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Prevalence of Tobacco Use among African-American College Students

Michael Celestin
University of New Orleans

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PREVALENCE OF TOBACCO USE
AMONG AFRICAN-AMERICAN COLLEGE STUDENTS

A Thesis

Submitted to the Graduate Faculty of the
University of New Orleans
in partial fulfillment of the
requirements for the degree of

Master of Arts
in
The College of Education
Department of Human Performance and Health Promotion

by

Michael D. Celestin, Jr.
B.A., University of Southwestern Louisiana, 1997
December 2003
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# TABLE OF CONTENTS

List Of Tables ........................................................................................................ iv  
Abstract .................................................................................................................. vi  
Chapter 1: Introduction .......................................................................................... 1  
  Background .......................................................................................................... 1  
  Importance Of The Study .................................................................................. 2  
  Purpose Of The Study ....................................................................................... 4  
  Research Questions ........................................................................................... 6  
  Limitations and Delimitations ........................................................................... 6  
  Assumptions ....................................................................................................... 8  
  Operational Definitions ....................................................................................... 8  
Chapter 2: Review Of Literature ......................................................................... 10  
  Protective Factors For African-American Youth .............................................. 10  
  Risk Factors For African-American Young Adults and Adults ....................... 13  
Chapter 3: Methodology ....................................................................................... 15  
  Research Questions ........................................................................................... 15  
  Research Hypotheses ......................................................................................... 15  
  Sample ............................................................................................................... 17  
  Procedure ........................................................................................................... 17  
  Statistical Analyses ......................................................................................... 18  
  Instrumentation ................................................................................................. 19  
  Items Of Interest ............................................................................................... 20  
Chapter 4: Results ................................................................................................. 23  
  Descriptive Statistics ......................................................................................... 23  
  Inferential Analysis ........................................................................................... 28  
Chapter 5: Discussion .......................................................................................... 40  
References .............................................................................................................. 45  
Appendices ............................................................................................................ 49  
  Appendix A: Formal Protocol .......................................................................... 49  
  Appendix B: Human Subject Consent Form ....................................................... 52  
  Appendix C: Harvard College Alcohol Study Survey ...................................... 54  
Vita ......................................................................................................................... 75
LIST OF TABLES

Table 1    Most Cited Constructs of the Social Cognitive Theory.............................. 5
Table 2    Index of Protective And Risk Factors.................................................. 11
Table 3    Items of Interest on the Harvard College Alcohol Study Survey.............. 20
Table 4    Frequency Distribution of African-Americans by Gender....................... 24
Table 5    Frequency Distribution of African-Americans by Age............................ 24
Table 6    Frequency Distribution of African-Americans by Classification.............. 25
Table 7    Frequency Distribution of African-Americans by Cigarette Use.............. 26
Table 8    Frequency Distribution of African-Americans First Use of Cigarettes.... 27
Table 9    Case Processing Summary................................................................. 29
Table 10   Cross-Tabulation of Respondents Living in Smoke-Free Housing......... 29
Table 11   Chi-Square Test of Respondents Living in Smoke-Free Housing............. 30
Table 12   Cross-Tabulation of Importance of Academic Work to Respondents...... 31
Table 13   Chi-Square Test of Importance of Academic Work to Respondents...... 32
Table 14   Cross-Tabulation of Respondents’ Satisfaction with Education............. 32
Table 15   Chi-Square Test of Respondents’ Satisfaction with Education............. 33
Table 16   Cross-Tabulation of Respondents’ Satisfaction with Life at School...... 33
Table 17   Chi-Square Test of Respondents’ Satisfaction with Life at School...... 34
Table 18   Cross-Tabulation of Respondents Encountering Free Cigarette Samples in Bar or Club.......................................................... 35
| Table 19 | Chi-Square Test of Respondents Encountering Free Cigarette Samples in Bar or Club | 35 |
| Table 20 | Cross-Tabulation of Respondents Encountering Free Cigarette Samples at Event or Party | 36 |
| Table 21 | Chi-Square Test of Respondents Encountering Free Cigarette Samples at Event or Party | 37 |
| Table 22 | Observed and Predicted Results for Results | 38 |
| Table 23 | Variables In The Logistic Regression Equation | 38 |
ABSTRACT

This study examined factors that may protect African-American young adults in college from early onset of cigarette smoking, and factors that may place them at risk for cigarette smoking, using the framework of the Social Cognitive Theory. It was hypothesized that existing regulation of smoking, positive attitude toward academics and school connectedness would be related to low cigarette-smoking rates, while exposure to pro-tobacco promotions would be related to high cigarette smoking rates. A convenience sample of 576 undergraduates at Dillard University of New Orleans completed a Harvard College Alcohol Study survey. Forty six percent (n=269) completed the survey. Ninety-one percent were African American, and 13% of them were ever-smokers. Chi Square analysis was used to test for a statistically significant difference in response rates between ever-smokers and non-smokers. Results indicated no significant differences between respondents for any outcome measures. The Social Cognitive Theory constructs were not supported by the findings.
CHAPTER ONE

INTRODUCTION

This introduction includes a background section providing a contextual stage for conducting this research. The importance and the purpose of the study are then described, and the research questions are identified. The chapter closes with a discussion of the study’s limitations and delimitations, assumptions, and operational definitions.

Background

Tobacco use is a major health risk. At least 1.1 billion people across the globe use various types of tobacco products, and approximately 4 million deaths were attributed to tobacco use in 1999 (WHO, 2002). Tobacco use is one of the ten leading health indicators among youth 17 years of age or under in high schools across America (USDHHS, 2000). The World Health Organization (2002) reported that across the world, cigarettes are the overwhelming tobacco product of choice. More than 4.5 million American high school students are current cigarette smokers, as defined by having smoked within the past 30 days. Among all youth in America, it is estimated that 6 million will die prematurely from a tobacco-related disease. In Louisiana, approximately 98,000 high school students currently smoke cigarettes, and 107,000 youth smokers in Louisiana will die prematurely from a tobacco-related disease (CDC, 2002).

This epidemic was designated one of the six priority health risk behaviors among young adults 18-24 years of age in college by the United States Department of Health and
Hospitals (2000). Data show that young adults who obtain an undergraduate or graduate
degree are less likely to smoke cigarettes compared to those with no college, some
college, or an associate degree. However, data also show that between 1993 and 2000 all
age groups decreased their cigarette smoking rates except young adults in college (CDC,
2002; SAMHSA, 2002). In fact, current cigarette smoking rates increased among young
adults with equal to or greater than thirteen years of education from approximately 18%
during 1992-1993 to approximately 23% during 1999-2000. This finding may reflect the
aging of adolescents with high smoking rates in the mid 1990’s, and possibly tobacco
companies targeting of young adults (CDC, 2002). Rigotti et. al. (2000) also reported an
increase in cigarette smoking prevalence among the same age group by as much as 28%
since 1993. In 1999, the overall national prevalence of current cigarette smoking among
young adults in college was 28.2% to 32.9% (Rigotti et. al, 2000).

Among all adults 18 years of age or older, tobacco use continues to be a top 10
leading health indicator (USDHHS, 2000). More than 45 million American adults are
current cigarette smokers (CDC, 2001). It is estimated that every year over 400,000
deaths are attributable to adult cigarette smoking (CDC, 2002). In Louisiana,
approximately 766,000 adults are current cigarette smokers (CDC, 2001), and 6,000
adults in Louisiana die each year due to tobacco-related diseases (CDC, 2002).

**Importance Of The Study**

The significance of the prevalence rates and mortality predictions cited above is
that tobacco use, particularly cigarette smoking, is the leading preventable cause of death
and disease among all Americans (CDC, 2003). More important to this research,
African-Americans’ use of tobacco needs to be studied because African-Americans
continue to suffer disproportionately from health consequences related to tobacco use such as lung cancer, heart disease, and stroke (USDHHS, 1998).

African-American youth begin smoking cigarettes later in life, as compared to Caucasian-American youth (SAMHSA, 2002; Anderson and Burns, 2000; USDHHS, 1998). Despite data showing that African-American youth smoke cigars at much higher levels than other ethnic groups, and African-American female youth cigarette smoking rates have increased significantly throughout the 1990’s, overall African-American youth tobacco use rates are substantially lower than Caucasian-American youth (ALF, 2003). Approximately 16% of African-American high school students are current cigarette smokers, compared to approximately 32% of Caucasian-American high school students (CDC, 2002; ALF, 2001).

The overall national prevalence of current cigarette smoking among African-American young adults in college was reported at 11.2%, compared to 31.3% of Caucasian-American young adults in college (Rigotti et. al., 2000). A few researchers conducting local studies at predominantly African-American colleges have reported varying cigarette-smoking rates. Rates among African-American young adults at these colleges were reported at 4% (Kelley and Lowing, 1997), 12% (Rhodes et. al., 1995), 13% (Ford and Goode, 1994) and 71.3% (Hestick et. al., 2001).

Variations in sample size and/or reporting systems may account for the difference in these rates. The majority used convenience samples of approximately 200 undergraduate students. Only Hestick et. al. (2001) used a random sample of approximately 600 undergraduate students. None of these local studies identified the
process used to develop their surveys, or the specifics of the measures they used. Therefore, the validity and reliability of their survey instruments are in question.

African-American adult cigarette smoking rates are about the same as those of Caucasian-American adults. Approximately 23% of African-American adults are current cigarette smokers, compared to approximately 24% of Caucasian-American adults (CDC, 2002). Despite the late onset of cigarette smoking among African-American youth, African-American adults are twice as likely as Caucasian-American adults to develop lung cancer, and are disproportionately affected by other tobacco-related diseases when compared to Caucasian-American adults (Wong et. al., 2002; USDHHS, 1998).

In sum, African-American youth begin cigarette smoking later in life than Caucasian-Americans, catch up to Caucasian-Americans as adults in cigarette smoking rates, and surpass Caucasian-Americans in death and disability rates from tobacco-related diseases.

Purpose Of The Study

The purpose of this study was to examine factors that may either protect young adult African-Americans in college from initiating cigarette smoking, or that may place them at risk of smoking cigarettes. Protective and risk factors identified for African-Americans in this study will be examined using the framework of the Social Cognitive Theory.

Originally introduced as the Social Learning Theory, the Social Cognitive Theory was based on stimulus response theory that emphasized reinforcement to shape behavior. The theory was later renamed the Social Cognitive Theory to incorporate personal factors, or cognitions (Glanz et. al., 1997). The Social Cognitive Theory proposes that
peoples’ behaviors can be explained in terms of a triadic, dynamic, and reciprocal model in which (1) behavior, (2) personal factors, and (3) environmental influences all interact. These interactions determine an individual’s behavior (McKenzie and Smeltzer, 2001).

The Social Cognitive Theory was selected for this study over other health behavior theories because of its attention to behavioral and environmental factors. Interpersonal theories such as the Health Belief Model and the Theory of Planned Behavior do not account for such factors. Constructs of the Social Cognitive Theory cited most in health behavior studies include the following: reinforcement (which can be accomplished directly or vicariously), observational learning, reciprocal determinism, expectations of outcomes, expectancies (values) on outcome, self-control or self regulation, self-efficacy, behavioral capability, and emotional coping response (McKenzie and Smeltzer, 2001; Glanz et. al., 1997; Simons-Morton et. al., 1995). Table 1 summarizes all of these constructs, as well as provides a definition and example of how each might be applied to tobacco use. Only the reinforcement and reciprocal determinism constructs of the Social Cognitive Theory were applied to this study.

Table 1

Most Cited Constructs of the Social Cognitive Theory

<table>
<thead>
<tr>
<th>Construct</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reinforcement*</td>
<td>Responses to a behavior that increase or decrease reoccurrence</td>
<td>a) Someone handing a non-smoker free cigarettes, encouraging their use</td>
</tr>
<tr>
<td>a) Direct</td>
<td>a) Given directly to the person performing the behavior</td>
<td>b) A non-smoker with a close friend that smokes</td>
</tr>
<tr>
<td>b) Vicarious</td>
<td>b) Modeling behavior for the person who would perform the behavior</td>
<td>A non-smoking college student asking to live in a non-smoking dormitory</td>
</tr>
<tr>
<td>Reciprocal Determinism*</td>
<td>Interaction between a person, a behavior, and their environment</td>
<td></td>
</tr>
<tr>
<td>Construct</td>
<td>Definition</td>
<td>Example</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Expectations</td>
<td>Anticipating the likely outcomes of a behavior</td>
<td>A smoking adult in a cessation program expecting after completion to be smoke-free</td>
</tr>
<tr>
<td>Expectancies</td>
<td>The values placed on a behavior</td>
<td>A non-smoking child believing that not smoking enhances physical performance</td>
</tr>
<tr>
<td>Self-Control or Self-Regulation</td>
<td>Management of a behavior to achieve goals or adjusting a behavior when necessary</td>
<td>A smoking adult setting personal goals to quit smoking, including rewards and punishments for the behavior</td>
</tr>
<tr>
<td>Behavioral Capability</td>
<td>Having the knowledge and skills to perform a behavior</td>
<td>A smoking adult developing skills to handle withdrawal symptoms from quitting</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>Confidence in the ability to perform a behavior</td>
<td>A non-smoking child believing that they can refuse a friend encouraging them to smoke</td>
</tr>
<tr>
<td>Emotional Coping Responses</td>
<td>Having the ability to deal with emotions felt before or after performing a behavior</td>
<td>A non-smoking child coping with the fear of saying no to a friend encouraging smoking</td>
</tr>
</tbody>
</table>

*Constructs that will be utilized in this study*

**Research Questions**

*Research Question 1*

What are the factors that may protect young adult African-Americans in college from initiating cigarette smoking?

