued

Offense Year	Offense 4		Offense 5		Offense 6	
	Number	Percent	Number	Percent	Number	Percent
Total	119	100.0	176	100.0	272	100.0
1980	0	0.0	0	0.0	0	0.0
1981	0	0.0	0	0.0	0	0.0
1982	0	0.0	0	0.0	0	0.0
1983	0	0.0	0	0.0	0	0.0
1984	0	0.0	0	0.0	0	0.0
1985	0	0.0	0	0.0	0	0.0
1986	6	5.0	4	2.3	0	0.0
1987	11	9.2	14	8.0	14	5.1
1988	13	10.9	16	9.1	18	6.6
1989	17	14.3	24	13.6	30	11.0
1990	7	5.9	11	6.3	23	8.5
1991	22	18.5	34	19.3	34	12.5
1992	12	10.1	19	10.8	43	15.8
1993	10	8.4	13	7.4	30	11.0
1994	9	7.6	13	7.4	16	5.9
1995	5	4.2	12	6.8	21	7.7
1996	3	2.5	5	2.8	16	5.9
1997	3	2.5	9	5.1	18	6.6
1998	1	0.8	2	1.1	9	3.3

Table A5 **Outcome of Offense, St Croix**

Outcome	Offense 1		Offense 2		Offense 3	
	Number	Percent	Number	Percent	Number	Percent
Total	888	100.0	196	100.0	85	100.0
Crisis Stabilization Center	5	0.6	0	0.0	0	0.0
Youth Rehabilitation Center	43	4.8	37	18.9	20	23.5
Boys/Girls Group Home	3	0.3	0	0.0	1	1.2
Transfer to Correctional Facility	4	0.5	2	1.0	1	1.2
Drug Rehabilitation Center	2	0.2	1	0.5	0	0.0
Psychological Evaluation	11	1.2	3	1.5	1	1.2
Dismissed	187	21.1	47	24.0	19	22.4
Left Jurisdiction	0	0.0	0	0.0	0	0.0
Case not prosecuted	70	7.9	7	3.6	0	0.0
Case pending	0	0.0	0	0.0	2	2.4
Community Service	3	0.3	1	0.5	0	0.0
Counseling	2	0.2	0	0.0	1	1.2
Restitution = $2000	10	1.1	0	0.0	0	0.0
Attend School Regularly	0	0.0	0	0.0	0	0.0
Academic Program	0	0.0	0	0.0	0	0.0
Read/Submit book report	0	0.0	0	0.0	0	0.0
Curfew/prnt/princ	2	0.2	0	0.0	0	0.0
reprimand/prin/j off	0	0.0	0	0.0	0	0.0
Probation	328	36.9	69	35.2	27	31.8
Other	218	24.5	29	14.8	13	15.3

Table A5 **Outcome of Offense, St Croix:** Continued

Outcome	Offense 4		Offense 5		Offense 6	
	Number	Percent	Number	Percent	Number	Percent
Total	9	100.0	12	100.0	38	100.0
Crisis Stabilization Center	0	0	0	0.0	0	0.0
Youth Rehabilitation Center	2	22.2	5	41.7	13	34.2
Boys/Girls Group Home	0	0.0	0	0.0	0	0.0
Transfer to Correctional Facility	0	0.0	0	0.0	1	2.6
Drug Rehabilitation Center	0	0.0	1	8.3	0	0.0
Psychological Evaluation	0	0.0	0	0.0	0	0.0
Dismissed	1	11.1	2	16.7	12	31.6
Left Jurisdiction	0	0.0	0	0.0	0	0.0
Case not prosecuted	1	11.1	0	0.0	0	0.0
Case pending	0	0.0	1	8.3	2	5.3
Community Service	0	0.0	0	0.0	0	0.0
Counseling	0	0.0	0	0.0	0	0.0
Restitution = $2000	0	0.0	0	0.0	0	0.0
Attend School Regularly	0	0.0	0	0.0	0	0.0
Academic Program	0	0.0	0	0.0	0	0.0
Read/Submit book report	0	0.0	0	0.0	0	0.0
Curfew/prnt/princ	0	0.0	0	0.0	0	0.0
reprimand/prin/j off	0	0.0	0	0.0	0	0.0
Probation	3	33.3	3	25.0	5	13.2
Other	2	22.2	0	0.0	5	13.2