

CURIOSITY, OPPORTUNITY, AND AGENCY:
UNDERSTANDING DIVERGENT PATTERNS OF ADOLESCENT TOBACCO USE

By

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Tobacco use among teenagers in the U.S. has risen considerably over the past decade, with 70% of students reporting to have experimented with smoking at least once. Furthermore, 80% of U.S. smokers begin using tobacco before age 18, suggesting that the greatest need for tobacco control and public health intervention is within the adolescent population. Likewise, there is increased need for research in the applied social sciences to inform, evaluate and improve upon smoking prevention programs. This paper presents findings from an ethnographic study of youth smoking in North Florida. Understanding that smoking experiences within a diverse youth population may differ, emphasis was placed on the potential for variation in tobacco use patterns among youths of different gender, age, ethnic or peer groups. Participant-observation of youths was conducted at 15 locations within a single city and complemented by qualitative, open-ended interviews of 33 adolescents, aged 11 to 17 years old. Both methods were used to explore three broad research themes: (1) perceptions of the risks and benefits of tobacco use, and the peer,

family or institutional sources of these perceptions; (2) the situational and social context of smoking initiation; and (3) the situational and social context of smoking maintenance. Developing themes for exploration were added following preliminary data collection, and included cigarette brand preference/recall and informant perceptions of the tobacco industry and Florida's "truth" campaign. Teenage smoking was found to be primarily social, with 90.6% of observed smokers using tobacco in interaction with other youths. Three patterns of cigarette procurement were observed, including "bumming," sharing, and acquiring cigarettes through distribution. In addition, youths at certain venues were observed smoking less mainstream cigarette brands or rolling their own cigarettes. These divergent patterns may be explained by socioeconomic status or the politically "radical" peer group affiliation of some youths, through which resistance against large tobacco corporations is commonly expressed. Among interviewed youths, thirteen (39.4%) reported having used tobacco at least once – a group found to be significantly older than those who had never smoked (mean age 14.7 and 12.8 years respectively, $p < 0.0003$). Interview narratives suggested the existence of divergent patterns of initiation, including smoking experiences defined as solitary or opportunistic, in which youths express a sense of curiosity or autonomy motivating their smoking behavior. Future interventions are recommended that recognize the significance of opportunistic smoking (in addition to more traditional "peer pressure" models) and offer strategies for adolescents to cope with curiosity and the desire to emulate smoking peers or family members.

CHAPTER 1 INTRODUCTION

The past decade has been marked by a rising trend in the prevalence of tobacco consumption among U.S. teenagers. According to the Centers for Disease Control and Prevention (CDC), frequent adolescent cigarette use increased significantly from 12.7% in 1991 to 16.8% in 1999 (CDC 2000). The same survey found that 70.4% of students had experimented with smoking at least once. With the aim of informing the development and evaluation of tobacco control programs, studies of youth smoking in the applied social sciences have sought to both describe tobacco use and explore its etiology. Qualitative investigations are well-suited for revealing patterns of smoking that may be unique to certain ethnic, socioeconomic or geographic groups. Similarly, open-ended interview methods can help elicit the emic rationale for youth smoking – particularly as it occurs in initiation narratives and discussions of tobacco preferences. The present research explores how patterns of adolescent smoking initiation and maintenance may vary by ethnicity, gender, age or peer group – emphasizing the roles of human cultural and biological diversity that emerge through anthropological query.

In terms of social context, a popular conception is that first-time use occurs in the presence of peers, who instigate group smoking behaviors through coercion or more subtle socialization processes. Alexander et al. found that while group experiences were the norm for most smoking initiation narratives, some informants reported having stolen cigarettes from family members, which they smoked in isolation from others (Alexander et al. 1999). Studies of maintenance tobacco use reveal a related pattern, particularly in

the context of brand preference. Most youths are reported to mirror adult tobacco preferences by smoking the more heavily marketed brands, with African-American teens generally preferring Newport and Kool, and white teens preferring Marlboro and Camel (Gittelsohn et al. 1999). However, Nichter et al. reported a small minority of adolescent female smokers who preferred to smoke "whatever they could find," describing a pattern of opportunistic tobacco acquisition similar to that found in solitary experimentation narratives (Nichter et al. 1997).

Using results from a team ethnographic study of teenage smoking in North Florida, this paper explores opportunistic patterns of tobacco use – as it occurs in both smoking initiation and maintenance – and presents the relevance of these and other divergent patterns for informing future intervention programs. Chapter 2 presents a historical and epidemiological background for the topic of teenage smoking. This literature review also presents examples of tobacco control programs in Florida and discusses research approaches used in the applied social sciences for informing and evaluating programs. Chapter 3 presents the study's methods, which were divided into two concurrent phases: (1) participant-observation of youth smoking in social settings, occurring over 24 sessions; and (2) ethnographic interviews of 33 teenagers (11-17 years) regarding their experiences with and perceptions of tobacco. Emphases on first-time use narratives and cigarette preferences were intended to elicit group or ethnic differences in tobacco use behaviors.

Chapter 4 presents findings from both field observations and interviews. Most youth smoking was observed in a social context, with tobacco use occurring primarily in groups of interacting youths. Patterns of cigarette procurement included "bumming",

sharing, or acquiring tobacco through distribution. While tobacco brand preferences generally reflected those of the adult population (e.g., Marlboro, Camel, Newport), certain divergent preferences were observed among groups of adolescents who frequented specific evening venues. From interviews, narratives of smoking initiation and maintenance revealed patterns of opportunistic and solitary smoking that are often overlooked in the literature. Relevant themes drawn from these narratives included overt influence from peers, emulation of peers or family members, curiosity, and "learning" to smoke. This section also presents the number and type of cigarette brands recalled by each informant, and youth perceptions of anti-tobacco media campaigns currently underway in Florida (e.g., the "truth" campaign).

Chapter 5 concludes the paper with a discussion of the findings and their policy implications. Recommendations are made for tailoring future interventions to address the diversity, rather than the uniformity of adolescent tobacco use behaviors. Existing school-based education programs may benefit from portraying opportunistic, solitary smoking situations, as well as providing teenagers with strategies for coping with the curiosity and emulation pressures that are associated with autonomous decision-making. Divergent brand preferences are explained as a function of socioeconomic status and politically "radical" peer group affiliation. Florida's televised "truth" marketing campaign, which maintains a critical stance against the tobacco industry, may function only to limit the scope of acceptable cigarette brands among this minority of youths. Suggestions are made for ensuring that social marketing programs stress the dangers of *all* cigarette brands, regardless of which company produces them.

CHAPTER 2 BACKGROUND

The first manufactured cigarettes in the United States became commercially available shortly following the Civil War (Kluger 1997). Originally confined to a few Northern cities, where use of chewing tobacco was less prevalent, cigarettes provided a quicker, cheaper method for consuming tobacco. Producers aggressively merchandised the cigarette using gimmicks that foreshadowed those of today's *Marlboro* and *Camel* brands. Frequent users of the popular 19th-century brand *Bull Durham* were rewarded with free gifts, while its more successful dealers earned premiums. By 1875, sales of manufactured cigarettes had climbed to 42 million units from 20 million a decade earlier. Five years later, sales of ready-made cigarettes had reached 500 million (Kluger 1997: 18).

During the first quarter of the 20th century, cigarette smoking among men became notably profuse. In an increasingly crowded, urban society, the habit was considered less objectionable and time-consuming than use of cigars or pipe tobacco. American soldiers of the First World War consumed cigarettes heavily, largely because other methods were unmanageable or unsanitary in the battle lines. Recognizing that cigarettes served as "an essential sustainer of morale," organizations such as the Red Cross, which had before the war opposed their use among young men, now supplied them liberally (Kluger 1997: 63). By 1922, cigarettes became the nation's highest grossing tobacco product. The epidemic rise in tobacco use continued, peaking among males in 1955, when 55% of American

men reported smoking cigarettes (CDC 1999). Ten years later, smoking rates among American women peaked at 35%.

Beginning in the mid-1930's, corresponding increases in lung cancer incidence and mortality were demonstrated. What had once been a rare form of cancer was quickly surpassing all others, rising in incidence at five times the rate of other forms of cancer between 1938 and 1948 (Kluger 1997). In 1930, the rate of lung cancer mortality among men was 4.9 per 100,000 (CDC 1999). By 1960, this rate had risen to approximately 40 per 100,000 and was continuing to climb (ACS 2002).

Following a 100-year history of cigarette smoking, the first report of the Surgeon General on its health consequences was published in 1964 (USPHS 1964). The report concluded that cigarette smoking was causally related to lung cancer in men, with data suggesting the same association in women. In addition, smoking was associated with chronic bronchitis, emphysema, and coronary artery disease. Tobacco use has since been implicated as a risk factor in heart disease, atherosclerotic peripheral vascular disease, cancers of the larynx, mouth, and esophagus, chronic obstructive pulmonary disease, intrauterine growth retardation and low birth weight (CDC 1999). More recently, studies of environmental tobacco smoke (or "passive smoking") have found increased rates of lung cancer, asthma, respiratory infections, and decreased pulmonary function in nonsmokers (CDC 1999).

Approximately 440,000 premature deaths in the United States are attributed to cigarette smoking annually (CDC 2002). Despite these findings and a 40-year history of tobacco education and prevention efforts among public health experts, nearly 25% of

American adults aged 18 years or older (Plies and Coles 2002), and 28% of high school students (CDC 2001) currently use cigarettes.

According to the Centers for Disease Control, approximately 80% of U.S. smokers begin using tobacco before age 18 years (2001). Based on these data, the greatest need for tobacco control is among middle- and high-school students. In 2000, an estimated 15% of middle-school students and 35% of high-school students were current users of any tobacco product. Among high-school students, 21% reported having ever smoked cigarettes daily. Daily cigarette use varies by ethnicity, with higher rates among white students (24%) than among African-American (12%), Hispanic (14%) or Asian-American (15%) students (CDC 2001). These rates reflect a rising trend in tobacco use among both adolescents and college students over the past ten years, which "threatens to slow or reverse the decline in adult smoking prevalence that has occurred since 1965 in the United States" (Wechsler et al. 1998). Following a decade of relative stability, rates of cigarette smoking among high school students increased by 32% between 1991 and 1997 (CDC 1998).