*Research Question 2*

What are the factors that may place young adult African-Americans in college at risk of smoking cigarettes?

**Limitations and Delimitations**

A limitation to using the Social Cognitive Theory is that it may have been too broadly formulated. With so many constructs, an explanation can be offered for nearly any situation. Therefore, it is important for research using the Social Cognitive Theory
that 1) clarity is given to where and when the constructs apply, 2) the constructs are based on the characteristics of the target population, and 3) use of the theory is evaluated carefully (McKenzie and Smeltzer, 2001).

Because the participants were African-American college students who attend a private, predominantly black, faith based liberal arts institution in the Metropolitan New Orleans, Louisiana area, the sample may be not be representative of African-American college students in general. Therefore, caution must be exercised when generalizing the results from this study to other states, parochial, private, and public schools.

Unpublished validity and reliability scores on the Harvard College Alcohol Study survey measures for cigarette smoking was another limitation to this study. Because the questionnaire was a self-reported instrument, a respondent may provide misinformation by responding to a statement in ways that they believe to be socially acceptable, or agreeing with a statement (or answer yes to a statement) when they are unsure or ambivalent. Additionally, using a self-reporting survey can result in underreporting the attitudes, beliefs and behaviors of respondents (McMillan and Schumacher, 1999).

The convenience sampling of African-American young adults enrolled in the “first time student class” was also a limitation of the study, resulting in responses from less than half of Dillard University’s freshman population. This low number of respondents and low percentage of smokers were a common result of other studies (Kelley and Lowing, 1997; Rhodes et. al., 1995; Ford and Goode, 1994). Additionally, since African-Americans typically start smoking later then Caucasian Americans, using freshman students only may have significantly limited the number of respondents reporting ever smoking.
Assumptions

It is assumed that the researcher has identified from the professional literature the major factors that may either protect young adult African-Americans in college from initiating cigarette smoking, or that may place them at risk of smoking cigarettes. It is also assumed that the survey instrument was understandable to the participants and it was easy to use. Finally, it is assumed that the participants answered the questions honestly and their responses provided accurate data for analysis.

Operational Definitions

Current Smoker

A current smoker is a person that has smoked at least one cigarette within the past 30 days.

Ever-Smoker

An ever-smoker is a person that has indicated smoking at least one cigarette in their lifetime, just not within the past 12 months.

Never Smoker

A never smoker is a person that has never smoked a cigarette in his or her lifetime.

Protective Factor

A protective factor moderates the influence of risk factors and contributes to positive development, which prevents negative behaviors and outcomes.

Risk Factor

A risk factor influences the chance of drug use and contributes to negative development, which permits negative behaviors and outcomes.
Reciprocal Determinism

Reciprocal determinism is a Social Cognitive Theory construct defined as the interaction between a person, a behavior, and their environment.

Reinforcement

Reinforcement is a Social Cognitive Theory construct defined as a response to a behavior that may increase or decrease reoccurrence of that behavior.
CHAPTER TWO

REVIEW OF LITERATURE

This review of literature includes an investigation of factors that may protect African-American youth from cigarette smoking, and those that place African-American young adults and adults at risk of smoking cigarettes.

Protective Factors for African-American Youth

Limited research is available concerning protective factors that keep African-American youth from using tobacco (Wallace and Muroff, 2002; Sullivan and Farrell, 1999). One reason, according to Wallace and Muroff (2002), is that many of the protective and risk factors researchers have identified were done using samples of predominantly, if not only, Caucasian-American youth. The Substance Abuse and Mental Health Services Association (SAMHSA, 2002) contends that regardless of ethnicity, youth experience the same protective and risk factors. However, many researchers argue that more research needs to be done without assuming that African-American and Caucasian-American youth are equally exposed and vulnerable to similar factors (Wallace and Muroff, 2002; Sullivan and Farrell, 1999).

Another reason for the lack of research might be the distinction between a protective factor and a risk factor. According to SAMHSA (2002), protective factors represent the influences, orientations, and behaviors in youths’ lives that contribute to positive development and help prevent negative behaviors and outcomes. Risk factors
would be their opposites. Sullivan and Farrell (1999) identified studies seeking to define protective and risk factors, but make the argument that previous studies are inconsistent with their conceptual distinction. The authors conclude that protective and risk factors differ not only in the direction of the effect, but also in the nature of the effect. Protective factors serve as buffers that moderate the influence of risk factors on drug use, where as risk factors have a direct effect on drug use (Sullivan and Farrell, 1999).

In addition, the identification of risk and protective factors must account for the fact that over time, youth change their perceptions about their protection and risk, and they vary depending on the individual and their environmental constraints (SAMHSA, 2002; Sullivan and Farrell). Table 2 lists protective and risk factors that influence drug use found in the literature. The factors are categorized based on their internal/individual and external/contextual levels of influence.

Table 2

<table>
<thead>
<tr>
<th>Internal/Individual Factors</th>
<th>External/Contextual Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic experiences^1, *</td>
<td>Availability of the drug^2, *</td>
</tr>
<tr>
<td>Alienation and rebellion^2</td>
<td>Community disorganization^2</td>
</tr>
<tr>
<td>Associating with drug using peers^2</td>
<td>Community protection environment^1</td>
</tr>
<tr>
<td>Attitudes favorable toward drug use^2</td>
<td>Family supervision^1</td>
</tr>
<tr>
<td>Early involvement in drug use^2</td>
<td>Laws that regulate access to drugs^1</td>
</tr>
<tr>
<td>Family bonding^1</td>
<td>Low neighborhood risk^2</td>
</tr>
<tr>
<td>Family risk factors^2</td>
<td>Low socioeconomic status^2</td>
</tr>
<tr>
<td>Other antisocial behaviors^2</td>
<td>Parental attitudes and expectations^1</td>
</tr>
<tr>
<td>Peer rejection in early elementary grades^2</td>
<td>Peer attitudes and pressure^2</td>
</tr>
<tr>
<td>Physiological factors^2</td>
<td>Peer substance use^2</td>
</tr>
<tr>
<td>School bonding^1, *</td>
<td>School performance^2</td>
</tr>
<tr>
<td>Internal/Individual Factors</td>
<td>External/Contextual Factor</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Substance use(^2)</td>
<td>School activity involvement(^1)</td>
</tr>
<tr>
<td>Intolerant attitudes toward deviance(^1)</td>
<td>School prevention environment(^1), *</td>
</tr>
</tbody>
</table>

\(^1\)Protective Factors  
\(^2\)Risk Factors  
*Factors that will be utilized in this study

Through family and school bonds youth build an internal resiliency, over time, to external risks they encounter. These bonds represent meaningful involvement in family and school life that is challenging, provides a sense of contribution, and is rewarding. Youth find interacting and achieving in these environments worthwhile, which protects them from initiating substance use.

African-American youth have been more likely to report high levels of family and school connectedness, school involvement, attitudes toward academics, parental and school supervision, and satisfaction with their relationships with their parents, when compared to Caucasian-American youth. These protective factors were found to be statistically significant in moderating cigarette smoking among African-American youth (SAMHSA, 2002; Wallace and Muroff, 2002; Kegler et. al., 2002; Gittelsohn et. al., 2001; Sullivan and Farrell, 1999; Klesges and Robinson, 1995).

The reciprocal determinism construct of the Social Cognitive Theory may theoretically explain the influence of school supervision and how maintaining a positive attitude toward schooling affect African-American youths’ decisions to avoid cigarette smoking. Glanz et. al. (1997) suggests that policies restricting smoking may serve as a bi-directional interaction between the person and their environment, and enhance cigarette smoking prevention. This aspect of the Social Cognitive Theory would support
the hypothesis that the regulation of smoking by schools, as measured by providing
smoke-free housing on campus, will be related to low cigarette smoking rates. Glanz et.
al. (1997) also suggest that having a positive attitude about the role a person plays, and
the activities they engage in, such as school connectedness and academic work, may
serve as a positive bi-directional interaction between a person and their environments or
activities, and can positively affect their behavior. Thus, this aspect of the Social
Cognitive Theory would support the hypotheses that greater school connectedness, as
measured by satisfaction with their education and school life, and having a positive
attitude toward academic work will be related to low cigarette smoking rates.

Risk Factors For African American Young Adults And Adults

As with the study of protective factors for African-American youth, limited
research was available studying risk factors for late onset cigarette smoking among
African-American young adults and adults. Some researchers believe that the attention
placed on preventing youth cigarette smoking has taken away from the significance of
studying risk factors for late onset cigarette smoking (Glied, 2003; Moon-Howard, 2003;
Chaloupka, 2002). Studies found that while researchers focused on youth prevention,
tobacco companies began marketing their products heavily towards the young adult and
adult populations (Altman et. al., 1996; Sepe et. al., 2002; Ling and Glantz, 2002).

The more responsible youth become, as they mature into young adulthood, the
less external supervision they receive from their family, and the opportunity for schools
to promote positive choices in youth decreases (Sale et. al., 2003; SAMHSA, 2002).
Internal documents made available to the public as a result of a Master Settlement
Agreement between the U.S. and several of the largest tobacco companies revealed that
bar and nightclub cigarette promotions are highly successful in increasing sales of particular brands to young adults (Katz and Lavack, 2002). Providing free cigarettes and other brand name promotional items, especially during the transition period for adolescents in high school to young adulthood, are possible risk factors for late smoking onset (Sepe et. al., 2002; Ling and Glantz, 2002).

The reinforcement construct of the Social Cognitive Theory may theoretically explain the influence of pro-tobacco promotions on African-American young adults and adults’ decision to start cigarette smoking. As discussed by Glanz et. al. (1997), providing a positive reinforcement (i.e. offering free cigarettes to a non-smoker at a bar or event) serves as motivation and increases the likelihood of performing a behavior (i.e. trial smoking of the free cigarettes). This aspect of the Social Cognitive Theory supports the hypotheses that encountering free cigarettes at bars and clubs, or events and parties, will be related to high cigarette smoking rates.
CHAPTER THREE

METHODOLOGY

This chapter discusses the research design, including subsections describing hypotheses and variables; the study’s participants and sampling procedure; instrumentation, including reliability and validity issues associated with the measurement of this study’s key concepts; and the data analysis plan.

Research Questions

Two research questions guided this study:

Research Question 1

What are the factors that may protect young adult African-Americans in college from initiating cigarette smoking?

Research Question 2

What are the factors that may place young adult African-Americans in college at risk of smoking cigarettes?

Research Hypotheses

Research Question 1

What are the factors that may protect young adult African-Americans in college from initiating cigarette smoking?
Research Hypothesis 1.1
Respondents who live in smoke-free housing on campus will have lower cigarette smoking rates than respondents who do not live in smoke-free housing on campus.

Research Hypothesis 1.2
Respondents who report their academic work as being important will have lower cigarette smoking rates than respondents who report their academic work as being unimportant.

Research Hypothesis 1.3
Respondents who report greater satisfaction with their education will have lower cigarette smoking rates than respondents who are less satisfied with their education.

Research Hypothesis 1.4
Respondents who report greater satisfaction with their school life will have lower cigarette smoking rates than respondents who are less satisfied with their school life.

Research Question 2
What are the factors that may place young adult African-Americans in college at risk of smoking cigarettes?

Research Hypothesis 2.1
Respondents that report exposure to pro-tobacco promotions in bars and clubs will have higher cigarette smoking rates than those who report no exposure to pro-tobacco promotions in bars and clubs.

Research Hypothesis 2.2
Respondents that report exposure to pro-tobacco promotions at events and parties will have higher cigarette smoking rates than those who report no exposure to pro-tobacco promotions at events and parties.
Sample

Participants in this study were undergraduate African-American young adults enrolled at Dillard University of New Orleans, Louisiana. Dillard University is a private, predominantly black, faith based liberal arts institution. All of Dillard's housing on campus is smoke-free. In the spring of 2003, the institution enrolled more than 1,800 undergraduate students (1,389 were female and 437 were male). More than 95% of the total enrollment was African-American. A convenience (non-random) sample of undergraduate students was selected through the university’s Jubilee Scholars program. The Jubilee Scholars program enrolls all entering freshman into a mandatory class, which helps them with the transition of entering college. A copy of the formal protocol form given to university representatives can be found in Appendix A. In the spring of 2003, 578 undergraduate students were enrolled in the program (454 were female and 124 were male).

Procedure

Following thesis committee approval, permission was sought and granted by the Harvard School of Public Health for the use of the Harvard College Alcohol Study survey. Subsequently, permission was sought and granted by Dillard University’s Human Subjects Committee to approach the Jubilee Scholars program director and invite enrolled students’ participation in the study. The program director approved enrollee participation and the issuance of extra credit points in the class as an incentive for participation. An on-site contact person was designated to ensure that procedures were in place to protect students’ anonymity in the data collection process. A procedure to distribute and collect the surveys once completed was established, and a school
representative was selected to store the completed surveys until the researcher collected them.

The researcher hand delivered all material (human subject consent form, survey and pencils) to the on-site contact person. Students that agreed to participate were required to complete a human subject consent form. The consent form identified 1) the title, purpose, and research procedures for the study, 2) the principal investigator’s contact information for answers to questions, 3) the potential risks and benefits to the participant and, possibly, to society, 4) the process for protecting the participants’ confidentiality and 5) any alternate procedures. A copy of the human subject consent form can be found in Appendix B. Students who consented to participation in the study were given a copy of the Harvard College Alcohol Study (Harvard College Alcohol Study) survey to complete.

