

**A Comparison of States to Determine the Impact
of the Social Environment on Adolescent
Cigarette Smoking**

by

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Abstract: Cigarette smoking has been shown to cause significant health problems and a significant impact on our economy. Cigarette smoking predominately begins in one's adolescence. This study examined the likelihood of adolescent initiation, frequency, and quantity of cigarette smoking with respect to the social environment. We defined the social environment as the immediate physical surroundings, social relationships, and cultural milieus in which people interact. By examining gender, race, and other characteristics of the social environment, we identified certain subgroups that seem more susceptible to adolescent cigarette smoking.

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I. Introduction

Tobacco use in the general population presents multiple problems. Individually, health problems include hypertension and increased risks of lung cancer and cardiovascular disease.¹ On average, a smoker reduces his/her life span by 12 years.² Nationally, statistics show tobacco's harmful effect on the population. Smoking causes 17% of all deaths in the United States and Canada.³ Smoking related medical expenditures run over 50 billion annually, and smoking causes over 400,000 deaths per year in the United States alone.⁴

With these statistics, one would think the general population would realize the danger in smoking and related tobacco use. Indeed, the U.S. government has steadily increased government spending on tobacco control programs. Although accurately calculating government figures on expenditures relating to anti-tobacco programs can be quite difficult, general estimates show the government nearly doubled tobacco related research and education, from 81.0 million in 1989 to 153.3 million in 1996.⁵ However, despite the money spent, estimates suggest 20.7% of US adults will smoke this year. More troubling, the estimates predict that adolescent smoking will rise in the upcoming years.⁶

Why does this statistic foretell of a very disturbing trend? The reason lies in the addictive nature of tobacco. Eighty-nine percent of regular adult smokers experimented with cigarettes at age 18 or younger, and studies show that the earlier a child/adolescent tries a cigarette the more likely he/she will become a frequent smoker as an adult.⁷ The Surgeon General reports that adolescence is the time in one's life when cigarette use begins, develops, and becomes an established behavior.¹⁷ With an adolescent population growing up on cigarettes, we are creating the next generation of smokers, and the nicotine addiction means a major effort is required to quite smoking. Studies estimate the average smoker takes 16-20 years to successfully quit from the time they started smoking.⁸

We must then ask ourselves the question: Why do adolescents begin smoking and why do they continue smoking?

II. Adolescent Reasons for Initiation

Adolescents give multiple reasons for starting smoking, such as tobacco advertising, peer pressure, and parental influences. Through the years, tobacco companies purposely targeted children with their advertising campaigns. Recent studies show rapid increases in adolescent smoking initiation when coordinated with effective tobacco promotions.⁹ Although outlawed now, Joe Camel and characters like him are

ingrained in the public's consciousness, and those characters only serve to encourage adolescent experimentation with cigarettes.

Another major factor that adolescents cited in starting cigarette smoking dealt with parental and peer influences.¹⁴ Peer pressure drives many teens to try things they normally wouldn't by themselves. Peer pressure drives much of teenage society. Think of the trends in clothing, music, and movies. The same can be said of smoking. If a teen hangs around fellow teens that smoke, he/she will be tempted to experiment. Every person experiences peer pressure sometime in their life, and many teens capitulate and begin smoking simply because of their friends' encouragement. Studies show the likelihood of an adolescent starting tobacco increases three-fold when they associate themselves with friends who promote tobacco experimentation.¹⁰ Parents can play a role as well. As children, we tend to emulate our parents. If a parent smokes on a frequent basis, the child will view the habit as acceptable and even "a must do", especially the younger the child is. More importantly, parents play a role in progression rather than experimentation. Friends can make an adolescent start, but witnessing parents who smoke tend to make the teenager advance to regular smoking. Indeed, studies show a mother's smoking status critical. If a mother smokes, female and male experimenters tend to become established smokers.¹¹ The risks increase even more if teenagers obtain their support from someone other than a parent.¹²

Previous research also indicates that race plays a role in determining what adolescents start experimenting with cigarette smoking. Studies indicate black attitudes towards smoking discourage cigarette use and encourage behavior conducive to not smoking.¹⁶ These studies indicate black adolescents are more influenced by their family and friends' beliefs that cigarette smoking is bad than white adolescents, and these black values protect black adolescents somewhat from starting smoking.¹⁸ Another study revealed that gender plays a role as well. Male adolescents tend to have a slightly higher affinity for experimentation of cigarette smoking than female adolescents.¹⁹

Also, poverty status and its correlation to parental supervision seem to play a key role in determining which adolescents begin smoking. Latchkey kids seem to have higher adolescent smoking rates. A study performed by Mott showed that permissive parenting, due to lack of time at home because of work, causes a slight increase in the likelihood of adolescent smoking. Poverty status plays a role because families where both parents are less likely to be in poverty, but it also means less time at home for the parents.³⁵ Another study called the "Alameda" county study examined smoking rates among a poverty area and compared it to a non-poverty area. Statistics show the poverty had a slightly higher smoking rate among adolescents than in the non-poverty area.³⁷

What do all these factors share in common? They are part of a larger whole, the social environment, and this is a key definition.

III. The Social Environment & Its Relationship to Smoking

We define the social environment as the social relationships, cultural milieus, and physical surroundings wherein a defined group of people interact and function.¹⁵ The social environment encompasses everything: including religious practices and institutions, community beliefs, economic and social processes, race and cultural relations, health services, power relations, social inequalities, arts and entertainment, etc. As you can see, the social environment is quite large, it surrounds us not simply as a physical environment that we can see, but rather as complex and dynamic movements and changes over time that affect all aspects of our lives.

Since the social environment impacts how we live, the next logical step would be to ask how the social environment impacts youth tobacco smoking? For example, the social environment encompasses government. We view our educational system as part of the government. If a school mandates a strict policy and enforcement towards smoking, this could thwart an adolescent considering experimentation. On the other hand, a school that openly allows tobacco use on its properties would lend itself to a higher rate of adolescent smoking.

Recognizing the importance of the social environment, recent studies attempted to control the social environment. Dr. Jean Forster used the TPOP (Tobacco Policy Options for Prevention) clinical trials to test local policy changes and their subsequent effects on the community.¹³ Minnesota communities agreed to take part and imposed strict smoking restrictions on retailers, such as civil penalties (fines and high licensing fees). Consequently, communities agreeing to the program witnessed youth smoking at 20 percent of the general youth population, while communities that did not witnessed rates at 30 percent.

This example illustrates the social environment's role in adolescent tobacco experimentation and prolonged use. By simply changing one aspect, one can affect adolescent tobacco use. However, this example looked at only one aspect of the social environment. We want to look at the social environment's total picture. By identifying what social environment factors influence youth tobacco use, either by encouraging or discouraging, we can much better understand what drives the youthful adolescent population in America to begin experimenting with tobacco. From what we know about the dangers of tobacco use both to the individual and to the country, we believe this is vital in furthering our knowledge on the issue.

IV. Comparing Different Social Environments

No two social environments are the same. With all the aspects that make up the total environment, no two are likely to be equal. With that in mind, a comparison of two different social environments by examining social economic data and comparing that with adolescent smoking rates would reveal what social environmental differences could

possibly affect smoking. We could conceivably answer our primary study question: How exactly does the social environment impact youth tobacco smoking, and what variables within the social environment are significant? In doing so we will also answer many secondary study questions that are linked with the primary study question. Does impact of adolescent cigarette smoking differentiate between race and gender? Do different family types affect adolescent attitudes and consequently, affect smoking rates in some way? Does parents' employment status affect adolescent attitudes and thus, smoking rates? What effect does the poverty rate have on adolescent cigarette smoking rates? Do state laws affect adolescent smoking rates? These types of questions will be answered. By selecting New York and Mississippi, we have two social environments that provide a stark contrast with another. New York's location in the Northeastern part of the country and Mississippi's location in the Deep South make them natural contrasts. The Northeast and South have demonstrated different governmental policies, cultural beliefs, philosophies, etc., in past years. This makes them good candidates for comparison.

V. Methodology of Examining the Social Environment

This project employed a case study method in approaching data accumulation and analysis. We limited the study population to those adolescents included in the various data sources that are described below in their respective sections. Moreover, the study populations we worked with were limited to those study populations examined by the various surveys and information from the data sources we used. As explained above, we chose two states, New York and Mississippi, based upon their very different and contrasting social environments. We chose to study the year 1997 because the 1997 Youth Risk Behavior Survey is the last national and state comprehensive survey performed which measured adolescent tobacco use from which we could access adolescent smoking rates (outcomes).

VI. Framing the Social Environment

In order to understand the respective social environments we constructed data tables with various social environmental data. We divided the data into specific subgroups.