Clearly, the reduction of smoking rates among youths is a priority for U.S. health policy. The addictive properties of the drug nicotine explain a large part of the reluctance to quit among adult smokers. Consequently, the therapeutic strategies used to promote cessation – including individual counseling, group approaches (e.g., the 12-step program) and pharmacological approaches (e.g., nicotine patches, anxiety medications) – have seen mixed success. There is therefore a strong argument for researching, designing and evaluating interventions that target adolescents prior to developing nicotine dependence, and in particular, prior to initiating tobacco use.

Youth Smoking Interventions

Approaches to youth tobacco control may be grouped according to *delivery* – whether through educational, therapeutic, or regulatory means – and according to one of two program *objectives*, prevention or reduction/cessation. In Florida, many youth tobacco control programs are educational in nature, for which a clear distinction between prevention and cessation is often not apparent. Prevention programs are intended to reach adolescents in the early stages of smoking behavior – those at risk for initiating tobacco use or those experimenting with smoking, but who have not yet adopted regular patterns of maintenance. Cessation programs target regular smokers, taking into account the influence of nicotine dependence as an obstacle to behavior change.

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), a smoker is considered to be addicted to nicotine if meeting any three of the following the criteria within a one-year time frame: (1) tolerance to nicotine; (2) withdrawal symptoms after cessation; (3) smoking more than usual; (4) persistent desire to smoke despite efforts to decrease intake; (5) extensive time spent smoking or purchasing tobacco; (6) postponing work, social or recreational events in order to smoke; (7) continuing to smoke despite health hazards (APA 1994). These criteria have been assessed among adolescents using psychometric instruments such as the Hooked on Nicotine Checklist (HONC) and through adapting other questionnaires originally developed for adults, such as the Fagerstrom Tolerance Questionnaire (FTQ) (O'Loughlin et al. 2002). The 10-item HONC is grounded on a functional, theory-based definition of nicotine dependence in youth that postulates: "Persons are hooked when they experience a loss of autonomy over nicotine" (O'Loughlin et al. 2002: 202). Loss of autonomy occurs through three models of addiction – *self-medication*, emphasizing the use of cigarettes to moderate stress;

incentive sensitization, which leads to cravings; and *negative reinforcement*, which occurs when tobacco is used to avoid unpleasant withdrawal effects.

Qualitative research of high-school students in Montreal demonstrated that all three addiction models were salient in the experiences of adolescent smokers (O'Loughlin et al. 2002). These findings suggest that high schools are likely to contain adolescents at all stages of the continuum – from non-smokers at high risk of initiation, to experimenters, to regular users in varying degrees of nicotine dependence. Interventions that aim to reach the greatest number within this heterogeneous population may benefit from program content that addresses both prevention and cessation.

Certain social marketing campaigns such as Florida's "truth" anti-tobacco advertisements are televised, with the potential to reach both smoking and non-smoking teenagers. Educational messages about the health hazards of tobacco or the tobacco industry's manipulation of the public are general enough to address both prevention and cessation. However, adolescents in maintenance stages of smoking require program content that specifically offers strategies to overcome addictive patterns. Cessation goals are therefore better addressed through therapeutic programs that deal with topics such as motivation, stress management, and relapse prevention.

Given the addictive properties of tobacco and the rituals associated with smoking it, cessation programs are less successful than prevention in meeting objectives. The Project EX, a school-based clinic smoking cessation program, reported only 30% of program participants had quit smoking at 3-months follow-up (Sussman et al. 2001). Cessation rates have also been shown to decrease with follow-up – a function of smoking relapses among participants who were smoke-free at program completion (Adelman et al. 2001).

Conversely, educational prevention programs often can reach a greater number of youths for longer periods of time, and are more likely to maintain success rates. In Florida, statewide prevention programs were responsible for a 13% decrease in the proportion of teenagers who had ever tried a cigarette after the first year of implementation (Sly et al. 2001). After three years, 19% fewer high school students reported having ever tried smoking (FDHHS 2001). Preventing the onset of smoking may be a more effective means of reducing tobacco use at the population-level, and the morbidity and mortality associated with it. According to the CDC, "the optimal public health strategy is to prevent tobacco use completely or to intervene in the smoking behavior continuum as soon as possible" (1997: 387).

Two broad intervention initiatives in Florida are worth noting in greater detail: (1) State government programs, administered through the Florida Department of Health and Human Services – most of which were recently implemented through settlement funding from the tobacco industry, and (2) the American Lung Association's prevention and cessation programs. Following is a description of each program and results from published evaluation studies of their effectiveness.

Florida State Division of Health Awareness and Tobacco

The Florida state government's initiative for youth smoking control has gained increasing national attention, as much for its "in your face" youth-developed media campaigns as for being the first state to implement programs using legal settlement funding from the tobacco industry (Epstein and Soteropoulos 1997, Sly et al. 2001). In August 1997, cigarette companies paid an \$11.3 billion settlement to the state of Florida – the second of four state lawsuits against tobacco corporations to recover smoking-related healthcare costs. Unlike the first settlement (\$3.6 billion to Mississippi), Florida's

included concessions that the tobacco industry agree to limit marketing practices and fund anti-smoking campaigns (Epstein and Soteropoulos 1997). Specifically, cigarette makers were banned from advertising on roadside billboards, taxis, buses, and at sporting arenas, while cigarette vending machines were banned from establishments that admit children. Aside from these regulatory measures, \$250 million were allocated for anti-smoking education in Florida schools and media-based prevention programs. The settlement specified that Florida would benefit if other states reached more favorable settlements in similar "Medicaid" lawsuits. In September 1998, following settlements in Texas and Minnesota for \$15.3 billion and \$6.6 billion respectively, cigarette companies agreed to pay Florida an additional \$1.7 billion and accept stricter advertising and lobbying guidelines (Reuters News Service 1998). Among these was the prohibition of promotional merchandise such as t-shirts, hats and backpacks bearing cigarette brand names or logos. Nationally, this litigation led to the Master Settlement of November 1998, in which tobacco companies agreed to pay \$206 billion over 25 years for the remaining 46 states (Meier 1998). The national settlement also included provisions for marketing similar to those of Florida's settlement.

The primary governmental agency through which settlement provisions for anti-smoking programs are implemented is the Division of Health Awareness and Tobacco (DHAT) – a unit of the Florida Department of Health and Human Services. The Florida Tobacco Control Program (FTCP) administered through DHAT claims three goals: (1) to prevent initiation of tobacco use; (2) to reduce tobacco use; and (3) to protect citizens from environmental tobacco smoke exposure (DHAT 2003). To meet these goals, the FTCP works with county health departments throughout the state, local community

partnerships, and county tobacco prevention coordinators. The program is also responsible for developing two student-led tobacco prevention and education initiatives: a high-school group, Students Working Against Tobacco (SWAT) and its college-student counterpart, Student Tobacco Reform Initiative: Knowledge for Eternity (STRIKE). Finally, the marketing and communications component of FTCP's activities – the "truth" campaign – creates and promotes television and billboard messages "to inspire a youth movement against tobacco use" (DHAT 2003).

Since its inception in 1997, FTCP has developed local SWAT clubs in over 200 middle schools, 200 high schools and 80 community facilities across the state (DHAT 2003). SWAT's primary mission is to "educate, unite and empower Florida youth regarding the manipulation of minors by Big Tobacco" (SWAT 2003). The traditional messages of tobacco's health effects and the influence of social pressures in smoking, which are present in FTCP-supported educational programs, are complemented by SWAT's anti-industry emphasis. "Big Tobacco" is defined as five major corporations, which together produce the majority of cigarette brands consumed by Americans: (1) RJR Reynolds; (2) Philip Morris; (3) Brown & Williamson; (4) Lorillard Tobacco Co.; and (5) Liggett Group, Inc. Television commercials, print and billboard ads produced by SWAT's "truth" campaign are well-known throughout the state for their uncompromising criticism of these corporations. The campaign's humorous, shocking, and thought-provoking anti-tobacco advertisements were conceived under the assumption that teenage youths feel strongly about maintaining control over their own lives. Educating adolescents about the industry's manipulative tactics is then seen as a strategy for empowerment, providing teens with even more reason to reject tobacco use. Other

activities by SWAT include mural projects, representation at sporting events, and assisting Florida law enforcement agencies with compliance checks to discourage underage tobacco sales.

The STRIKE program was developed in September 1999 to accommodate SWAT members who had graduated high school and were entering colleges and universities (STRIKE 2003). Administered through DHAT's College Advocacy Initiative, STRIKE develops and promotes similar activities to SWAT, yet with a greater emphasis on tobacco use cessation for a slightly older target population. After four years of activity, STRIKE program groups exist in 17 sites across the state, including two- and four-year institutions.

Florida's youth tobacco control programs are often considered a model for other states, and have been subject to numerous evaluations. The Florida Youth Tobacco Survey to monitor all program outcomes was first implemented in 1998. By 2001, the percentage of middle school students who had ever tried smoking a cigarette dropped from 43.6% to 32.1%. Among high school students, this rate dropped from 66.0% to 53.7% during the same period (FDHHS 2001). This evaluation also measures the proportion of "committed never-smokers" – students who report they have never tried a cigarette and will "definitely not" try a cigarette in the near future or if a best friend offered one. Among high school students, the percentage of committed never-smokers rose from 25.0% to 41.8% between 1998 and 2001. Perhaps most useful is the evaluation's measure of "current cigarette use," which is defined as "using some form of tobacco in the past 30 days" and can be compared with results from the CDC's National Youth Tobacco Survey. In Florida, 19% of high school students were defined as current

smokers in 2001, compared with 28% nationally (CDC 2001, FDHHS 2001). Clearly, Florida's programs have shown success in effecting youth smoking rates that are lower than both state baseline and national rates.

A cross-sectional telephone survey has also been conducted to evaluate three dimensions of the "truth" media campaign: (1) population-based estimates of the program's reach; (2) target population reactions to individual ads; and (3) effects of the campaign on anti-tobacco attitudes and smoking behaviors (Sly, et al. 2001). After one year of activity, the ad campaign had reached an estimated 93% of Florida's youth. Survey respondents were asked attitude questions related to the program's content, including whether they agreed with the statement: "Tobacco companies try to get young people to smoke because older people quit or die." By 1999, the percentage of Florida teenagers who agreed with this statement had risen from 65% to 80%. A parallel survey of national youth found no increase in this percentage (64% to 63%), suggesting the one-year increase was unique to Florida and probably influenced by "truth" campaign messages.