Statistical Analyses

Once the surveys were collected, all data was organized and entered into a database. Statistical software used in this study was SPSS for Windows. Appropriate descriptive statistics were reported on sample characteristics. Additionally, an inferential analysis was done to examine the stated hypotheses. Chi square analysis was conducted to determine whether or not there was a statistically significant difference in responses between respondents based on the independent variables. Logistic Regression analysis was done to predict smoker and non-smoker responses based on the combination of values of independent variables.
**Instrumentation**

Survey research is often employed to learn about people’s attitudes, beliefs, values, demographics, behavior, opinions, desires, and habits, with the goal of understanding the relationships among these variables (McMillan and Schumacher, 2001). Because this study focused on African-American college students’ behavior and attitudes, it was appropriate to utilize survey research as the methodological approach. The survey method gathers data that is used to describe characteristics of certain populations (McMillan & Schumacher). Thus, the methodological approach of survey research fit the designed purpose of this study.

The Harvard College Alcohol Study survey was chosen for use over two other health surveys specific to the college population: the National College Health Risk Behavior Survey (NCHRBS) and the National College Health Assessment (NCHA). The NCHRBS was not chosen for use in this study because it was only administered in 1995, as opposed to the Harvard College Alcohol Study survey being conducted every other year since 1993. The NCHA was not chosen to use in this study because it was piloted in 1998 using the same cigarette smoking prevalence measures found in the Harvard College Alcohol Study survey. The Harvard College Alcohol Study survey was the only survey that measured the importance of academic work, prevalence, smoking regulation and pro-tobacco promotions, and satisfaction with school connectedness.

The Harvard College Alcohol Study survey contains nineteen questions related to tobacco use. The survey also contains questions about demographics and student characteristics, alcohol and other drug use, gambling, violence, physical activity and sexual activity. In total the Harvard College Alcohol Study survey contains 120
questions and was used in its entirety. The most recent Harvard College Alcohol Study results (from 1999) were from a representative sample of 128 four-year U.S. colleges and universities. Nine were dropped because of low response rates. Random samples of undergraduates were drawn from their total enrollment, which produced a total sample of approximately 225 students from each institution. Response rates ranged from 40% to 83%. Sixty-one percent of respondents were female, and 6% were African-American (Rigotti et. al., 2000). A copy of the Harvard College Alcohol Study can be found in Appendix C. The authors of the survey did not calculate validity and reliability scores on the Harvard College Alcohol Study survey tobacco use measures.

Items of Interest

The Items of interest to this study on the Harvard College Alcohol Study survey are presented in Table 3.

Table 3

Items of Interest on the Harvard College Alcohol Study Survey

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>How old are you?</td>
<td>17 or younger, 18, 19, 20, 21, 22, 23, 24, 25 or older</td>
</tr>
<tr>
<td>A2</td>
<td>Are you male or female?</td>
<td>Male, Female</td>
</tr>
<tr>
<td>A3</td>
<td>What is your current year in school?</td>
<td>Freshman (first year), Sophomore (2\textsuperscript{nd} year), Junior (3\textsuperscript{rd} year), Senior (4\textsuperscript{th} year), 5\textsuperscript{th} year or beyond (undergraduate), Graduate student</td>
</tr>
<tr>
<td>A8-C</td>
<td>How important is it for you to participate in the following activities at college: academic work?</td>
<td>Very Important, Important, Somewhat Important, Not At All Important</td>
</tr>
<tr>
<td>Item</td>
<td>Statement</td>
<td>Options</td>
</tr>
<tr>
<td>------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>B12</td>
<td>Some universities have housing that is specially designated as “smoke-free.” Do you live in this type of housing during the current school year?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>E1-Q</td>
<td>How often, if ever, have you used any of the drugs listed below: cigarettes?</td>
<td>Never Used, Used, but NOT in Past 12 Months, Used in Past 30 Days, Used in Past 30 Days</td>
</tr>
<tr>
<td>E2-A</td>
<td>How old were you when you first: smoked a cigarette?</td>
<td>Never Did This, 9 or younger, 10-12, 13-15, 16, 17, 18, 19 or Older</td>
</tr>
<tr>
<td>E11</td>
<td>Since the beginning of the school year, have you ever been to a bar or club when free samples of cigarettes were available?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>E12</td>
<td>Since the beginning of the school year, have you ever been to an event or party on campus when free samples of cigarettes were available?</td>
<td>Yes, No</td>
</tr>
<tr>
<td>F1</td>
<td>In general, how satisfied are you with the education that you are receiving?</td>
<td>Very satisfied, Somewhat satisfied, Somewhat dissatisfied, Very dissatisfied</td>
</tr>
<tr>
<td>F2</td>
<td>In general, how satisfied are you with your life at school?</td>
<td>Very satisfied, Somewhat satisfied, Somewhat dissatisfied, Very dissatisfied</td>
</tr>
<tr>
<td>G3</td>
<td>Which of these racial or ethnic groups describes you best?</td>
<td>White, Black/African American, Asian/Pacific Islander, Native American Indian/Native Alaskan, Other</td>
</tr>
</tbody>
</table>

The dependent variable in this study is cigarette smoking prevalence and will be ascertained from responses to item E1-Q. The independent variables in this study are importance of academic work, living in smoke-free housing on campus, level of satisfaction with education, level of satisfaction with life at school, availability of free samples of cigarettes at a bar or club, and availability of free samples of cigarettes at an
event or party. Answers to these questions will be ascertained from responses to items A8-C, B12, F1, F2, E11 and E12.
CHAPTER FOUR

RESULTS

In this chapter the results of the analysis of the data collected in this investigation are presented. The chapter is divided into two sections. In the first section a description of the participants is reported along with respondents’ answers to items of interest on the Harvard College Alcohol Study survey. In the second section statistical results from the tests of the research hypotheses are reported.

Descriptive Statistics

Descriptive statistics are reported on the several demographic variables of interest. Categories are identified and frequencies and percentages of the African-American sample falling into these categories are reported. Narrative summaries of the results are included.

Participants’ Gender

Participants were asked to indicate their gender. Descriptive data for the participants’ responses are presented in Table 4.
Table 4

Frequency Distribution of African-Americans by Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>211</td>
<td>86.1</td>
</tr>
<tr>
<td>Male</td>
<td>33</td>
<td>13.5</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Total</td>
<td>245</td>
<td>100</td>
</tr>
</tbody>
</table>

In total, forty-six percent of the program enrollees (n=269) completed the Harvard College Alcohol Study survey. Of these, 91% percent (n=245) were African American. Among the African-American sample, 86% (n=211) were female and 14% (n=33) were male, with one person not indicating their gender.

Participants’ Age

Participants were asked to indicate their age. Descriptive data for the African-Americans’ responses are presented in Table 5.

Table 5

Frequency Distribution of African-Americans by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>3</td>
<td>1.2</td>
</tr>
<tr>
<td>18</td>
<td>138</td>
<td>56.3</td>
</tr>
<tr>
<td>19</td>
<td>97</td>
<td>39.6</td>
</tr>
<tr>
<td>20</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>21</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Age</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>-----</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>22</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>23</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>24</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>25</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>245</td>
<td>100</td>
</tr>
</tbody>
</table>

Ninety-six percent were between 18 (n=138) and 19 (n=97) years old (56% and 40% respectively), 2% were 20 years old (n=5), and 1% was 22 and 23 years each (n=2, one in each age category). No African-American respondents reported their age to be 21, 24 or 25.

Participants’ Classification

Participants were asked to indicate their classification. Descriptive data for the African-Americans’ responses are presented in Table 6.

Table 6

Frequency Distribution of African-Americans by Classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>239</td>
<td>97.6</td>
</tr>
<tr>
<td>Sophomore</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Junior</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5th Year or Beyond</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Graduate School</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>245</td>
<td>100</td>
</tr>
</tbody>
</table>
Ninety-eight percent classified themselves as freshman (n=239), 2% as sophomores (n=5), and half a percentage point (n=1) as 5th year or beyond. No African-American respondents reported their classification as junior or in graduate school.

*Participants’ Cigarette Use*

Participants were asked to indicate how often, if ever, they used cigarettes. Descriptive data for the African-American’ responses are presented in Table 7.

**Table 7**

<table>
<thead>
<tr>
<th>Cigarette Usage</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>213</td>
<td>86.9</td>
</tr>
<tr>
<td>Used, but not in the past 12 months</td>
<td>19</td>
<td>7.8</td>
</tr>
<tr>
<td>Used, but not in the past 30 days</td>
<td>9</td>
<td>3.7</td>
</tr>
<tr>
<td>Used in the past 30 days</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td>Total</td>
<td>245</td>
<td>100</td>
</tr>
</tbody>
</table>

Eighty-seven percent (n=213) of respondents indicated that they never used cigarettes. Eight percent (n=19) of respondents indicated that they used cigarettes, just not in the past twelve months. Four percent (n=9) of respondents indicated that they used cigarettes, just not in the past thirty days. One percent (n=2) of respondents indicated that they used cigarettes in the past 30 days equaled one percent (n=3). One percent (n=2) of respondents did not indicate their cigarette usage. In total, 13% of African-American respondents indicated that they have smoked a cigarette at some point in their lifetime according to this question.
Participants’ Age When First Used Cigarettes

Participants were asked to indicate the age when they first used cigarettes.

Descriptive data for the African-American’ responses are presented in Table 8.

Table 8

Frequency Distribution of Age African-Americans First Used Cigarettes

<table>
<thead>
<tr>
<th>Age First Used Cigarettes</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never did this</td>
<td>177</td>
<td>72.2</td>
</tr>
<tr>
<td>9 or younger</td>
<td>10</td>
<td>4.1</td>
</tr>
<tr>
<td>10-12</td>
<td>17</td>
<td>6.9</td>
</tr>
<tr>
<td>13-15</td>
<td>28</td>
<td>11.4</td>
</tr>
<tr>
<td>16</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>18</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td>19 or older</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Total</td>
<td>245</td>
<td>100</td>
</tr>
</tbody>
</table>

Seventy-two percent (n=177) of African-American respondents that answered this question indicated that they have never used cigarettes. This number differs from the percentage of respondents indicating that they have never used cigarettes in the previous table. First use of cigarettes for African-American respondents occurred more between the ages of 13 and 15 at 11% (n=28). Seven-percent (n=28) of African American respondents first used a cigarette between the ages of 10 and 12. Four-percent (n=10) of African-American respondents first used a cigarette at 9 years of age or younger, and also
between 17 and 18 years of age. One percent (n=2) of African-American respondents first used a cigarette at 19 years of age or older. One African-American respondent did not indicate an age of first cigarette use.

Inferential Analyses

Chi-Square Testing

Because of the low number of respondents who were current smokers, a chi square analysis was used to test whether or not there was a statistically significant difference in responses between smokers and non-smokers. In order to conduct the Chi-Square analysis, the dependent variable measure (cigarette smoking prevalence) had to be recoded from a four answer categorical variable into two categories. The original four categories were 1) Never Used, 2) Used, but not in the past 12 months, 3) Used, but not in the past 6 months, and 4) Used in the past 30 days. The recoded categories were 1) Non-smoker (original category 1) and 2) Ever-smoker (original categories 2, 3 and 4). Recoding results found that 12% (n = 30) of the African-American respondents were ever-smokers. Of these, 83% (n=25) were female and 17% (n=5) were male.

There were two research questions for this study. Research Question 1 asked: “What are the factors that may protect young adult African-Americans in college from initiating cigarette smoking?” Research Question 2 asked: “What are the factors that may place young adult African-Americans in college at risk of smoking cigarettes?” A case-processing summary is presented in Table 9.
Table 9

Case Processing Summary

<table>
<thead>
<tr>
<th>Question</th>
<th>Valid</th>
<th>Missing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Percent</td>
<td>N</td>
</tr>
<tr>
<td>Live in smoke-free housing</td>
<td>233</td>
<td>95.1%</td>
<td>12</td>
</tr>
<tr>
<td>Importance of academic work</td>
<td>239</td>
<td>97.6%</td>
<td>6</td>
</tr>
<tr>
<td>Satisfaction with education</td>
<td>243</td>
<td>99.2%</td>
<td>2</td>
</tr>
<tr>
<td>Satisfaction with life at school</td>
<td>243</td>
<td>99.2%</td>
<td>2</td>
</tr>
<tr>
<td>Free cigarette samples in bar or club</td>
<td>243</td>
<td>99.2%</td>
<td>2</td>
</tr>
<tr>
<td>Free cigarette sample at event or party on campus</td>
<td>243</td>
<td>99.2%</td>
<td>2</td>
</tr>
</tbody>
</table>

Research Hypothesis 1.1

Research Question 1 was examined by Research Hypothesis 1.1 that stated respondents who live in smoke-free housing on campus will have lower cigarette smoking rates than respondents who do not live in smoke-free housing on campus. A cross-tabulation of data is presented in Table 10.

Table 10

Cross-Tabulation of Respondents Living in Smoke-Free Housing

<table>
<thead>
<tr>
<th>Live In Smoke-Free Housing</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-smoker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>129</td>
<td>74</td>
<td>203</td>
</tr>
<tr>
<td>Expected Count</td>
<td>132.4</td>
<td>70.6</td>
<td>203.0</td>
</tr>
<tr>
<td>Ever-Smoker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>23</td>
<td>7</td>
<td>30</td>
</tr>
<tr>
<td>Expected Count</td>
<td>19.6</td>
<td>10.4</td>
<td>30.0</td>
</tr>
<tr>
<td>Total</td>
<td>152</td>
<td>81</td>
<td>233</td>
</tr>
<tr>
<td>Live In Smoke-Free Housing</td>
<td>Yes</td>
<td>No</td>
<td>Total</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------</td>
<td>-----</td>
<td>-------</td>
</tr>
<tr>
<td>Expected Count</td>
<td>152.0</td>
<td>81.0</td>
<td>233.0</td>
</tr>
</tbody>
</table>

Although more ever-smokers indicated living in smoke-free housing on campus, Chi-Square test results, presented in Table 11, indicated no significant difference between respondents. Therefore, the test did not reach significance to support or reject Hypothesis 1.1.