A. General Youth Population Data

This first subset provides a numerical description of the youth population makeup in the states. Furthermore, this set broadens the makeup, not simply counting heads but adolescents' living conditions too. The data was taken from the 1990 United States Census. The U.S. Census is a general statistical account of the U.S. population. Citizens are sent forms with basic questions every 10 years and are expected to reply. Census workers then personally try to formally contact a citizen in person to get an accurate headcount. The Census remains the most accurate way of describing the general population for a state. We accessed the U.S. Census Bureau interactive data retrieval site at <http://venus.census.gov/cdrom/lookup>, and chose STFCA data (data concerning

detailed geography). We obtained state-level data on various population demographics for each state. The tables in the census each incorporate a different universe, one that pertains to a particular set of data. For example, in table 1 below the universe is all persons age 14-18. This means this table includes all persons between ages 14-18 that were counted in 1990. The universe used by the census is included within each data table title provided below for this subgroup. We chose only those data tables we felt were pertinent to adolescent populations. In each set you will find the actual number of people and a percentage. The “total” in each set represents the denominator. Breaking down subsets:

1. Gender and Race Distributions of the Adolescent Population: This set measures all adolescents from age 14 to 18 years old. This table provides general raw counts of race and gender adolescent distributions. We can examine this data with adolescent smoking rates to conclude whether any certain subgroups are more susceptible to adolescent smoking. The table breaks down the total youth population into subgroups of females or males, blacks or whites, and black females or black males or white females or white males.
2. Family Types of Families with a Child or Children Under 18 Years Old: This set measures different family types with children under 18 years old. This table describes whom an adolescent is living with primarily, whether it is two parents or one parent, a mother or a father. From this table, we can observe if any one type of family predominates, and to a certain degree, tell what the family structure is in the state. The data includes the total number of families and subgroups of married couples, male householders with no wives, and female householders with no husband.
3. Adolescent School Enrollment, Type of School and Race Distribution of Students: This set of data contains a universe of all persons three years or older who currently attend an elementary, junior high (middle), or high school. The data profiles the makeup of the state school system. From this data, we can begin to see what type of school students attend and attain a better understanding of the social environment. It measures the percentage of students in public schools, percentage of students in private schools, percentage of students who were white and attending school, and the percentage of students who were black and attending school.
4. School Enrollment, Employment Status and Educational Attainment of the Adolescent Population: With a universe containing persons 16-19 years old, this set measures what adolescents do. This data set tells us what percentage of adolescents is working so we may begin to understand what some adolescents are doing after school. The first subset measures the number of adolescents in the armed forces compared with the number of civilians. The second subset counts the number of high school graduates not in a higher education school setting (college, etc.) with the number of non-high school graduates not currently enrolled at any type of school. The third subset compares those adolescents in

school with adolescents either not in school but employed, not in school and unemployed, or not in school and not in the labor force.

5. School Enrollment, Employment Status and Educational Attainment of the Adolescent Population by Race: This data set remains essentially the same as the one described immediately above. Again, this data set tells us what percentage of adolescents is working so we may begin to understand what some adolescents are doing after school. The difference is this table is that it will tell us differences due to race. The data subdivides into two universes, each with unique data. Universe one includes only whites 16-19 years old, and universe two contains only blacks 16-19 years old.
6. Employment Status of Parents with at least 1 Child Under 18 Years: With a universe containing children under 18 years old in families or subfamilies, this data table describes the adolescent's number of parents and whether they work or not. The data divides into two main subsets, children with the traditional two-parent family and children with non-traditional one-parent families. The first subset (traditional) divides further into subgroups: both parents in labor force, father in labor force only, or mother in labor force only. The second subset (non-traditional) divides into two main groups, either the adolescent lives with the father or he/she lives with the mother. Each group divides into subgroups, either the father is in the labor force or not, and either the mother is in the labor force or not.
7. Poverty Status of Adolescents in 1989: This universe contains all persons between the ages of 12 and 17 whose poverty status is determined. These sets of data measure the poverty rate of adolescents compared to the general adolescent population. This data will give us an idea of the ratio of adolescents that live in poverty in the state with respect to other adolescents. The data splits into two subsets, those whose income rises above the poverty level and those whose income falls below the poverty level.
8. Poverty Status of Adolescents in 1989 by Gender Distribution: The universe remains the same as the "poverty status of adolescents in 1989", and the premise essentially remains the same. The difference lies in the separation of females and males. This data measures the poverty rate of men, ranking them as falling either above or below the poverty level, and the poverty rate of women, with the same ranking system.
9. Poverty Status of Adolescents in 1989 by Race Distribution: The universe remains the same as the previous two, and the structure is the same as "poverty status of adolescents in 1989 with gender differences". Simply replace males and females with whites and blacks and the data shown generates the poverty rate for each, respectively.

10. Poverty Status by Family Types with Children Present in 1989: With the universe containing all families, this data set measures the poverty rates of various family types where children ages 1 to 17 years are present. This table provides us with a description of what types of families are more likely to live in poverty. The data divides into two main subsets, married couple families and non-married families. As with other poverty rate statistics, the married couple family subset divides into two main groups, those families above the poverty level and those families below the poverty level. The non-married families divide into two subgroups, children living with the father only and children living with the mother only. The same applies again, with each subgroup dividing into those falling below the poverty level versus those above the poverty level.

11. Poverty Status of Family Types with Children Present in 1989 by Race

Distribution: The universe and theme remain essentially the same as the data set previously mentioned immediately above. This data table tells us the same as the one above with an emphasis on race. This data set possesses two universes, white families in universe one and black families in universe two. Once again, poverty levels among different types (same as immediately above) of families are measured in the same fashion, but this time we differentiate poverty rates among different family types amongst different races.

B. General State Tobacco Laws Concerning Adolescents

These data tables represent the economic and governmental aspects of tobacco use in New York and Mississippi. Using data taken from the STATE (State Tobacco Activities Tracking and Evaluation) System, we compiled data we feel represents the impact of tobacco economically on a social environment and the government's policies towards youth smoking. The STATE system represents the first online database system run by the Centers for Disease Control (CDC). The goal is to provide every person quick access to tobacco facts, use prevalence, etc., for all states and provinces of the United States. By accessing the CDC website at <http://www.cdc.gov/tobacco/stat&natdata.htm> we had access to historical and up to date information on various information concerning tobacco use in a state. Browsing topics gives a comprehensive list of this various information. We selected youth behaviors and youth tobacco legislation as those topics pertinent to this research.

The first table deals with youth access to vending machines. This data tells if the state has a law or policy relating the following questions to cigarette vending machines:

1. Is youth access restricted from machines?
2. Are machines banned from certain locations?
3. Are machines subject to limited placement?
4. Do states require locking devices on machines?
5. Is supervision necessary for owners to run machines?
6. Is there enforcement authorities in state government equipped to regulate the industry?

7. What type of enforcement regulates the industry?
8. Can the business incur a penalty?
9. What type of penalty?
10. What is the minimum penalty to owners who break the rules?
11. What is the maximum penalty to owners who break the rules?
12. Does the government have the power to suspend or revoke the license of owners caught breaking the rules?

The second table deals with direct cigarette sales to youths. This data tells if governments adopted policies trying to prevent adolescent youth smoking. The following questions were asked of adolescents.

1. Is there a minimum age on cigarette purchases?
2. What is the minimum age?
3. Are minor purchases prohibited?
4. Is minor possession prohibited?
5. Is minor use prohibited?
6. Is there an enforcement authority to enforce regulations?
7. What agency is responsible?
8. Can a business incur a penalty?
9. What is the penalty type?
10. What is the minimum penalty on a business?
11. What is the maximum penalty on a business?
12. Are there penalties to minors?

C. Youth Smoking Statistics

This data set represents the outcome of different social environments on youth tobacco statistics. The data was taken from the 1997 Youth Risk Behavior Survey (YRBS) sponsored by the Centers for Disease Control and U.S. Department of Health and Human Services. The YRBS is designed to provide information on risk behaviors among young people. CDC works in conjunction with state and local education and health agencies to distribute surveys asking risk behavior questions. The state and local education agencies designate selected schools in which the survey is conducted. CDC supports these agencies through funding and serve an advisory role. Once the forms are completed, all are sent to the CDC main office in Atlanta where data analysis takes place. In 1997, CDC distributed surveys in grades 9-12, in the selected high schools of 39 states, 16 metropolitan cities, and 4 U.S. territories. These school-based surveys yielded an average of 2,200 responses per state. Data were taken from a compact disc provided by the Centers for Disease Control & Prevention and United States Department of Health and Human Services (Public Health Service). Additional information was collected at the YRBS website, <http://www.cdc.gov/nccdphp/dash/yrbs/yrbsaag.htm>. Mississippi reported 1,532 responses. Males accounted for 50.5% of the response population and females 49.5%. Whites accounted for 36.9% of the response population and blacks 58.4%. In New York, 3,741 responses were reported. Males accounted for 49.7% of the response population and females 50.3%. Whites accounted for 60.2% and blacks 13.9%.

The questions here are based on questions in the questionnaire that adolescents answered in the 1997 YRBS concerning cigarette smoking. This data gives a comprehensive makeup of the tobacco use environment in New York and Mississippi. The questions asked were:

1. Have you ever tried cigarette smoking? Adolescents answered either yes or no. Having ever tried smoking is defined as taking one or two puffs.
2. How old were you before you smoked your first cigarette? This question examines how old a person was when he/she decided to experiment. The subgroups divide into 8 years or younger, 9-10 years, 11-12 years, 13-14 years, 15-16 years, or 17 years and older.
3. Have you smoked cigarettes on 1 or more of the past 30 days? This question determines the frequency of smoking by an adolescent. The subgroups divide into those adolescents smoking no cigarettes in the past 30 days, those smoking 1-2 days a month, 3-5 days, 6-9 days, 10-19 days, 20-29 days, or those smoking all 30 days.
4. How many cigarettes do you smoke on the days you smoke? This data measures the volume of cigarettes smoked when an adolescent smokes. The subcategories divide into those not smoking at all, those smoking less than 1 cigarette, 1 cigarette only, 2-5 cigarettes, 6-10 cigarettes, 11-20 cigarettes, or more than 20 cigarettes per time they smoke.
5. How did you get your cigarettes? This question answers how adolescents obtain their cigarettes, since in many states it is illegal to sell to people less than 18 years. The subcategories divide into: those not smoking, those buying cigarettes from a store/gas station, those buying them from a vending machine, those giving someone else money to buy them cigarettes, those borrowing cigarettes from someone else, those stealing cigarettes, and those obtaining cigarettes some other way.
6. Were you asked to show proof if you bought your cigarettes at the store within the last 30 days? This question deals with how strict storeowners become when they suspect someone of trying to purchase cigarettes while a minor, which is illegal. The subcategories divide into: those who don't smoke, those who do not buy cigarettes from a store, those who were asked to show proof, and those who were not.
7. How many days in the past 30 days have you smoked cigarettes on school property? This question deals with adolescents who smoke on school grounds, even though many schools have outlawed the practice and the adolescent could face strict penalties if caught. The data measures the frequency of adolescent smokers even though they know they face the stiff penalties. The subcategories

divide into those smoking none, 1-2 days, 3-5 days, 6-9 days, 10-19 days, 20-29 days, and all 30 days in the past month.