American Lung Association (ALA)

The ALA is responsible for two major youth smoking programs in Florida. The first is a cessation program called "Not on Tobacco" (NOT), designed for teenagers who are regular cigarette smokers. Emphasizing a "total health approach" to smoking cessation and reduction, NOT includes ten 50-minute sessions occurring once a week. Youths meet in same-gender groups of no more than ten during regular school hours, with same-gender facilitators introducing topics such as motivation, addiction, consequences of smoking, preparation for quitting, dealing with urges and cravings, relapse prevention, stress management, dealing with family and peer pressure, exercise

and nutrition, and volunteerism. A two-year evaluation study compared Florida's NOT program with a brief intervention consisting of one 5- to 10-minute mixed-gender session (Dino, et al. 2001). The more involved NOT program demonstrated a 21.7% quit rate (validated by carbon monoxide test), which was significantly higher ($p < 0.05$) than the 12.6% quit rate among brief intervention participants. While this evaluation showed the benefit of a comprehensive, small-group approach to cessation, the overall success rates were less than ideal, with greater than 75% of participants continuing to smoke at two years follow-up.

The ALA's second intervention – Teens Against Tobacco Use (TATU) – is a prevention-oriented program in which teenagers visit elementary schools to talk with younger students about the dangers of smoking (TATU 2003). The program was implemented in Florida in 1998 through funding by The Humana Foundation, the charitable arm of health insurance provider Humana, Inc (Humana 2003).

For Tampa's program, youth speakers are trained at a day-long seminar during which they are instructed to emphasize three main points to their 4th- and 5th-grade audiences: (1) smoking is hard to quit; (2) smoking kills; and (3) tobacco companies lie (Jackson 2000). The last point resonates with Florida's "truth" campaign messages, although TATU operates in 36 other states, and anti-industry messages may be more prevalent in Florida's programs. Nationally, the intervention is reported to reach approximately 40,000 youths each year (TATU 2003).

Informing Intervention Through Research

Given the demonstrated capacity for youth tobacco programs to change attitudes about smoking and decrease smoking rates, research intended to improve upon and promote further development of such programs is a necessary component for maintaining

success. A broad array of academic fields contributes to this endeavor, including the social sciences, marketing and public health. Surveillance studies, such as those conducted by the CDC, are valuable for describing time-trends in youth smoking and for elucidating differences in smoking patterns by demographic subgroups such as gender, ethnicity, or geographic location. University-based studies, often firmly rooted in theory regarding tobacco use, contribute by exploring new questions or testing hypotheses about adolescent smoking – how it begins, how it progresses, and how it can be stopped.

Two major emphases direct this kind of academic and applied research. The first is a focus on the *determinants* of youth tobacco use – those factors that are believed to be associated with both initiation and maintenance of smoking. Etiological factors are amenable to statistical analysis, including the prediction of future youth smoking or cessation behaviors using multiple regression techniques. As such, studies that emphasize factors are often quantitative in nature, relying on closed-ended survey instruments or previously released surveillance datasets. Factors that are determined to be most influential on youth smoking may then be modified or addressed in prevention and cessation programs. A second emphasis deals with the *processes* of youth tobacco use, which typically conceptualize smoking as a sequence of discrete steps from initiation to maintenance and addiction. Exploratory, qualitative research is often indicated for understanding such processes, which may vary considerably among subgroups of the youth population.

Determinants of Youth Smoking

For years, researchers have considered peer, family and media influences to be the most significant determinants of youth smoking behavior. Teenagers who report smoking among their closest friends, or among the majority of members in their friendship

networks, are consistently more likely themselves to smoke (Biglan, et al. 1995). Some ethnic discrepancies exist in terms of the relative influence of peer smoking – with stronger associations for white youths than for black, Asian, or Latino youths (Landrine, et al. 1994). Teenagers have also been found more likely to smoke when living with family members who smoke – mothers, fathers and siblings – although measures of association are not as strong as for peer influence, and there is less consistency regarding these findings across studies (Cowdery et al. 1997, Males 1995). Media factors are believed to influence youth smoking through pro-tobacco imagery present in movies and television, and through tobacco industry marketing efforts (Crawford 2001). Celebrity role models in television shows, movies, and musical acts may be particularly influential in promoting or discouraging tobacco use among their teenage fans.

Demographic factors have also been studied as variables predicting experimental smoking among adolescents. A six-year longitudinal study found males to be significantly more likely than females (OR 2.57) and rural children significantly more likely than urban children (OR 1.45) to experiment with tobacco (Harrell 1998). Factors that made a youth less likely to experiment were African-American ethnicity (OR 0.47) and having parents who graduated high school (OR 0.75) or college (OR 0.44). The most significant predictor of smoking initiation was age, or more accurately, "pubertal level" – assessed using a five-stage Pubertal Development Scale. Youths in more advanced stages of puberty (4-5) were found eight times more likely to experiment with tobacco than those in earlier stages (1-3).

Social marketing and community health studies have also measured teenage attitudes, beliefs and perceptions – both to predict smoking behavior and to identify the

mechanisms or structures through which other predictors operate. Aitken and Eadie measured recall and recognition of cigarette advertisements by 11- to 14-year old youths in Glasgow, Scotland (1990). Smokers were more likely to identify cigarette advertisements and demonstrated a greater appreciation for the ads, although the authors did not assume these factors necessarily preceded smoking initiation, stating: "Cause and effect relationships are always difficult to disentangle. For example, children may become more aware and appreciative of cigarette advertising after they start smoking" (Aitken and Eadie 1990: 410). The study did find commonly associated variables, such as older age and male gender, to predict youth recall of cigarette brands.

Community health research based on the CDC-funded Tobacco Control Network (TCN) elicited smoking-related attitudes, beliefs and perceptions using focus groups of U.S. teenagers – 42% of whom were self-identified smokers (Luke et al. 2001). The study collected data from eight TCN research sites, six of which appended group discussions with a photo sort activity. Youths were shown pictures of teenagers from a photo essay book and asked to decide whether or not the pictured teens were smokers. The resulting image-related discussions showed that adolescents considered smoking to be dirty and unattractive, and smokers to be sexually active, rebellious, depressed, or stressed-out. On the other hand, teenagers viewed non-smokers as having busy, active lives, self-control, independence, and being proud of themselves, their families, and their heritage. The authors suggested that smoking may be attractive to teens "precisely because of its association with risk," recommending educational interventions that present the social benefits of non-smoking as well as the health detriments (Luke et al. 2001: 202).

In addition to factors associated with smoking initiation, other factors have been tested as predictors of maintenance and addiction. Sensory qualities, such as the "taste" of cigarettes, are rarely associated with initiation but do play a role in determining why smokers maintain tobacco use or why they smoke particular brands (O'Loughlin et al. 2002). For regular smokers, motivation to smoke is not only social, but psychological. A variety of withdrawal responses play a role in maintaining regular use, including anxiety, irritability, and increased appetite. Many youths have reported smoking cigarettes when hungry or as a strategy to actively lose weight, particularly girls. Social and situational cues influence maintenance smoking in a similar way, and among teenagers are less likely to occur in settings in which smoking is prohibited. Smoking on the walk to school or waiting for the bus becomes a ritual for regular youth smokers, such that the daily activity (walking, waiting) reinforces smoking behavior, and cravings result from the situational stimulus when tobacco is not available.

Processes of Youth Smoking

While at a single point in time, tobacco use may be seen as caused by multiple interacting risk factors, there is also value in considering it the end result of social and psychological processes through which individual youths interact and change. These processes are most readily conceived in steps or stages – for example, the continuum of youth smoking behavior suggested by the CDC: preparation, trying, experimentation, regular smoking, and nicotine dependence or addiction (CDC 1997). To accommodate research objectives, studies are likely to focus on a single stage, identifying the sub-processes and specific factors responsible for transitions into and out of that stage. Smoking experimentation is one of the most common stages studied, largely because youths who experiment with tobacco are the most at-risk for becoming regular smokers

(Nichter et al. 1997). Other processes, such as initiation or quitting, may be considered events within stages or events that mark stage transitions. Because prevention is a preferred objective for tobacco control, smoking initiation is a popular process for study (Alexander et al. 1999; Cowdery et al. 1997; Nichter et al. 1997; Oei et al. 1986). Understanding why teenagers attempt smoking for the first time is critical for developing strategies to prevent it.

A similar model used widely in public health disciplines is the transtheoretical "stages of change" model developed by James Prochaska and Carlo DiClemente (1992). Applicable to all types of health behavior change, for harm or good, this model considers five stages which lead to the behavior in question: (1) *Precontemplation*, in which the individual does not yet recognize a need or express a desire to change; (2) *Contemplation*, in which one is aware of a problem and begins considering, but not committing to behavioral change; (3) *Preparation*, in which the individual intends to take action in the next month and has initiated partial or incomplete changes, such as reducing smoking; (4) *Action*, in which a commitment to fully modify behavior has been made; and (5) *Maintenance*, in which one works to prevent relapse of old patterns.

Research with smokers has found that these stages proceed in a linear schema (Prochaska et al. 1992). They may also apply to both the process of acquiring and the process of quitting a smoking habit. Validated questionnaires have been developed to assess an individual's stage of smoking or cessation behavior, for which intervention program content may then be tailored. A randomized controlled trial of a smoking program based on this model found little difference in follow-up smoking rates between youths in the intervention and control groups (Aveyard et al. 1999). However, this

program's failure may be attributed to delivery, as the intervention consisted of a computer-administered "expert system".

Other studies have adapted the transtheoretical model for specific uses. Volk et al. (1996) articulated tobacco brand preference with smoking habit stage, suggesting that youths in the maintenance stage tend to smoke a regular, preferred brand of cigarette. Adolescents in contemplation or action stages of smoking are not yet committed to smoking in the future, and therefore less likely to prefer specific brands. The process of acquiring a cigarette-smoking habit involves a steady increase in the frequency of smoking, and the eventual necessity of purchasing or otherwise acquiring cigarettes from retail sources. Once smoking has become a regular pattern, the adolescent smoker is likely to have decided on a particular brand.

Another process that is particularly relevant for youth smoking research may be construed generally as *peer-group affiliation*. A theory of smoking and group membership may be based on the finding that, while youths perceive adult smoking as psychological, personal and passive, they view their own smoking as social and active (Rugkasa et al. 2001). Smoking is considered one of many behaviors youths associate with certain groups of their peers. To gain membership to these groups, teens may take up smoking, alcohol or other drug use, adopt specific patterns of dress, even drive specific types of cars. A high school may contain a number of such groups, distinguished by youths using shared terms such as "skaters", "stoners", "thugs", "ravers" – with many of these terms also describing activities that are associated with each group. Group membership is not entirely exclusive, as some youths identify with more than one group and may serve as liaisons between members of two related groups. However, some pairs

of groups may be considered in opposition, such as the relationship between "preps" and "freaks" in which membership crossover may be less likely.