Table 11

Chi-Square Test of Respondents Living in Smoke-Free Housing

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>1.984</td>
<td>1</td>
<td>.159</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>1.447</td>
<td>1</td>
<td>.229</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>2.099</td>
<td>1</td>
<td>.147</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td></td>
<td>.218</td>
<td>.113</td>
</tr>
<tr>
<td>Linear-by Linear</td>
<td>1.975</td>
<td>1</td>
<td>.160</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Association</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>233</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research Hypothesis 1.2

Research Question 1 was examined by Research Hypothesis 1.2 that stated respondents who report their academic work as being important will have lower cigarette smoking rates than respondents who report their academic work as being unimportant. A cross-tabulation of data is presented in Table 12.
Table 12

Cross-Tabulation of Importance of Academic Work to Respondents

<table>
<thead>
<tr>
<th></th>
<th>Importance Of Academic Work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Important</td>
</tr>
<tr>
<td>Non-smoker Count</td>
<td>189</td>
</tr>
<tr>
<td>Expected Count</td>
<td>188.0</td>
</tr>
<tr>
<td>Ever-Smoker Count</td>
<td>26</td>
</tr>
<tr>
<td>Expected Count</td>
<td>27.0</td>
</tr>
<tr>
<td>Total</td>
<td>215</td>
</tr>
<tr>
<td>Expected Count</td>
<td>215.0</td>
</tr>
</tbody>
</table>

Although more ever-smokers indicated their academic work was important than not important, Chi-Square test results, presented in Table 13, indicated no significant difference between respondents. A second Chi-Square test was done using a set of recoded answer categories that included Important (which consisted of the answer categories Very Important, Important, and Somewhat Important) and Not Important (which consisted of the answer category Not At All Important) to see if there would be any significant differences between respondents. This second Chi-Square test indicated no significant difference between respondents based on recoded categories. Therefore, neither test reached significance to support or reject Hypothesis 1.2.
Table 13

Chi-Square Test of Importance of Academic Work to Respondents

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>1.439</td>
<td>3</td>
<td>.697</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>1.666</td>
<td>3</td>
<td>.644</td>
</tr>
<tr>
<td>Linear-by Linear Association</td>
<td>.391</td>
<td>1</td>
<td>.532</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>239</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research Hypothesis 1.3

Research Question 1 was examined by Research Hypothesis 1.3 that stated respondents who report greater satisfaction with their education will have lower cigarette smoking rates than respondents who are less satisfied with their education. A cross-tabulation of data is presented in Table 14.

Table 14

Cross-Tabulation of Respondents’ Satisfaction with Education

<table>
<thead>
<tr>
<th>Satisfaction With Education</th>
<th>Very Satisfied</th>
<th>Somewhat Satisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Very Dissatisfied</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-smoker</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>81</td>
<td>102</td>
<td>23</td>
<td>7</td>
<td>213</td>
</tr>
<tr>
<td>Expected Count</td>
<td>82.4</td>
<td>98.2</td>
<td>25.4</td>
<td>7.0</td>
<td>213.0</td>
</tr>
<tr>
<td><strong>Ever-Smoker</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>13</td>
<td>10</td>
<td>6</td>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>Expected Count</td>
<td>11.6</td>
<td>13.8</td>
<td>3.6</td>
<td>1.0</td>
<td>30.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>94</td>
<td>112</td>
<td>29</td>
<td>8</td>
<td>243</td>
</tr>
<tr>
<td>Expected Count</td>
<td>94.0</td>
<td>112.0</td>
<td>29.0</td>
<td>8.0</td>
<td>243.0</td>
</tr>
</tbody>
</table>

Although more ever-smokers indicated greater satisfaction with their education, Chi-Square test results, presented in Table 15, indicated no significant difference between
respondents. A second Chi-Square test was done using a set of recoded answer categories that included Satisfied (which consisted of the answer categories Very Satisfied and Somewhat Satisfied) and Unsatisfied (which consisted of the answer categories Somewhat Dissatisfied and Very Dissatisfied) to see if there would be any significant differences between respondents. This second Chi-Square test indicated no significant difference between respondents based on recoded categories. Therefore, neither test reached significance to support or reject Hypothesis 1.3.

Table 15

Chi-Square Test of Respondents’ Satisfaction with Education

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>3.266</td>
<td>3</td>
<td>.352</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>3.100</td>
<td>3</td>
<td>.376</td>
</tr>
<tr>
<td>Linear-by Linear Association</td>
<td>.070</td>
<td>1</td>
<td>.792</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>243</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Research Hypothesis 1.4*

Research Question 1 was examined by Research Hypothesis 1.4 that stated respondents who report greater satisfaction with their school life will have lower cigarette smoking rates than respondents who are less satisfied with their school life. A cross tabulation of data is presented in Table 16.

Table 16

Cross-Tabulation of Respondents’ Satisfaction with Life at School

<table>
<thead>
<tr>
<th></th>
<th>Very Satisfied</th>
<th>Somewhat Satisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Very Dissatisfied</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-smoker</td>
<td>Count</td>
<td>64</td>
<td>114</td>
<td>26</td>
<td>9</td>
</tr>
</tbody>
</table>
### Satisfaction With Life At School

<table>
<thead>
<tr>
<th></th>
<th>Very Satisfied</th>
<th>Somewhat Satisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Very Dissatisfied</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ever-Smoker</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected Count</td>
<td>64.9</td>
<td>113.1</td>
<td>26.3</td>
<td>8.8</td>
<td>213.0</td>
</tr>
<tr>
<td>Count</td>
<td>10</td>
<td>15</td>
<td>4</td>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>Expected Count</td>
<td>9.1</td>
<td>15.9</td>
<td>3.7</td>
<td>1.2</td>
<td>30.0</td>
</tr>
<tr>
<td>Count</td>
<td>74</td>
<td>129</td>
<td>30</td>
<td>10</td>
<td>243</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected Count</td>
<td>74.0</td>
<td>129.0</td>
<td>30.0</td>
<td>10.0</td>
<td>243.0</td>
</tr>
<tr>
<td>Count</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Although more ever-smokers indicated greater satisfaction with their life at school, Chi-Square test results, presented in Table 17, indicated no significant difference between respondents. A second Chi-Square test was done using a set of recoded answer categories that included Satisfied (which consisted of the answer categories Very Satisfied and Somewhat Satisfied) and Unsatisfied (which consisted of the answer categories Somewhat Dissatisfied and Very Dissatisfied) to see if there would be any significant differences between respondents. This second Chi-Square test indicated no significant difference between respondents based on recoded categories. Therefore, neither test reached significance to support or reject Hypothesis 1.4.

Table 17

Chi-Square Test of Respondents’ Satisfaction with Life at School

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>.233</td>
<td>3</td>
<td>.972</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>.234</td>
<td>3</td>
<td>.972</td>
</tr>
<tr>
<td>Linear-by Linear</td>
<td>.070</td>
<td>1</td>
<td>.792</td>
</tr>
<tr>
<td>Association</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>243</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Research Hypothesis 2.1

Research Question 2 was examined by Research Hypothesis 2.1 that stated respondents that report exposure to pro-tobacco promotions in bars and clubs will have higher cigarette smoking rates than those who report no exposure to pro-tobacco promotions in bars and clubs. A cross-tabulation of data is presented in Table 18.

Table 18

Cross-Tabulation of Respondents Encountering Free Cigarette Samples in Bar or Club

<table>
<thead>
<tr>
<th>Free Cigarette Samples In Bar Or Club</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-smoker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>12</td>
<td>201</td>
<td>213</td>
</tr>
<tr>
<td>Expected Count</td>
<td>14.0</td>
<td>199.0</td>
<td>213.0</td>
</tr>
<tr>
<td>Ever-Smoker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>4</td>
<td>26</td>
<td>30</td>
</tr>
<tr>
<td>Expected Count</td>
<td>2.0</td>
<td>28.0</td>
<td>30.0</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>227</td>
<td>243</td>
</tr>
<tr>
<td>Expected Count</td>
<td>16.0</td>
<td>227.0</td>
<td>243.0</td>
</tr>
</tbody>
</table>

Although fewer ever-smokers indicated encountering free cigarette samples in a bar or club, Chi-Square test results, presented in Table 19, indicated no significant difference between respondents. Therefore, the test did not reach significance to support or reject Hypothesis 2.1.

Table 19

Chi-Square Test of Respondents Encountering Free Cigarette Samples in Bar or Club

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>2.534</td>
<td>1</td>
<td>.111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>1.437</td>
<td>1</td>
<td>.231</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>2.073</td>
<td>1</td>
<td>.150</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Value</td>
<td>df</td>
<td>Asymp. Sig. (2-sided)</td>
<td>Exact Sig. (2-sided)</td>
<td>Exact Sig. (1-sided)</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------</td>
<td>----</td>
<td>----------------------</td>
<td>---------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td>2.524</td>
<td>1</td>
<td>.119</td>
<td>.119</td>
<td></td>
</tr>
<tr>
<td>Linear-by Linear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Association</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>243</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research Hypothesis 2.2

Research Question 2 was examined by Research Hypothesis 2.2 that stated respondents that report exposure to pro-tobacco promotions at events and parties will have higher cigarette smoking rates than those who report no exposure to pro-tobacco promotions at events and parties. A cross-tabulation of data is presented in Table 20.

Table 20

<table>
<thead>
<tr>
<th></th>
<th>Free Cigarette Sample At Event Or Party</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Non-smoker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>5</td>
<td>208</td>
</tr>
<tr>
<td>Expected Count</td>
<td>6.1</td>
<td>206.9</td>
</tr>
<tr>
<td>Ever-Smoker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>Expected Count</td>
<td>.9</td>
<td>29.1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>7</td>
<td>236</td>
</tr>
<tr>
<td>Expected Count</td>
<td>7.0</td>
<td>236.0</td>
</tr>
</tbody>
</table>

Although more ever-smokers indicated encountering free cigarette samples at an event or party, Chi-Square test results, presented in Table 21, indicated no significant difference between respondents. Therefore, the test did not reach significance to support or reject Hypothesis 2.2.
Table 21

Chi-Square Test of Respondents Encountering Free Cigarette Samples at Event or Party

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>1.754</td>
<td>1</td>
<td>.185</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>.549</td>
<td>1</td>
<td>.459</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>1.360</td>
<td>1</td>
<td>.243</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td></td>
<td>.209</td>
<td>.209</td>
</tr>
<tr>
<td>Linear-by Linear Association</td>
<td>1.746</td>
<td>1</td>
<td>.186</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>243</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Logistic Regression Analysis

The Chi-Square analysis results did not indicate that any of the variables are significant. To further demonstrate this, several logistical regression steps were taken. Logistic Regression analysis was done to predict smoker and non-smoker responses based on the combination of values of independent variables. The objective of this step was to progress from the Chi-Square analysis and control for factors to develop the most parsimonious predictive model. The full set of independent variables were entered into the Logistic Regression analysis to define the direction and level of the coefficients, identify which variables, if any, are significant, determine the and $R^2$ (the measure of association between variables) when all variables are forced into the model.

Two-hundred-thirty cases were included in the analysis, with 15 cases rejected because of missing data. In beginning block zero, the Initial Log Likelihood Function (-2 Log Likelihood) equaled 178.118%. In beginning block one, using the Enter method, all independent variables were entered on step number one. Estimation terminated at iteration number six because Log Likelihood decreased by less than .01%. The Log Likelihood Function (-2 Log Likelihood) equaled 164.966%. The Goodness of Fit
equaled 234.937%. Cox & Snell $R^2$ equaled .056%. Nagelkerke $R^2$ equaled .103%. The
Chi-Square equaled 13.152%, with 12 degrees of freedom and a significance level of
.358% for the model, block and step tests. Chi-Square equaled 7.071%, with 8 degrees of
freedom and a significance level of .529% for the Goodness-Of-Fit test. Observed and
predicted results for non-smokers and smokers can be found in Table 22.

Table 22

Observed and Predicted Results for Non-Smokers and Smokers

<table>
<thead>
<tr>
<th></th>
<th>Predicted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-Smoker</td>
</tr>
<tr>
<td>Observed</td>
<td>N</td>
</tr>
<tr>
<td>Non-Smoker</td>
<td>N</td>
</tr>
<tr>
<td>Smoker</td>
<td>S</td>
</tr>
<tr>
<td>Overall</td>
<td></td>
</tr>
</tbody>
</table>

Variables entered into the Logistic Regression equation are presented in Table 23. The
Logistic Regression analysis found that none of the variables in the equation were
statistically significant.