8. Have you ever tried to quit smoking? This question measures adolescents' desires to quit smoking. The subcategories are either yes, I've tried or no, I've never tried.

VII. The Social Environment and Tobacco Description

A. General Youth Population Description

1. Gender and Race Distributions of the Adolescent Population:

The first table (refer to table A) summarizes the total adolescent population, defined as those teenagers between age 14 and 18, in New York and Mississippi, with a demographic breakdown of gender and race. New York possesses a much larger overall population. Looking at gender, we observe an approximately even ratio of females to males in both states. However, looking at race, we observe blacks making up a much larger percentage of the adolescent population in Mississippi (44.7%) than in New York (19.5%). Combining race and gender, we see fairly even splits in the female and male populations for both New York and Mississippi, meaning amongst the white population there is a fairly even ratio of boys to girls and the same can be said of the black population. We see the much larger percentage amongst the gender by race breakdowns.

The table represents the respective female-male and white-black ratios of students in each state. In terms of gender, each state possesses a fairly even ratio of females to males. The differences within the adolescent populations lie in the gender ratios. In New York, blacks make up 1 in 5 adolescents, but in Mississippi the ratio is almost 1 in 2. Consequently, a larger percentage of the total adolescent population in Mississippi is composed of blacks (22.4% boys, 22.3% girls) versus that of New York (9.6% boys, 9.8% girls).

2. Family Types of Families with a Child or Children Under 18 Years Old

The second table (refer to table B) summarizes the types of families that adolescents live with. The large majority of both New York and Mississippi teenagers live in families with two parents, but New York teens have a slightly higher rate. Amongst male householders with no wife, the percentages reveal that Mississippi and New York are nearly equal, and both states only have a very small percentage of families where the male householder has no wife. More prevalent is the female householder with no husband, each state making up approximately 1 in 4 of all families. Mississippi retains a slightly higher rate, thus making up the difference in the married couple families. Basically, in both states 3 out of 4 teens live with a married couple. However, a slightly larger percentage of teens in Mississippi live with a female householder with no husband. In both states, it is very rare to encounter a teen living with a male householder with no wife.

3. Adolescent School Enrollment, Type of School and Race Distribution of Students

The third table (refer to table C) provides a description of the school enrollment of all persons 3 years and older for the states. Data for adolescents only was unavailable. In table 5, New York had a high percentage of adolescent students attend public school at 85.2%, while in Mississippi an even larger percentage attend public school, 91.3%. In both cases, the majority of students attend public school. However, in New York a larger percentage attends private school, at 14.8% versus 8.7% for Mississippi. Another interesting contrast is the percentage of whites versus blacks. In New York, approximately two-thirds of the student population is white, and one-fifth is black. This represents a very diverse student body, with not only blacks and whites but also other races present in the school system. In Mississippi, 52.0% of the students are white and 46.8% are black. These percentages leave little room for other races in Mississippi.

4. School Enrollment, Employment Status and Educational Attainment of the Adolescent Population

From the table, one observes some differences in the adolescent population when dealing with education. In Mississippi, a higher percentage of students attend public schools, and vice versa in New York, a higher percentage of students attend private school. Another notable difference is the race ratios. In Mississippi, the white/black ratio is fairly even, but in New York whites predominate the adolescent population in school systems.

The next tables (refer to tables D1, D2) describe what an adolescent is doing with his/her time. Overall, a larger percentage of adolescent Mississippians are in the armed forces than in New York, although both states only have very small percentages in the armed forces. In New York a larger percentage of adolescents attend school than in Mississippi, but the percentages are very close. Of those that do not attend school, a larger percentage of New York adolescents work while a greater percentage of Mississippi teens are either unemployed or not in the labor force.

Amongst white persons, a larger percentage of students in New York are in the Armed Forces. Also, a larger percentage of New Yorkers attend school (82.0% vs. 77.2% in MS). To make up this large difference, a larger percentage of Mississippi white adolescents either are either employed, unemployed, or not in the labor force. Amongst black persons, the percentages of adolescents in the armed forces are the same. Interestingly, a higher percentage of black students attend school in Mississippi, and to make up the difference the situation is reversed. A larger percentage of black adolescents are either employed or not in the labor force in New York with an equal percentage unemployed.

From these tables some implications are found. In both states, the vast majority of students attend school. Amongst races, a larger percentage of whites attend school in New York than in Mississippi while a larger percentage of blacks attend school in Mississippi than in New York. Conversely, a greater percentage of whites in Mississippi

are not in school and employed, unemployed or not in the labor force period. In contrast in New York it is a larger percentage of blacks that are not in school and employed, unemployed, or not in the labor force than in Mississippi.

The second half of the D tables (tables D3, D4) represents the percentage of adolescents not enrolled in a secondary school that have either graduated or dropped out. As one sees, the overall percentage of teens in New York who are not currently in school but have high school degrees are about equal to those that drop out. In Mississippi, we observe that more teens that aren't in college, high school, or a trade school also do not have high school diplomas, 53.3% to 47.3% that have degrees.

In both states the majority of white adolescents who aren't in school have graduated from high school already. However, in New York the percentage is much larger of those who graduated versus those who didn't (57.6% vs. 43.5%). In Mississippi, the percentage is more even (51.8% vs. 48.8%). Amongst black adolescents, the reverse trend is seen. In both states the majority of black adolescents who aren't currently in high school have not earned their diplomas. The percentages are about equal in both states (40.8% vs. 59.6% in NY, 40.9% vs. 59.4% in MS).

From this data we can draw a picture of 16-19 year olds who aren't in high school. In New York, the split is even, but we can see lines drawn between blacks and whites. If an adolescent is white, more than likely s/he will have her high school degree, but if the person is black then they are more than likely not to have one. The same can be said in Mississippi, except if the adolescent is white there is less likely of a chance that the teen has a high school degree when compared with white adolescents in New York.

5. Employment Status of Parents with at least 1 Child Under 18 Years

Table E (refer to table E) examines the labor force status of parents whom adolescents live with. In New York and Mississippi about 44% of children live with parents who are both in the labor force. However, a larger percentage of New York adolescents that has two parents have a father who works in the labor force exclusively (23.2% NY, 17.8% MS), while a greater percentage of Mississippi adolescents who live with two parents have a mother in the labor force only or neither in the labor force. If the adolescent lives with only one parent, the statistics tend to be the same. Both New York and Mississippi teens that live with the father have the same chance of the father working or not working. However, if the adolescent lives with the mother the situation is different. The adolescent whose mother lives in Mississippi tend to be in the labor force more (20.6%) than the mother who lives in New York (15.8%).

This table describes an adolescent's situation with their parents in terms of their labor force status. Statistically, approximately 4 in 10 adolescents have two parents and they both work. If only one parent works in a two-parent household, a greater percentage of fathers work in New York than in Mississippi and a greater percentage of mothers work in Mississippi than in New York. It is rare in both states for a child to live with the father only and the statistics show most fathers in this situation are in the labor force.

However, if the adolescent lives with only a mother, then a greater percentage of Mississippi mothers are in the labor force compared with New York.

6. Poverty Status of Adolescents in 1989 (Overall, Gender, and Race)

The F tables (refer to tables F1, F2, F3) provide a description of an adolescent's poverty status if their poverty status is determined in 1989. Overall, the data implies that New York adolescents are much less likely to live in poverty than Mississippi adolescents. The overall poverty rate in Mississippi (31.9%) almost doubles that in New York (17.0%). If we break down the statistics to males and females, the same trend is found. Males in Mississippi have nearly double the poverty rate, 31.1%, than those in New York, 16.5%. The same trend is found in females, 32.7% for Mississippi females as compared to 17.5% for New York adolescent females. If we examine table 13, we see an even greater discrepancy between whites and blacks. Among whites, the poverty rate is almost the same for New York and Mississippi, 12.4% to 13.5%. However, the black data is much different. While New York has a high poverty rate at 29.8%, over half of Mississippi's black adolescents are below the poverty level at 53.4%.

Therefore, if we consider the environment we can state some facts. New York teens are much less likely to live in poverty than teens in Mississippi, regardless of gender or race. There is no difference if you are female or male; Mississippi adolescents have a greater percentage of poverty. However, differences are found in race. New York and Mississippi white adolescents have about the same poverty level, 12.4% for New York and 13.5% for Mississippi. However, black adolescents in New York have a 29.8% poverty level but black adolescents in Mississippi have a 53.4% poverty level. Therefore, black adolescents live in much greater poverty levels in Mississippi.

7. Poverty Status by Family Types with Children Present in 1989 (Overall and Race)

The G tables (refer to tables G1, G2) measures family poverty levels. In table G1 we have overall poverty levels for different family types. In married couple families, New York has a low poverty level at 6.3% while Mississippi has a higher poverty level, doubling the level of New York at 13.2%. In families with only one parent, if the adolescent lives with the father the poverty level is 18.8%, but lower than in Mississippi at 35.9%. Once again, the Mississippi poverty levels for one-parent families where only the father is present doubles that of New York. In cases where only the mother is present, the poverty level of New York is 43.4%, but it is still lower than in Mississippi at 61.4%. The poverty rate is markedly higher for mother-only families than the other groups, but across the board Mississippi retains a much higher poverty rate.

Table G2 breaks down the families into tables comparing race. In both New York and Mississippi white married couples enjoy relatively low levels of poverty, but in Mississippi we still find the same trend of the poverty level there doubling what it is in New York. In white families with only a male householder the poverty level of New York is 14.6%, but it is lower than Mississippi at 20.3%. If we look at white families

where there is only a female householder present New York poverty levels are 36.0% and Mississippi poverty levels are 39.1%.

Black families are where marked differences begin to show. In married black couple families, New York has a poverty level of 10.0%, but in Mississippi the poverty level is much higher at 25.5%, far above any other poverty level for married couples previously observed. If we turn to black families with only the male householder than New York families the poverty level is 22.7%. However, it is worse in Mississippi where nearly half of these types of families live in poverty at 49.0%. If we turn to black families with only a female householder the New York families the poverty levels are 43.4%, but Mississippi families in this category have a higher poverty level at 69.9%.