In this context smoking is seen as an expressive act, which simultaneously identifies the youth as a peer group member to outsiders and reinforces the youth's status to others within the peer group. Using the terminology of Erving Goffman, peer groups define categories of *social identity* among youths (1963). Unique characteristics of physical appearance, including clothing, jewelry and hairstyle, personal habits and demeanor may be considered symbols for expressing social information. A tobacco-using youth who belongs to a socially marginalized peer group may recognize smoking behavior as both a stigma symbol to non-smoking adults and a prestige symbol to other members of his or her peer group. The process of rebellion from authoritative groups and structures (e.g., parents, school, employers, police) – found to be a salient smoking-related theme among adolescents (Luke et al. 2001) – therefore is also a process of conformity to other peer-group members. In a TCN-study of smoking image themes, one focus group participant identified smokers as: "The more rebel types. And they try to be different. But the more they try to be different, they become the same" (Luke et al. 2001).

Peer group affiliation is both a social and personal process. Individuals seeking group membership accept and adopt group-specific practices, begin learning and sharing patterns or rules of interaction (both within and between groups), and begin frequenting locations where group members are known to congregate. At the same time, psychological changes are taking place at the personal level – either to accommodate the social changes or as a result of them. Theories of identity change are particularly relevant for exploring this process. Such research conceptualizes youth smoking behavior as a

facilitator or correlate of identity change, with special emphasis on the roles of structure (external influences) and agency (internal determination) in effecting activities and the rationalizations upon which youths base their activities. From this perspective, "smoking is viewed as a behavior that can be 'tried on' in the same way as one assumes a new identity through altering one's clothes or changing one's crowd of friends" (Nichter et al. 1997).

Traditionally, researchers have attributed the development of adolescent smoking to structural influences – for example, smoking as a mechanism for reducing stress related to family environment, social alienation, and academic pressure (Nichter et al. 1997). The most commonly implicated structural influence is "peer pressure," defined as coercion, both overt and subtle, on the part of peers with whom the adolescent identifies. In research among adolescent girls, Nichter et al. have argued the case for re-examining peer pressure "from an adolescent perspective in which autonomy is highly valued" (Nichter et al. 1997: 286). In other words, youths faced with the decision to begin smoking are not entirely passive in dealing with social influences. Most informants denied having actually experienced peer pressure to try a cigarette, although once labeled as a smoker, they experienced encouragement to smoke with others in their peer group.

Youth denial of peer pressure may serve as an affirmation of personal agency. In the social sciences, the concept of agency gained increasing use in the late 1970's, with the development of anthropological practice approaches and the resurgence of symbolic interactionism in sociology. Anthony Giddens was among the first to stress the theoretical importance of agency, insisting that its relationship with structure was one of modern social theory's central problems (1984). The structural properties of social

systems may be seen as either constraining or enabling individual capacity for voluntary action. For example, smoking behavior may be enabled for teenagers of lower-income families, in which parents are more likely to work longer hours or to work night shifts, allowing greater periods of unsupervised time and opportunity to engage in disapproved behaviors. On the other hand, teenagers from families that are very involved in the local community – belonging to PTA or church groups, for instance – may encounter smoking disapproval frequently and from a variety of structural sources, constraining their tobacco use.

Giddens suggested that these social influences are not external to individual actors in the same sense that the surrounding environment is external. The process of peer group affiliation among youths involves internalizing group structural qualities, and adopting group behaviors that are then expressed as manifestations of agency. In Pierre Bourdieu's terms, smoking behavior becomes one expression of the *embodied habitus* that develops when a youth takes on the social identity of a new peer group.

The processes discussed above, whether conceptualized as a stage-continuum of smoking behavior or as part of larger processes of group affiliation and social identity formation, are manifested through specific behavioral patterns that vary by subgroups of the youth population. African-American youths, for example, demonstrate lower smoking rates compared to whites, often attributed to structural family pressures against smoking (Clark et al. 1999; Griesler and Kandel 1998). Age of smoking onset also occurs later in both black and Hispanic youths, suggesting that stages of experimentation and initiation events occur in older social contexts within these ethnic groups (Griesler and Kandel

1998). Consequently, prevention program content may be modified for these adolescents to take into account settings and activities associated with older groups of smokers.

Cigarette brand preference has also been found to vary by ethnicity, with African-American youths preferring Newport cigarettes, and increasingly, the Black and Mild brand of plastic-tipped cigarillos (Gittelsohn et al. 1999; Page and Evans 2002). These brand preferences mirror those of African-American adults – a process that has consistently been found in studies of brand preference among youths of all ethnic groups (Aitken and Eadie 1990; Chapman and Fitzgerald 1982). This suggests that adolescents may: (1) emulate the smoking behaviors of their parents, older siblings and peers, and adult role-models within community or media venues, or (2) respond positively to the same heavily marketed brand advertisements that are presumably targeted toward adults.

Smoking-related behavioral patterns may also vary by gender, age, geography, religion, socioeconomic status, and of course, peer-group. Prevention and cessation programs may be made more effective if designed to take into account these variations, which are best elucidated through qualitative, exploratory research.

CHAPTER 3 METHODS

In the Summer of 2001, a dual-site ethnographic study of adolescent smoking in the state of Florida was initiated with funding from the American Cancer Society. Faculty and student anthropologists from the University of Miami and the University of Florida collaborated to produce and implement a research design that would best address three broad themes: (1) Perceptions of the risks and benefits of tobacco use, and the peer, family or institutional sources of these perceptions; (2) The situational and social context of smoking initiation; and (3) The situational and social context of smoking maintenance. In particular, research questions were constructed to explore the potential for age, ethnic and group variation around these themes. As James Spradley has suggested, the formulation of hypotheses falls later in the research sequence for exploratory, ethnographic studies (1979). The present research is therefore intended to help formulate rather than test hypotheses regarding patterns of tobacco use.

This paper presents findings from the Gainesville study site – a city in North Florida of approximately 96,000 residents (U.S. Census Bureau 2001). One faculty member and six student researchers adopted a unique, team ethnographic approach to study design and data collection. Project activities were broadly divided into field observation and interview components, lasting for approximately four months between May and August 2001. At the study's onset, weekly meetings were held for developing interview questions and brainstorming potential observation sites and informant sources. Both observations and interviews were conducted in pairs whenever possible, and team

members collaborated to produce periodic progress reports of the study's findings. Analysis and interpretation of results was facilitated through the use of a restricted-access, database-driven website for sharing data. Relevant reference citations, observational fieldnotes, and interview transcripts could be uploaded to this common source, making data accessible to all group members as soon as it was available.

Field Observation

Potential sites for observation of youth smokers in "natural" settings were compiled during team brainstorm sessions early in the project. The initial list was limited to locations at which researchers had casually observed youths smoking in the past or otherwise suspected youth smoking. These included parks, malls, movie theaters, a bowling alley, a roller-skating rink, a local arts festival, and various downtown venues. As the study progressed, additional locations were added to the list based on informant reports or suggestions. The final site list included a total of 15 locations within the city, observed over 24 sessions (Results – Table 1). Sites where youths had been observed smoking during an initial session were surveyed subsequent multiple times.

In conducting a site observation, researchers first explored the site for the presence of teenage youths (smoking or non-smoking), after which stationary observations were made either inconspicuously, or through researcher-informant interaction. In determining who to classify as "teenagers," researchers cast a wide net, including all youths estimated to be of middle-school or high-school age – 12-18 years old. Particular attention was paid to the activities and behaviors of observed teenagers, including degree of physical exertion, dyadic or group interaction, and the content of audible conversations. Personal characteristics such as dress, posture, and affect were relevant for determining a youth's role in relation to the situational context. To a certain extent, the apparent status of

adolescents within their peer groups could be understood through observing the dynamics of interaction and personal demeanor.

For teenagers who were observed using tobacco in some form, information was gathered on gender, ethnicity, apparent age, social context of tobacco use (solitary or group), presence of specific tobacco use patterns (e.g., sharing), and brand or type of tobacco smoked. At many sites, detailed observational data were gathered on these youths -- including personal smoking-related idiosyncracies (e.g., how they light, "ash", or put out their cigarettes, how quickly they smoke, whether they appear nervous or distracted). Further detail was provided through time-sequencing extended or discontinuous activities – taking into consideration the role of event transitions such as a change in activity from greeting and conversing with friends to smoking cigarettes with friends.

Observations were conducted as unobtrusively as possible. Techniques for inconspicuous data gathering included: 1) using small notepads and walking away from observed groups before note-taking; 2) using no notepad and recording all observations upon returning from the session; 3) engaging in the same activities as those observed (e.g., playing pool at a billiards hall, reading poetry at an "open mic" venue); 4) smoking cigarettes in the presence of observed smokers; and 5) interacting with observed individuals. Interacting with youths proved to be the most valuable technique, converting passively observed subjects to active informants. Smoking cigarettes was also found valuable in locations where youths had gathered solely for the purposes of smoking and socializing – for example, on sidewalks outside malls or open-mic venues. By smoking cigarettes themselves, researchers were able to assimilate with the crowd, close enough to

hear conversations among observed youths and in some cases facilitating their inclusion in the dialogue. In fact, many researcher-informant interactions were smoking-related, in which teenagers asked to “bum” cigarettes or “get a light” from researchers who were smoking. The inverse of this interaction, in which researchers “bummed” cigarettes from teenagers, was also useful in acquiring close observations as well as determining an observed individual’s brand preference. Researcher-informant interaction that was not smoking-related usually occurred with informants who were acquainted with the researcher. In some cases, strangers were approached, usually by team members who revealed their roles as anthropologists working on a study of youth smoking. Self-disclosure was generally more productive than concealment, since it tended to elicit informal discussion about smoking.

Overall, observations lasted a mean of 96 minutes (range: 15 - 195 minutes). Field notes for all 24 sessions were compiled and analyzed for variation in patterns of smoking behavior among peer or ethnic groups. The total number of smokers was counted and data were extracted regarding gender, ethnicity, cigarette brand, social context of smoking (solitary or group), and when available, method of cigarette acquisition.