Table 23

Variables In The Logistic Regression Equation

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>R</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of Academic Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Important</td>
<td>3.1818</td>
<td>1.2321</td>
<td>1.3178</td>
<td>1</td>
<td>.2510</td>
<td>.0000</td>
<td>.2431</td>
</tr>
<tr>
<td>Important</td>
<td>-1.4144</td>
<td>1.3724</td>
<td>.0588</td>
<td>1</td>
<td>.8084</td>
<td>.0000</td>
<td>.7169</td>
</tr>
<tr>
<td>Somewhat Important</td>
<td>-3.328</td>
<td>20.7617</td>
<td>.1102</td>
<td>1</td>
<td>.7399</td>
<td>.0000</td>
<td>.0010</td>
</tr>
<tr>
<td>Not At All Important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Satisfied</td>
<td>3.0578</td>
<td>3</td>
<td>.3828</td>
<td>3</td>
<td>.9551</td>
<td>.0000</td>
<td>1.0813</td>
</tr>
<tr>
<td>Somewhat Satisfied</td>
<td>.0782</td>
<td>1.3884</td>
<td>.0032</td>
<td>1</td>
<td>.9551</td>
<td>.0000</td>
<td>1.0813</td>
</tr>
<tr>
<td>Independent Variables</td>
<td>B</td>
<td>S.E.</td>
<td>Wald</td>
<td>df</td>
<td>Sig</td>
<td>R</td>
<td>Exp(B)</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>------</td>
<td>-------</td>
<td>------</td>
<td>----</td>
<td>-------</td>
<td>-----</td>
<td>--------</td>
</tr>
<tr>
<td>Somewhat Dissatisfied</td>
<td>-.3387</td>
<td>1.3954</td>
<td>.0589</td>
<td>1</td>
<td>.8082</td>
<td>.0000</td>
<td>.7127</td>
</tr>
<tr>
<td>Very Dissatisfied</td>
<td>.6981</td>
<td>1.3944</td>
<td>.2506</td>
<td>1</td>
<td>.6166</td>
<td>.0000</td>
<td>2.0099</td>
</tr>
<tr>
<td>Satisfaction with School Life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Satisfied</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.9450</td>
<td>.0000</td>
<td></td>
</tr>
<tr>
<td>Somewhat Satisfied</td>
<td>.3939</td>
<td>1.3521</td>
<td>.0849</td>
<td>1</td>
<td>.7708</td>
<td>.0000</td>
<td>1.4827</td>
</tr>
<tr>
<td>Somewhat Dissatisfied</td>
<td>.1000</td>
<td>1.3151</td>
<td>.0058</td>
<td>1</td>
<td>.9394</td>
<td>.0000</td>
<td>1.1052</td>
</tr>
<tr>
<td>Very Dissatisfied</td>
<td>.2553</td>
<td>1.3410</td>
<td>.0362</td>
<td>1</td>
<td>.8490</td>
<td>.0000</td>
<td>1.2908</td>
</tr>
<tr>
<td>Live in Smoke-free Housing</td>
<td>-.9037</td>
<td>.5030</td>
<td>3.2282</td>
<td>1</td>
<td>.0724</td>
<td>-.0830</td>
<td>.4050</td>
</tr>
<tr>
<td>Free Cigarettes At Bar/Club</td>
<td>-.9937</td>
<td>.6874</td>
<td>2.0900</td>
<td>1</td>
<td>.1483</td>
<td>-.0225</td>
<td>.3702</td>
</tr>
<tr>
<td>Free Cigarettes At Event/Party</td>
<td>-1.3208</td>
<td>1.0695</td>
<td>1.5252</td>
<td>1</td>
<td>.2168</td>
<td>.0000</td>
<td>.2669</td>
</tr>
<tr>
<td>Constant</td>
<td>4.8734</td>
<td>3.0957</td>
<td>2.4784</td>
<td>1</td>
<td>.1154</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER FIVE

DISCUSSION

The purpose of this study was to examine factors that may either protect young adult African-Americans in college from initiating cigarette smoking, or that may place them at risk of smoking cigarettes, using the theoretical framework of the Social Cognitive Theory. African-American college participants in this study were undergraduate male and female African-American young adults enrolled at Dillard University of New Orleans during the 2002-2003 school year. Participating students, selected from a mandatory freshman class by convenience sampling, who consented to participating in the study, were given a copy of the Harvard College Alcohol Study (Harvard College Alcohol Study) survey to complete. Forty-six percent of the class enrollees (n=269) completed the Harvard College Alcohol Study survey. Of these, 91% percent (n=245) were African American between 18 and 19 years of age. Females accounted for the majority of participants who completed the survey (86.1%).

Protective factors examined in this study included school supervision, attitude toward academics, and school connectedness. It was hypothesized that living in smoke-free housing on campus, finding academic work important, and being satisfied with the education received and life at school would yield low smoking rates. The reciprocal determinism construct of the Social Cognitive Theory was expected to theoretically support these findings. On the contrary, Chi-Square tests found no significant difference
between respondents, and Logistic Regression Analysis found no statistically significant results for the independent variables. In addition, more ever-smokers reported living in smoke-free housing on campus, indicating their academic work was important, and being satisfied with their education and life at school. It was expected to find a lower number of total ever-smokers. However, this study found more ever-smokers responding in opposition to the hypotheses for Research Question 1, which was not expected. The reciprocal determinism construct of the Social Cognitive Theory does not support these findings.

Risk factors examined in this study included pro-tobacco promotions. It was hypothesized that encountering free cigarettes at a bar or club, or at an event or party, would yield high smoking rates. The reinforcement construct of the Social Cognitive Theory was expected to theoretically support these findings. On the contrary, Chi-Square tests found no significant difference between respondents, and Logistic Regression Analysis found no statistically significant results for the independent variables. In addition, fewer ever-smokers reported encountering free cigarettes at a bar or club, or at an event or party. It was expected to find a low number of total ever smokers. However, this study found more ever-smokers responding in opposition to the hypotheses for Research Question 2, which was not expected. The reinforcement construct of the Social Cognitive Theory does not support these findings.

Future researchers should address the limitations of this study to produce better results. A threat to external validity is associated with the sample used in this study. Because the participants were undergraduate African-American young adults enrolled at Dillard University of New Orleans, Louisiana, the sample may not be representative of
African-American college students in general. Therefore, caution should be exercised when generalizing the results from this study to other states and schools. Misinterpretation of questions may have also limited this study. Future studies must address the validity and reliability concerns of the Harvard College Alcohol Study survey measures for cigarette smoking among African-American young adults in college. Although Rigotti et. al. (2000) report surveying a national random sample, they do not indicated the appropriateness of the measures or the degree of error that may exist with this population. An illustration of this can be seen when looking at cigarette smoking prevalence rates found in this study. After survey results revealed a 13% ever-smoker prevalence rate from responses to the question “How often, if ever, have you used any of the drugs listed below: cigarettes,” it was not expected that responses to the question “How old were you when you first: smoked a cigarette” would result in a 27% ever-smoker prevalence rate. To address this limitation to using a self-reporting survey, future researchers may want to apply techniques for validation of cigarette smoking such as tests to detect cotinine (a metabolite created when the body processes nicotine). Lastly, a limitation to this study was the convenience sampling technique. Future researchers should apply a random sampling technique and increase the number of respondents to maximize their study’s potential. Future researchers may want to also follow students from their freshman year to examine any changes in their cigarette smoking rates, or use a sample of students at different academic levels.

In conclusion, this study was a descriptive, exploratory study of young adult African-American college students’ influence by factors that may either protect them from initiating cigarette smoking, or that may place them at risk of smoking cigarettes,
using the theoretical framework of the Social Cognitive Theory. No relationship was found between students’ cigarette smoking prevalence and importance of academic work, living in smoke-free housing on campus, level of satisfaction with education, level of satisfaction with life at school, availability of free samples of cigarettes at a bar or club, and availability of free samples of cigarettes at an event or party. This finding may be the result of the continued influence of youthful protective factors on students in their freshman year, as they are still making the transition from youth to young adulthood and are not as exposed to the risk factors associated with smoking as originally hypothesized. The reciprocal determinism and reinforcement constructs of the Social Cognitive theory used to examine the hypotheses are not supported by the findings. The knowledge gained from this research can help future researchers build upon the body of knowledge surrounding protective and risk factors for cigarette smoking among young adult African-American college students.

Although the hypotheses in this study were not supported or rejected, this study has made an important contribution to research examining why African-Americans begin cigarette smoking later in life than Caucasian-Americans, catch up to Caucasian-Americans as adults in cigarette smoking rates, and surpass Caucasian-Americans in death rates from tobacco-related diseases. Finding similar cigarette smoking prevalence rates as those of other local studies cited using similar methodologies not only confirms their findings, but also highlights the necessity to apply a random sampling technique to a larger number of respondents to maximize a study’s potential. Additionally, this study’s literature review harnessed a growing body of literature examining protective factors for mediating cigarette smoking for future researchers. The literature review also revealed
more research is needed studying risk factors for young adult and adult African-American cigarette smoking.
REFERENCES


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Substance Abuse And Mental Health Services Administration (2002). The National Cross-Site Evaluation Of High Risk Youth Programs. Rockville, MD: Center For Substance Abuse Prevention, Department Of Health And Human Services Publication No. Sma 003375.


APPENDIX A

Formal Protocol
FORMAL PROTOCOL

1. TITLE OF RESEARCH STUDY: Prevalence Of Tobacco Use Among African-American College Students

2. INVESTIGATORS: Michael D. Celestin, Jr., Masters Candidate, Department of Human Performance & Health Promotion, University of New Orleans, New Orleans, LA 70148, 504-280-7061. Dr. Peter Anderson, Professor and Thesis Committee Chairperson (can be reached at the same above information).

3. INTRODUCTION: This study examined factors that may protect African-American young adults in college from early onset of cigarette smoking, along with factors that may place African-American young adults at risk for cigarette smoking. African-American youth begin cigarette smoking later in life than Caucasian-Americans, catch up to Caucasian-Americans as adults in cigarette smoking rates, and surpass Caucasian-Americans in death rates from tobacco-related diseases. Researchers agree that this disparity in health consequences between African-Americans and Caucasian-Americans from tobacco use warrants an examination of patterns among African-American college students.

4. PARTICIPANTS: Participants will be 18 to 24 year old, male and female, African-American college students.

5. JUSTIFICATION FOR USING THIS PARTICULAR POPULATION: African-American youth begin cigarette smoking later in life than Caucasian-Americans, catch up to Caucasian-Americans as adults in cigarette smoking rates, and surpass Caucasian-Americans in death rates from tobacco-related diseases. Researchers agree that this disparity in tobacco use and health consequences between African-Americans and Caucasian-Americans from tobacco use warrants an examination of patterns among African-American college students.

6. SUBJECT RECRUITMENT PROCEDURES: Participants will be selected based on a convenient (non-random) sampling of students who are in Dillard University’s Jubilee Scholars Program class. Please find attached a letter of permission from the Jubilee Scholars Program Director.

7. GENERAL EXPERIMENTAL PROCEDURES: Participants will complete the Harvard College Alcohol survey that addresses a number of health risks, including tobacco use. Please find attached a copy of the survey. The amount of time it takes to complete the survey varies upon each participant. Participants will benefit from five extra credit points in their Jubilee Scholars Program class. Additionally, researchers will benefit from new thinking and new knowledge about African-American college students’ tobacco use prevalence.
8. HUMAN SUBJECT CONSENT FORM: Each participant in the study will complete a human subjects consent form. The consent form identified the title, purpose and research procedures for the study; the principal investigator’s contact information for answers to questions; the potential risks and benefits to the participant and, possibly, to society; the process for protecting the participant’s confidentially; and any alternate procedures. Please see an attached copy of the human subjects consent form.

9. PROTECTION OF CONFIDENTIALITY: Survey results may be released to Dillard University in summary form only. The results of this study may be published. Names will not be connected with any study data; student ID numbers will be used to track participants. Privacy will be protected.

10. DEBRIEFING PROCEDURES: Participants will be informed about the nature of this study at the beginning of their Jubilee Scholars Program class. The principal investigator will be there to answer any questions at the completion of the study when appropriate. Any inquiries concerning the results of this study can be requested and replied to by the principal investigator whose contact information is located on the consent form.

11. POTENTIAL RISKS OR DISCOMFORTS: There are no known risks to participation in this study either physically, psychologically, socially, or economically. Participants may refuse to, or withdraw from, participation in the survey at any time without jeopardizing, in any way, their academic standing or relationship with school staff in the present or future. In the event of a research-related injury or emergency emerges, please contact the principal investigator of the study.
APPENDIX B

Human Subject Consent Form
HUMAN SUBJECT CONSENT FORM

1. TITLE OF RESEARCH STUDY: Prevalence Of Tobacco Use Among African-American College Students.

2. PRINCIPAL INVESTIGATOR: Michael D. Celestin, Jr., Masters Candidate, Department of Human Performance & Health Promotion, University of New Orleans, New Orleans, LA 70148, 504-280-7061.

3. PURPOSE OF THE RESEARCH: This study examines factors that may protect African-American young adults in college from early onset of cigarette smoking, along with factors that may place African American young adults at risk for cigarette smoking.

4. PROCEDURES FOR THIS RESEARCH: Participants will complete the Harvard College Alcohol survey that addresses a number of health risks, including tobacco use. The amount of time it takes to complete the survey varies upon each participant.

5. POTENTIAL RISKS OF DISCOMFORTS: There are no known risks to participation in this study either physically, psychologically, socially, or economically. Participants may refuse to, or withdraw from, participation in the survey at any time without jeopardizing, in any way, their academic standing or relationship with school staff in the present or future. In the event of a research-related injury or emergency, please contact the principal investigator of the study.

6. POTENTIAL BENEFITS TO YOU OR TO OTHERS: Participants will benefit from five extra credit points in their Jubilee Scholars Program class. Additionally, researchers will benefit from new thinking and new knowledge about African-American college students’ tobacco use prevalence.

7. ALTERNATE PROCEDURES: There are no alternative procedures to this research study. Your participation is entirely voluntary and you may withdraw consent and terminate participation at any time without consequence.

8. PROTECTION OF CONFIDENTIALITY: Survey results may be released to Dillard University in summary form only. The results of this study may be published. Names will not be connected with any study data; student ID numbers will be used to track participants. Your privacy will be protected.

9. SIGNATURES:

I HAVE BEEN FULLY INFORMED OF THE ABOVE-DESCRIBED PROCEDURE WITH ITS POSSIBLE BENEFITS AND RISKS, AND I HAVE GIVEN PERMISSION OF PARTICIPATION IN THIS STUDY.