These statistics paint a very different picture for the states. In New York, married couples enjoy the lowest levels of poverty. If only one parent is present, the percentages are greater than an adolescent will live in poverty. Homes where only a female householder is present have the highest levels of poverty. Interestingly, blacks in New York have higher poverty rates across the board when compared to whites. However, these statistics pale in comparison to Mississippi. Across the board, Mississippi has higher levels of poverty indicating it is a poorer state. Overall, Mississippi has a much higher poverty rate in all types of families. Curiously, white families in Mississippi have a slightly higher rate when compared to white families in New York. It is the black families in Mississippi that have markedly higher rates across the board.

These statistics suggest living in New York is advantageous concerning lower poverty levels. Married couples have the lowest poverty levels, then with a father alone the next lowest, and living with a mother only have the highest poverty levels. Black adolescents in New York have greater poverty levels, but the majority of black families still live above poverty. However, adolescents in Mississippi live in much greater poverty levels. Married couples in Mississippi have the lowest poverty levels, followed once again by father only families and then by mother only families. White adolescents in Mississippi have slightly higher poverty levels than those in New York. However, black families in Mississippi have much higher poverty levels than those in New York. Mississippi black adolescents have great chances of living in poverty.

B. Youth Tobacco Law Description

Data table H (refer to table H) compares the state's laws when dealing with adolescent access to cigarette vending machines. As one can see, most of the laws were very similar, however some differences stood out. New York required constant supervision if an owner could run a vending machine, whereas Mississippi did not. Another important distinction between the two states is the penalty amounts. New York had a minimum penalty of \$100 and a maximum of \$300 while Mississippi had a minimum of \$20 and a maximum of \$100. These fines mean New York is tougher on owners if penalties are caught.

Table I (refer to table I) contains various laws concerning cigarette sales to adolescents. Once again, New York and Mississippi were pretty similar. However, some distinctions stood out. First, New York did not prohibit minor use or possession of cigarettes, but Mississippi did. The penalties, however, were dissimilar. New York retained a minimum fine of \$100 and \$300 maximum if laws are broken, but Mississippi had a flat fee of \$50.

These tables suggest New York had created a tougher environment in which an adolescent can purchase cigarettes. The state tax was much higher, the fines stiffer if laws were broken.

C. Youth Tobacco Smoking Data Description

1. Initiation of Cigarette Smoking

The J tables (refer to tables J1, J2) show the percentage of students who have ever tried cigarette smoking. Overall, a slightly larger percentage of Mississippi adolescents have tried cigarette smoking (71.4% MS to 68.1% NY). However, an interesting trend occurs. The percentages show that in Mississippi adolescent females tend to have tried cigarettes less (67.1%) versus New York adolescent females (68.8%), and it is the males in Mississippi that have tried cigarettes much more, 75.9%, than their New York counterparts, 67.3%. In terms of race, in both states whites try cigarettes more than blacks, but in New York the rate for experimentation is lower amongst both blacks and whites than in Mississippi, leading to the difference in total percentage where New York adolescents try smoking less than Mississippi adolescents.

These tables illustrate adolescents' attitudes towards using cigarettes. In Mississippi, adolescents seem to have a little more affinity towards trying cigarettes. Statistics show that Mississippi adolescents try cigarettes more than adolescents in New York. The difference comes in gender where Mississippi adolescent men try cigarettes much more than New York adolescent men, but Mississippi adolescent women and New York adolescent women have about the same affinity towards trying cigarettes.

2. Age at Which Adolescent Smoked First Whole Cigarette

Tables K1 and K2 assess how old adolescents are when they first smoked a whole cigarette. Overall, a slightly larger percentage of New York adolescents have smoked a whole cigarette (56.3%) versus Mississippi adolescents (55.5%). Interestingly, a much larger percentage of New York adolescent females smoked a whole cigarette (57.1%) than Mississippi adolescent females (50.0%). The trends are reversed where males are concerned. A larger percentage, 61.4% of Mississippi adolescent males smoked a whole cigarette while only 55.4% of New York adolescent males smoked one. Overall, 56.0% of New York adolescents smoked their first whole cigarette between ages 13-16, with a much larger percentage of females (61.1%) between ages 13-16 than males (50.9%). Of those remaining New York adolescents, 40.3% smoked their whole first cigarette before age 13, (35.7% female, 44.8% male) while 3.7% smoked their first whole cigarette after

age 17 (3.2% female, 4.3% male). In Mississippi, 51.5% of adolescents smoked their whole first cigarette between ages 13-16 (56.0% female, 48.5% male), while 41.8% smoked their first whole cigarette before age 13 (35.6% female, 46.9% male).

Racial data shows that a larger percentage of Mississippi white adolescents tend to have smoked a whole cigarette earlier (refer to table K2). Approximately 51% of MS white adolescents smoked a whole cigarette, but 41.8% of NY white adolescents smoked a whole cigarette before age 13. Amongst blacks approximately 55% in each state smoked a whole cigarette between ages 13-16.

In looking at the tables, one observes that over half of both New York and Mississippi's adolescent population have smoked a whole cigarette in their lifetime. A slightly higher percentage of adolescents have smoked one in New York.

3. Frequency of Smoking over Past 30 Days

The L tables (refer to tables L1, L2) access how often an adolescent smokes over the past 30 days. Overall, New York adolescents smoke more frequently (defined as 1 or more days over the past 30 days) at 33.0% compared to Mississippi's 31.3%. Overall, a larger percentage of New York adolescent females smoke more frequently (33.1%) than Mississippi adolescent females (25.5%). Amongst males the situation is reversed. In New York, 32.7% of male adolescents smoke frequently compared to 37.7% of Mississippi adolescent males. Of those frequent smokers in New York, 38.2% smoked 9 days or less, while 61.8% smoked 10-30 days during the past 30 days. In Mississippi, 43.5% of frequent adolescent smokers smoked less than 10 days during the past 30 days, but 56.5% smoked 10-30 days. For New York females, 43.8% of frequent adolescent smokers smoked less than 10 days during the past 30 days, and 56.2% smoked more than 10 days. In Mississippi, the percentages were 48.6% smoked less than 10 days, 51.4% smoked 10 days or more during the past 30 days. For New York males, 32.7% smoked frequently less than 10 days during the past 30 days whereas 67.3% smoked 10 days or more. For Mississippi males, the percentages were smaller at 40.1% and 59.9%, respectively.

In terms of race, a larger percentage of Mississippi white adolescents have frequently used cigarettes, 44.0%, versus that of New York, 40.3%. If we examine the breakdown of frequency among white and black adolescents, a greater percentage of Mississippi adolescents are smoking frequently at younger ages, regardless of race.

4. Quantity of Cigarette Smoking per Time Adolescent Smoked

The M tables (refer to table M1, M2) measure the quantity of cigarettes an adolescent will smoke when they do smoke. We define quantity as smoking at least 1 whole cigarette, and then we break down the percentages in increasing quantity. Overall, a slightly larger percentage of New York adolescents smoke a greater quantity, 33.5%, versus Mississippi adolescents, 32.2%. A greater percentage of New York adolescents smoke at least 6 or more cigarettes per day (31.9% to 29.5%). In terms of gender, the

reverse trend exists again. A larger percentage of Mississippi female adolescents smoke in greater quantities, 27.7%, as compared to New York female adolescents, 25.8%. The reverse trend is found amongst male adolescents. In Mississippi, the percentage is less at 30.6% versus New York at 38.5%.

In terms of race, Mississippi owns a greater percentage in both white and black adolescents who smoke more cigarettes when they smoke. Amongst white Mississippi adolescents, 44.6% have smoked in the quantity we defined (6 to more than 20 cigarettes per time), whereas 40.6% of white New York adolescents have. Amongst the black adolescent population, New York retains a percentage of 16.2% compared with Mississippi's 23.5%. Breaking down the quantity data, however, we see interesting trends. Overall, New York white adolescents are smoking less in quantity than Mississippi adolescents, 35.7% versus 44.6%. However, breaking down the black adolescent quantity data, we see that a larger percentage of black adolescents in New York are smoking in greater quantities, 11.7% versus that of Mississippi, 9.8%.

5. Frequency of Cigarette Smoking on School Property over Past 30 Days

The N tables (refer to tables N1, N2) measure the frequency of adolescent cigarette smoking on school property. Overall, a greater percentage of New York adolescents smoke on school property at 17.5%, versus Mississippi at 13.2%. In breaking these percentages down, New York adolescents have a greater percentage in every category measured. If we look at table 27 and examine gender, among female adolescents New York has a much higher percentage than Mississippi, 16.7% versus 7.8%. However, if we breakdown the frequency, New York female adolescents had a higher percentage in smoking more frequently than Mississippi female adolescents, 38.9% to 30.8%. In terms of males, Mississippi male adolescents had a slightly higher percentage, 19.2%, than in New York, 18.4%. Breaking down the frequency data, we see that the same trend exists as that among female adolescents, New York male adolescents smoke more frequently on school property (55.4% to 45.8% for Mississippi).

Table N2 (refer to table N2) examines the frequency of adolescent cigarette smoking on school property by race. In terms of whites, New York and Mississippi had approximately equal rates in terms of frequent smoking on school property. However, white adolescents tended to smoke more frequently (49.5% NY vs. 45.4% MS) on school property whereas black adolescents in Mississippi tended to smoke more frequently on school property (31.4% NY vs. 36.0% MS).