Interviews

Participants for interviews were recruited from a pool of youths related in some way to colleagues, friends, and family members of the research team. Potential informants were initially restricted to those of middle school age – between 11 and 14 years old -- to address variation in smoking patterns within this understudied age group. Efforts were made to include both white and African-American youths, smokers and non-smokers, although a representative demographic composition was limited by the convenience sampling method. To increase the representation of smokers, interviews of

informants aged 15 to 17 years old were conducted later in the study. Researchers contacted youths or their parents in person or by telephone to briefly introduce the purpose of the study and invite participation. Youths who participated were offered a compensatory payment of \$15.

Researchers conducted interviews in pairs within the homes of participants and tape-recorded the resulting discussions for subsequent transcription. An open-ended, semi-structured format permitted exploration of smoking initiation and maintenance, exposure to tobacco use through family and peers, and youth perceptions of "peer pressure" and "addiction". Participants were also asked about their perceptions of the physiological effects of tobacco use, with particular attention given to the source of health knowledge (e.g., parents, school programs, media). Many interview questions were developed after the study began, when initial data suggested new avenues for exploration. These included questions regarding youth knowledge of tobacco production and marketing, awareness and perceptions of Florida's "truth" media campaign, and beliefs about the cost and material contents of cigarettes (e.g., tobacco, nicotine, tar, poisonous additives). In addition, informants were asked to recall and discuss cigarette brands, advertisements, and public service announcements. The complete and final list of interview questions is included in the Appendix. Interviews were limited to between 30 and 90 minutes in duration, and as such, not all questions were raised in every interview. Discussions necessarily followed topics and themes most relevant to the individual informant, and allowance was always made for exploration of other smoking-related themes that were not part of the interview guide.

One important component that was addressed in all interviews was use of narrative elicitation methods to explore smoking initiation experiences. This technique has proven useful in previous studies of adolescent smoking, particularly for determining the social and situational context of smoking experiences (Seguire and Chalmers 2000). In the present study, informants were asked to describe or "tell the story" of their first experience ever using tobacco. Researchers encouraged informants to expand on their narratives with follow-up questions regarding life situation, immediate social environment, physical setting, and sequence of smoking activities. Non-smokers were asked a version of the question to elicit experiences in which they were offered cigarettes by peers or family members.

Thirty-three interviews were transcribed and explored for both a priori and developing smoking-related themes. A priori themes were those understood at project onset to be relevant, including the processes of smoking initiation and maintenance, and informant perceptions of smoking and addiction. Developing themes were those added to the study following initial data collection, and included cigarette brand preference and recall, and informant perceptions of the tobacco industry and "truth" campaign. Data were extracted and tabulated for each informant regarding age, gender, ethnicity, parental smoking status, smoking experimentation and maintenance, and cigarette brand recall. Among youths with initiation narratives, additional data were extracted regarding age, presence of others, and brands smoked at initiation. For those who were regular smokers, preferred cigarette brands were also collected. Data were analyzed using JMP software (SAS Institute, Inc., Cary, NC).

CHAPTER 4 RESULTS

Field Observations

Youths estimated to be 18 years or younger were observed smoking during 15 of 24 observational sessions. Locations where greater than two tobacco-using youths were observed included: 1) a shopping mall during late afternoon; 2) a movie theater during mid- to late-evening; 3) an evening poetry reading, which took place at a downtown venue; 4) a skateboard park during mid- to late-evening; 5) a downtown pool hall in late evening; and 6) a coffee house, which was hosting an evening "open-mic" event. Table 1 presents profiles for each session, including location, time and duration of observation, total smokers observed, and total smokers estimated to be 18 years of age or younger.

Across all field reports, 53 youths were observed smoking, of whom 26 (49%) were male and 27 (51%) were female. In terms of ethnic composition, 46 (87%) of smoking youths were white, while the remaining 7 (13%) were identified as African-American. Relative age of youths was difficult to estimate and not routinely collected, although most smokers were believed (or through interaction, confirmed) to be in their late teens, between 16 and 18 years.

Two locations that demonstrated the highest frequency of youth smoking (10 or greater) were a downtown pool hall and a coffee house located between the downtown and campus districts. Both sites were visited during the late evening hours (between 10 pm and 12 am), and shared qualities that may explain their higher smoking rates in comparison to other locations visited during the afternoon, such as the park, the

Table 1: Sites of Youth Smoking Observation

Site key	Description	Time	Duration (min.)	Total smokers	Smokers \leq 18 years (% total)
1	Middle-school park	2:30 pm	105	0	0
1	Middle-school park	4:45 pm	90	0	0
2	Arts festival	3:15 pm	60	9	2 (22%)
2	Arts festival	9:45 am	75	0	0
3	Commercial district	6:00 pm	120	1	1 (100%)
4	Bowling alley	8:00 pm	120	5	1 (20%)
5	Downtown bus stop	8:30 pm	30	1	1 (100%)
6	Commercial plaza	8:00 pm	90	2	0 (0%)
7	Skateboard park	8:00 pm	135	1	1 (100%)
7	Skateboard park	9:45 pm	45	1	1 (100%)
7	Skateboard park	9:30 pm	150	4	3 (75%)
8	Gas station	9:30 pm	15	2	2 (100%)
9	Shopping mall	4:30 pm	105	13	5 (38%)
9	Shopping mall	2:00 pm	90	8	0 (0%)
10	Movie theater	8:20 pm	120	12	6 (50%)
11	Poetry venue	11:00 pm	30	1	1 (100%)
11	Poetry venue	9:30 pm	195	9	5 (56%)
12	Pool hall	9:45 pm	105	6	0 (0%)
12	Pool hall	10:00 pm	120	16	12 (75%)
12	Pool hall	10:00 pm	60	2	2 (100%)
13	Convenience store	5:15 pm	90	5	0 (0%)
14	Coffee house	10:15 pm	135	19	10 (53%)
14	Coffee house	10:30 pm	150	9	0 (0%)
15	Tobacco shop	8:45 pm	75	2	0 (0%)

mall, or the movie theater. Unlike the other sites, the pool hall and coffee house permit smoking inside, providing a visual barrier from the public street for teenagers to engage in smoking with some amount of privacy. Furthermore, the storefront windows of these establishments are typically obscured with flyers, posters and neon signs advertising the beer brands sold within. While buildings in these locations are often crowded during the late evening, the people frequenting them rarely include parents, teachers or other authority figures of adolescent patrons.

On certain evenings, the downtown poetry venue also functions as a late-evening refuge for teenagers. However, smoking is not permitted within the building, and

smokers must use either the back porch or the storefront sidewalk. Consequently, a slightly lower frequency of youths were observed smoking at the poetry reading (5 smokers). It should be noted that all five teenagers smoked on the front sidewalk, rather than the lower-profile porch. During the poetry reading's established "smoke breaks", smokers and non-smokers alike tend to congregate on the front sidewalk, where there is more room to socialize. For adolescent smokers at this venue, the desire to take part in this socialization is perhaps greater than the perceived need to hide smoking behaviors from potential authority figures. This site is discussed in further detail below.

Social Context

Observations consistently revealed that smoking cigarettes was articulated with socializing. Smoking in the context of interaction with other youths (either in pairs or groups) occurred for 90.6% of observed smokers, while 9.4% were solitary smokers.

At the shopping mall, researchers observed instances of smoking that began as solitary events but ended in group context. Because smoking is not permitted within the mall, and smokers were seen gathered outside its entrance near the food court. A solitary white male ("Jack") wearing a blue muscle-shirt emerged from the entrance with a Camel cigarette and asked another smoker for a "light." The two smokers did not engage in further conversation, although shortly thereafter, two other white male youths ("Don" and "Alex") exited the mall and began interacting with Jack. Don, who wore his black athletic baseball cap turned backwards, had come out to smoke a cigarette. Alex was presumably there to keep Don company. After lighting his cigarette, Don engaged in conversation with Jack, switching his cigarette from hand to hand as he smoked, and climbed on top of a newspaper dispenser to sit. He introduced himself to Jack, and both discovered they attended the same local community college.

During their conversation, a solitary white female walked out of the food court and around the three male youths, producing a soft pack of cigarettes from her pants pocket. She sat at a bench in front of the mall's arcade entrance to smoke her cigarette. A minute following her arrival, the three males walked over to the arcade entrance – Jack and Don still smoking their cigarettes – and introduced themselves to her. Here, two instances of initial solitary smoking behavior – by individuals who were not previously acquainted – ultimately ended as a group smoking event.

The social activities associated with youth smoking varied by the venue in which they took place. Casual conversations and brief interactions were more likely at locations such as the mall or the movie theater, where an individual's presence was often transitory. At the mall entrance, smokers were often waiting for rides to pick them up, and many were workers from the mall's food court on short cigarette breaks. Smoking outside the movie theater was generally associated with waiting in line for tickets, and youth smokers were rarely present at these sites for longer than 15 minutes. Conversely, at evening venues such as the pool hall and coffee house, teenagers could smoke while engaging in recreational activities – allowing for repeated, frequent smoking behaviors during extended periods of social interaction. In these locations, smoking was articulated with conversing, playing pool or arcade games, performing on stage, and drinking alcohol.

Patterns of Procurement

Three interactive methods of acquiring cigarettes were observed among youths: "bumming," sharing, and acquiring through distribution. The common expression, to "bum" a cigarette, refers to the activity of requesting a cigarette from someone – generally a person whose status as an owner of cigarettes is known or suspected. Cigarette bumming is often an impersonal transaction initiated by the receiver, who may

or may not be acquainted with the cigarette donor. With a stranger, the interaction typically involves a stimulus (e.g. noticing someone is holding a pack of cigarettes), a request, a transition of cigarette ownership, some expression of gratitude from the receiver, and termination of the interaction. Bumming a cigarette from an acquaintance, as observed among youths at both the poetry reading and coffee house, is more likely to result in lasting, more meaningful social interaction.

Cigarette sharing is defined as consumption of the same tobacco product by two or more individuals. It occurs when a smoker who temporarily possesses a lit cigarette passes it on to a friend, who smokes from the cigarette before passing it back (or on to a next individual). A youth may request to "get a drag" from another's cigarette, or the cigarette may be offered by the original owner for sharing. In either case, sharing may constitute two passes – to the receiver, and back to the donor – or it may continue in turn-based fashion until the cigarette is finished. Many cases of cigarette sharing were observed among pairs of teenage girls. At the front entrance of the movie theater, two white female youths were dropped off by a middle-aged woman. The girls got in line for tickets, and as soon as the car pulled away, one of them produced a pack of Marlboro Ultra-light cigarettes from her purse and lit one. She shared the cigarette with her companion until after their tickets had been purchased. They then continued to wait outside the entrance until the cigarette was finished before entering.