<table>
<thead>
<tr>
<th>SIGNATURE OF SUBJECT</th>
<th>NAME OF SUBJECT (PRINT)</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGNATURE OF PERSON OBTAINING CONSENT</td>
<td>NAME OF PERSON OBTAINING CONSENT (PRINT)</td>
<td>DATE</td>
</tr>
</tbody>
</table>
APPENDIX C

Harvard College Alcohol Study Survey
College Alcohol Study

Harvard School of Public Health

- Please complete the questionnaire as soon as possible, and return it in the postage-paid return envelope provided.
- Return the enclosed postcard separately. This lets us take your name off the follow-up list.
- Indicate your answers by filling in the circles.

YOU MUST USE A NO. 2 PENCIL INCORRECT MARKS ☒ ☐ ☐ CORRECT MARK ●

- Your answers are anonymous. Do not write your name on the questionnaire.
- Your participation is, of course, voluntary. You do not need to answer any question which makes you feel uncomfortable.

Thank you for your help. We do hope you will take part and let your views be represented.

Please return this questionnaire in the postage-paid envelope as soon as possible or mail it to:

Harvard School of Public Health
c/o Center for Survey Research
University of Massachusetts-Boston
100 Morrissey Blvd.
Boston, MA 02125-3393

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SECTION A: STUDENT LIFE

A1. How old are you?
- 17 or younger
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25 or older

A2. Are you male or female?
- Male
- Female

A3. What is your current year in school?
- Freshman (first year)
- Sophomore (2nd year)
- Junior (3rd year)
- Senior (4th year)
- 5th year or beyond (undergraduate)
- Graduate student

A4. Did you transfer to this school from another college?
- No, did not transfer → Go to A5
- Yes, during this current school year → Go to A4a
- Yes, before this school year → Go to A4a

A4a. Was the school you transferred from . . .
- In the same state?
- In a different state?
  - If in a different state, what state did you transfer from?
- Outside of U.S.A.?

A5. Are you a member of a fraternity or sorority?
- Yes
- No

A6. Where do you live during the current school year while you are at college? (Choose one answer.)
- Single-sex residence hall or dormitory → Go to A7
- Co-ed residence hall or dormitory → Go to A7
- Other university housing → Go to A7
- Fraternity/sorority house → Go to A7
- Off-campus house or apartment → Go to A6a
- Other: __________________ → Go to A6a

A6a. If off-campus, how far from school?
- Less than 1 mile
- 1-2 miles
- 2+ to 5 miles
- More than 5 miles

A7. With whom do you currently live? (Choose all that apply.)
- Alone
- Roommate(s) or housemate(s)
- Spouse or partner
- Parent(s) or other relative(s)

A8. How important is it for you to participate in the following activities at college? (Choose one answer in each row.)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Very Important</th>
<th>Important</th>
<th>Somewhat Important</th>
<th>Not At All Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Athletics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Arts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Academic work</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>d. Fraternity or sorority life</td>
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<tr>
<td>e. Political activism</td>
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<tr>
<td>f. Parties</td>
<td></td>
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<tr>
<td>g. Community service</td>
<td></td>
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<tr>
<td>h. Religion</td>
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<tr>
<td>i. Attend sports events</td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>
### SECTION B: YOUR VIEWS ABOUT POLICIES AND PROGRAMS

**B1. Do you think alcohol use is a problem for students on your campus?**
- A major problem
- A minor problem
- A problem
- Not a problem

**B2. What is your school's policy about alcohol use on campus by students, staff, and faculty?**
(Choose one answer.)
- Alcohol prohibited for everyone, regardless of age
- Alcohol prohibited for all students, regardless of age
- Alcohol prohibited for everyone under 21
- Alcohol allowed for those over 21 but only in designated locations or at special events
- No school policy
- Don't know school's policy

**B3. In your opinion, how strongly does your school enforce its alcohol policy?**
- The alcohol policy is strongly enforced
- The alcohol policy is enforced
- The alcohol policy is weakly enforced
- The alcohol policy is not enforced at all
- Don't know school's policy / No school policy

**B4. Do you agree with the way your college is dealing with student alcohol use?**
- Agree strongly
- Disagree strongly
- Agree
- Disagree

**B5. Which of the following do you think should be your school's policy about student drinking?**
(Choose one answer.)
- The current alcohol policy
- A policy which imposes greater restrictions on alcohol use
- A policy which imposes fewer restrictions on alcohol use
- Don't know school's policy

**B6. Since the beginning of the school year, has your school provided the following types of information to you?**
(Choose one answer in each row.)

<table>
<thead>
<tr>
<th>Information</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Where you can get help for alcohol-related problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. How to recognize when someone has a drinking problem</td>
<td></td>
<td></td>
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<tr>
<td>c. The long term health effects of heavy drinking</td>
<td></td>
<td></td>
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<tr>
<td>d. The dangers of alcohol overdose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. College rules for drinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Penalties for breaking rules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Students' drinking rate at your school</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**B7. Since the beginning of the school year, have you attended or seen the following alcohol education materials or programs?**
(Choose one answer in each row.)

<table>
<thead>
<tr>
<th>Materials</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Attended lectures, meetings or workshops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Received mailings or handouts</td>
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<td></td>
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<tr>
<td>c. Seen posters or signs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Read announcements or articles in student newspapers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Taken a special college course on alcohol and other student life issues</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B8. Some universities have housing that is specially designated as "alcohol-free." Do you live in this type of housing during the current school year?
- Yes → Go to B9
- No → Go to B11

B9. If you live in "alcohol-free" housing, how were you assigned to "alcohol-free" housing? (choose one answer)
- I live in "alcohol-free" housing because I specifically requested it
- I was assigned to an "alcohol-free" housing because I am a freshman (or under 21 years old)
- I live in "alcohol-free" housing because all of the housing at my school is "alcohol-free"
- Other: ____________________________

B10. If you live in "alcohol-free" housing, how is the alcohol policy enforced in your housing? (choose one answer)
- Enforced strictly, very few students drink alcohol while in my residence hall
- Somewhat enforced, some students drink alcohol while in my residence hall
- Not enforced, many students drink alcohol while in my residence hall

B11. If you do not live in "alcohol-free" housing, would you like to do so?
- Yes
- No

B12. Some universities have housing that is specially designated as "smoke-free." Do you live in this type of housing during the current school year?
- Yes → Go to B13
- No → Go to B14

B13. If you live in "smoke-free" housing, how were you assigned to "smoke-free" housing? (choose one answer)
- I live in "smoke-free" housing because I specifically requested it
- I was assigned to "smoke-free" housing because all of the housing at my school is "smoke-free"
- Other: ____________________________

B14. If you do not live in "smoke-free" housing, would you like to do so?
- Yes
- No

B15. How likely is it that a student under 21 years of age who drinks alcohol on or near your campus in any of the following situations will be caught? (Choose one answer in each row.)

<table>
<thead>
<tr>
<th>Situation</th>
<th>Very Likely</th>
<th>Somewhat Likely</th>
<th>Somewhat Unlikely</th>
<th>Very Unlikely</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. In a dorm room</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. At a dorm party or social event</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. At a fraternity or sorority party</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. At an intercollegiate home athletic event</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>e. At an intercollegiate away athletic event</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. At an off-campus party</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>g. At an off-campus bar or club</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

B16. If a student is caught on your campus using a fake ID to get alcohol, what is likely to happen to the student? (Choose all that apply.)
- Nothing will happen
- Will be refused alcohol
- ID will be confiscated
- Will receive official warning
- Will be fined
- Will be sent to an alcohol education program
- Will be required to do community service
- Will be put on probation
- Parents will be notified
- Don't know
B17. If a student under 21 years of age attempted to purchase alcohol in the city or town where your college is located, how likely is it that he or she . . . (Choose one answer in each row.)

<table>
<thead>
<tr>
<th></th>
<th>Very Likely</th>
<th>Somewhat Likely</th>
<th>Somewhat Unlikely</th>
<th>Very Unlikely</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Would be asked for an ID for proof of age?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. Would be refused sale of alcohol?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

B18. If a student is caught using a fake ID to purchase alcohol off campus in the city or town where your college is located, how likely to happen are each of the following consequences? (Choose one answer in each row.)

<table>
<thead>
<tr>
<th></th>
<th>Very Likely</th>
<th>Somewhat Likely</th>
<th>Somewhat Unlikely</th>
<th>Very Unlikely</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The ID is rejected and the sale refused</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. The ID is confiscated</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c. Local police are notified</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d. School is notified</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e. Parents are notified</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

B19. What should be the legal minimum drinking age? (Choose one answer.)

- Under 18
- 18
- 19
- 20
- 21 or over

B20. Are there places at or near your school where you or your friends usually can get alcohol without showing an ID? (Choose one answer in each row.)

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>Yes</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. At a local off-campus bar or club</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. At an on-campus pub</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c. At a local liquor or grocery store</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d. At a fraternity or-sorority house</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

B21. To what extent do you support or oppose the following possible school policies or procedures? (Choose one answer in each row.)

<table>
<thead>
<tr>
<th></th>
<th>Strongly Support</th>
<th>Support</th>
<th>Oppose</th>
<th>Strongly Oppose</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Prohibit kegs on campus</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. Offer alcohol-free dorms</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c. Ban advertisements of alcohol availability at campus events and parties</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d. Provide more alcohol-free recreational and cultural opportunities such as movies, dances, sports, and lectures</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e. Make the alcohol rules more clear</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f. Enforce the alcohol rules more strictly</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>g. Crack down on drinking at sororities and fraternities</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>h. Hold hosts responsible for problems arising from alcohol use</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>i. Crack down on under-age drinking</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
B22. What is your school's policy about SMOKING in dormitories and residence halls?

- Tobacco smoking is not allowed in student rooms
- Tobacco smoking is allowed in student rooms only if roommates agree
- Tobacco smoking is allowed in some or all dorms
- No policy
- Don't know school's policy

B23. To what extent do you support or oppose the following possible school policies or procedures about smoking? (Choose one answer in each row.)

<table>
<thead>
<tr>
<th>a. Prohibit smoking in every building on campus</th>
<th>Strongly Support</th>
<th>Support</th>
<th>Oppose</th>
<th>Strongly Oppose</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Prohibit smoking in all parts of residence halls including student sleeping quarters</td>
<td>○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Prohibit smoking in on-campus bars or pubs</td>
<td>○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Prohibit smoking in on-campus restaurants or dining areas</td>
<td>○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Prohibit advertisements for tobacco products on-campus and in student newspapers</td>
<td>○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Prohibits the sale of tobacco products on campus</td>
<td>○ ○ ○ ○</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Enforce the tobacco policies more strictly</td>
<td>○ ○ ○ ○</td>
<td></td>
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</tr>
<tr>
<td>h. Prohibit sponsorships of school parties or events by tobacco companies</td>
<td>○ ○ ○ ○</td>
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</tr>
</tbody>
</table>

SECTION C: PERSONAL ALCOHOL USE

The following questions ask about how much you drink. A "drink" means any of the following:
- A 12-ounce can or bottle of beer
- A 4-ounce glass of wine
- A 12-ounce bottle or can of wine cooler
- A shot of liquor straight or in a mixed drink

C1. Think back over the last two weeks. How many times have you had five or more drinks in a row?

- None
- Once
- Twice
- 3 to 5 times
- 6 to 9 times
- 10 or more times

C2. During the last two weeks, how many times have you had four drinks in a row (but no more than that)?

- None
- Once
- Twice
- 3 to 5 times
- 6 to 9 times
- 10 or more times

C3. What type of alcohol did you usually have on those occasions when you have four or more drinks in a row?

- Beer
- "Low Alcohol" beer
- Wine coolers
- Wine
- Liquor (or mixed drinks)
- No "usual" drink

C4. The last time that you had four or more drinks in a row, how many drinks did you actually have?

- 4 drinks
- 5 drinks
- 6 drinks
- 7 drinks
- 8 drinks
- 9 drinks
- 10–14 drinks
- 15 or more drinks

C5. How long did it take you to consume the number of drinks you indicated in question C4?

- 1 hour or less
- 2 hours
- 3 hours
- 4 hours
- 5 hours
- 6 hours or more

C6. How much did you pay for one drink the last time you had four or more drinks in a row?

- Nothing, it is typically free
- Under $0.50
- $0.51–1.00
- $1.01–2.00
- $2.01–3.00
- $3.01 or more
- I pay a set fee for all you can drink; that fee is usually (Please fill in amount.)
C7. How would you best describe yourself in terms of your current use of alcohol? (Choose one answer.)
- Abstainer
- Abstainer—former problem drinker in recovery
- Infrequent drinker
- Light drinker
- Moderate drinker
- Heavy drinker
- Problem drinker

C8. How easy is it for you to obtain alcohol?
(Choose one answer.)
- Very difficult
- Difficult
- Easy
- Very easy
- Don’t know, I don’t drink

C9. How many drinks does it take you to feel drunk?
- 1 drink
- 2 drinks
- 3 drinks
- 4 drinks
- 5 drinks
- 6 drinks
- 7 drinks
- 8 drinks
- 10 or more drinks
- I don’t know

C10. When did you last have a drink (that is more than just a few sips)?
- I have never had a drink ⇒ Skip to C22 (page 10)
- Not in the past year ⇒ Skip to C22 (page 10)
- More than 30 days ago, but in the past year ⇒ Skip to C17
- More than a week ago, but in the past 30 days ⇒ Go to C11
- Within the last week ⇒ Go to C11

Answer questions C11 through C15 only if you have had a drink in the past 30 days.