VIII. Summary & Discussion of Social Environmental Data & Tobacco Data

1. Summary of Population Demographics

We first looked at general adolescent population demographic data. In examining this data, we first noticed that Mississippi had a higher percentage of blacks than New York, and, thus, had a higher percentage of black females and males. We also observed that Mississippi had a slightly higher rate of single parent mothers whereas New York

had more married couples. The racial differences in school population are consistent with the general adolescent population differences, but a larger percentage of MS adolescents attend public school. We noticed that a very small percentage of adolescents go into the armed forces at that age, but most stay civilians. Most adolescents choose to stay in school, but a higher percentage of white adolescents in Mississippi quit school and go in the labor force, while in New York it is blacks that quit school more and join the work force. We also observed that more New York adolescents live in two parent families and that at least one of these parents work. One of the biggest differences we found between New York and Mississippi is that Mississippi is a much poorer state. The overall poverty rate in Mississippi doubles that of New York. This trend is especially prevalent among blacks more so than whites. Single mother black families seem to be the worst, especially in Mississippi.

2. Summary of Adolescent Smoking Data (Outcomes)

In discussing the adolescent smoking data, we find some interesting trends from our data. Adolescent males in Mississippi are the cause of Mississippi's overall increased percentage of adolescents who have ever tried smoking. We've concluded racial differences do not play a significant role in adolescents who have ever tried smoking because Mississippi is higher by approximately 6% in both whites and blacks. However, we noticed that whites have more affinity for trying smoking in both areas. We also noticed that a higher percentage of New York adolescents have smoked a whole cigarette earlier in their life. This trend is seen in gender data as well, but among races New York blacks smoke a whole cigarette earlier but Mississippi whites smoked one earlier. Another interesting find was that New York adolescents smoked with more frequency, regardless of gender versus those of Mississippi. Amongst races, however, we observed that white Mississippi adolescents smoke with much greater frequency, but Mississippi black adolescents smoke so infrequently as compared to black male adolescents from New York as to bring the MS frequency percentages down below that of NY. Another alarming trend for New York is that adolescents there smoke in greater quantities than in Mississippi, especially males. Racially, whites in Mississippi tend to smoke in greater quantities but blacks in New York are the reverse. New York adolescents also have a tendency to smoke more on school property. This holds true for males, females, and whites. Blacks in Mississippi tend to smoke on school property slightly more.

3. Discussion of Data

In comparing the data sets, we see that Mississippi adolescents tend to have tried smoking more, but once hooked, New York adolescents smoke more frequently and in greater quantities. In Mississippi, basically white adolescent males are the primary reason for such high smoking rates. White males consistently had higher percentages in all of the cigarette related data. Blacks had lower percentages in Mississippi and New York consistently. Perhaps this is due to the fact that black adolescents do not initiate smoking as much. Blacks have been shown to have lower smoking initiation rates.³³ We expected this, though, because of recent studies. Nelson found that blacks were less likely to smoke than white adolescents over the period 1974-1991.²¹ We also expected

that whites would start smoking earlier in life based upon the previous literature we found. In fact, our data coincided with a study performed by Griesler in which he found that white adolescents predominately started smoking at an earlier age.²² Why do whites consistently smoke more? A possible explanation is that blacks do not have the money needed to buy cigarettes as frequently as whites and, therefore, do not have the means to smoke as often as whites do. Also, studies have shown that black families tend to discourage smoking much more than white families.³⁶ Another reason could be that whites simply like the taste, smell, and feel of cigarettes better than blacks. A study performed by Escobedo suggested that whites are more prone enjoying cigarette smoking and would, therefore, smoke more.²⁶

We were also not surprised that whites smoked more frequently. Our data correlated with a study performed by Flint in which white adolescents were found to smoke more frequently than their black counterparts.²⁴ It was also expected that blacks would smoke less on school property, and this was found. Our data correlated with Fiore, who did a study and found that whites tend to smoke more frequently on school property rather than blacks.²⁸

What surprised us is that white males in Mississippi have all of the traits that make white males smoke more than black males, but white males in Mississippi even exceeded the white males in New York in terms of smoking frequency, quantity, and initiation. One possible explanation is that Mississippi lies in the Deep South, the heart of tobacco country, and that males there have been programmed over time to like cigarettes. Certainly, New York's industrial state doesn't encourage smoking as much as the culture of the Deep South in Mississippi. Another reason, perhaps, could be linked with Mississippi's single parent percentage when compared to New York. Recent studies indicate that pro-active family parenting can cause a decrease in an adolescent's smoking initiation.²⁹ It could be that adolescents that are in single parent households have more of an opportunity to initiate cigarette smoking because the parent can't be there all the time. Conversely, perhaps married couples can split these duties and keep track of their adolescent's whereabouts and if s/he is initiating cigarette smoking.

We also expected to find gender differences, in that we expected women to smoke less than men. Again, this hypothesis was somewhat correct when we analyzed our data. This data corresponds with a study done by the CDC showing that women continue to smoke at slightly lower rates than men.²⁰ We also expected that women would smoke less. Johnston performed a study where males were shown to smoke more frequently than females at adolescence.²³ We also found that men were much heavier smokers than women, which is in accordance with other studies. Zhu found that men are more likely to be heavy smokers rather than women.²⁵ Also, our study revealed that men tended to smoke more on school property. This correlates with other data. For example, Husten found that females have higher goals for education and do not smoke at school as frequently than males do.²⁷ A reason for these trends could be historical. Remember, women were not allowed to smoke for a long time in our nation's history, for the practice was shunned by society. Only in the past 100 years have feelings changed and women's roles in societies evolved to equality.

Other reasons could apply to the states as a whole and not to specific subsets within the states. A possible reason could be the education system. In general, New York adolescents are wealthier and can afford private educations. These private schools could, hypothetically, be tougher on smoking and cause discouragement among the adolescent community in smoking initiation. Also, it seems as if Mississippi adolescents don't seem to have higher educational goals than New York adolescents. This trend is important because it has been shown that cigarette smoking is higher for students who have less education.²⁵ People with higher educational goals tend to smoke less, whereas those that quit have less ambitious goals and have been shown to be more at risk for smoking initiation and progression.³⁰ Another project cited poor school performance, and the resultant drop out, as reasons why an adolescent would begin to smoke.³¹ Another factor, concluded by Valois, was that adolescents who worked had money and, therefore, could afford them much easier.³² This applies to Mississippi white males again because, percentage wise, they work more than their New York counterparts.

Another factor could be the laws and penalties of New York as compared to Mississippi. We have noted that New York has much tougher fines and penalties than Mississippi. Once again, we are hypothesizing that tobacco plays a larger part of the government agenda in Mississippi and, thus, Mississippi lawmakers are more hesitant to impose stricter cigarette accessibility laws to adolescents. These looser environments could lead to much easier access for Mississippi adolescents.

Poverty didn't play as big a role in determining who smoked as we had thought. Blacks in Mississippi were the poorest, yet their smoking rates remained consistently below whites. We also compared white poverty rates and whites in Mississippi still scored consistently higher smoking rates than their New York counterparts, indicating that poverty isn't as big a factor as we had thought. This evidence indicates that, perhaps, the black community discouragement of smoking in general is a bigger influence than their poverty rate.

4. Limitations

Possible limitations of this study include not being able to actually go in the field to do hands-on research. Due to time constraints, we were unable to travel to the states studied or contact school administrators and other local persons who could shed some light into the cigarette smoking situation in a town, city, or statewide. Another limitation was that in other studies blacks tended to underreport cigarette use.³⁴ The same could have happened with the YRBS data.

IX. Final Conclusions

In Mississippi, male adolescents smoke much more than females, and this is the cause in Mississippi having a higher adolescent smoking rate compared to New York. Blacks smoke less than whites, perhaps due to external ethnic influences in the black community that discourage smoking. New York adolescents start smoking earlier and

once initiation is started, they keep smoking with a greater frequency and in greater quantities than Mississippi adolescents. Once again, male adolescents seem to be the difference, as male adolescents in New York smoke with greater frequency than their Mississippi counterparts. Although, in general, students smoke less on school property, this trend in frequency also translates onto school property somewhat. Both New York females and males smoke more on school property than their Mississippi counterparts. This is particularly true for New York male adolescents. Interestingly, whites also smoke in much greater quantities than blacks. This is another statistic that leads to the theory that blacks are far more discouraged from smoking than are whites.

In thinking of this data with the social environment, we see that Mississippi has a much more even distribution of the population of blacks and whites. This more even distribution, coupled with the apparent black negative attitude toward smoking, seems to be a major reason why Mississippi adolescents smoke with less frequency and in smaller quantities. Poverty rate didn't seem to play as big a factor as we had originally thought.

Education also seems to play a big role as part of the social environment when it comes to cigarette smoking. In New York a larger percentage of black adolescents are not in school and in Mississippi a larger percentage of white adolescents are not in school. However, remember that we have found that blacks smoke less, but whites that are not in school are at a much higher risk of cigarette smoking. Also, the educational attainment in Mississippi is slightly lower than in New York for white adolescents. Lower educational attainment has been linked with higher adolescent smoking rates.

This study hopes to provide more information on the impact of the social environment on adolescent cigarette smoking. With the amount of information, one can see that there is much evidence out there. However, we believe more efforts need to be made to look at the data from a big picture. Much research has been done on individual factors, such as poverty rate, gender, or race differences. However, not much research had been found on applying all of these social environmental factors together in a way to ascertain a certain combination that specifically targets one group as being at risk above another, or so forth. This study attempted to do so, and from the data we see the social environment is very complex and many factors can contribute, as a sum, to increase the likelihood of smoking. From this study, we found that white adolescent males living in Mississippi seem to be especially at high risk. They live more predominantly in single-parent households and in greater poverty rates with lower educational ambitions. These connections are what this study hopes to provide as a framework for future studies on this very important issue.