Unlike cigarette sharing, distribution involves the donation of entire cigarettes to one or more others from the same source. It is further distinguished from "bumming" in that the interaction is initiated by the donor, rather than the receiver. In producing a cigarette for his/her own use, the donor also offers cigarettes to nearby friends and

acquaintances, setting the stage for lasting social interaction and dialogue among the smokers. This pattern was observed among youths at the poetry reading, where teenagers had acquired rolled tobacco cigarettes from an older performer ("Travis") in his late 20's. The episode occurred during one of the reading's smoke breaks, when performers and audience alike temporarily gather on the storefront sidewalk for their "nic fix." Travis, a self-identified "farm punk" and guitarist who lives on a farm outside the city with a group of other youths (punks, hippies, musicians, squatters), was followed outside by two teenage poets – "Heidi" (also a farm punk) and "Jeremy" (a student and host of that evening's reading). Travis sat on the sidewalk and began hand-rolling cigarettes from a tin of Bugler tobacco (a Turkish blend made in America), taking one for himself and distributing one each to Heidi and Jeremy. The group engaged in friendly conversation while smoking, and incited a few of the previously non-smoking youths to light their own cigarettes.

Use of alcohol and other drugs (including legal drugs, such as coffee) commonly occurs with tobacco use in social contexts. Among adolescents, methods for procuring alcohol are often similar to those for acquiring tobacco. Many youths who smoked on the sidewalk at the poetry venue were also seen drinking whiskey from a single flask. The alcohol was passed among peers and shared in the same way a cigarette may be shared, yet with a higher sense of risk. Awareness of open-container alcohol laws and the potential for attracting police attention made alcohol consumption a more secretive activity – exhibited in the unmarked, opaque bottle used to contain the whiskey.

Divergent Tobacco Preferences

In addition to providing insight into less typical tobacco procurement behaviors (*how* youths are smoking), field observations from the poetry reading may also be

explored for trends in brand preference (*what* youths are smoking). Rolled cigarettes of the type distributed by Travis were not commonly observed in the context of youth smoking at other venues. Throughout the city, youths generally preferred to smoke pre-rolled, packaged brands such as Marlboro, Camel, and Newport.

Another unusual cigarette preference was the "Bambu" brand smoked by "Pete" – an 18-year-old white male who also distributed cigarettes to other teenage friends during the poetry reading smoke breaks. Near the end of the first break, Pete was seen on the sidewalk talking with Susan (also a teenager), who was smoking a cigarette from Pete's pack. Pete conserved his cigarettes, and for himself produced a half-smoked cigarette from behind his ear. After he lit his cigarette with the tip of Susan's cigarette, the two discussed their perceptions of the Bambu brand:

Susan: I like them. They're smooth. The smoke goes down easy.

Pete: Actually, I don't think they're smooth. I think they're kind of harsh. But that's what I like about them.

Smoking clove cigarettes was also observed at the coffee-house, easily distinguishable from tobacco for their unique smell. Identified by the CDC as an emerging form of tobacco among U.S. youth, "cloves" are flavored cigarettes containing tobacco and clove extract (Prevention 2001). During the venue's "open mic" night, which attracts a slightly younger high-school and college-aged crowd, a group of four youths was observed smoking cloves while sitting on a couch. The group consisted of two white males and two white females – one of whom wore choker chains, silver jewelry and knee-high socks, taking on aspects of dress commonly associated with the "goth" peer group. Of the two males, one sat near the couch, holding a regular tobacco cigarette in reserve behind his ear. The youth wandered around the bar when not interacting with the

other three youths, suggesting that he may have taken on the role of liaison between two or more otherwise unrelated groups. The four teenagers shared a single lighter to light their clove cigarettes, and seemed to engage in pleasant, playful interaction.

Interviews

Demographic information of all interviewed informants is presented on Table 2. Gender and ethnicity composition may only roughly reflect that found in the regional youth population, with a slightly disproportionate majority of informants being male (60.6%) and white (84.8%). (According to recent Census data, approximately 70% of the Gainesville community is white (Bureau 2001).) Thirteen informants (39.4%) reported having used tobacco at least once. Of these, 41.7% reported no parental smoking, and 58.3% reported smoking by one or both parents. Males represented 61.5%, and females 38.5% of informants who had used tobacco at least once. Statistically significant dependence was not found between smoking initiation and gender or parental smoking variables by Fisher's exact test. However, informants with initiation narratives were significantly more likely to be older than those who had never smoked (mean age 14.7 and 12.8 years respectively)($p < 0.0003$).

Smoking Experimentation

For thirteen teenagers who described first-time tobacco use experiences, smoking experimentation variables are presented on Table 3. The majority reported initiation using cigarettes (53.8%) with one other teenage individual (69.2%). In five cases, initiation took place with one friend who had prior experience with smoking, while four informants reported initiation with a family member – either a brother (2) or a cousin (2). The brands of tobacco smoked during these experiences were largely unspecified, suggesting that this was not a relevant factor determining why teens chose to experiment.

Table 2: Interview Informant Demographics

		n (%), N=33
Gender	Male	20 (60.6)
	Female	13 (39.4)
Ethnicity	White	28 (84.8)
	African-American	5 (15.2)
Parental smoking	Neither parent smokes	17 (51.5)
	One parent smokes	11 (33.3)
	Both parents smoke	2 (6.1)
	No response	3 (9.1)
Informant smoking	Non-smoker	20 (60.6)
	Experimented only	9 (27.3)
	Smoked, then quit	2 (6.1)
	Regular smoker	2 (6.1)
Age	Mean	13.5 years
	Range	11 - 17 years

Table 3: Youth Smoking Experimentation

		n (%), N=13
Social context	Pair	9 (69.2)
	Group	2 (15.4)
	Solitary	2 (15.4)
Type of tobacco	Cigarette*	7 (53.8)
	Cigar**	5 (38.5)
	Pipe tobacco	1 (7.7)
Age of first experimentation	Mean	12.25 years
	Range	10 – 14 years

* Includes Newport (2), Capri (1) and unspecified (4) brands

** Includes Black and Mild (1) and unspecified (4) brands

The fact that recall of tobacco brand was incomplete lends support to the theory that opportunity plays a significant role in smoking initiation. Most youths did not claim

to seek out a particular brand of cigarette, but instead professed an inclination to "try" tobacco in any form after it emerged through social or situational context. Two cases of opportunistic tobacco acquisition are worth noting. The first involves a 14-year-old white male who first used tobacco with his brother -- also a non-smoker at the time:

It was in the Bahamas . . . I was walking around town with my brother. I found one on the ground. It was like a brand new cigar just laying on the ground . . . I was just curious to see what it was like, so I tried it.

A second case involves a white female who first smoked at the age of 13 with a friend, who was described as a "veteran smoker":

She was 15 or 16. She lived next door and was older than me. We took some of my mom's (Capri) cigarettes and walked around the block.

Although in this situation the accomplice had prior experience smoking, unlike other paired initiation scenarios, she was not the source of tobacco. Instead, both girls conspired to actively acquire cigarettes when circumstances allowed (i.e., when the mother had left her cigarettes accessible). The same pattern emerges for two cases of solitary initiation. One was a 16-year-old white male whose father had been a cigar smoker:

I just found a cigar and tried it. I was curious. I had to kinda search for 'em myself. They weren't just laying around . . . I just stumbled across it, looking for some silverware.

Contradictory statements are apparent within this informant's narrative. After stating that he "had to . . . search" for the cigar, he later reported that he had "stumbled across it." Regardless of which account is correct, a clear sense of agency is implied in this informant's choice to experiment with smoking. As with the previous example, his timing was determined by the circumstances of his parent's absence.

Four themes were drawn from the smoking experimentation narratives: 1) Overt influence from peers; 2) Peer or family emulation; 3) Curiosity; and 4) "Learning" to smoke. Overt peer influence is synonymous with popular or media representations of "peer pressure" – i.e., coercion of unwilling group members to participate in smoking behaviors. However, because the term "peer pressure" may take on numerous definitions among teenage informants, from "social approval" to "social coercion," its use becomes problematic for this category (Alexander et al. 1999). Very few informants reported overt influence in their initiation narratives. One 14-year-old white male agreed to try smoking only after repeated, insistent requests were made by his friend to join in:

He asked a couple of times before when I'd come over [to his barn]. He asked every time. Cause I had come over there probably like the fifth time he'd asked me. I thought I might as well try it.

Emulation of peers and family members - which may also fall into the youth emic category of "peer pressure" – was a far more common element in experimentation stories. Notably, teenagers reported emulating the smoking behaviors of individuals they held admiration for, or from whom they sought social acceptance. A white female, whose brother had introduced her to menthol cigarettes at the age of 12, disclosed that a desire for social inclusion within a group of "older people" motivated her decision to start smoking:

I wanted to be cool in front of my brother and his friends and in front of my older friends . . . I had just stopped hanging out with kids my own age. Cause they weren't as cool anymore. Or at least I thought so.

Aspects of both overt influence and emulation were present in the testimony of one white male, who first tried tobacco in the presence of a group of peers:

I only did it once because it was kind of peer pressure. I had a bunch of my friends with me . . . One of 'em goes "hey you wanna try a cigarette?" Well first, I didn't want to have anything to do with it. My other friend, he was one of my biggest

influences. He started to do it. They asked me to [smoke]. Well the first time I said "no." Then I saw my friend doing it. The one I really looked up to. That's when they asked me again and I said "yes."

Curiosity as a motivational influence for first-time tobacco use occurs less often in stories of overt influence, but appears to be a reliable precedent for active or opportunistic acquisition. Two informants who reported smoking tobacco products they had "found" also claimed that curiosity was their main motivation. Youth agency to experiment with smoking is perhaps most apparent in narratives where curiosity leads to a deliberate search or request for cigarettes. One 13-year-old black male revealed curiosity as his sole motivation – to the exclusion of coercion or emulation – for deciding to "take a puff" of his friend's Black and Mild cigar:

They smell good so I just wanted to see how it would taste. So that's what happened . . . He wasn't much of my friend. He was just like a kid that came over. [He didn't offer it.] I actually asked for it. I just said I'm not going to smoke the whole thing. I was just going to try it.