C11. On how many occasions have you had a drink of alcohol in the past 30 days? (Choose one answer.)
- 1 to 2 occasions
- 3 to 5 occasions
- 6 to 9 occasions
- 10 to 19 occasions
- 20 to 39 occasions
- 40 or more occasions

C12. In the past 30 days, on those occasions when you drank alcohol, how many drinks did you usually have? (Choose one answer.)
- 1 drink
- 2 drinks
- 3 drinks
- 4 drinks
- 5 drinks
- 6 drinks
- 7 drinks
- 8 drinks
- 9 or more drinks

C13. In the past 30 days, how often did you drink enough to get drunk? (By drunk, we mean unsteady, dizzy, or sick to your stomach.) (Choose one answer.)
- Not at all
- 1 to 2 occasions
- 3 to 5 occasions
- 6 to 9 occasions
- 10 to 19 occasions
- 20 to 39 occasions
- 40 or more occasions

C14. In the past 30 days, how many drinks did you have the last time you attended any of the following events? (Choose one answer in each row.)

<table>
<thead>
<tr>
<th>Attended and had:</th>
<th>Didn't Attend</th>
<th>No Drinks</th>
<th>1 or 2 Drinks</th>
<th>3 Drinks</th>
<th>4 Drinks</th>
<th>5 or More Drinks</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Residence hall social event or party</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>b. Fraternity or sorority event or party</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>c. On-campus dance or concert</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>d. Intercollegiate home athletic event</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>e. Intercollegiate away athletic event</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>f. On-campus pub</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>g. Off-campus party</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>h. Off-campus bar or club</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
</tbody>
</table>
C15. In the past 30 days, have you taken advantage of the following: (choose one answer in each row)
   a. Happy hours
   b. Low priced promotions at off-campus bars (ladies nights, drink 'til-you-bust, etc.)
   c. Special promotions by beer companies
   d. Cover charge for unlimited drinks at an off-campus bar
   e. Small admission fee for unlimited drinks at a private party
   f. Small admission fee for unlimited drinks at a fraternity or sorority party
   g. Free unlimited drinks at a fraternity or sorority party
   h. Free unlimited drinks at a private party

Answer this question only if you are younger than 21 years of age. If you are older, go on to question C17.

C16. In the past 30 days, have you obtained alcohol in any of the following ways? (Choose one answer in each row.)
   a. Got it myself without being carded
   b. Got it from someone who was under 21
   c. Used my own fake ID
   d. Got it from a student who was 21 or older
   e. Got it from a stranger who was 21 or older
   f. Got it from parents or relatives

Answer questions C17 through C21 if you have had a drink either within the past year or within the past 30 days.

C17. Since the beginning of the school year, how often has your drinking caused you to . . . ? (Choose one answer in each row.)
   a. Have a hangover
   b. Miss a class
   c. Get behind in school work
   d. Do something you later regretted
   e. Forget where you were or what you did
   f. Argue with friends
   g. Engage in unplanned sexual activity
   h. Not use protection when you had sex

Not At All  Once  Twice  3 Times  4 or More Times
C17. Since the beginning of the school year, how often has your drinking caused you to...? (Choose one answer in each row.)

<table>
<thead>
<tr>
<th></th>
<th>Not At All</th>
<th>Once</th>
<th>Twice</th>
<th>3 Times</th>
<th>4 or More Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Damage property</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>j. Get into trouble with the campus or local police</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>k. Get hurt or injured</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>l. Require medical treatment for an alcohol overdose</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

C18. Since the beginning of the school year, how frequently has each of the following happened to you? (Choose one answer in each row.)

<table>
<thead>
<tr>
<th></th>
<th>Not At All</th>
<th>Once</th>
<th>2 or 3 Times</th>
<th>4 or More Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I was stopped or searched for alcohol when entering a dorm or residence hall</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>b. My own room was searched for alcohol</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>c. I was &quot;carded&quot; or asked for my ID at a campus event</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>d. I was &quot;carded&quot; or asked for my ID at a fraternity or sorority event</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>e. I was part of a group that was drinking and we were asked to be more quiet or less disruptive</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>f. I was at a campus party that was &quot;shut down&quot; because of alcohol</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

C19. Since the beginning of the school year, has your school taken any of the following actions as a consequence of your drinking? (Choose one answer in each row.)

<table>
<thead>
<tr>
<th></th>
<th>Not At All</th>
<th>Once</th>
<th>2 or 3 Times</th>
<th>4 or More Times</th>
<th>I Do Not Drink</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I was cited for a violation of college rules</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>b. I received a warning</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>c. I was fined</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>d. I was required to attend an alcohol education program</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>e. I had to perform community service</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>f. I was referred to an alcohol treatment program</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>g. I received other disciplinary action</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>h. My parents were notified</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

C20. How important are each of the following reasons for you to drink alcohol? (Choose one answer in each row.)

<table>
<thead>
<tr>
<th></th>
<th>Very Important</th>
<th>Important</th>
<th>Somewhat Important</th>
<th>Not At All</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. To get away from my problems and troubles</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>b. To relax or relieve tension</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>c. To get drunk</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>d. To have a good time with my friends</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Continue with question C20 on next page...
C20. How important are each of the following reasons for you to drink alcohol? (Choose one answer in each row.)

- There is nothing else to do
- To celebrate
- To help me get my work done
- I like the taste
- As a reward for working hard
- To fit in with my friends
- To feel more comfortable when I'm with the opposite sex
- Everyone else is drinking
- Because it's cheap

C21. How much do you typically pay for one alcoholic drink? (Choose one answer.)

- Do not drink
- Nothing, it is typically free
- Under $0.50
- $0.51–1.00
- $1.01–2.00
- $2.01–3.00
- $3.01 or more
- I pay a set fee for all you can drink; that fee is usually [insert amount]

The following question is for everyone.

C22. If you choose not to drink at all or to limit your drinking, how important is each of the following reasons for you? (Choose one answer in each row.)

- Drinking is against my religion
- Drinking is against my values
- People in my family have had alcohol problems
- I'm not old enough to drink legally
- I'm going to drive
- It costs too much money
- I don't like the taste
- My friends don't drink
- I don't want to disappoint someone I care about
- I'm going on a date
- It is bad for my health
- It interferes with my studying
- It interferes with my athletic activities

Continue with question C22 on next page
C22. If you choose not to drink at all or to limit your drinking, how important is each of the following reasons for you? (Choose one answer in each row.)

Very Important Important Somewhat Important Not At All Important

n. I've decided to cut down
   ○ ○ ○ ○
a. I don't want to lose control
   ○ ○ ○ ○
p. I recently drank too much
   ○ ○ ○ ○
q. I've had problems with alcohol
   ○ ○ ○ ○
r. It's fattening
   ○ ○ ○ ○
s. Fear of getting caught
   ○ ○ ○ ○

SECTION D: DRINKING OF OTHER STUDENTS

D1. Since the beginning of the school year, how often have you experienced any of the following because of other students' drinking? (Choose one answer in each row.)

Not At All Once 2-3 Times 4 or More Times

a. Been insulted or humiliated
   ○ ○ ○ ○
b. Had a serious argument or quarrel
   ○ ○ ○ ○
c. Been pushed, hit, or assaulted
   ○ ○ ○ ○
d. Had your property damaged
   ○ ○ ○ ○
e. Had to "baby-sit" or take care of another student who drank too much
   ○ ○ ○ ○
f. Found vomit in the halls or bathroom of your residence
   ○ ○ ○ ○
g. Had your studying or sleep interrupted
   ○ ○ ○ ○
h. Experienced an unwanted sexual advance
   ○ ○ ○ ○
i. Been a victim of sexual assault or "date rape"
   ○ ○ ○ ○

D2. Based on what you heard or experienced approximately what proportion of the following do you think are at your school? (Choose one answer in each row.)

<table>
<thead>
<tr>
<th>%</th>
<th>0%</th>
<th>1-9%</th>
<th>10-19%</th>
<th>20-29%</th>
<th>30-39%</th>
<th>40-49%</th>
<th>50-59%</th>
<th>60-69%</th>
<th>70-79%</th>
<th>80-89%</th>
<th>90-100%</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Abstainers (Students who do not drink at all)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>b.</td>
<td>Students who drink more than they should</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

D3. What is the maximum number of drinks in a row that is safe to consume on a single drinking occasion?

None 1 or 2 Drinks 3 Drinks 4 Drinks 5 Drinks 6 Drinks 7 Drinks 8 Drinks 9 Drinks 10 or More Drinks

For a male student
   ○ ○ ○ ○ ○ ○ ○ ○ ○ ○
For a female student
   ○ ○ ○ ○ ○ ○ ○ ○ ○ ○
D4. How would you compare your alcohol use to that of students at your school and your friends? (Choose one answer in each row.)

<table>
<thead>
<tr>
<th></th>
<th>Much Less Than Most</th>
<th>Less Than Most</th>
<th>A Little Less Than Most</th>
<th>About Average</th>
<th>A Little More Than Most</th>
<th>More Than Most</th>
<th>Much More Than Most</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students at your school</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Your friends</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

D5. In your opinion, to what extent do students at your school approve of the following behaviors? (Choose one answer in each row.)

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Strongly Approve</th>
<th>Approve</th>
<th>Disapprove</th>
<th>Strongly Disapprove</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Having 6 drinks at a party</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>b. Having 3 or 4 drinks on a date</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>c. Having one or two drinks before driving</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>d. Coming back to the dorm drunk</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>e. Reporting a student who is noisy and disruptive</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>f. Reporting a roommate who often drinks too much to the health center</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>g. Playing drinking games</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>h. Refusing to drink at a party</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

D6. Since the beginning of the school year, how often have you asked someone who has had too much alcohol to stop drinking? (Choose one answer.)

- ○ Not at all
- ○ Once
- ○ 2–3 times
- ○ 4 or more times

D7. Since the beginning of the school year, how often have you complained to a college official or Resident Advisor about the behavior of students who were high or intoxicated? (Choose one answer.)

- ○ Not at all
- ○ Once
- ○ 2–3 times
- ○ 4 or more times

D8. What action was taken about your complaint? (Choose all that apply.)

- ○ Did not complain
- ○ No action
- ○ Student(s) were warned
- ○ Student(s) were disciplined
- ○ Don't know

Answer question D9 only if you are 21 years of age or older.

D9. In the past 30 days, how many times . . .

(Choose one answer in each row.)

<table>
<thead>
<tr>
<th>Action</th>
<th>Not At All</th>
<th>Once</th>
<th>Twice</th>
<th>Three or More Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Has someone under 21 years of age asked you to purchase alcohol for them?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>b. Have you purchased alcohol for someone under 21 years of age?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
## SECTION E: OTHER PERSONAL BEHAVIORS

**E1. How often, if ever, have you used any of the drugs listed below?**

Do not include anything you used under a doctor's orders.

(Choose one answer in each row.)

<table>
<thead>
<tr>
<th></th>
<th>Never Used</th>
<th>Used, but NOT in Past 12 Months</th>
<th>Used, but NOT in Past 30 Days</th>
<th>Used in Past 30 Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Marijuana (or hashish)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Crack cocaine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Other forms of cocaine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Barbiturates (prescription-type sleeping pills like Seconal, Nembutal, downs or Yellow Jackets)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Ritalin, Dextedrine, or Adderall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Other amphetamines (methamphetamine, crystal meth, speed, uppers, ups)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Tranquilizers (prescription-type drugs like Valium, Librium, Xanax, Ativan, Klonopin)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Heroin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Other opiate-type prescription drugs (codeine, morphine, Demerol, Percodan, Percocet, Vicodin, Darvon, Darvocet)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. LSD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. Other psychedelics or hallucinogens like mushrooms, mescaline or PCP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Ecstasy (MDMA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>m. Other &quot;party drugs&quot;-(Ketamine, Special K, GHB)</td>
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<td>n. Anabolic steroids (either injections like Depo-testosterone or Durabol, or pills like Anadrol, Dianabol, or Winstrol)</td>
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<tr>
<td>o. Other performance-enhancing drugs (growth hormone, diuretics, fluid pills, ephedrine)</td>
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<td>p. Chewing tobacco, dip or snuff</td>
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<tr>
<td>q. Cigarettes</td>
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<tr>
<td>r. Cigars</td>
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<tr>
<td>s. Pipe tobacco</td>
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<tr>
<td>t. Birds (or beedies—small, hand rolled cigarettes)</td>
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</table>
E2. How old were you when you first... (Choose one answer in each row.)

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<tr>
<th></th>
<th>Never Did This</th>
<th>9 or Younger</th>
<th>10-12</th>
<th>13-15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19 or Older</th>
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</thead>
<tbody>
<tr>
<td>a. Smoked a cigarette</td>
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<td>b. Started smoking regularly</td>
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<td>c. Smoked a cigar</td>
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<td>d. Drank alcohol regularly</td>
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<td>e. Got drunk</td>
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<td>f. Used marijuana</td>
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<td>g. Started using marijuana regularly</td>
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<td>h. Placed a bet for money</td>
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<tr>
<td>i. Started to bet or gamble regularly</td>
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</table>

E3. On how many of the last 30 days did you smoke cigarettes?

- I never smoke → Skip to E11
- I did not smoke cigarettes at all in the past 30 days
- I smoked cigarettes on 1 to 4 of the last 30 days
- I smoked cigarettes on 5 to 9 of the last 30 days
- I smoked cigarettes on 10 to 19 of the last 30 days
- I smoked cigarettes on 20 or more of the last 30 days, but not everyday
- I smoked cigarettes every day in the last 30 days

Answer question E4–E10 only if you smoke.

E4. How many cigarettes a day do you smoke on average? (One pack equals 20 cigarettes.)