X. References

- ¹ McGinnis JM, Foege WH. “Actual Causes of Death in the United States”. Journal of the American Medical Association vol. 270, 1993, pages 2207-2212
- ² Centers for Disease Control and Prevention. State Tobacco Control Highlights Rockville, MD, Centers for Disease and Prevention, 1996
- ³ Centers for Disease Control. Reducing the Health Consequences of Smoking- 25 Years of Progress: A Report of the Surgeon General Rockville, MD, Centers for Disease Control, 1989
- ⁴ National Center for Health Statistics. Health United States, 1992 Hyattsville, MD, National Center for Health Statistics, Public Health Service, 1993
- ⁵ Pechmann C, Dixon P, Layne N. “An Assessment of U.S. and Canadian Smoking Reduction Objectives for the Year 2000”. American Journal of Public Health vol. 88 (no. 9), 1998, pages 1362-1367
- ⁶ Centers for Disease Control and Prevention. “Tobacco Use and Usual Source of Cigarettes among High School Students- United States, 1995”. MMWR (Morbidity and Mortality Weekly Report) vol. 45, 1996, pages 413-418
- ⁷ Chassin L, Presson CC, Sherman SJ, et al. “The Natural History of Cigarette Smoking: Predicting Young-adult Smoking Outcomes from Adolescent Smoking Patterns”. Health Psychology vol. 9, 1990, pages 701-716
- ⁸ Lamkin L, Houston TP. “Nicotine Dependency and Adolescents: Preventing and Treating”. Adolescent Medicine vol. 25 (no. 1), March 1998, pages 123-124
- ⁹ Pierce JP, Lee L, Gilpin EA. “Smoking Initiation by Adolescent Girls, 1944 through 1988: An Association with Targeted Advertising”. Journal of the American Medical Association vol. 271, 1994, pages 608-611
- ¹⁰ Distefan JM, Gilpin EA, Choi WS, et al. “Parental Influences Predict Adolescent Smoking in the United States, 1989-1993”. Journal of Adolescent Health vol. 22, 1998, pages 466-474
- ¹¹ Conrad KM, Flay BR, Hill D. “Why Children Start Smoking: Predictors of Onset”. British Journal of Establishment Smoking vol. 87, 1992, pages 1711-1724
- ¹² Skinner WF, Massey JL, Krohn MD, et al. “Social Influences and Constraints on the Initiation and Cessation of Adolescent Tobacco Use”. Journal of Behavioral Medicine vol. 8, 1985, pages 353-376

- ¹³ Forster JL, Murray DM, Wolfson M, et al. “The Effects of Community Policies to Reduce Youth Access to Tobacco”. American Journal of Public Health vol. 88, no. 8, 1998, pages 1193-1198
- ¹⁴ Bauman KE, Fisher LA, Bryan ES, et al. “Antecedents, Subjective Expected Utility and Behavior: A Panel Study of Adolescent Cigarette Smoking”. Addictive Behavior vol. 9, 1984, pages 121-136
- ¹⁵ Barnett E, Casper ML. “A Definition of the Social Environment (Letter to the Editor)”. American Journal of Public Health (in press).
- ¹⁶ McIntosh H. “Black Teens not Smoking in Great Numbers”. Journal of the National Cancer Institute vol. 87, no. 8, 1995, page 564
- ¹⁷ Department of Health and Human Services. Preventing Tobacco Use Among Young People: A Report of the Surgeon General Rockville, MD, U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1994
- ¹⁸ Gritz ER, Prokhorov AV, Suchanek-Hudmon K, et al. “Cigarette Smoking in a Multiethnic Population of Youth: Methods and Baseline Findings”. Preventive Medicine vol. 27, 1998, pages 365-384
- ¹⁹ Choi WS, Pierce JP, Gilpin EA, et al. “Which Adolescent Experimenters Progress to Established Smoking in the United States”. American Journal of Preventive Medicine vol. 13, no. 5, 1997, pages 385-391
- ²⁰ Centers for Disease Control. “Cigarette Smoking Among Adults- United States, 1993”. Morbidity and Mortality Weekly Report vol. 43, 1994, pages 925-930
- ²¹ Nelson DE, Giovino GA, Shopland DR, et al. “Trends in Cigarette Smoking Among US Adolescents, 1974 through 1991”. American Journal of Public Health vol. 85, no. 1, 1995, pages 34-40
- ²² Griesler PC, Kandel DB. “Ethnic Differences in Correlates of Adolescent Cigarette Smoking”. Journal of Adolescent Health vol. 23, 1998, pages 167-180
- ²³ Johnston LD, O’Malley PM, Bachman JG. National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1993 Volume 1: Secondary Students Rockville, MD, US Department of Health and Human Services, Public Health Service, National Institutes of Health, 1994
- ²⁴ Flint AJ, Novotny TE. “Trends in Black/White Differences in Current Smoking Among 18- to 24-Year-Olds in the United States, 1983-1993”. American Journal of Preventive Medicine vol. 14, no. 1, 1998, pages 19-24

- ²⁵ Zhu BP, Giovino GA, Mowery PD, et al. "The Relationship between Cigarette Smoking and Education Revisited: Implications for Categorizing Persons' Educational Status". American Journal of Public Health vol. 86, no. 11, 1996, pages 1582-1589
- ²⁶ Escobedo LG, Anda RF, Smith PF, et al. "Sociodemographic Characteristics of Cigarette Smoking Initiation in the United States: Implications for Smoking Prevention Policy". Journal of the American Medical Association vol. 264, no. 12, 1990, pages 1550-1555
- ²⁷ Husten CG, Chrismon JH, Reddy MN. "Trends and Effects of Cigarette Smoking Among Girls and Women in the United States, 1965-1993". Journal of the American Medical Women's Association vol. 51, no. 1-2, 1996, pages 11-18
- ²⁸ Fiore MC. "Trends in Cigarette Smoking in the United States: the Epidemiology of Tobacco Use". Medical Clinician of North America vol. 76, 1992, pages 289-303
- ²⁹ Salem DA, Zimmerman MA, Notaro PC. "Effects of Family Structure, Family Process, and Father Involvement on Psychosocial Outcomes Among African-American Adolescents". Presented at the Biennial Meeting of the Society for Research in Child Development, Washington, DC, April 1997
- ³⁰ Johnston LD, O'Malley PM, Bachman JG. National Trends in Drug Use and Related Factors among High School Students and Young Adults, 1975-1986 Washington, DC, Alcohol, Drug Abuse, and Mental Health Administration, National Institutes on Drug Abuse, 1987
- ³¹ Escobedo LG, Marcus S, Holzman D, et al. "Sports Participation, Age at Smoking Initiation, and the Risk of Smoking among US High School Students". Journal of the American Medical Association vol. 269, 1993, pages 1391-1395
- ³² Valois RF, Dunham AC, Jackson KL, et al. "Association Between Employment and Substance Abuse Behaviors among Public High School Adolescents". Journal of Adolescent Health vol. 25, 1999, pages 256-263
- ³³ Wallace JM, Bachman JG. "Explaining Racial/Ethnic Differences in Adolescent Drug Use: the Impact of Background and Lifestyle". Sociology Problems vol. 38, no. 3, 1991, pages 333-357
- ³⁴ Bauman KE, Ennet SE. "Tobacco Use by Black and White Adolescents: the Validity of Self-Reports". American Journal of Public Health vol. 84, no. 3, 1994, pages 394-398
- ³⁵ Mott JA, Crowe PA, Richardson J, et al. "After-school Supervision and Adolescent Cigarette Smoking: Contributions of the Setting and Intensity of After-school Self-care". Journal of Behavioral Medicine vol. 22, no. 1, 1999, pages 35-58

³⁶ Koepke D, Fay BR, Johnson CA. “Health Behaviors in Minority Families: The Case of Cigarette Smoking”. Family and Community Health vol. 13, 1990, pages 35-43

³⁷ Yen IH, Kaplan GA. “Poverty Area Residence and Changes in Physical Activity Level: Evidence From the Alameda County Study”. American Journal of Public Health vol. 88, no. 11, 1998, pages 1709-1712

TABLE A**Gender and Race Distribution of the Adolescent Population, Ages 14-18, in 1990, Mississippi and New York**

	<u><i>New York</i></u>		<u><i>Mississippi</i></u>	
Total persons age 14-18	1156605	100.0%	213957	100.0%
Females	566275	49.0%	104270	48.7%
Males	590330	51.0%	109687	51.3%
Blacks	225278	19.5%	95678	44.7%
Whites	792606	68.5%	115885	54.2%
Black Females	113674	9.8%	47701	22.3%
Black Males	111604	9.6%	47977	22.4%
White Females	383569	33.2%	55431	25.9%
White Males	409037	35.4%	60454	28.3%

Source: United States Census Bureau, 1990 Census

TABLE B**Family Type for Families with a Child 18 Years or Under, 1990, Mississippi and New York**

	<u><i>New York</i></u>		<u><i>Mississippi</i></u>	
Married couple family	894858	72.4%	153773	69.2%
Male householder, no wife	44852	3.6%	7510	3.4%
Female householder, no husband	296324	24.0%	60934	27.4%
Total families w/ child <18 yrs.	1236034	100.0%	222217	100.0%

Source: United States Census Bureau, 1990 Census

TABLE C**Adolescent School Enrollment, Type of School and Race Distribution, All Persons 3 Years and Older Enrolled in Elementary through High School, in 1990, New York and Mississippi**

	<u><i>New York</i></u>		<u><i>Mississippi</i></u>	
% in public school	2467954	85.2%	479944	91.3%
% in private school	427887	14.8%	45714	8.7%
% of students who were white	1931168	66.7%	273561	52.0%
% of students who were black	597354	20.6%	246074	46.8%
Total number of persons 3 yrs. Or over in elem. through high school	2895841	100.0%	525658	100.0%

Source: United States Census Bureau, 1990 Census

TABLE D1**School Enrollment, Employment Status and Educational Attainment of the Adolescent Population, Ages 16-19 years, in 1990, New York and Mississippi**

	<u><i>New York</i></u>		<u><i>Mississippi</i></u>	
Total persons 16-19 yrs. in Armed Forces	4499	0.4%	2666	1.5%
Total Civilian persons 16-19 yrs.	986830	96.9%	177207	98.5%
In School	797103	78.3%	140057	77.9%
Not in School – Employed	122938	12.1%	18352	10.2%
Not in School – Unemployed	29159	2.9%	6472	3.6%
Not in School - Not in labor force	69109	6.8%	14992	8.3%
Total persons 16-19 yrs.	1018309	100.0%	179873	100.0%