Some informants suggested that smoking was a behavior that had to be learned – or more accurately, that techniques existed for *proper* or *acceptable* use of cigarettes. In this context, teaching a friend or sibling *how* to smoke becomes a socialization process, an element of group affiliation by which specialized knowledge of the "smoker" group is imparted to initiates. The same white female who reported wanting to be "cool" in front of her brother and his friends described how she was taught to use cigarettes properly:

My brother took me out on my mom's back porch and he was smoking a cigarette, and he said "here, hit this." And he put it in my hand and he said "ok, now inhale" and I inhaled and then I smoked the rest of it . . . I was hanging out with a bunch of older people at that time so they helped.

Later in her narrative, the girl reported a second experimentation experience in which she was given a "refresher" lesson by a smoking friend:

The second time I was at the bus stop and one of my friends met me there cause she lives right down the road. And she met me and she was just like "here" and I took it. She said I didn't inhale at all. So she taught me how to inhale again. And then we went to her house and smoked a couple more cigarettes.

Smoking Maintenance

Within the sample of 33 youths, four (12%) reported having been regular smokers – two of whom continued to smoke regularly at the time interviews were conducted.

Notably, all four youths were white females at the older end of the sample age range (15-17 years).

One regular smoker, "Katie," was 17 at the time of interview and had begun smoking Newport cigarettes at age 12. Her mother and brother were both smokers, and the process of emulating her brother and older smoking peers played a considerable role in her decision to smoke. Katie professed having two preferred brands of cigarette, with the other being Marlboro Milds.

The second regular smoker, "Jenn," was 16 at the time of interview and also smoked Newports – beginning at age 10. She reported that both her parents smoked cigarettes, as well as her friends and other members of her family. Jenn's narrative is notable in that it describes a process of increasing frequency of smoking that marks the transition between experimentation and maintenance:

Probably about 6th grade when I started smoking half a pack. Because 4th and 5th was basically stealing cigarettes from my parents and my friends stealing cigarettes from their parents. It wasn't like anything, but towards the 6th grade I started hanging out with a lot of high school students. Where I used to live it was a very small town and I knew everybody and I could get cigarettes very easily. I started buying my own pack and they'd last me about 2-3 days.

Coinciding with Jenn's increase in tobacco use were changes in both social context and patterns of tobacco acquisition. During her experimental stage, Jenn was acquiring cigarettes by stealing them from parents. After beginning to "hang out" with high-school

students, she acquired cigarettes through means that were more legitimate and less secretive – bumming cigarettes, then eventually buying her own.

The teenage girls who had quit regular smoking by the time of their interviews were both friends, and frequented the same downtown venues during evening leisure activities. One, who had begun smoking at age 13, reported quitting her 4- to 5-month habit because it was "stupid": "I sat down and thought about it – I was like, 'this is retarded'." This teenager's maintenance patterns never approached the frequency or regularity of smoking among those informants who did not quit, and patterns of acquisition were primarily opportunistic:

I was smoking after I really started going to a lot of parties. It was like, "hey, somebody passed me a cigarette." Whatever. That kind of thing. At parties, maybe one or two people had the cigarettes and they passed them around.

Brand Recall

Table 4 presents the counts and frequencies of all tobacco brands specifically mentioned by interview informants. In total, 14 brands were elicited, with Marlboro and Camel clearly the most recognized. The number of brands recalled by each informant were calculated and analyzed as a function of parental and experimental smoking status. The overall mean number of brand names elicited was 2.2 (range 0 - 6). Informants with one or both parents who smoked recalled more brands than those whose parents did not smoke (means 2.8 and 1.7 respectively) – a difference that was not statistically significant ($p < 0.07$). Likewise, informants who had experimented with tobacco at least once recalled more brand names than those who had never tried smoking (means 2.8 and 1.8 respectively) ($p < 0.05$).

When extracted from the overall informant dataset, the four youths who had reported smoking regularly recognized a mean of 4.5 tobacco brand names (range: 3-6).

All four recalled Marlboro and Newport brands. Black & Mild and Camel brands were each recalled by three out of four. The remaining informants who had never been regular smokers recalled a mean of 1.9 tobacco brand names, a difference that found statistically significant analysis of variance ($t = -3.67$, $p=0.0009$).

Media Perceptions

The majority of informants (73%) reported being aware of the "truth" commercials created by the Florida state's SWAT initiative. Informants were able to discuss the primary messages of these commercials – namely, that tobacco companies are manipulative and lie – and many recalled specific commercials that had made an impression on them. These included a commercial in which a memorial showed "dead people in plastic bags," one where youths were depicted giving a trophy to a tobacco company for making the cigarette brand that kills the most people, and one where tobacco executives were depicted shredding documents about teenage smoking. A commercial that was described by multiple informants depicted a tobacco executive taking a lie-detector test for saying that smoking wasn't addictive.

Overall, teenagers reported positive impressions of these commercials, including the regular smokers. Katie, a regular smoker of Newport cigarettes, suggested that the "truth" commercials were a valuable means of preventing smoking in younger children:

When they first came out, I just laughed at 'em pretty much. But now I think it's good that they have 'em out there for the younger kids but they're not really talking to the older kids . . . Older kids don't really care about what they smoke, no matter what the TV is saying.

While many youths found the commercials to be "funny," "weird," "true," and "effective," some were more ambivalent about the ad campaign, or expressed an active dislike for it. One teenager reported the commercials were "kind of dumb, but they

Table 4: Brand Recognition

Brand	Response count	Response frequency (N=33)*
Marlboro	19	0.58
Camel	15	0.45
Black & Mild	7	0.21
Newport	7	0.21
Kool	5	0.15
Virginia Slims	5	0.15
Winston	3	0.09
Cuban cigars	2	0.06
Salem	2	0.06
Blackstone	1	0.03
Capri	1	0.03
Doral	1	0.03
Parliament	1	0.03
Tourney	1	0.03

* Total response frequency does not equal 1 because some respondents mentioned more than one brand

put out a good message." Another suggested that the "truth" commercials do not help people stop smoking – "they just make people mad." Implicit within this informant's reasoning was the assertion that youths are active agents in their smoking behavior. To suggest that tobacco companies have control over their choices, therefore, is to insult their autonomy:

They're obscene about it. They're rude. They're offensive to teenagers who smoke cigarettes and that's just not gonna help anybody if they're offended. All these cartoons with people smoking cigarettes – they'll offer the kid a cigarette and he'll like do some mean things to him and stuff like that. In actuality if that kid wants to smoke they're gonna smoke cigarettes whether they're 12 or whether they're 18. If they want to smoke cigarettes . . . they're gonna do it.

CHAPTER 5 DISCUSSION: IMPLICATIONS FOR INTERVENTION AND RESEARCH

Overall, findings from this study support previously established conceptions of teenage smoking – namely, that both initiation and maintenance smoking behaviors take place in peer groups, and that mass-marketed cigarette brands represent the majority of those that are both recognized and used by youths. Marlboro and Camel cigarettes were the most common brands smoked by youths during field observation – mentioned by 58% and 45% of interview respondents, respectively. In comparison, Nichter et al. reported Marlboro as the preferred brand for 64% of female youth informants, while Camel was preferred by 21% (Nichter et al. 1997). For a cohort of smoking youths in Massachusetts, Pucci and Siegel reported that 44.6% preferred Marlboro, and 10.1% preferred Camel (Pucci and Siegel 1999). The second most common brand in their study was Newport (22.9%), which also had respectively high recognition status in the present study's interviews.

Other confirmatory findings included the perception that youths take up smoking to enhance their image – to seem "cool" in front of friends or other youths with whom affiliation is desired. From this perspective, smoking can be seen as a means of conveying social information, embedded within the processes of identity change and group membership. The idea that smoking is a learned skill with shared codes of etiquette may lead to the phenomenon of "trying" or "practicing" cigarette smoking. While it was not elicited in the present study's interviews, previous qualitative research reported teens practicing with cigarettes prior to smoking in front of friends: "Part of looking 'cool'

while smoking was not coughing and appearing like a novice when you did it" (Nichter et al. 1997).

It should be noted, however, that research findings were not meant to be generalizable to the entire youth population. Using convenience sampling strategies, this exploratory design was better suited for uncovering hidden populations and eliciting behavioral patterns likely to be divergent, or occurring within distinct minorities of a diverse population. These divergent patterns are readily captured using a combination of observational and interview approaches. Among them, the interacting roles of opportunity, curiosity, and agency in determining youth smoking initiation are notable. Opportunistic tobacco acquisition for first-time users has the following two properties: 1) the personal source (owner) of the tobacco product is not present at the time of acquisition; 2) elements of curiosity and/or agency are more readily apparent within the youth's motivation to smoke. Both cases of solitary smoking initiation from this study's interviews fulfilled these criteria, suggesting that educational intervention programs that emphasize "peer pressure" are not likely to affect this minority of youths who have already made up their minds about smoking – that they will try it when opportunity allows, regardless of who is present or what type of tobacco is encountered.

On the other hand, opportunistic smoking among maintenance smokers is likely to take place in interaction with the source of tobacco. Youths who fit into this category include those who have no brand preference, and who acquire their cigarettes through "bumming" off of others. In reality, some youths who adopt this pattern were observed to exhibit very broad category preferences. For instance, menthols and cloves might be rejected by an opportunistic smoker who prefers non-flavored tobacco and perceives that

it is available. When in the presence of a donor who smokes non-flavored tobacco, the same smoker would be expected to accept whatever brand is offered. Clearly, this is a theme open for further exploration. Future studies may employ cognitive methods to elicit a taxonomy of tobacco variants for opportunistic smokers, and decision-making models (e.g., optimal foraging) to describe their patterns of selection when "bumming" cigarettes.

Previous researchers have suggested the phenomenon of "any" brand preference is indicative of staging in smoking habit (Volk et al. 1996). Adolescents just beginning to smoke regularly are likely to have no brand preference for a period before finally settling on a preferred brand. Two hypotheses are therefore that teens with no brand preference are likely to be younger and to smoke less than those with specific preferences. In a study among teenagers in Australia, Chapman and Fitzgerald reported that youths with "any" brand preference were significantly less likely to be heavy smokers than those with specific brands, and more likely to be light smokers (Chapman and Fitzgerald 1982). Given these findings, opportunistic smoking is expected to be more prevalent in the early stages of smoking habit – during initiation and experimentation.

Future prevention programs would therefore benefit from depicting opportunistic situations in program content. School-based video programs, for instance, may portray youths finding a new cigar on the sidewalk or accidentally finding a pack of cigarettes in their parents' bathroom. The actors may be shown experimenting with or rejecting the tobacco, prompting discussion among adolescent viewers about the processes involved in making such decisions, and how to best arrive at making the decision to not smoke. Teenagers at risk for tobacco use are often taught strategies for rejecting smoking in

group contexts, where direct peer influence plays a significant role. A more comprehensive, effective program design would also address strategies for rejecting tobacco in *solitary* contexts – teaching children to confront their curiosity and desire to emulate admired, smoking peers or family members. Furthermore, an emphasis on curiosity and autonomy as initiation factors may also apply to use of alcohol and other drugs – making this study's findings broadly applicable to youth interventions for all high-risk behaviors.