- None
- Less than one cigarette
- More than half a pack, but less than a pack
- Less than half a pack
- About half a pack
- A pack
- More than a pack

E5. Compared to the beginning of your freshman year in college, how has your smoking changed?

- I smoke more often now
- I smoke about the same now
- I smoke less often now

E6. Have you smoked at least 100 cigarettes in your lifetime?

- Yes
- No

E7. In the past 30 days, how soon after you wake up in the morning do you usually smoke your first cigarette?

- I did not smoke in the past 30 days
- Within 15 minutes
- 16-30 minutes
- 31-60 minutes
- More than 60 minutes

E8. In the past 30 days, do you smoke mainly when you are with people, mainly when you are alone, or do you smoke as often by yourself as with others?

- I did not smoke in the past 30 days
- Mainly alone
- Mainly with others
- As often alone as with others

E9. In the past 12 months, how many times have you tried to quit smoking and succeeded for at least 24 hours? (Choose one answer.)

- Never
- 3 times
- Once
- 4 times
- Twice
- 5 or more times

E10. What best describes your intentions regarding quitting smoking entirely?

- I never expect to quit entirely
- I may quit entirely in the future but not in the next 6 months
- I plan to quit entirely in the next 6 months
- I plan to quit entirely within the next 30 days
The following questions are for everyone.

E11. Since the beginning of the school year, have you ever been to a bar or club when free samples of cigarettes were available?
- Yes
- No

E12. Since the beginning of the school year, have you ever been to an event or party on campus when free samples of cigarettes were available?
- Yes
- No

E13. Since the beginning of the school year, how often have you been bothered by someone else’s smoking in your dormitory or residence?
- Never
- Rarely (once/month or less)
- Sometimes (more than once/month up to once/week)
- Often (more than once/week but not every day)
- Very often (everyday)

E14. On how many of the last 30 days did you smoke cigars?
- I did not smoke cigars at all in the past 30 days
- I smoked cigars on 1 to 4 of the last 30 days
- I smoked cigars on 5 to 9 of the last 30 days
- I smoked cigars on 10 to 19 of the last 30 days
- I smoked cigars on 20 or more of the last 30 days, but not everyday
- I smoked cigars every day in the past 30 days

E15. During the past school year, how often did you bet or spend money on each of the following gambling activities? (choose one answer in each row.)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>A Few Times a Year</th>
<th>Monthly, But Not Weekly</th>
<th>Weekly, But Not Daily</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Betting on professional sports</td>
<td></td>
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<tr>
<td>b. Betting on college sports</td>
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<td>c. Betting on horse or dog races</td>
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<td>d. Casino gambling</td>
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<tr>
<td>e. Betting on the lottery or the “numbers”</td>
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<tr>
<td>f. Internet betting or gambling</td>
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<td>g. Betting with a bookie</td>
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<tr>
<td>h. Cards, dice or other games of chance while at school</td>
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</tbody>
</table>

E16. During the past school year, has your betting or gambling caused personal problems for you?
- Yes
- No
- Did not gamble in the past school year

E17. If you have ever been sexually active, has it been with . . . ? (Choose one answer.)
- I have not been sexually active → Skip to E23
- Same sex partner(s)
- Opposite sex partner(s)
- Both opposite and same sex partners
E18. How many people have you had sexual intercourse with in the past 30 days? (Choose one answer.)

- 0
- 1
- 2
- 3 or more

E19. When you have sexual intercourse, how often do you or your partner use a condom?

- Never
- Sometimes
- Rarely
- Always

E20. Since the beginning of the school year, have you had sexual intercourse against your wishes because someone used force? (Choose one answer.)

- 0 times
- 1 time
- 2 times
- 3 or more times

E21. Apart from anything you just told us in question E20, since the beginning of the school year, have you had sexual intercourse against your wishes because someone threatened to harm you? (Choose one answer.)

- 0 times
- 1 time
- 2 times
- 3 or more times

E22. Apart from anything you just told us in question E20 and E21, since the beginning of the school year, have you ever had sexual intercourse when you were so intoxicated that you were unable to consent? (Choose one answer.)

- 0 times
- 1 time
- 2 times
- 3 or more times

E23. Have you ever thought you had a drinking problem?

- Yes
- No

E24. Since starting college, have you ever sought help because you thought that you had a problem with alcohol? (Choose one answer.)

- Yes
- No

E25. Since starting college, have you ever received counseling or treatment for an alcohol-related problem? (Choose one answer.)

- Yes
- No

E26. In the past 30 days, how often did you drive a car, truck, or motorcycle? (Choose one answer.)

- Not at all
- Only a few times
- Once or twice a week
- Most days
- Nearly every day

E27. In the past 30 days, how many times did you . . . (Choose one answer in each row.)

<table>
<thead>
<tr>
<th>a. Drive after drinking alcohol?</th>
<th>Not At All</th>
<th>Once</th>
<th>Twice or More</th>
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</thead>
<tbody>
<tr>
<td>b. Drive after having 5 or more drinks?</td>
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<td>c. Ride with a driver who was high or drunk?</td>
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<td>d. Serve as a designated driver?</td>
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<tr>
<td>e. Ride with a designated driver?</td>
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</table>

E28. Since you started school this year, were you . . . (Choose one answer in each row.)

| a. A driver in an automobile accident in which someone was injured? | | |
| b. A driver in an automobile accident in which no one was injured? | | |
| c. Arrested for driving under the influence? | | |

E29. Do you have a “working firearm” (defined as a gun—including pistol, revolver, rifle or shotgun) with you at college?

- Yes → Go to E29a
- No → Go to E30

E29a. If “Yes”, why do you have a working firearm with you at college? (Choose all that apply.)

- Protection
- Hunting
- Recreation
- Other: ____________________________
- Job required
- Sports shoots
- ROTC

E30. While you have been at college, has anyone used, displayed or brought out a working firearm against you in a hostile manner?

- Yes
- No

(please specify)
SECTION F: STUDENT ACTIVITIES

F1. In general, how satisfied are you with the education that you are receiving? (Choose one answer.)
   - Very satisfied
   - Somewhat satisfied
   - Somewhat dissatisfied
   - Very dissatisfied

F2. In general, how satisfied are you with your life at school? (Choose one answer.)
   - Very satisfied
   - Somewhat satisfied
   - Somewhat dissatisfied
   - Very dissatisfied

F3. How many close student friends do you have? (Choose one answer.)
   - None
   - One
   - Two
   - Three
   - Four
   - Five or more

F4. Do you know a member of the faculty or administration with whom you can discuss a personal problem? (Choose one answer.)
   - Yes
   - No

F5. Which of the following best describes your grade point average this year?
   - A
   - A-
   - B+
   - B
   - B-
   - C+
   - C
   - C-
   - D
   - No grade or don't know

F6. In the past 30 days, how many hours per day on average have you spent on each of the following activities? (Choose one answer in each row.)

<table>
<thead>
<tr>
<th>Activity</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 or More</th>
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</thead>
<tbody>
<tr>
<td>Watching TV or videos</td>
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<tr>
<td>Studying outside of class</td>
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<td>Working for wages</td>
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<td>Socializing with friends</td>
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<td>Student organizations</td>
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<tr>
<td>Playing or practicing intercollegiate sports</td>
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<td>Other physical activities (e.g., intramural athletics, jogging, biking)</td>
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<tr>
<td>Volunteer work</td>
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<td>Non academic computer use (e.g., computer game, surfing the web)</td>
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</table>
F7. Think back over the past 7 days. On how many days did you exercise or participate in physical activity for at least 20 minutes that made you sweat and breathe hard, such as basketball, soccer, running, swimming laps, bicycling, or similar aerobic activities?
- 0 days
- 1 day
- 2 days
- 3 days
- 4 days
- 5 days
- 6 days
- 7 days

F8. Now think about your last year in high school. During a typical week, on how many days did you exercise or participate in physical activity for at least 20 minutes that made you sweat and breathe hard, such as basketball, soccer, running, swimming laps, bicycling, or similar aerobic activities?
- 0 days
- 1 day
- 2 days
- 3 days
- 4 days
- 5 days
- 6 days
- 7 days

SECTION G: BACKGROUND INFORMATION

G1. What is your current marital status?
   (Choose one answer.)
   - Never married
   - Married
   - Divorced
   - Separated
   - Widowed

G2. Are you of Spanish or Hispanic origin?
   - Yes
   - No

G3. Which of these racial or ethnic groups describes you best? (Choose one answer.)
   - White
   - Black/African American
   - Asian/Pacific Islander
   - Native American Indian/Native Alaskan
   - Other

G4. In what religion were you raised?
   (Choose one answer.)
   - None
   - Islam
   - Catholicism
   - Protestantism
   - Judaism
   - Other: __________

G5. During an average week at college how much money do you get from . . . (Choose one answer in each row.)
   - A job or other work
   - Other sources (allowances, etc.)

   | $0  | $1–10 | $11–20 | $21–35 | $36–50 | $51–75 | $76–125 | $126+
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G6. In general, how would you rate your health now?
- Excellent
- Very good
- Good
- Fair
- Poor

G7. What is your current weight (in pounds) without clothes or shoes?
- 117 or less
- 118–128
- 129–135
- 136–146
- 147–160
- 161–170
- 171–190
- Greater than 190
G8. What is your current height (in feet and inches) without shoes?
- 5’3” or less
- 5’4”
- 5’5”
- 5’6”
- Greater than 6’0”

G9. During your last year in high school, how often did you drink alcohol (beer, wine, liquor) during a typical month? (Choose one answer.)
- Never
- 1–2 occasions
- 3–5 occasions
- 6–9 occasions
- 10–19 occasions
- 20–39 occasions
- 40 or more occasions

G10. During the last year in high school, how many drinks did you usually have when you drank alcohol? (A drink is a 12 oz. can or bottle of beer; a 4 oz. glass of wine; a 12 oz. bottle or can of wine cooler; or a shot of liquor straight or in a mixed drink.) (Choose one answer.)
- Did not drink alcohol
- 5 drinks
- 6 drinks
- 7 drinks
- 8 drinks
- 9 or more drinks

G11. During your last year in high school, on how many occasions did you have 5 or more drinks in a row?
- Never
- 1–2 occasions
- 3–5 occasions
- 6–9 occasions
- 10–19 occasions
- 20–39 occasions
- 40 or more occasions

G12. Where was the high school you attended during your senior year located? (Choose one answer.)
- Same state as current college
- Different state from current college (If different state, in which state did you attend your senior year in high school?)
- ALAB.
- ALASK.
- ARIZ.
- ARK.
- CALIF.
- COLO.
- CONN.
- DEL.
- D.C.
- FLOR.
- GEOR.
- HAWAI.
- IDAHO
- ILLIN.
- INDIANA
- IOWA
- KAN.
- KEN.
- LOUIS.
- MAINE
- MARY.
- MAS.
- MICH.
- MINN.
- MISS.
- MISSO.
- MONT.
- NEB.
- NEV.
- N.H.
- N.J.
- N. MEX.
- N. YORK
- N. CAR.
- N. DAK.
- OHIO
- OREG.
- PENN.
- R.I.
- SO. CA.
- S. DAK.
- TENN.
- TEXAS
- UTAH
- VERM.
- VIRG.
- WASH.
- W. VIRG.
- WISC.
- WYOM.

- Outside of U.S.A.

G13. Did you participate in high school athletics?
- No
- Yes, earned a varsity letter
- Yes, did not earn a varsity letter

G14. Describe your father's (or that person who served as your father in raising you) use of alcohol during most of the time that you were growing up. (Choose one answer.)
- Not applicable (No father or father substitute)
- Abstainer
- Abstainer—former problem drinker in recovery or recovered
- Infrequent or light drinker
- Moderate drinker
- Heavy drinker
- Problem drinker
- I don't know
G15. Describe your mother's (or that person who served as your mother in raising you) use of alcohol during most of the time that you were growing up. (Choose one answer.)
- Not applicable (no mother or mother substitute)
- Abstainer
- Abstainer—former problem drinker in recovery or recovered
- Infrequent or light drinker
- Moderate drinker
- Heavy drinker
- Problem drinker
- I don't know

G16. How did your family feel about drinking alcohol when you were growing up?
- My family did not approve of drinking
- They accepted light drinking but disapproved of heavy drinking
- They accepted heavy drinking
- There was disagreement about drinking in my family

G17. How far did your father (or that person who served as your father) go in school?
- Less than a high school diploma
- High school diploma
- Some college or technical schooling beyond high school
- Four year college degree or more
- Don't know
- Not applicable

G18. How far did your mother (or that person who served as your mother) go in school?
- Less than a high school diploma
- High school diploma
- Some college or technical schooling beyond high school
- Four year college degree or more
- Don't know
- Not applicable

G19. Have you ever completed a similar survey for the Harvard School of Public Health College Alcohol Study? (Choose all that apply.)
- Yes, in 1997
- Yes, in 1998
- Yes, in 1999
- Yes, in 2000
- No, I have never completed a similar survey

G20. Is there anything else you would like to tell us concerning alcohol use at your school? If so, please write it on a separate piece of paper and include it with your returned questionnaire.

THANK YOU FOR YOUR TIME AND COOPERATION IN HELPING TO MAKE THIS A SUCCESSFUL STUDY

FOR OFFICE USE ONLY

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<tr>
<th>DATE</th>
<th>Comments</th>
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VITA

Michael D. Celestin, Jr. was born in New Orleans, Louisiana in 1975. He is a graduate of Edna Karr Magnet High School of New Orleans. He graduated from the University of Louisiana at Lafayette in Lafayette, Louisiana, in 1997 with a Bachelor of Science Degree in Interpersonal and Organizational Communication.