Source: United States Census Bureau, 1990 Census

TABLE D2**School Enrollment, Employment Status and Educational Attainment of the Adolescent Population by Race, Ages 16-19 years, in 1990, New York and Mississippi***Universe 1: White persons 16-19 years*

	<u><i>New York</i></u>		<u><i>Mississippi</i></u>	
Total persons 16-19 yrs. in Armed Forces	3401	0.5%	2070	2.1%
Total Civilian persons 16-19 yrs.	684443	99.5%	97897	97.9%
In School	564058	82.0%	77194	77.2%
Not in School – Employed	72467	10.5%	13244	13.2%
Not in School – Unemployed	16783	2.4%	2842	2.8%
Not in School - Not in labor force	34536	5.0%	6687	6.7%
Total white persons 16-19 yrs.	687844	100.0%	99967	100.0%

Universe 2: Black persons 16-19 years old

Total persons 16-19 yrs. in Armed Forces	777	0.4%	500	0.6%
Total Civilian persons 16-19 yrs.	184878	99.3%	77417	99.4%
In School	141054	75.8%	61304	78.7%
Not in School – Employed	14124	7.6%	4853	6.2%
Not in School – Unemployed	8310	4.5%	3598	4.6%
Not in School - Not in labor force	22707	12.2%	8162	10.5%
Total black persons 16-19 yrs.	186195	100.0%	77917	100.0%

Source: United States Census Bureau, 1990 Census

TABLE D3**Adolescents Not Currently in School and Educational Attainment, Ages 16-19 years, in 1990, New York and Mississippi**

	<u><i>New York</i></u>		<u><i>Mississippi</i></u>	
High school graduates not currently enrolled in college or trade school	97714	44.2%	18822	47.3%
Non-high school graduates not currently enrolled in any school	98211	44.4%	21204	53.3%
Total adolescents not in school	221206	100.0%	39816	100.0%

Source: United States Census Bureau, 1990 Census

TABLE D4**Adolescents Not Currently in School and Educational Attainment by Race, Ages 16-19 years, in 1990, New York and Mississippi***Universe 1: White Persons 16-19 yrs. not in high school*

	<u><i>New York</i></u>		<u><i>Mississippi</i></u>	
High school graduates not currently enrolled in college or trade school	71326	57.6%	11803	51.8%
Non-high school graduates not currently enrolled in any school	53840	43.5%	11122	48.8%
Total white persons not in school	123786	100.0%	22773	100.0%

Universe 2: Black Persons 16-19 yrs. not in high school

High school graduates not currently enrolled in college or trade school	18434	40.8%	6801	40.9%
Non-high school graduates not currently enrolled in any school	26903	59.6%	9870	59.4%
Total black persons not in school	45141	100.0%	16613	100.0%

Source: United States Census Bureau, 1990 Census

TABLE E**The Employment Status of Parents with Children Under 18 Years, Families or Subfamilies, in 1990, New York and Mississippi**

	<u><i>New York</i></u>		<u><i>Mississippi</i></u>	
<u>Children living w/ 2 parents:</u>				
Both parents in labor force	1147430	43.8%	209165	43.5%
Father in labor force	606764	23.2%	85466	17.8%
Mother in labor force	50063	1.9%	12429	2.6%
Neither in labor force	48784	1.9%	9885	2.1%
<u>Children living w/ 1 parent:</u>				
<u>Living with father:</u>				
in labor force	89145	3.4%	16904	3.5%
not in labor force	16512	0.6%	4203	0.9%
<u>Living with mother:</u>				
in labor force	414992	15.8%	98938	20.6%
not in labor force	245186	9.4%	44063	9.2%
Total children	2618876	100.0%	481053	100.0%

Source: United States Census Bureau, 1990 Census

TABLE F1**Poverty Status of Adolescents, Persons Age 12-17 years Whose Poverty Status Is Determined in 1990, New York and Mississippi**

	<u><i>New York</i></u>		<u><i>Mississippi</i></u>	
Income above poverty level	1115069	83.0%	170028	68.1%
Income below poverty level	227945	17.0%	79549	31.9%
Total persons between 12 and 17 whose poverty status is determined	1343014	100.0%	249577	100.0%

Source: United States Census Bureau, 1990 Census

TABLE F2**Poverty Status of Adolescents by Gender, Persons Age 12-17 years Whose Poverty Status Is Determined, in 1989, New York and Mississippi**

	<i><u>New York</u></i>		<i><u>Mississippi</u></i>	
<u>Males</u>				
Income above poverty level	571547	83.5%	88224	68.9%
Income below poverty level	112689	16.5%	39848	31.1%
Total males 12 to 17 years whose poverty status is determined	684236	100.0%	128072	100.0%
<u>Females</u>				
Income above poverty level	543522	82.5%	81804	67.3%
Income below poverty level	115076	17.5%	39701	32.7%
Total females 12 to 17 years whose poverty status is determined	658598	100.0%	121505	100.0%

Source: United States Census Bureau, 1990 Census

TABLE F3**Poverty Status of Adolescents by Race, Persons Age 12-17 years Whose Poverty Status Is Determined, in 1989, New York and Mississippi**

	<i><u>New York</u></i>		<i><u>Mississippi</u></i>	
<u>White</u>				
Income above poverty level	822327	87.6%	115459	86.5%
Income below poverty level	116907	12.4%	18007	13.5%
Total whites 12 to 17 years whose poverty status is determined	939234	100.0%	133466	100.0%
<u>Black</u>				
Income above poverty level	185358	70.2%	52841	46.6%
Income below poverty level	78553	29.8%	60454	53.4%
Total blacks 12 to 17 years whose poverty status is determined	263911	100.0%	113295	100.0%

Source: United States Census Bureau, 1990 Census

TABLE G1**Poverty Status of Adolescents by Family Type and the Presence & Age of Children, Families, in 1989, New York and Mississippi**

	<u><i>New York</i></u>		<u><i>Mississippi</i></u>	
<u>Married Couple Family w/ a child or children 1-17 years</u>				
Income above poverty level	1519731	93.7%	229567	86.8%
Income below poverty level	101443	6.3%	35017	13.2%
Total married couple families w/ a child/children 1-17 yrs.	1621174	100.0%	264584	100.0%
<u>Other family types:</u>				
<u>Male householders w/ no wives and a child/children 1-17 years</u>				
Income above poverty level	80938	81.2%	10162	64.1%
Income below poverty level	18679	18.8%	5687	35.9%
Total male householders (no wives) with a child/children 1-17 years	99617	100.0%	15849	100.0%
<u>Female householders w/ no husbands and a child/children 1-17 years</u>				
Income above poverty level	313451	56.6%	39244	38.6%
Income below poverty level	240040	43.4%	62305	61.4%
Total female householders (no husbands) w/ a child/children 1-17 yrs.	553491	100.0%	101549	100.0%

Source: United States Census Bureau, 1990 Census

TABLE G2**Poverty Status of Adolescents by Family Type and the Presence & Age of Children According to Race of the Householder, Families, in 1989, New York and Mississippi***Universe 1: White families*

	<u>New York</u>		<u>Mississippi</u>	
<u>Married Couple Family w/ a child or children 1-17 years</u>				
Income above poverty level	1219417	95.3%	176311	91.3%
Income below poverty level	59680	4.7%	16742	8.7%
Total married couple families w/ a child/children 1-17 yrs.	1279097	100.0%	193053	100.0%

Other family types:Male householders w/ no wife and a child/children 1-17 years

Income above poverty level	49966	85.4%	5887	79.7%
Income below poverty level	8522	14.6%	1496	20.3%
Total male householders (no wife) with a child/children 1-17 years	58488	100.0%	7383	100.0%

Female householders w/ no husband and a child/children 1-17 years

Income above poverty level	153953	63.9%	16985	61.0%
Income below poverty level	87151	36.1%	10880	39.0%
Total female householders (no husband) w/ a child/children 1-17 yrs.	241104	100.0%	27865	100.0%

*Universe 2: Black families*Married Couple Family w/ a child or children 1-17 years

Income above poverty level	159814	90.0%	51276	74.5%
Income below poverty level	17667	10.0%	17585	25.5%
Total married couple families w/ a child/children 1-17 yrs.	177481	100.0%	68861	100.0%

Other family types:Male householders w/ no wife

<u>and a child/children 1-17 years</u>				
Income above poverty level	19828	77.3%	4170	51.0%
Income below poverty level	5822	22.7%	4006	49.0%
Total male householders (no wife) with a child/children 1-17 years	25650	100.0%	8176	100.0%
<u>Female householders w/ no husband and a child/children 1-17 years</u>				
Income above poverty level	124955	56.6%	21992	30.1%
Income below poverty level	95937	43.4%	50973	69.9%
Total female householders (no husband) w/ a child/children 1-17 yrs.	220892	100.0%	72965	100.0%
Source: United States Census Bureau, 1990 Census				

TABLE H		
Laws on Adolescent Access to Cigarette Vending Machines		
<i>All information is current as of 1997</i>		
	<u>New York</u>	<u>Mississippi</u>
Youth Access to Vending Machines		
Is youth access restricted from machines?	Yes 4/1/93	Yes 2/1/98
Are machines banned from certain locations?	Yes 4/1/93	Yes 2/1/98
Are machines subject to limited placement?	No	No
Do states require locking devices on machines?	No	No
Is supervision necessary for owners to run machines?	Yes 4/1/93	No
Is there state agencies within government equipped to regulate the industry?	Yes 9/6/92	Yes 7/1/94
What type of enforcement regulates the industry?	Law enforcement officer	Attorney General & Local Law Enforcement