Unlike first-time users (who are rarely in a position to purchase their own cigarettes), an important factor motivating regular smokers to use opportunistic strategies and adopt divergent tobacco preferences may be cost. Bumming, sharing or receiving cigarettes through distribution costs nothing, but will support an individual's smoking habit provided that: 1) smoking takes place in the presence of other, cigarette-owning smokers; and 2) the individual adopts no specific brand preference. Unique smoking patterns observed at the poetry reading site provide a convincing case for cost-motivated brand preference. Arguably, as farm punks, Travis, Heidi and Jeremy have few economic resources, and their decision to smoke loose Bugler tobacco may have been due to its considerably lower cost-per-ounce. A query of prices at the local tobacco shop where Travis purchased his Bugler tobacco supports this argument. One 6-ounce tin of Bugler contains approximately 170.25 grams of tobacco, which, assuming that a single cigarette contains one gram of tobacco, can produce 170 cigarettes. Cost ranges from \$9 to \$11. On the other hand, a single pack of Marlboro cigarettes contains twenty, which means that one would have to purchase nine packs to equal the number of cigarettes contained in a single Bugler tobacco tin. A conservative estimate of cost for a single Marlboro pack is

\$2.20, resulting in a total cost of \$19.80 after nine packs are purchased. Even if a Bugler tin costs \$11, the overall savings acquired by choosing this brand over Marlboro equals 56%.

However, it is important to note that when considering tobacco use among teenagers, cost is not the only salient motivator for divergent brand preference. In the state of Florida, it is illegal to sell tobacco products to youths under the age of 18. Following interpretations by Nichter et al., brand preferences may only become truly established once youths are old enough to buy their own packs (Nichter et al. 1997: 292). Teenagers who have just begun smoking habitually, and who are not yet old enough to legally purchase cigarettes on their own, would then be expected to exhibit sharing, distribution, and opportunistic acquisition behaviors. For 18-year-old youths capable of purchasing their own cigarettes, the sensory qualities associated with particular brands may also play a role. The Bambu cigarettes smoked by Pete cost \$3 per pack from the local tobacco shop, which is comparable to the \$2 - \$4 cost of Marlboro cigarettes from the same store. While Pete was observed engaging in friendly interaction with the "farm punks" and less economically capable youths, his formal attire – dress pants, shoes and shirt with tie – suggested that money was not a major constraint for him. Susan's response to smoking this brand ("I like them. They're smooth") supports an intuitive assertion that taste and other subjective sensory qualities are instead the primary motivators for smoking Bambu.

Another explanation for these cases of divergent brand preference exists by virtue of the venue itself. The building at which the poetry readings take place doubles as a meeting space for community activists, while many of the performers and audience

members self-identify as politically "radical." Most of the younger farm punks call themselves anarchists, which is evident in the anti-corporate themes portrayed in their writing. Despite the fact that Bugler rolling tobacco is manufactured by Brown & Williamson – a corporation that also makes Kool, GPC, and Capri brands and is on SWAT's "Big Tobacco" list – it is not a brand name that immediately identifies its consumer as a supporter of the major tobacco companies. It can be argued that youths who espouse radical political beliefs are ideologically opposed to supporting these corporations that have been under public scrutiny over the past decade. Yet, rather than prevent youth uptake of tobacco use entirely, such positions simply place limitations on which brands are acceptable. A teenager within this group who smokes Marlboro or Camel cigarettes may be influenced by social disapproval from peers (either perceived or real) to switch to a less mainstream brand.

In light of problems that the legal age limit creates for theories of cost-motivation, political motivation becomes a viable alternative theory, particularly for the minority of youths who express "radical" identities. For anarchist teenagers who live and work on organic farms at the city's peripheries, the concept of the "non-organic" may play a role in their position against the major tobacco corporations. In their view, companies are reputed to compromise product quality for the "bottom line." In the case of tobacco, it is the addition of carcinogenic and poisonous substances that makes mass-marketed cigarettes far more dangerous than natural, organic tobacco. To draw an analogy, the Marlboro cigarette is to the pesticide-sprayed fruit as loose, rolled tobacco is to the organically produced fruit. Further ethnographic research is required to confirm these hypotheses.

Youths who have divergent brand preferences motivated by radical beliefs are not likely to be affected by educational campaigns such as "truth", which emphasize the wrongful actions of tobacco corporations. While these youths may fully support the methods and anti-corporate approaches of the "truth" campaign, they may at same time distance themselves from its messages – presuming their own immunity to corporate manipulation on the basis of their political beliefs. Essentially, these youths are saying, "The tobacco companies can't control me because I already know they're wrong." One white female informant, who had been a regular smoker and frequented the poetry readings, believed the campaign was valuable for respecting youth autonomy: "I agree with them cause they're not trying to get people to not smoke. They're just trying to let everyone know what it does to you . . . If you want to smoke it's your choice." The result is a subgroup of the youth population that is relatively immune to tobacco industry influences, but just as susceptible to peer and family influences.

For this minority of adolescents, preventive interventions are indicated that establish the detrimental physiological effects of tobacco *regardless* of the presence of carcinogenic, poisonous, or addicting additives. Youths must be made aware that "corporate" tobacco is not the only kind that kills. Furthermore, anti-industry media approaches (e.g., "truth") should emphasize that cigarettes are not Big Tobacco's only hazardous products. Commercials may be designed that depict use of rolling tobacco (in some audience segments, smokeless tobacco) to be included in a larger series of commercials that focus on mass-marketed cigarettes. These recommendations allow for tailoring of interventions to diverse segments of the overall youth population, while continuing to target a majority of youths.

The findings of this paper are not applicable to all teenage smokers, but rather suggest ways in which diverse youth elements – grouped by age, gender, ethnicity or peer affiliation – may have different experiences of tobacco use. Smoking is conceptualized as part of a larger process through which adolescents change in interaction with each other, their families, communities and institutions. In a clinical sense, it is also seen as a process of stages leading to nicotine dependence. The most effectively targeted stage for prevention programs – initiation – is best understood when considering the sense of autonomy or agency expressed by adolescents in their narratives. These findings suggest a refined etiology of smoking behavior that includes psychological, cultural, and social factors, introducing a new direction of inquiry relevant for tobacco control and public health.

APPENDIX INTERVIEW GUIDE

Demographic

- 1) How old are you?
- 2) What grade are you in?
- 3) Where are you from? What's your cultural background?
- 4) Do your parents or siblings smoke cigarettes?

Perceptions of smoking and addiction

- 5) What are some of the risks of smoking?
- 6) What are some of the benefits of smoking?
- 7) Where did you hear about these risks or benefits? What are your sources of information?
- 8) How often does someone have to smoke to be called a 'smoker'? Would you consider someone a smoker if they never buy cigarettes, but sometimes share them? What is your definition of a "smoker"?
- 9) How many cigarettes a day/week is "a lot"?
- 10) What does it take to get addicted to cigarettes? How many cigarettes/how long smoking?
- 11) (When X brand is mentioned): What types of people smoke X brand of cigarettes?
- 12) Would you want your own children to use tobacco?
- 13) What age would you say your children are old enough to make their own decisions about smoking?

Initiation

- 14) Tell me about when you started using tobacco / first took a drag off a cigarette.

- 15) Where were you?
- 16) Who were you with?
- 17) Who initiated the smoking?
- 18) What did it *feel* like the first time you smoked a cigarette?
- 19) What did the cigarette mean to you at the time?
- 20) Has your opinion about the risks and benefits of smoking changed since this experience?

Family/community influence

- 21) (If parents are smokers): Did they ever ask you to light their cigarettes for them? To buy them cigarettes?
- 22) What brand of cigarettes do your parents/siblings smoke?
- 23) What areas in town do you feel safest? Do you feel physically safe with your parents?
- 24) Are you (or have you ever been) a latchkey kid? Are you ever left home alone?
- 25) Do you know about some places in town that sell cigarettes? (e.g., “Smoke,” “Modern Age”)

Peer group influence

- 26) What sort of informal economy is there at your school? Do kids sell candy? Cigarettes? Drugs? Anything else?
- 27) What other things do kids pressure each other to do? (e.g., ways to talk, dress, etc.)

Terminology, slang, and folklore

- 28) What are some other words for ‘cigarette’ used by kids your age? How do kids ask each other for cigarettes?
- 29) What sort of stories or little rituals do kids have about smoking?
- 30) What is the worst brand to smoke? Ever heard any bad stories about kids who smoked these brands?

- 31) What sort of diseases can you get if you share cigarettes?

Maintenance behaviors

- 32) Since beginning to use tobacco, under what circumstances do you use it?
- 33) How much tobacco do you smoke? How often?
- 34) What brand of tobacco do you smoke? Is this the same brand smoked by your friends or parents?
- 35) Why do you use (or not use) tobacco? What do you get out of using tobacco?
- 36) Has your opinion of the risks and benefits of smoking changed since you started smoking regularly?
- 37) How often do you share cigarettes you're smoking with others? How often do you smoke the whole cigarette yourself?
- 38) Name all the drugs you can think of? Do you use any of these? Do you drink coffee?

Industry, regulatory and media perceptions

- 39) What is the legal age of smoking?
- 40) What can you tell me about the lawsuits that have been filed against cigarette companies? Do you think people have a right to sue the companies?
- 41) Are the *Truth* commercials effective? What do other kids or your family say about them?
- 42) Who makes the cigarettes?
- 43) How much do cigarettes cost?
- 44) How many cigarettes in a pack?

Stress

- 45) Are there stressors in your life?
- 46) What do you use/do to control negative mood states or make you happy? (Tobacco? Drugs? Video games?)

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BIOGRAPHICAL SKETCH

Ryan Theis was born in Chicago, Illinois, in April 1975. After completing a Bachelor of Science degree in journalism at the University of Florida, Mr. Theis worked as a consultant in medical outcomes research. During the course of his graduate work in anthropology, he has participated in research in topics including adolescent tobacco use, alcoholism treatment for veterans, homelessness, migrant farmworker housing, and business development and incubation. Mr. Theis is currently pursuing a Master of Public Health degree from the University of Florida.