	9/6/92	2/1/98
Signage required	No	No
Can the business incur a penalty?	Yes	Yes
	9/6/92	7/1/94
What type of penalty can a business incur?	Fine	Misdemeanor, fine
	9/6/92	7/1/94
What is the minimum penalty?	\$100	\$20
	9/6/92	7/1/94
What is the maximum penalty?	\$300	\$100
	9/6/92	7/1/94
Does the government have the power to suspend/revoke the license of a business?	None	None
Source: State Tobacco Activities Tracking & Evaluation System from 1999		

TABLE I**Laws on Cigarette Sales to Youth***All information is current as of 1997*

	<u>New York</u>	<u>Mississippi</u>
Cigarette Sales to Youth		
Is there a minimum age on cigarette purchases?	Yes 8/9/65	Yes
What is the minimum age (in years)?	18 8/9/65	18
Is minors purchases prohibited?	No	Yes 2/1/98
Is minor possession prohibited?	No	Yes 2/1/98
Is minor use prohibited?	No	No
Is there an enforcement authority there to enforce regulations?	Yes 9/6/92	Yes
What agency is responsible?	County board of health 9/6/92	Attorney General & Local Law Enforcement 2/1/98
Signage required	Yes 8/9/65	Yes
Can a business incur a penalty?	Yes 9/6/92	Yes
What is the penalty type?	Fine 9/6/92	Fine, warning letter 2/1/98
What is the minimum penalty on a business?	\$100 9/6/92	\$50 2/1/98
What is the maximum penalty on a business?	\$300 9/6/92	\$50 2/1/98
Are there penalties to minors?	No	No

Source: State Tobacco Activities Tracking & Evaluation System from 1999

TABLE J1

Percentage of Adolescents Who Have Ever Tried Cigarette Smoking Once, Total and Gender Percentages, Ages 8 and older in 1997, New York and Mississippi

Universe: % are adolescents responding yes

	Totals		Females		Males	
	NY	MS	NY	MS	NY	MS
<i>Have you ever tried cigarette smoking?</i>	68.1	71.4	68.8	67.1	67.3	75.9

Source: Youth Risk Behavior Survey, 1997

TABLE J2

Percentage of Adolescents Who Ever Tried Cigarette Smoking Once, Total and Race Percentages, Ages 8 and older in 1997, New York and Mississippi

Universe: % are adolescents responding yes

	Totals		Whites		Blacks	
	NY	MS	NY	MS	NY	MS
<i>Have you ever tried cigarette smoking?</i>	68.1	71.4	71.7	77.1	61.5	67.6

Source: Youth Risk Behavior Survey, 1997

TABLE K1**Age of an Adolescent When S/He Smoked a Whole Cigarette, Total and Gender Percentages, Ages 8 and older in 1997, New York and Mississippi***Universe: % are adolescents responding yes**How old were you before you smoked a whole cigarette?*

	Totals		Females				Males					
	NY	MS	NY	MS	NY	MS	NY	MS				
Total of adolescents who smoked a whole cigarette	56.3	55.5	57.1	50	55.4	61.4						
<u>Breakdown by age</u>												
12 years or younger	22.7	40.3%	23.2	41.8%	20.4	35.7%	17.8	35.6%	24.8	44.8%	28.8	46.9%
13 to 16 years	31.5	56.0%	28.6	51.5%	34.9	61.1%	28	56.0%	28.2	50.9%	29.5	48.0%
17 or older	2.1	3.7%	3.7	6.7%	1.8	3.2%	4.2	8.4%	2.4	4.3%	3.1	5.0%

Source: Youth Risk Behavior Survey, 1997

TABLE K2**Age of an Adolescent When S/He Smoked a Whole Cigarette, Total and Race Percentages, Ages 8 and older in 1997, New York and Mississippi***How old were you before you smoked a whole cigarette?**Universe: % are adolescents responding yes*

	Totals		Whites				Blacks					
	NY	MS	NY	MS	NY	MS	NY	MS				
Total of adolescents who smoked a whole cigarette	56.3	55.5	61.9	67.9	42.6	47.7						
<u>Breakdown by age</u>												
12 years or younger	22.7	40.3%	23.2	41.8%	24.6	39.7%	34.8	51.3%	17.8	41.8%	14.3	30.0%
13 to 16 years	31.5	56.0%	28.6	51.5%	34.8	56.2%	31.9	47.0%	23.6	55.4%	27.9	58.5%
17 or older	2.1	3.7%	3.7	6.7%	2.5	4.0%	1.2	1.8%	1.2	2.8%	5.5	11.5%

Source: Youth Risk Behavior Survey, 1997

TABLE L1**Frequency of Adolescent Cigarette Smoking During the Past 30 Days, Total and Gender Percentages, Ages 8 and older in 1997, New York and Mississippi***Universe: % are adolescents responding yes*

	Totals		Females				Males					
	NY	MS	NY	MS	NY	MS	NY	MS	NY	MS		
<i>Have you smoked cigarettes on 1 or more of the past 30 days?</i>												
Total of adolescents smoking 1 cigarette or more	33	31.3	33.1	25.5	32.7	37.7						
Breakdown of frequency												
Smoked 1 to 9 of the past 30 days	12.6	38.2%	13.6	43.5%	14.5	43.8%	12.4	48.6%	10.7	32.7%	15.1	40.1%
Smoked 10 to 30 of the past 30 days	20.4	61.8%	17.7	56.5%	18.6	56.2%	13.1	51.4%	22	67.3%	22.6	59.9%

Source: Youth Risk Behavior Survey, 1997

TABLE L2**Frequency of Adolescent Cigarette Smoking During the Past 30 Days, Total and Racial Percentages, in 1997, New York and Mississippi***Universe: % are adolescents responding yes*

	Totals		Whites				Blacks					
	NY	MS	NY	MS	NY	MS	NY	MS	NY	MS		
<i>Have you smoked cigarettes on 1 or more of the past 30 days?</i>												
Total of adolescents smoking 1 cigarette or more	33	31.3	40.3	44	15	22.1						
Breakdown of frequency												
Smoked 1 to 10 of the past 30 days	12.6	38.2%	13.6	43.5%	14.3	35.5%	13	29.5%	7.6	50.7%	13.8	62.4%
Smoked 10 to 30 of the past 30 days	20.4	61.8%	17.7	56.5%	26	64.5%	31	70.5%	7.4	49.3%	8.3	37.6%

Source: Youth Risk Behavior Survey, 1997

TABLE M1**Quantity of Adolescent Cigarette Smoking During the Past 30 Days, Total and Gender Percentages, Ages 8 and older in 1997, New York and Mississippi***Universe: % are adolescents responding yes*

	Totals		Females				Males					
	NY	MS	NY	MS	NY	MS	NY	MS				
<i>How many cigarettes do you smoke on the day you</i>												
<i>Smoke?</i>												
Total of people who smoked at least 1 cigarette	33.5	32.2	33.7	26.4	32.7	38.5						
Breakdown by number of cigarettes												
Smoked less than 1 to 5 cigarettes per day	22.8	68.1%	22.7	70.5%	25	74.2%	19.1	72.3%	20.1	61.5%	27.1	70.4%
6 to more than 20 cigarettes per day	10.7	31.9%	9.5	29.5%	8.7	25.8%	7.3	27.7%	12.6	38.5%	11.8	30.6%

Source: Youth Risk Behavior Survey, 1997

TABLE M2**Quantity of Adolescent Cigarette Smoking During the Past 30 Days, Total and Race Percentages, Ages 8 and older in 1997, New York and Mississippi***Universe: % are adolescents responding yes*

	Totals		Whites				Blacks					
	NY	MS	NY	MS	NY	MS	NY	MS	NY	MS		
<i>How many cigarettes do you smoke on the day you</i>												
<i>Smoke?</i>												
Total of people who smoked at least 1 cigarette	33.5	32.2	40.6	44.6	16.2	23.5						
Breakdown of number of cigarettes												
Smoked less than 1 to 5 cigarettes per day	22.8	68.1%	22.7	70.5%	26.1	64.3%	24.7	55.4%	14.3	88.3%	21.2	90.2%
6 to more than 20 cigarettes per day	10.7	31.9%	9.5	29.5%	14.5	35.7%	19.9	44.6%	1.9	11.7%	2.3	9.8%

Source: Youth Risk Behavior Survey, 1997

TABLE N1**Frequency of Adolescent Cigarette Smoking in Schools During the Past 30 Days, Total and Gender Percentages, Ages 8 and older in 1997, New York and Mississippi***Universe: % are adolescents responding yes*

	Totals		Females				Males					
	NY	MS	NY	MS	NY	MS	NY	MS	NY	MS		
<i>How many days in the past 30 days have you smoked cigarettes on school property?</i>												
Total % of adolescents smoking on school property	17.5	13.2	16.7	7.8	18.4	19.2						
Breakdown of frequency												
Smoked 1 to 10 of the past 30 days	9.1	52.0%	7.8	59.1%	10.2	61.1%	5.4	69.2%	8.2	44.6%	10.4	54.2%
Smoked 10 to 30 of the past 30 days	8.4	48.0%	5.4	40.9%	6.5	38.9%	2.4	30.8%	10.2	55.4%	8.8	45.8%

Source: Youth Risk Behavior Survey, 1997

TABLE N2**Frequency of Adolescent Cigarette Smoking in Schools During the Past 30 Days, Total and Race Percentages, Ages 8 and older in 1997, New York and Mississippi***Universe: % are adolescents responding yes*

	Totals		Whites				Blacks					
	NY	MS	NY	MS	NY	MS	NY	MS	NY	MS		
<i>How many days in the past 30 days have you smoked cigarettes on school property?</i>												
Total % of adolescents smoking on school property	17.5	13.2	20.8	20.7	8.6	7.5						
Breakdown of frequency												
Smoked 1 to 10 of the past 30 days	9.1	52.0%	7.8	59.1%	10.5	50.5%	11.3	54.6%	5.9	68.6%	4.8	64.0%
Smoked 10 to 30 of the past 30 days	8.4	48.0%	5.4	40.9%	10.3	49.5%	9.4	45.4%	2.7	31.4%	2.7	36.0%

Source: Youth Risk Behavior Survey, 1997